

Twenty-five years fighting the Good Fight

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Captain Kevin Wark and Mate Mike Lohr on the F/V Dana Christine offloading a catch of “bodacious” bluefish at the Viking Village Dock in Barnegat Light, NJ

What is collected here represents a large part of what I have written over the last quarter of a century. All of it deals with fishing, mostly commercial fishing, and the focus is almost entirely on our domestic (U.S.) fisheries. Except for the first entry, an embarrassingly complimentary profile by colleague Robert Fritchey, everything is entered chronologically and either directly or indirectly documents many of the changes that have been adopted willingly by or forced upon our commercial fishing industry.

By way of background, the total value of domestic landings – both fish and shellfish - was \$3.44 billion in 1991. The \$5.50 billion value of landings in 2014 (the last year for which data is available) was worth \$3.26 billion in 1991 dollars. In real value total landings have decreased by slightly over 5% since 1991.

But this relatively minor drop in value doesn't tell the whole story. Both the Atlantic lobster fishery and the Atlantic sea scallop fishery have experienced an unprecedented increase in value in the past quarter century. If it weren't for the increased revenues from these two fisheries, the national picture would be far different. In 1991 the value of American lobsters and Atlantic sea scallops made up 9.3% of the value of total U.S. landings. In 2014 lobsters and scallops made up 18% of the total value. Not so obviously, the growth in these two fisheries masked significant declines in others.

These declines are most apparent in the New England groundfish fishery. The current condition of this iconic fishery demonstrates more than anything else the institutionalized inflexibility that has plagued fishing and fishermen, both commercial and recreational, since they were discovered by crisis-hungry focused environmental activists (and the super-rich foundations that support them) in the late 1980s.

As far as navigating among the following pages, I'm working on a glossary but am afraid it's going to be as long as this collection. For the time being I suggest that you use the "find" function on your .PDF reader. I will be making additions as I disinter them from my hard drive, so if you follow me on Twitter or Facebook you will be notified immediately. If you are as averse to social media as I am, just check back here occasionally.

As always, if you have any questions, comments or critiques, feel free to contact me at nilsstolpe@cfl.rr.com (and remember that while I really appreciate the attaboys, well thought out criticism should be valuable to any writer).

Thanks for your indulgence,

Nils Stolpe

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By way of setting the stage, below is a profile of me that National Fisherman ran in 2005. It was written by author (**Wetland Riders, Missing Redfish: The Blackened History of a Gulf Coast Icon**) and NF correspondent Robert Fritchey and might have painted a (slightly) too grand portrait of me.

Nils Stolpe

Robert Fritchey/National Fisherman/April 2005

Back in the 1970s, as they backtracked from the bungled burglary at the Watergate Hotel to the Nixon White House, informant "Deep Throat" told investigative reporters Woodward and Bernstein to "Follow the money."

Thirty years later, some of the hottest journalistic action is still in following the money. But don't look to your local newspaper, newsmagazine or public radio station for enlightenment, because the money trails today often radiate from a handful of the nation's wealthiest "charitable" foundations, and end with those media outlets themselves.

Thanks to Al Gore - or not - the Internet has facilitated the dissemination of many viewpoints, so it should come as no surprise that one of the best sources on the undue influence that untaxed foundations exert on the media, and on environmentalists, scientists and government agencies - indeed, on the fishery management process itself - is a Web site. Funded by members of the Garden State Seafood Association and the National Fisheries Institute, www.fish

"Nils is such a good writer, in laying out ideas, and the factual basis he relies on," says Jim Lovgren, 48, a Point Pleasant trawler, a former member of the Mid Atlantic Fishery Management Council, and director of the Garden State Seafood Association, which retain Stolpe as its communication director.

Stolpe downplays his efforts as a writer. *"It gets rid of my frustrations, so I don't have to kick the dog,"* he jokes *"So he's happier."*

In truth, the entire industry listens to what Stolpe says. *"We've had Nils working for the Jersey industry, but everything he does is benefitting the industry around the country, in the information he gathers and so forth. He's been all over Pew for years, before anybody ever heard of 'em."*

With billions in assets, the Pew Charitable Trusts has funded a body of research critical of commercial fishing practices in this country.

"They're riding around on their white horse, and nobody wants to touch 'em," Lovgren says.

Stolpe definitely has Pew in his sights: *"When you've got a multibillion dollar, tremendously media savvy, 'charitable' bunch of foundations selling only one perspective, and you don't have the wherewithal to sell the countervailing perspective at any level at all, that bothers the hell out of me."*

Stolpe, 59, grew up in the heart of South Jersey, between Atlantic City and Philadelphia, and first developed an interest in the sea via his father, who held an unlimited captain's license. *"I guess the longest trip he took, he and my mom took a grain tanker to India and they were gone for six months,"* he says.

Stolpe studied environmental science, with a marine emphasis, at Rutgers University, and later earned a master's degree in environmental planning.

"Back in those days they used to have planners who would say 'put this here, put that there," says Stolpe, who, nevertheless, started off his career in aquaculture.

"The professor that I used to work for as an undergraduate got a grant to do some small-scale wastewater-heat aquaculture at a power plant in Trenton, on the Delaware River, and he hired me as the project manager. We started out growing freshwater shrimp in the summer and later branched out to where we were also growing rainbow trout in the winter."

"We proved that you can do it," says Stolpe, "if you want to throw enough money and technology at it."

After 10 years on that job, he hired on with the New Jersey Department of Agriculture, who wanted him to come up with an aquaculture development plan for the state.

Though he was still "young and naive" at the outset, Stolpe's vision for New Jersey's role in aquaculture development evolved until, after nine years with the state's Department of Agriculture, it irrevocably clashed with that of his superiors.

"I thought you could do aquaculture anywhere you can grow stuff. But I eventually figured out that there was no way in the world serious aquaculture was going to happen in New Jersey. New Jersey has super high labor costs, super high land costs, super high energy costs, super high construction costs."

With that realization, Stolpe pitched the idea to his boss that they should be building up the capability of New Jersey's businesses to support aquaculture in other countries, where it might more sensibly be occurring.

"My boss at the time said, 'No, if it doesn't have to do with growing stuff, I'm not interested. So you're going to be doing aquaculture development.'"

Said Stolpe: *"No I'm not," and I left. I was starting to feel like a bureaucrat anyway - not a good thing for anybody to feel like."*

The state agency's loss was the fishing industry's gain, as Stolpe hung out his shingle as an independent consultant. In addition to his role with Garden State Seafood, Stolpe is also the communications director for the Fisheries Research Institute, which he describes as *"sort of an offshoot of the Blue Water Fishermen's Association,"* a longliner trade association, and he does work for other industry groups, *"as the opportunity arises,"* he says.

Visitors to www.fishingnj.org, *"a clearing house for information on the fish and seafood Industry,"* are advised not to log on right before dinner, because even a quick search for a specific subject can turn into an educational odyssey. In his introduction to the site, Stolpe recalls his pre-computer academic career when research was conducted in libraries, and *"the book that caught my eye on the shelf below the one I wanted... was often more interesting and occasionally more useful than what I was initially looking for."* By listing topics randomly, Stolpe tries to recreate that serendipitous experience for Web site visitors, therefore "nudging you to broaden your interests."

One of the site's many links carries the visitor to FishNet, a cross-referenced archive of "information sheets" that Stolpe writes and faxes or e-mails to more than 1,500 industry members, media, and government officials.

"They're sort of like updates of what's going- on nationally, internationally, in fisheries or related to it," he explained. *"Or I'll pick a particular topic and do something more in depth. Just basically, one, getting the kind of information out that should be getting out and, two, doing, for lack of a better term, muckraking - all of the work that I've done on the Pew stuff and all of the interconnections there."*

In his informal FishNet pieces, Stolpe, with a strong scientific background, obviously enjoys deconstructing the extravagant PR-agency-contrived campaign rhetoric of "anti-fishing activists."

In the May 8, 1999 FishNet, for instance, Stolpe homed in on the early stages of Pew's anti-trawling campaign. Stolpe quoted three different sources as they tried to dramatically quantify the amount of sea bottom disturbed by both dredges and trawls: A pair of scientists funded by the Philadelphia-based foundation claimed that the gear was affecting an area *"as large as Brazil, the Congo and India combined,"* while Ted (Cheers) Danson's estimate was *"an area greater than the U.S. and Mexico combined,"* and a draft of a federal bill guessed *"an area... twice the size of the contiguous United States."*

With the estimates varying by millions of square miles, Stolpe dryly suggests, *"We might have the start of an anti-fishing benchmark to rival the 'nets big enough to swallow a 747' mantra that was so widely used by the antis a while back. Might this indicate that the anti-fishing activist's possess some kind of equivalent of schooling behavior?"*

Stolpe goes on to calculate that if the methodology of the anti-fishing polemicists were to be applied to New Jersey's motorized vehicles, *"almost 5 million square miles of terrestrial habitat could be flattened... by New Jersey's vehicular traffic annually - almost twice the total land area of the contiguous 48 United States."*

"You have to reduce these obscene claims to the level of stupidity that they deserve," said Stolpe. *"Nobody's dragging where there ain't any fish. They're dragging where there are fish. And they're making the same tows every year because in spite of dragging there every year, the fish keep on coming back. So that's not a bad thing, that's what you want to do."*

"The anti-fishing groups have successfully confused 'sustainable' fishing with 'no-impact' fishing, but they're two totally different things," continues Stolpe, who makes his point with photos of feed lots, plowed fields and chicken farms. "It's impossible to maintain a level of fish production from the oceans that we have, without having an impact," he says.

"You're not going to catch hundreds of tons of fish from an area without affecting the bottom, without affecting the ecosystem, without affecting the mix of fish in the area. The dialogue at this point is, 'You're disturbing the ocean bottom, you're not supposed to be doing that.' That's total bullshit. We need to start thinking about how to start a public discourse about how much modification of the ocean are we willing to accept for how much seafood production."

As useful and entertaining as Stolpe's Internet writings are, his contributions to the industry don't end there. *"He's the most under-appreciated guy in the industry," insisted Lovgren. "I bounce a lot of ideas off Nils, and I think a lot of people in the industry do." This may explain why the same words crop up in conversations with New Jersey's fishermen, words like "positive imaging" and "cooperation."*

Even while he helps boost the public's awareness of the industry, Stolpe suggests that its image is not as tarnished as many fishermen think.

"My acid test for whether we've got an image problem is whether Madison Avenue is still using commercial fishermen to sell stuff. As long as they are, I think we're OK. And they still are," he said, referring to television ads for cough drops, canned tuna, even E-bay.

"We're all real sensitive about all the anti-industry propaganda that comes down the pike, but I don't think it's reached the level of the consumer, the average citizen. Hopefully, it'll continue to not reach them," says Stolpe, who sees commercial fishing as "the only real connection that the average person has to the oceans, other than the oceans being some kind of amusement park. The only way the average person has to connect to the ocean is through the fish he or she eats. Or to go down and see an actual fishing community."

Well, why not? *"I mean, we've got schools out there where the teachers are buying into all this doom-and-gloom crap but the same teachers are looking for anything to do with their kids. So put 'em on a bus, take 'em down to a commercial fishing dock, and show 'em a monkfish! Kids love it, and it's building up a feeling for the industry, and for fishermen."*

In addition to helping Viking make their tours a success, Stolpe's currently more directly involved in another public outreach via the Adopt-A-Boat program. Based upon a successful pilot program by MIT's Sea Grant, *"You put a class of kids with a boat," explained Stolpe. "A lot of boats now have VMS" - vessel monitoring systems - "connected to e-mail, so the guy's out fishing and he can send an e-mail to the class and say 'We caught this,' and so on."*

"Last year, I did it with a scallop boat and a fourth-grade class," says Stolpe.

"They 'adopted' the F/V Kathy Ann, and the captain's a big guy who looks like a fisherman, about halfway between a fisherman and a Viking. He walks in and these little fourth-grade kids, their eyes just popped out. He gave 'em a little spiel about fishing and then we did 'question and answer.' The kids were all over him: 'What's a fisherman do? What's the weirdest thing you ever caught? Did you ever catch a body?'"

"These are things that the industry can do. They don't take a lot of money. They're inconvenient, but they have a fantastic payoff, PR-wise - and the media will kill to cover something like kids and Adopt-A-Boat. If you have a dock, clean it up, and get people down there on the weekends and show 'em what you do."

"It's part of the industry having to come out of its shell."

"You know," he adds, "it isn't just us anymore. These are the kinds of things we should be having Sea Grant do. Otherwise they'll be out there pushing aquaculture."

With his scientific background, Stolpe also helps promote better science through cooperative research. A recent project involved the Monkfish Defense Fund and the National Fisheries Institute's scientific monitoring committee. *"NMFS was trawling with bottom-fish gear to survey for monkfish," he said, "so we got the money for scientists to get out there on fishermen's boats and catch monkfish. Programs like that are really good because they educate both fishermen and scientists."*

In a related venture, Stolpe worked with New Jersey's industry and NFI to implement an innovative program that raises research money by setting aside a portion of a fishery's total allowable catch, which is then auctioned off.

Ernie Panacek manages the privately owned Viking Village Dock, at Barnegat Light on New Jersey's Long Beach Island, where nearly 40 commercial boats tie up. According to Panacek, Stolpe was a catalyst in setting up and promoting what has become a very rewarding dock-tour program. *"Nils helped develop this, and a lot of these kind of positive-image public awareness-type things, across the board."*

Dock tours at the Viking Village Dock are conducted weekly during the summer. While Viking advertises the free tours, the Ocean County tourism agency gladly promotes the popular tours. During the spring, when schools are taking students on field trips, "we have them by the busloads," says Panacek.

"We have a big mural that New Jersey's Department of Agriculture helped us build and paint," Panacek says. It illustrates the three different types of fisheries we have here - scallopers, gillnetters and longliners - and that's where the tour starts. They explain the three fisheries and then show them the boats on the dock. We showcase the fish that we're catching at the time, and talk about the regulatory problems, the management, and the cooperative research that are involved in it."

"This is what the people need to hear."

"We need to fight for what we think is right. And that is by showing them the knowledge we have, what we've learned in fishing, and what we know about the fish stocks. We can turn the tide; we can get the people on our side. Because the people don't know what's going on. It's all real important stuff. And Nils has been a big part of all that."

Despite the many challenges facing the industry, and the efforts of its opponents, Stolpe says prospects for the future are bright if logic and reason prevail. *"Obviously the public is starting to catch onto the benefits of eating seafood," he says. "As we get better and better science, as we improve the scientific foundation that the industry rests on, and as the industry becomes more and more aware of how to do business in an acceptable fashion - you know, reducing bycatch and reducing unnecessary damage to the ecosystem - things look good."*

Ad Hoc Mixed Trawl Management Committee
12/01/91 (printed in COMMERCIAL FISHERIES NEWS)

This article, written back in 1991, discusses some of the problems inherent in the fisheries-by-fisheries management strategy that still predominates in the federal fisheries management establishment today. While I reported at the time (somewhat overconfidently, I'm afraid) that the Mid-Atlantic Fisheries Management Council was attempting to address some of the problems inherent in this type of management through a Mixed Trawl Committee, that attempt was unsuccessful.

To anyone at all familiar with the process, it's obvious that what passes for fisheries management today is really "fishermen management" (more accurately commercial fishermen management). The reason for this is fairly obvious. When everything that impacts on a fish stock is considered, (commercial) fishing pressure is the only thing that the managers have proven themselves in the least bit capable of controlling.

This has resulted in the assumption that fishermen who harvest a particular stock can be managed as if they were the fish that are supposedly being managed - in isolation and not affected by extraneous factors. Thus we have a fluke management plan that assumes that commercial fishermen who land fluke are - or will be - only concerned with catching fluke, that scallop fishermen should only catch scallops, groundfish fishermen only groundfish and a seemingly endless litany of geographic, gear, possession and landing restrictions and prohibitions all designed to make the administration and enforcement of FMP's focused on a single species effective.

However, fishermen can't be treated in FMP's as if they operated "in a vacuum", at least if their well-being is of any concern to the managers. Anyone with the slightest knowledge of the commercial fishing industry is aware that the ability to adapt to changing short term or long term conditions - whether they are environmental, social or economic - is vital to success in many of our commercial fisheries. (This isn't to say that fisheries that are based on a high degree of specialization - scallop, menhaden, sea clam, etc. - can't be successful as well). A large part of our industry in the Mid-Atlantic and New England has developed around the ability to switch from one species to another during the sea-son (or even during the same trip). This style of fishing, which has evolved over generations, is in balance with the changing resource base, with fluctuating market conditions, and with the way of life of those who either participate in or depend upon it. The participants - many of them third or fourth or fifth generation fishermen - aren't as interested in getting rich as they are in supporting their families well and in passing on a tradition-rich heritage to their children.

This traditional mixed trawl fishery and the way of life it supports is being threatened by a management regime intent on forcing fishermen into easy-to-manage, convenient-to-enforce categories. The ultimate management plan, at least according to the philosophy of this regime, would mandate a restricted number of transponder equipped boats allowed to catch limited (by trip or season) amounts of regulated sizes of one particular species of fish during specific times using approved gear and offloading only in limited (monitored) ports and only during specified landing windows (and in the best of all possible worlds from the manager's perspective, paying for the privilege as well). All with a total disregard for the impact on the lives and the livelihoods of the fishermen being managed or on the stocks supposedly benefitting from this management. I couldn't imagine anyone seriously suggesting that, because bank robberies are a growing problem and because tax revenues available for police departments are shrinking, we should restrict the location of banks to those areas that can be easily policed and restrict the hours that they are allowed to be open to those times when adequate police protection was conveniently available. But this type of control is exercised

routinely in fisheries (fishermen?) management, and it is exercised with concern for nothing other than the demonstration of a reduction in the number of a particular species taken by commercial fishermen.

Fortunately the Mid-Atlantic Council in forming an ad hoc Mixed Trawl Fishery Management Committee has taken an important first step in recognizing that it might be possible to manage fishermen effectively without totally disrupting their way of life, a way of life that has evolved over generations and that is a vital component of the character of many coastal communities. This mixed trawl fishery, having developed in the Mid-Atlantic and New England in one of the most highly urbanized, used and abused sections of coastline in the U.S., proves that commercial fishing can successfully coexist with competing and in many instances antagonistic uses while at the same time providing significant year-round economic activity and preserving an irreplaceable part of our cultural heritage. From any perspective that recognizes values above and beyond those necessitated by the declining budgets, public scrutiny, imprecise "science" and political pressures that are presently driving the National Marine Fisheries Service's policy towards commercial fishing, this is a part of our culture that, like so many other traditional fisheries, should be a beneficiary rather than a casualty of public policy. Every commercial fisherman owes a debt of gratitude to the Mid-Atlantic Council and its Chairman, Axel Carlson, for recognizing this.

The task that this ad hoc committee is facing is certainly going to be more formidable than the creation of a typical plan or plan amendment. But at the same time it should direct management effort in what might be far more appropriate and more productive directions. For example, the current amendment to the Fluke FMP would force a fisherman to decide to concentrate on fluke before he left the dock, regardless of the availability of other species once he started fishing, regardless of the price of these alternative species, regardless of how few and far between the fluke were, in fact, regardless of everything except the ease with which a regulation allowing only one net on board can be enforced. Is as much as possible being done for the fluke stocks when a fisherman is put in the position of having to fish for them exclusively on a trip? It's doubtful. More than that, it's not how a lot of our fishermen have worked in the past and it's definitely not how they should be forced to work in the future. There have been "shortages" in fish stocks before, but there have always been other fisheries available as safety valves to take the pressure of those stocks. The present management trend is removing these options, wiring closed the safety valves, and concentrating the pressure (fishing and political) on species that would very likely be better off without it.

Our mixed trawl fishery is there because it works. It allows commercial fishermen to make a living, to support their families and to pump millions of dollars into the economy in the shadow of the World Trade Center. Having proven capable of adapting to many of the pressures that are driving the federal fisheries bureaucracy today, it is capable of surviving the current "crisis" as well. Beyond that, I hope that we can demonstrate that management, whether of fisheries or fishermen, can be accomplished cooperatively, can be accomplished effectively, can take advantage of the knowledge, skill and experience of the fishermen and can meet the legislative and administrative requirements of the management establishment while at the same time preserving the economic and ecological viability and the character of the fishery being managed. We are looking forward to working closely with the ad hoc mixed trawl fishery committee and hope that somewhere down the line we can look back on this effort as one of the first that recognized the validity in managing the fishery, the fishermen and the fish.

The first committee meeting is on November 14 and we will keep you apprised of our progress as we proceed.

**A SURVEY OF POTENTIAL IMPACTS OF BOATING ACTIVITY
ON ESTUARINE PRODUCTIVITY**

presented at:

MARINE ENGINES AND VESSELS PUBLIC WORKSHOP

(sponsored by U.S.E.P.A. Office of Air and Radiation)

Ann Arbor, Michigan

by:

Nils E. Stolpe

July 29, 1992

**[Link to NJ Fishing Consumer Alert page](#) [Link to NJ Fishing Consumer Alert page](#)
[\[Link to imageLink to NJFishNet issue discussing boating impacts\]](#)**

(This information is the result of reviewing literature from varying sources and is meant to indicate possible directions for further investigation rather than to draw any definite - or indefinite - conclusions concerning potential impacts.)

An increasing amount of attention is being directed towards the health of our living marine resources. Declining stocks of economically and/or ecologically important species of finfish and shellfish in recent years have generated a great deal of focused public scrutiny, unfocused legislation, high profile law suits and friction between competing user groups. Generally this culminates in attempts - usually successful - to fix the blame on (commercial) over-fishing, power generation or loss of "critical" habitat. But, having been employed by or for commercial fishermen for the past fifteen years, I have yet to be convinced that their efforts are up to the task of severely depleting so many stocks so rapidly. In fact

the total commercial fishing effort in the Mid-Atlantic region on the traditional "inshore" species has probably increased less than 10% in the last ten years. Likewise, installed electrical generating capacity hasn't increased significantly in this time. And while coastal development, generally considered to be the prime cause of habitat destruction, has been continuing, in recent years it has been carried out in an increasingly controlled and environmentally responsible manner.

But what has changed? In 1979 the total number of boats registered in New Jersey, including most motorized craft but excluding jet skies and the larger documented vessels, was 110,000. In 1989 this number had risen to 173,000, an increase of 57%. Quoting Dr. William Fox, who as the National Oceanographic and Atmospheric Administration's Assistant Administrator for Fisheries is the head fisheries manager for the federal government, "Over 70 percent of the U.S. commercial and recreational landings that provide over \$30 billion to the U.S. economy are composed of species associated with estuaries at some time in their life history. Seventy percent of our production is dependent upon the preservation of nearshore habitat." (taken from a presentation by Dr. Fox to the National Fisheries Institute, April, 1991). These critical estuaries are the site of most of the boating activity in the Mid-Atlantic and are obviously on the receiving end of most of the growth in that activity.

Through contacts with marine researchers, environmentalists and resource managers it was found that, with the exception of a few narrowly defined areas of investigation, virtually no recent work has been done on the impact of boating activity on the estuarine environment. Some studies were completed in the 1960's and early 70's (when recreational boating was carried on at a level significantly less intensive than it is today, boats being smaller and with much less power), some questions were raised, and then the research community directed its attention elsewhere. But it seemed as if, at least with the levels of recreational boating use that have become common in water bodies such as New Jersey's coastal bays, there might very well be an impact of such activities on at least some of the less tolerant finfish or shellfish species.

With this in mind, a literature review was begun aimed at identifying negative impacts from sources that could be related to those that might be generated by boating. These impacts were grouped into three categories: direct physical stresses on aquatic organisms similar to those that might be caused by vessel operation (impacts by propeller leading edges or hull parts, propeller generated turbulence and shear forces, hull generated rotational forces), negative impacts on the physical environment similar to those that might be caused by vessel operation (increased thermal loading, increased turbidity, disruption of stratification) and biological effects of pollutants, particularly hydrocarbons, similar to boat engine emissions. While little or no work is available directly assessing the impacts of boat operation, enough has been done in related or similar areas to allow inferences to be drawn regarding whether or not an actual potential exists for such impacts.

DIRECT PHYSICAL STRESSES:

Some research has been carried out, primarily by the Corps of Engineers, on physical impacts to fish and invertebrates from commercial river traffic - barges and tow boats - and a significant amount has been done to assess the impact on aquatic organisms of passage through hydroelectric turbines or thermoelectric generating station cooling systems. Physical damage, principally occurring during passage through the circulating pumps, was reported as the major cause of entrainment mortality of aquatic organisms during normal power plant operation (Shubel and Marcy, 1978) and shearing and striking were determined to be the major causes of damage to fish passing through turbines (with significant damage - decapitation and losses of chunks of flesh - attributed to cavitation forces as well. Bell, 1974). However, other workers (Taylor and Kynard, 1985 and Cramer and Oligher, 1974) reported that cavitation in turbines was the chief cause of mortality of entrained organisms. (While the role of cavitation in turbine and pump induced injuries and mortality is poorly understood, there is general agreement that it is a factor).

The shear and rotational forces generated along the wetted surfaces of barge traffic on the upper Mississippi were reported to have caused damage to 20% to 50% of fish eggs in the area of passage (Holland, 1986). Propeller generated turbulence 17 meters behind a vessel pushing barges varied from 2,500 dynes/cm² with unloaded barges going upriver to 50,000 dynes/cm² with loaded barges going down river (Kilgore and Conley, 1987) and Morgan et al experimentally determined that shear stresses between 120 and 785 dynes/cm² for 1 to 20 minutes were lethal to 50% of eggs and larvae of striped bass and white perch (1976). In laboratory tests on paddlefish and carp, significant differences in mortality were seen in larvae exposed to low versus high levels of turbulence similar to those resulting from commercial river traffic (Pearson et al, 1989).

There isn't agreement on either the magnitude of the forces generated by particular types of vessel operation or pump and turbine impellers operated under different conditions. Nor is there a consensus on the magnitude of the forces required to cause a specific level of injury or death to particular organisms. There is general agreement, however, that the disturbances to the water column caused by vessels and by the impellers of large pumps and turbines may be responsible for injuring or killing aquatic organisms and that the eggs and larval stages of finfish and shellfish are much more susceptible to damage by these forces than juveniles and adults.

IMPACTS ON THE PHYSICAL ENVIRONMENT:

Heat: To the extent that elevated temperatures may be a concern in an estuary under a particular set of conditions, added thermal input from any source could be significant. With an understanding of the intensity and distribution of boating activity in a particular estuary, it should be possible to model the effects of the resultant thermal inputs to determine under what conditions - if any - they could have any effect.

Turbidity: The deleterious effects of dredging induced turbidity on the estuarine environment are now commonly accepted and dredging projects are designed to minimize them. While adult finfish are capable of either avoiding or withstanding high levels of turbidity, eggs, larvae and juveniles can be severely impacted. Effects of increased turbidity include: smothering of sessile organisms, prolonged hatching time (Morgan, Raisin and Noe, 1983), reduction in growth, lessened feeding efficiency (Newcombe and MacDonald, 1991), impaired schooling ability (Pearson et al, 1989), and impaired growth of bottom vegetation due to lessened light penetration. While reported for only one species, herring larvae moved to higher levels of the water column as turbidity increased (Johnston and Wildish, 1982). Breitburg (1988) speculated that turbidity and other factors affecting feeding in the Chesapeake system might account for the difference between actual and predicted spawning success in striped bass while Morgan, Raisin and Noe reported that high turbidity levels could reduce larval survival in the same species by 57% (1983). Sediment loading and turbidity have long been recognized as significant factors in the successful hatching and development of salmonids.

Organic and inorganic sediments also play an important role in the movement and concentration of toxic materials in the estuarine environment.

Disruption of Stratification: Temperature and density (salinity) stratification during certain periods are characteristic of some estuaries. While it is possible that intense boating activity might disrupt such stratification, no descriptions of any other mechanisms capable of disrupting such stratification nor any effects of such a disruption were discovered.

ENGINE EMISSIONS:

The effects of hydrocarbons and heavy metals on and their movements through the marine environment have generated volumes of material that need not be surveyed here. However, areas with particular relevance to possible boating impacts include the concentration of these substances through adsorption onto suspended particles and in the flocculent layers of bottom sediments; the persistence of these substances in the marine environment (Burns and Saliot, 1986); and their contributions to forming microlayers at the air/water interface. Von Westerhagen et al (1987) reported that surface microlayer materials significantly affected development and survival of marine fish eggs and discussed the high susceptibility of thin-shelled pelagic eggs to petroleum hydrocarbon-derived pollution of natural waters. In Puget Sound it was demonstrated that exposure to surface microlayer samples collected from urban bay sites resulted in increased chromosomal aberrations in developing sole embryos and reduced hatching rates of sole eggs. These effects were associated with high concentrations of contaminants, including hydrocarbons and heavy metals.

From the foregoing, it is obvious that, given a high enough level of boating activity, there could be some negative effects on the estuarine environment or to fish stocks, particularly at the more susceptible early life stages. From here, then, we moved to a review of the available information on boating usage (fortunately, a number of data collection efforts - including the EPA initiative that has resulted in this workshop - were underway or had been recently completed and will provide a reasonably solid basis for future work).

BOATING USE LEVELS:

Going back to the early sixties (English, McDermott and Henderson, 1963), "extreme critical" boating use intensity - one that would have a significant toxic effect on fish life - was determined to be (converting their figures) at a level that used 18 gallons of fuel per acre-foot of lake volume per year. Eleven years later (Breidenback, 1974) "Saturation Boating Use" was determined for 5,100 acre Lake Geneva, Wisconsin for 600 boats with 9,000 total horsepower (300 boats with 5 hp engines used for trolling, 150 with 40 hp for water skiing and 150 with 10 hp for "boating"). When converted, their figures yielded a 15 gallon per acre-foot per year fuel use (assuming a 5 month boating season).

These can be contrasted with the current situation in Barnegat Bay, New Jersey. Barnegat Bay is fairly typical of estuaries in the Mid-Atlantic region. Having a total area of 47,000 acres, an average depth of 4.5 feet, a maximum depth of about 13 feet and 44% of its area covered by less than three feet of water, it is the site of intensive recreational boating activity for four or five months each year. There are 11,500 slips in marinas, an unknown number at private residences, dry storage for 7500 boats and 45 boat launching ramps in Barnegat Bay. Thirty percent of New Jersey's recreational boating takes place on this bay (Rogers, Golden and Halpern, 1990). Using recently derived figures for recreational boating fuel use in New Jersey commissioned by the U.S. Fish and Wildlife Service (Price Waterhouse, 1992), it can be estimated that 10,344,000 gallons of fuel was used in recreational boating on Barnegat Bay in 1990 (30% of New Jersey's total recreational boating fuel consumption of 34,481,000 gallons). This represents a usage level of 50 gallons per acre-foot per year and hasn't generated any discernible interest as being "out of the ordinary" or in any way exceptional.

What were once considered to be "worst case" levels of boating activity now appear to be regularly and significantly exceeded during normal recreational use of coastal waters.

DIRECT PHYSICAL IMPACTS:

Looking at the potential for direct physical impacts of boating activity on estuarine organisms it was assumed that the propeller of a boat in motion would impact on a volume of water - and the finfish and shellfish eggs, larvae and juveniles in it not capable of escape - equivalent to the area swept by the prop moving through the water at the speed of the vessel (while this is probably underestimating the volume - and organ-

isms - impacted considerably it is adequate for an initial approximation). A propeller 14 inches in diameter sweeps an area of approximately one square foot. At 30 miles an hour it would pass through and directly affect 3.6 acre-feet of water every hour. For comparison, an "average" base load generating station uses 150,000 cubic feet of water a minute - sixty boats worth - for condenser cooling. If all of the 19,000 boats in commercial storage (marina slip and rack) on Barnegat Bay were single screw craft capable of 30 miles an hour, a volume of water equivalent to the entire volume of the bay - 211,000 acre feet - would be completely swept by their propellers in only 3 hours of combined operation.

While not quantifiable at this time, it is hard to imagine that the impacts on affected estuarine organisms - particularly the more fragile eggs and larvae - of the propeller driving a boat at what are now accepted as normal cruising speeds aren't dramatic. They might well be of the same order of magnitude as those of the pumps and turbines in thermoelectric or hydroelectric plants. [Link to more on prop impacts for more on propeller impacts]

EMISSIONS:

Because of a lack of accessible performance data (marine engines are for the most part unregulated) the potential impact of marine engine emissions is one that is hard to get a direct handle on, at least for modern engines. Using the Price Waterhouse recreational fuel use figures previously referred to and projecting the levels of emissions reported by Breidenback in 1974 gives a dated (and we hope inflated, based on the improved performance of today's motors) measure of these emissions. Returning to Barnegat Bay, estimating that 80% of the total recreational boating fuel is used by outboard motors, and applying Breidenback's conclusion that the "average" pre-1974 motor will contribute 2.5% of its fuel to the water during most of the time it is in use would result in releases to the Bay of almost 500 tons annually. Even assuming a significant improvement in outboard engine efficiency and emission control since 1974 and a corresponding reduction in the release of condensable material ("...found to contain paraffinic, olefinic and aromatic hydrocarbons, as well as small amounts of phenols and carbonyl compounds." Breidenback, 1974) to only 1% of the total fuel input, the yearly release is still 200 tons for Barnegat Bay and 600 tons for the entire state.

POSSIBLE OBM INPUTS INTO COASTAL WATERS (and how they were estimated):

- * 11,000,000 gallons = 55,000,000 pounds = 25,000 tons/yr recreational fuel use in Barnegat Bay
- * 34,000,000 gallons = 170,000,000 pounds = 77,000 tons/yr recreational fuel use in N.J. Waters
- * 0.80 (Percentage of outboard motors in Barnegat Bay) x 25,000 tons fuel used = 20,000 tons OBM fuel used/yr in Barnegat Bay
- * 0.80 (Percentage of outboard motors in New Jersey) x 77,000 tons fuel used = 60,000 tons OBM fuel used/yr in New Jersey waters
- * 0.01 (Total hydrocarbon contribution reduced from Breidenbeck*) x 20,000 tons = 200 tons hydrocarbons into Barnegat Bay annually
- * 0.01 (Total hydrocarbon contribution reduced from Breidenbeck) x 60,000 tons = 600 tons hydrocarbons from recreational boating into New Jersey waters annually

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"The total amount of condensable material which can reasonably be expected to be condensed in a boating situation varied from about 1.5 to 7 percent of the fuel used."(pg 1, Section 1, Breidenback, 1974)

Assuming New Jersey has 1/50th of the total U.S. outboard boating activity (a conservative estimate given the length of the N.J. coastline and the abbreviated boating season here), then annual U.S. hydrocarbon inputs from OBMs could be 30,000 tons - mostly concentrated in the estuaries and near-shore waters. Total inputs of all petroleum products into the world ocean annually have been estimated to be from 1.7 to 8.8 million metric tons. The estimate for the total (worldwide) from urban runoff in 1985 was 40,000 tons and from industrial wastes was 200,000 tons. "While inputs from pleasure craft may be locally significant, we believe that the total amount of this input would not be on the same scale with the other in-puts."(Steering Committee ..., 1985). Since 1981 total oil inputs from shipping into the world's oceans declined 60% to 568,000 tons (Marine Pollution Bulletin, 1990).

While these estimates (and I hesitate to refer to them even with the level of accuracy that "estimate" implies) are nowhere near conclusive, they are an indication that, in spite of the Academy's belief to the contrary, outboard motor operation could be a major source of petroleum products released into the world's oceans, with effects focused on our own coastal waters.

TURBIDITY:

As reported by Yousef (1974), in water depths of 15 feet the operation of a 50 horsepower outboard would re suspend bottom sediments in a lake in Florida. Isolating turbidity attributable to boating activity - and its impacts - from that occurring normally or resulting from other anthropogenic activities would be difficult. However, it seems obvious that in shallow water bodies exposed to high natural inputs of silt, boating activity could play a large part in re suspending sediments and, particularly with the finest fractions, keeping them in suspension. Along with the direct contribution to increased turbidity, this could also contribute in-directly through making nutrients more readily available to the phytoplankton (Yousef et al, 1980). The role of boat traffic in increasing turbidity - and decreasing the survival of bottom vegetation - has received a great deal of attention in the United Kingdom (Garrad and Hay, 1987, Liddle, 1980 and others).

OTHER IMPACTS:

There are a several other potential negative impacts resulting from boating activities - propeller bottom scouring, leaching of toxics from bottom paints, spills during fueling operations, waste releases, etc. - that are at this point being considered and evaluated by the research community and aren't covered here.

The potential impacts that have been surveyed, however, have been ignored for the past twenty years. They are - or should be - of particular concern because any of them could be playing a significant role in the decline of one or several species that are or have been important to the inshore recreational and commercial fisheries in the Mid-Atlantic region.

The bay anchovy (*Anchoa mitchilli*), one of the primary forage fish in these waters, is an estuarine spawner from April to September that lays neutral density eggs. After hatching, the larvae migrate to the lower salinity, shallower and near-surface waters where they remain until winter approaches (Grosslem and Azarovit, 1986, Vouglitois et al, 1987). Declines in the abundance of bay anchovies is part of the impetus (declining weakfish stocks is the other) to force the construction of cooling towers at a nuclear power plant on the Delaware River. Bluefish (*Pomatomus saltatrix*) support an important commercial fishery and the largest segment of the recreational fishing industry in the Mid-Atlantic. Ocean spawners, the juvenile fish move into the estuaries in the spring and remain there until the waters begin to cool in the fall. Striped bass (*Morone saxatilis*) are important commercially and recreationally. Severe population declines attributed to lack of hatching success and/or larval survival in recent years have forced the almost complete closure of the fishery. Supposedly based on a single successful year-class, the striped bass fishery has been reopened but severely restricted for the past two years. Striped bass are estuarine spawners in the early spring, the juveniles moving into the ocean in the fall. Weakfish (*Cynoscion regalis*), summer flounder (*Paralichthys dentatus*), American oysters (*Crassostrea virginica*) and hard clams (*Mercenaria mercenaria*) as well as all dependent on the Mid-Atlantic estuaries for spawning, larval development and/or maturation during the peak of the recreational boating season and all are experiencing serious stock declines.

These species would all be in a position to suffer most acutely any negative effects of boat operation. They are in the estuaries during the peak boating period; they are there in forms - eggs, larvae or juveniles - least able to avoid or withstand physical or chemical challenges; they are generally found in the upper water levels that would receive the greatest impact of boating activity, possibly in prolonged contact with toxic substances concentrated in water surface microlayers or on constantly re suspended solids; and they are often being stressed by low oxygen levels and/or high water temperatures.

Considering the importance of maintaining the health of our inshore waters, the intensive and increasing use of these waters by recreational boaters, the increasing demands placed upon them by competing user groups, and the growing public attention directed towards the misuse - perceived or actual - of any public resource, further examination of these areas that I have briefly touched on is definitely warranted. Solely on the basis of the volume of water that they directly and violently disturb, it would seem that boating activities should receive a partial share of the scrutiny that other coastal activities must endure, at least until reasonable estimates concerning what - if any - impacts they are responsible for can be made.

In New Jersey alone the unburned residues, combustion products and generated heat from 30 million gallons of fuel are injected into our highly productive estuarine waters each year, generally at a time that is most critical to the delicate eggs, larvae and juvenile life stages of many of our important species. The impacts - if any - of this demand investigation as well.

Penalties and restrictions levied against other users of our estuarine resources for the supposed impacts of their operations on our fishery resources amount to billions of dollars each year. If these penalties and restrictions are misdirected and ineffective (and the continuing declines in many of our fisheries seem to be arguing strongly that they might be), then increasing them will be of no benefit. At the same time, continuing to ignore the effects of recreational boating - probably cumulative and possibly devastating - and allowing its continuing unfettered growth could be exacerbating a situation which could already be far beyond critical.

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The future of commercial fishing in the United States

05/26/97

Issues dealing with marine resource management and the use of our coastal and ocean waters have been receiving an increasing and long-overdue public scrutiny. Most of these issues are exceedingly complex, dealing with overlapping local, state, national and international jurisdictions, with often opposed social and economic pressures, and, most significantly, with complicated - and for the most part poorly understood - biological systems that are often influenced by factors far removed from any "local" control.

In spite of this complexity, advocates on one side or another of particular issues tend to present them in overly simplistic terms. While this is an effective method of generating support for a position, it can lead to shortsighted, narrowly focused policies that address obvious effects while ignoring the underlying causes. In this and later editions of NJ FishNet we will be discussing some of these issues and presenting them in a broader context than is usually the case.

Are the oceans being fished out?

Discussing the higher value, bottom-dwelling fish species, a publication of the Food and Agriculture Organization of the United Nations reports "*once the two major species, Alaska pollock and Atlantic cod, are excluded, landings of the remaining 403 resource items show a clear pattern of increase up to the early 1970s, followed by stability since then.*"¹ Another FAO document states "...44 percent of stocks that have been assessed are being exploited at their maximum or close to it; 25 percent are depleted." but then goes on "*aggregate data on the fishing vessels of the world show that the global fleet has started to decrease in size.*"² Clearly, some fisheries have been fished too heavily, but over-

fishing hasn't been pervasive. Fish stocks aren't in a universal state of decline and most of the major fishing nations - including the U.S. - have embarked on ambitious and effective programs to reduce fishing effort and to eliminate wasteful fishing practices.

Who owns the fish?

“Our nation's living marine resources belong to all its citizens”³

While the answer seems fairly obvious, questions of ownership of or access to living marine resources are one of the most contentious issues in fisheries management today.

The most simple - and most accurate - answer, as put by the USDOC's National Oceanic and Atmospheric Administration in the statement above, is that we all do. Common property resources including “wild” fish and shellfish are owned by the public and managed for us by appropriate government agencies or appointees. A restaurant patron in Chicago has as much ownership interest in a fish in the ocean off New Jersey as does a recreational angler who docks his expensive sport fishing yacht at a marina in Atlantic City.

Most of the “owners” of the fish and shellfish in the U.S. Exclusive Economic Zone - waters from 3 to 200 miles off our coast - aren't interested in catching their share of these fish themselves. For reasons of time, expense, access or personal preference they won't pick up a fishing pole, clam rake or crab pot and harvest their own seafood special or catch-of-the-day. (According to estimates by the National Marine Fisheries Service, only about 6% of U.S. citizens fish for sport in marine waters!) They depend on the commercial fishing industry to do it for them, and to do it for them at a price they can afford to pay.

But increasingly, members of the recreational fishing community and the yacht and tackle manufacturers it supports are pushing public policy in the direction of “gamefish” status for selected, generally highly desirable, species of fish. This designation means the only people who can use those fish are the recreational anglers who catch them or those they give them to.

The end result of this policy is exemplified by striped bass in New Jersey. Striped bass were made a de facto gamefish by the New Jersey legislature years ago for what were undoubtedly well-intentioned, conservation-related reasons. However, in recent years the striped bass stocks on the East coast have undergone such an explosive increase that they are now at near-record levels of abundance. The ocean is full of striped bass, fish that have been recognized as unparalleled on the table since colonial times, and yet not one of New Jersey's over seven million consumers can legally enjoy a meal of ocean-fresh striped bass - generally accepted as a product far superior to the farm-raised bass/perch hybrids New Jersey's consumers have been left with - unless he or she caught it with hook and line, was given it by a sportsfisherman or woman, or leaves the state to do it.

Every two or three years legislation is introduced in Washington to declare striped bass “gamefish” on the entire Atlantic coast. If passed, this would take these delicious fish off the menus of every restaurant and off the plates of every non-fishing consumer forever.

What are fish worth?

Members of the recreational fishing community are using the concept of “relative economic worth” to justify having some species designated “gamefish” and prohibiting the non-fishing public from having access to them. Their argument is that while pursuing their hobby they pay so much more on a per-fish basis to catch a fish than a commercial harvester is paid for the same fish at the dock, they are contributing much more to the economy with each fish they catch. Therefore, they argue, they should be allowed to monopolize entire species of fish or particularly productive patches of coastal water, at the expense of the commercial harvesters and, ultimately, the consumer.

A logical extension of this argument would have us all growing our own meat and vegetables and building our own houses and cars. It would certainly cost everybody a lot more, but would it represent any economic benefit?

Recreational fishing is a large and important industry, one that is critical to the well-being of many of our coastal communities. But it provides recreational opportunities - an integral part of which is a cooler of fresh fillets - not competitively priced seafood. The economic “equivalent” of a pound of fish caught on an offshore fishing trip would be a pound of fish eaten at a white tablecloth restaurant. In view of New Jersey's particularly restrictive laws, Philadelphia's widely acclaimed Striped Bass would seem a particularly appropriate example. Served with some adequate domestic wine, on a per-pound basis the fish served at the restaurant would definitely “contribute” more to the economy than the fish caught on the fishing trip, but that doesn't justify closing down the offshore recreational fisheries.

References:

¹Chronicles of Marine Fisheries Landings [1950 -1994]: trend analysis and fisheries potential, Grainger & Garcia, FAO Fisheries Technical Paper No. 359, 1996.

²Fisheries and food security issue paper, World Food Summit, 13-17 November 19.

³NOAA Fisheries Strategic Plan, USDOC/NOAA, May, 1997.

Water Quality in the New York Bight

06/25/97

The waters of the New York Bight are among the most heavily traveled in North America. Commercial shipping into and out of the ports of New York and Philadelphia, coastwise vessel traffic, over three hundred thousand recreational boats and a large commercial fishing fleet all pass through these waters. Along with this heavy vessel use, rivers that drain some of the most intensively developed areas in the U.S. pour into the Bight. And yet, in spite of all of this, the quality of the waters off New York and New Jersey has been steadily improving.

Thanks to the efforts of a thoroughly committed environmental community, to effective environmental regulations at the local, state, regional and national levels, and to a business community and an industrial base willing to make the required sacrifices, the last several years have shown marked improvements in a number of important indices of water quality.

How much have things improved? Quoting New Jersey Department of Environmental Protection Commissioner Bob Shinn, *"in early 1997, more than 600 acres of Navesink River waters were reopened for unrestricted harvesting (of clams) in one of the first successful programs of its type in the nation aimed at controlling nonpoint source pollution."* (NJDEP, Performance Partnerships for the Next Generation - Annual Report 1996). Possibly more exciting from a biological if not a culinary perspective, Dr. John Waldman at the Hudson River Foundation reports that for the last few years oysters have been found in waters - the Arthur Kill, the confluence of the Hackensack and Passaic Rivers, off the Battery - where they have been absent for decades. In Dr. Waldman's words, this is *"a very good sign"* of improving water quality. And from farther out in offshore waters, according to Dery Bennett of the American Littoral Society headquartered on Sandy Hook *"the catch of the commercial fishing fleet landed in New Jersey is delicious and wholesome. This includes the fish that we usually associate with ocean fisheries - fluke, flounder, hake, weakfish, tuna, etc. - as well as the mollusks - squid, scallops, surf clams and ocean quohogs - that are such an important part of the New Jersey industry."*

Finally, from the perspective of someone whose family has made a living on the waters of the New York Bight for generations, Ray Bogan of United Boatmen of New Jersey and New York says *"water quality and clarity in the Bight has improved over the last twenty years to the degree that the old timers feel that it is cleaner than it was back in the old days. Fin rot, an affliction that was common in the fish we caught in the Sixties and Seventies (and generally attributed to poor water quality), has all but been eliminated from our primary fishing grounds."* United Boatmen represents those fishermen on party and charter boats sailing from Northern New Jersey and Long Island ports who work in the waters in the heart of the Bight.

Does this mean that things are the way they should be in this piece of ocean that plays such a critical role in commerce, transportation and recreation in the Mid-Atlantic region? Certainly not. There are still advisories associated with heavy consumption of particular species of seafood from particular areas, and people with compromised immune systems should take the precautions they usually do. We've still got farther to go in a number of areas. But conditions have improved dramatically, and the improvements are far more significant than having bathers able to see their toes in waist-deep water for the first time in years.

Consumer Safety and Seafood Inspection

If things proceed as planned, and they most probably will because the schedule was set by the U.S. Food and Drug Administration in 21 CFR **"Safe and Sanitary Processing and Importing of Fish and Fishery Products,"** by December 18 of this year all processors of fish and fishery products must have a Hazard Analysis Critical Control Point (HACCP) [Link to FDA page on HACCP] program in place to insure that their products reach the consumer in a wholesome condition. "Fish" in the rule is virtually anything coming out of the water intended for human consumption and "Processing" is very broadly defined to include anyone doing anything to those fish from handling and storing all the way through manufacturing. If it has to do with fish or shellfish that are intended as food, it will most likely fall under these regulations.

The HACCP inspection system is one in which a processor analyzes his operation, determines all of the food safety hazards that are likely to occur to his product, and identifies points in the process where predetermined critical limits must be monitored. For the product to be in compliance these limits can't be exceeded. Unlike the more "traditional" forms of inspection where the final product is inspected for compliance with various standards, in HACCP the processes used in the production of the product are monitored. In fact, the HACCP system was designed to get away from end-product testing.

In creating a plan the processor isn't left entirely on his own. The U.S. Food and Drug Administration has published a **Hazards and Controls Guide** that provides the agency's *"...best advice on safety hazards that are reasonably likely to occur for virtually all species commercially marketed in the U.S. and for virtually all types of processing operations"* as well as *"...advice on controls available for those hazards."* (From a presentation by Philip Spiller, Director, Office of Seafood, Center for Food Safety and Applied Nutrition, U.S.F.D.A., at the Food and Drug Law Institute on December 11, 1996)

Because over half of all of the seafood consumed in the United States is imported, seafood HACCP requirements will apply to imported as well as domestic seafood. Importers will be responsible for taking steps to verify that their imports meet the U.S. HACCP requirements.

In 1993 the U.S. Department of Commerce's National Sea Grant program and the Association of Food and Drug Officials formed a National Seafood HACCP Alliance which is offering training courses across the country. In New Jersey the Regional Food and Drug Administration office, the New Jersey Department of Health and the New Jersey Sea Grant Program are offering HACCP training to industry members through a joint program of the Cape May Seafood Association and the Rutgers Cooperative Extension Fishermen's Training School. To date 45 seafood processors and 28 shellfish dealers have taken advantage of this program and courses are currently being scheduled for September and October.

What does this mean to the seafood industry? According to Robert Collette, Director of Food Regulatory Affairs at the National Fisheries Institute (in HACCP Management Manual Monthly Report, Vol. 1, No. 8, Jan. 1997) "...a well-designed and properly implemented HACCP plan provides great insight into how well a processing operation is running. This allows firms to better control the process - potentially yielding an improvement in product quality and a reduction in waste, as well as improved product safety."

And for the consumer? While seafood has consistently been demonstrably safer than other food products in the past, this new program should put any lingering concerns consumers might have about seafood products - whether from our local waters or from distant oceans - to rest.

Commercial harvesting and sportsfishing - who's catching what?

07/09/97

There's a common misperception that commercial fishermen - often referred to by the anti-commercial community as "netters" with the inference that there is something inherently immoral about harvesting fish with a net - are taking much more than their fair share of the fish. We addressed the issue of the ownership of fisheries resources several FishNet editions ago. It seems inarguable that, along with the estimated 16 million U.S. citizens who fish in our estuarine and ocean waters as a hobby, each of the two hundred and forty million U.S. citizens who don't fish also has a right to these resources. However, in the face of significant declines in some of our important fisheries, we thought it would be interesting to contrast the recreational and commercial landings in the Mid-Atlantic over the past several years.

We started out with the comprehensive records of the domestic recreational and commercial catches the U.S. Department of Commerce has made available through the National marine Fisheries Service's statistics site on the World Wide Web [Link to NMFS statistics site link to NMFS statistics site]. These records can be retrieved by time period, geographical region, harvest method, species, etc., imported into a spreadsheet or database program and subjected to various analyses.

For the purposes of this FishNet we downloaded data for the period 1990 to 1996 from the five Mid-Atlantic states (NY, NJ, DE, MD and VA) on the major warm-water species that support both recreational and commercial fisheries. We omitted species caught more-or-less exclusively by either recreational or commercial methods and we ignored species with a combined catch in the Mid-Atlantic of less than a million pounds a year. This gave us twelve species to examine. As highlighted in the quote below by the chairman of the Recreational Fishing Alliance, our list conveniently duplicated most of a listing of species that are alleged by some sportfishing advocates to be "threatened" by commercial harvesting. We graphed the total commercial landings (dotted lines) and recreational landings (solid lines) for each of the species. These graphs are on a separate page [[Link to Chart Comparison pagelink to comparisons]

"No more tuna. no more billfish, no more stripers. No more blues, sea bass, dolphin, sea trout, flounder, albacore, redfish, snook, grouper, sharks, tautog...Right now every one of these species - in fact every species of saltwater gamefish - is threatened by the predatory tactics of the politically-powerful commercial fishing groups." From a brochure produced by the Recreational Fishing Alliance, a sportsfishing organization based in New Jersey with members in a number of Mid-Atlantic and other states.

In the aggregate

Considering the amount of attention focused on perceived commercial overharvesting in recent years, we also looked at the total commercial harvest (landings) of our dozen selected species in relation to the reported recreational harvest (fish brought to the dock, used for bait or released dead) as made available by NMFS. Again, the commercial harvest is represented by the dotted line, the recreational by the solid. Bear in mind that this isn't a measure of the total recreational or commercial harvest in the Mid-Atlantic, just of those species that seem to be most controversial (Note - because of what appear to be significant discrepancies in the reported landings of Spot and Croaker in 1996, these species were omitted. These and other discrepancies, however, shouldn't detract from the overview of harvesting that is presented).

In spite of what are unquestionably some "holes" in both the recreational and the commercial data it's fairly obvious that the commercial fishermen (and the consumers they are fishing for) aren't getting the majority of all of the fish in the Mid-Atlantic and leaving the sportsmen with empty coolers.

The actual picture in the Mid-Atlantic

Of those species or species-groups that the Recreational Fishing Alliance zeroed in on in its brochure last year, twelve are common in our waters in the summer. Of the twelve, one - billfish - is reserved solely for the recreational anglers. Of those remaining, the NMFS data indicate

that six - striped bass, bluefish, sea bass, dolphin, redfish (channel bass) and tautog - have had the recreational harvest exceed the commercial for each year since 1990, three - sea trout (weakfish), albacore (we show all tuna species together) and sharks - are now being harvested at higher levels recreationally than commercially, and one - flounder (fluke and winter flounder) - shows a reasonable balance between recreational and commercial harvest.

In view of these facts it's hard to avoid asking the question "when it comes to Mid-Atlantic fishing, who's really threatening these species?"

So what's really going on?

Due to a number of factors, gauging the condition of fish stocks often presents unique scientific challenges. Management jurisdictions overlap. Fish refuse to remain within administratively convenient boundaries. Fishing efforts respond to economic or environmental conditions (notice the drop in recreational landings in 10 of the 12 species graphed in 1991 - 1992, a year when it rained on more than half of the summer weekends) as much as to the availability of fish. At this point we're only beginning to look at the interactions between different species or between species and their habitat, while declining budgets have seriously reduced fisheries managers' efforts to effectively estimate populations of fish at sea. We're increasingly reliant on fisheries dependent measures while it's becoming increasingly obvious that these may be the least reliable.

However, even granting its shortcomings, the information we have is accurate enough to show that, in spite of some "doom-and-gloom" predictions of the impacts of commercial fishing, in the Mid-Atlantic as much or more attention should be focused on the impacts of sportsfishing. Redfish and codfish are two species that have received a lot of media attention in the last several years. Redfish, also known as red drum, achieved national prominence when, as blackened redfish, they were popularized by renowned Louisiana chef Paul Prudhomme. Accompanying this prominence was increased market demand, intensified fishing pressure, declining stocks and a drive - successful in a number of states - to declare the species a "gamefish" and remove it entirely from the plates of the non-fishing public. Codfish is one of several species contributing to the so-called "collapse" of the New England groundfish fishery. While neither is a primary recreational or commercial fish in the Mid-Atlantic, each is caught in significant numbers and is popular as both recreational quarry and table fare. The commercial landing figures - again indicated by the dotted lines - are in keeping with what should be expected for declining stocks and increased conservation, but what of the recreational effort?

This isn't to imply that what's happening to codfish and redfish in our local waters is indicative of fishing for them throughout the rest of their respective ranges. However it does seem to bear out the pattern of recreational and commercial fishing in the Mid-Atlantic region. And probably in other regions as well. The important point is that any fishing activity is going to impact fish stocks. We can't afford to dismiss the impacts of recreational angling any more than we can have a management establishment unable to see beyond the nets of the commercial harvesters.

Commercial fishing and international trade

07/31/97

In spite of much rhetoric to the contrary, the United States' coastal waters are rich in fisheries resources. While stocks of New England cod, haddock and yellowtail flounder - collectively referred to as "groundfish" - are currently depressed relative to former periods of high abundance, fisheries experts believe they have been replaced by equivalent amounts of other species such as dogfish and skates. Happily, due to a combination of stringent management measures and natural population processes, the majority of the groundfish stocks are now in the process of rebuilding.

The waters off the Mid-Atlantic and New England are currently home to several millions of tons of Atlantic mackerel and herring. (Exactly how many tons is a matter of some debate. Fish populations are estimated using complex statistical manipulations that don't always enjoy universal acceptance. For purposes of scale, the total weight of all the edible fish and shellfish commercially caught in 1995 from Maine to Florida was under a million tons.) Similarly, the menhaden fishery, which has been a stable source of protein-rich fish meal, fish oil and sports fishing bait for over a century, is supported by a tremendous mass of fish ranging from the Gulf of Mexico to New England. Many other species of fish and shellfish are available at high levels of abundance.

Unfortunately, some of these species - in many instances the most common - aren't compatible with the culinary preferences of the U.S. seafood consumer. Much of the domestic seafood demand is for processed tuna, fresh or frozen shrimp and mild-tasting, white-fleshed fish like flounder, cod and striped bass. Conversely much of the international demand is for species unpopular with U.S. consumers but common and readily available to U.S. commercial harvesters in our inshore and offshore waters. These include herring, mackerel, dogfish and squid.

In recognition of this disparity between the fish available in our waters and the seafood preferences of our consumers, one of the goals of the Magnuson Act, the controlling Federal fisheries law which was enacted in 1976, was to replace the foreign catcher/processor fleets that were harvesting these high-demand (in international markets) species with U.S. boats and shore-based processing facilities. Another priority set forth in the Act was the development of foreign markets for the products the revitalized U.S. commercial fishing industry was producing (see the following page).

This was one of the more successful aspects of domestic commercial fisheries policy in the two decades following the passage of the Magnuson Act. From a primarily small-boat fleet fishing near-shore waters and for the most part supplying local or regional markets, the domestic commercial fishing industry has evolved into one employing state-of-the-art, ocean-spanning vessels providing competitively priced seafood to global markets. The positive impacts of this globalization have extended far beyond the fishermen, processors, dealers and consumers that have benefitted directly from it.

	1990	1991	1992	1993	1994	1995	1996
Total deficit (\$ millions)	103,062	67,020	84,546	115,610	151,415	160,475	168,488
Fish product imports	5,202	5,638	5,657	5,820	6,593	6,741	6,657
Fish product exports	2,299	2,463	2,171	2,722	3,440	3,443	3,599
Fish product deficit	2,904	3,175	3,486	3,099	3,153	3,298	3,059

Table of seafood imports/exports

As the table above (from the U.S.D.O.C. Web Site www.ita.doc.gov/industry/otea/otea.html - U.S. Aggregate Foreign Trade Data: Tables 23, 24 and 25) illustrates, the U.S. trade deficit ranged from \$70 billion to \$170 billion in the period from 1990 to 1996. In that time annual seafood imports exceeded exports by from \$2.2 to \$3.6 billion dollars, accounting for approximately two percent to four percent of the total deficit each year.

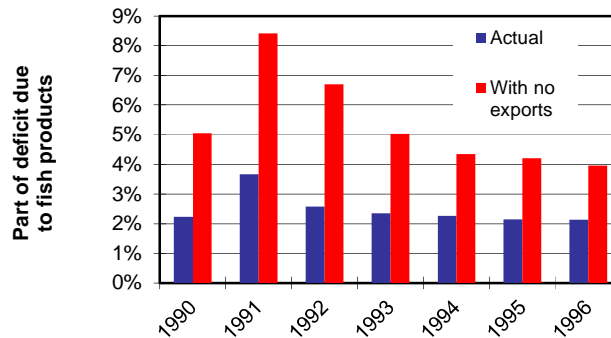
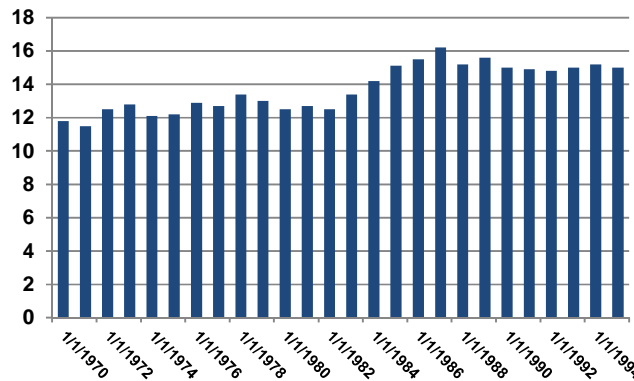


Chart of Trade Deficit due to seafood imports

The graph above contrasts the actual trade deficit due to fishery products with what that deficit would have been in the absence of any fishery exports. It illustrates how the U.S. fishing industry's increasing focus on products with strong overseas demand and increasing capability to catch, process and sell those products has had a significant impact on holding down the deficit. If it weren't for the export of fishery products in 1991, for example, the deficit would have risen from \$67 billion to over \$70 billion, an increase of four percent.

While not receiving the attention that other manufactured goods or commodities do, fishery products have a far from trivial impact on our balance of trade. The harvest of fish and shellfish from our rich coastal waters, whether to satisfy domestic demand or to supply foreign markets, is extremely important to our national economy and that importance is all too often overlooked by our policy makers and the management establishment.

U.S. Per capita seafood consumption (in pounds)



Graph of Annual U.S. Seafood Consumption

According to data provided by the National Marine Fisheries Service, the per capita consumption of seafood remained remarkably constant from 1910 to 1970. Excluding the years of the Depression and World War II, the annual figure varied between 10 and 12 pounds per person (with a single puzzling dip in 1914 to below 9 pounds).

The 1970s showed a gradual increase in consumption to above the 13 pound level. Then, starting in 1980, pushed by an upsurge in health consciousness, research demonstrating the dietary benefits of seafood consumption and the easy availability of high quality domestic seafood products, average consumption rose to above 16 pounds in 1988. It has remained around 15 pounds per person since then.

When the Congress of the United States passed the Magnuson Act in 1976, and as it has been amended since, the intent was and continues to be to maximize the benefits gained by U.S. citizens from the utilization of the living marine resources of the U.S. Exclusive Economic Zone and adjacent waters through:

- *Assuring the sustainability of the U.S. fisheries for future generations through identifying and preserving (or restoring) essential habitat and effectively managing recreational and commercial harvesting "...for the conservation and management of the fishery resources of the United States is necessary to prevent overfishing, to rebuild overfished stocks, to insure conservation, to facilitate long-term protection of essential fish habitats, and to realize the full potential of the Nation's fishery resources."*
- *Encouraging the increased recreational and commercial harvest of not fully utilized species up to their sustainable limits "...for the development of fisheries which are underutilized or not utilized by the United States fishing industry, including bottom fish off Alaska, is necessary to assure that our citizens benefit from the employment, food supply, and revenue which could be generated thereby."*
- *Encouraging the development of domestic and export markets for species not traditionally consumed in the United States, to maximize the benefit to the domestic economy and to provide much needed protein to world markets through "...both the advancement of existing and new opportunities for fisheries exports from the United States through the purchase of fishery products from United States processors, and the advancement of fisheries trade through the purchase of fish and fishery products from United States fishermen...."*

The above quotations were taken from the Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265 As amended through October 11, 1996 - J.Feder version 12/19/96)

In spite of the positive effects that the high level of fish and shellfish export activity has had on the trade deficit - and the obvious beneficial impacts of these exports on the overall economy - a handful of anti-commercial fishing groups are now actively campaigning against the harvest of fishery products from U.S. waters if those products are bound for foreign markets.

They seem to be arguing that the purpose of the Magnuson Act was to "reserve United States' fish for United States' citizens" and that exporting "our fish" is somehow counter to the public good. Our perusal of the Act hasn't shown where this is either stated or implied. In fact, as illustrated above, the Act not only allows for but actually encourages the export of fishery products.

Commercial fishing, seafood consumers and the media **08/20/97**

The cover story and an accompanying article in the current issue of TIME magazine are the latest variations on a theme that has become part of the standard repertoire of print and broadcast journalists covering environmental issues; using specific - and often misunderstood or misreported - instances of commercial harvesting to indict the entire commercial fishing industry. With phrases like "...computerized ships as large as football fields" wielding nets "...wide enough to swallow a dozen Boeing 747s" these and similar articles leave the casual reader with the impression that fisheries worldwide have been pushed to the brink of disaster by uncontrolled and rapacious commercial harvesting. While it's true that commercial overharvesting has been and still is responsible for declines in some fisheries, other factors which are usually ignored can be equally or more significant in influencing fish and shellfish populations. Unfortunately, as these TIME articles illustrate so well, fisheries facts and figures can be wielded in such a convincing manner that it's virtually impossible for the casual reader to not buy into the "blame it on overfishing" arguments. While "as large as football fields" might be a somewhat dimensionally inelegant term, it sure feels like it's bigger than any fishing vessel ought to be. Yet in the Alaskan and other fisheries that these 300' vessels are a part of, as large as a football field might well be the optimum size - for the owners, for the crew, and for the consumer. Then consider the seemingly pejorative use of "computerized." In these days of \$20,000 computerized automobiles, \$400 computerized washing machines and \$23 computerized cyberpets, should we expect a fishing vessel that costs millions of dollars and is the only thing separating several dozen crew members from hundreds of miles of very cold, very inhospitable water to not be computerized? Evidently we should, because that's the feeling we're left with after finishing the paragraph.

A little farther on in the article we find "In 1993...shrimp trawlers in the Gulf of Mexico caught and threw away an estimated 34 million red snappers, including many juveniles." Thirty-four million is a lot of fish. It's a lot of anything. But let's look at it from a slightly different perspective. Assuming the author is referring to the bycatch of the U.S. shrimp fleet in state and federal Gulf waters, and assuming those vessels are fishing in waters extending from shore out to ten miles, those 34 million fish were taken from about 9 million acres of water. This is less than four red snapper from each acre of water fished. This doesn't seem like quite as many fish, nor does it seem like a level of removal likely to do serious harm to the fishery.

The obvious assumption is that those 34 million fish, if they hadn't been discarded as bycatch, would have matured into commercially marketable or recreationally catchable fish, significantly increasing the Gulf's annual harvest of 3 million red snapper. As any somewhat advanced biology student will attest, that isn't quite how it works.

Most of the fish and shellfish utilized by seafood consumers and sports fishermen, including red snapper, produce eggs far in excess of those that would be needed under ideal (high-survival) circumstances to keep the species going. This is because the mortality levels in the estuarine/ocean environments for the eggs, the larvae, the fry and the juveniles of those fish and shellfish are truly staggering. While a large codfish might release several millions of eggs each year, if everything works the way it should on the average just two of those eggs will become mature cod. Ditto for oysters, ditto for starfish and ditto for red snapper. While it is a gross ecological oversimplification, it's not too far off to say the Gulf of Mexico is going to produce just about as many mature red snapper as it is able to support biologically. The rest, the excess production, are going to get eaten, get killed by the toxins from a red tide, get chewed up by the impellers of personal watercraft, get caught by other fisherman, or become bycatch in a shrimp trawl.

This isn't to say that unnecessary bycatch is acceptable in the shrimp fishery or in any other. It isn't, and a lot of research is going into the development of devices that will reduce bycatch while still allowing the fishermen to produce competitively priced seafood to meet an ever-increasing worldwide demand. But when bycatch is considered, it seems reasonable to consider it in the context of its actual biological and/or economic impacts. What proportion of the 34 million Gulf red snapper would otherwise reach maturity? Would a decrease in the amount of shrimp bycatch result in an increase in the recreational or commercial red snapper harvest? The answers to these questions are critical to the health of the Gulf ecosystem, to the survival of the thousands of families that depend on the shrimp fishery and to the gustatory pleasures of millions of seafood consumers. But they aren't getting asked, let alone answered.

In a similar vein, the August 13 Philadelphia Inquirer ran on the op-ed page an article titled "Swordfish technique depletes the swordfish population" written by Joshua Reichert, Environment Program Director of the Pew Charitable Trusts (similar articles by Mr. Reichert have appeared in other publications as well). A trip to your local fish market will show how important swordfish, which are harvested primarily by longline-equipped vessels, have become to the seafood consuming public.

Mr. Reichert reviews the various swordfish management measures imposed by both the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the National Marine Fisheries Service here in the U.S. These measures include minimum fish sizes, closed seasons, strict quotas and limits on the number of vessels allowed in the fishery. He continues "*The root problem is not only the size of the quota, the length of the season, or the number of vessels involved. It is how the fish are caught*" followed by what is becoming a standard litany of anti-longlining arguments. He then finishes with the statement "*Use of long-lines must be barred*" and calls for a swordfish fishery limited to rod-and-reel fishing and harpooning.

A response to a previous print assault of Mr. Reichert's on longlining was written by Niels Moore, National Coordinator for Seafood for America, and Nelson Beideman, Executive Director of Blue Water Fishermen's Association. Among the points they make:

- Pew also misses the mark when it claims that the root problem is HOW the fish are caught rather than how MANY are caught! In fact, fishery conservation is about the number of fish harvested, not about by whom, or how, they are harvested.
- The allowable U.S. catch of swordfish has been cut by more than 50 percent since 1989.
- Swordfish migrate throughout the Atlantic and are harvested in the waters of many nations. Many of the key nations in the fishery have agreed to the catch quotas of ICCAT, which has recommended that member nations like the United States stop importing swordfish from those nations that don't abide by the quotas. "The American fishermen who make their living catching swordfish...have asked U.S. officials to implement ICCAT's recommendations and prevent swordfish imports from those nations violating international catch limits. Pew's failure to help in this effort, or even mention the international aspect of the fishery in its column, is disappointing."

We have been grossly neglecting our coastal and ocean ecosystems for the greatest part of this century, and for most of that time the voices of commercial fishermen have been among the few raised in protest. Now that the results of that neglect are becoming obvious to the rest of the world, it seems tragically ironic that members of the mainstream media and the environmental community have decided to make those same fishermen scapegoats.

(One of Pew's other ventures into the world of fish and fishing is SeaWeb. In its own words "*SeaWeb is a multimedia public education project designed to raise awareness of the world ocean and the life within it. We aim to provide information and opinion from a broad spectrum of sources to help us all become more connected and involved in the life of the sea. SeaWeb's approach is objective but not neutral - our bias is to protect the living ocean.*" Sylvia Earle is currently the "voice for the oceans" for SeaWeb. Ms. Earle, in a New York Times Magazine profile back on June 23, 1991, referred to fish as "*our fellow citizens with scales and fins*" and was quoted as saying during dinner at a seafood restaurant "*I never eat anyone I know personally,...I wouldn't eat a grouper any more than I'd eat a cocker spaniel. They're so good-natured, so curious. You know, fish are sensitive, they have personalities, they hurt when they're wounded....*" SeaWeb's WWW address is <http://www.seaweb.org/>)

Is “managing fishing” the same as “managing fish?”

07/27/97

In the last decade or so we've become adept at managing fishing effort, at least commercial fishing effort. As we've discussed in previous editions of FishNet, commercial fishermen are told in which fisheries they can fish, when they can fish, how they can fish, what gear they can use, how many fish of what size they can catch, what they can't catch, and where and in what form they can sell what they do catch. Disregarding these management measures results in fines commonly amounting to tens of thousands and ranging up to millions of dollars and may even result in permanent expulsion from commercial fishing. Needless to say, industry members take management imposed restrictions very seriously and total landings in virtually every commercial fishery have dropped significantly in recent years.

However, in spite of increasingly restrictive commercial regulations and in the face of severely reduced commercial harvest levels, the conventional wisdom is that in most of our fisheries things are getting worse and that in the remainder improvement isn't happening rapidly enough. According to the “blame it on overfishing” philosophy clung to by the management establishment and generally embraced by the mass media and the environmental community, as we are getting better at managing fishing we are getting worse at managing fisheries. Predictably, this results in pressure for even more stringent regulations. But is this the appropriate response? If fishing mortality is among the dominant factors influencing the abundance of a particular species then it definitely is. But what if fishing mortality is insignificant in comparison to other factors impacting on a fishery? Consider the following:

“Canada’s Fisheries Resource Conservation Council, in recommending a commercial cod fishery of 22,000 metric tons in the waters off Atlantic Canada in 1997 estimated that ...5 million harp seals live in the waters surrounding Newfoundland and Labrador and that they consume about 140,000 tonnes of cod each year.” (From a Reuters article written by Gavin Will on October 24, 1996)

“...Over 75% of commercial fish depend on the habitat of estuaries....Chesapeake Bay - 90% of sea grass meadows were destroyed by 1990; in 30 years (1959-89), oyster harvest fell from 32 million pounds to 4 million....Hudson-Raritan Estuary - 75% of original tidal marshes are destroyed in both New York and New Jersey....North Carolina Estuaries - North Carolina lost more wetlands than any other state from 1973 to 1983, and most of the loss continues to be in the coastal plain....” [From the Restore America’s Estuaries website]

“Imagine a city as big as New York suddenly grafted onto North Carolina’s Coastal Plain. Double it. Now imagine that this city has no sewage treatment plants. All the wastes from 15 million inhabitants are simply flushed into open pits and sprayed onto fields. Turn those humans into hogs, and you don't have to imagine at all. It's already here. A vast city of swine has risen practically overnight in the counties east of Interstate 95. It's a megalopolis of 7 million animals that live in metal confinement barns and produce two to four times as much waste, per hog, as the average human.” (From a series in the Raleigh News & Observer on the North Carolina hog industry²)

*“The two-stroke motor, found on 75% of all boats and personal watercraft, causes 1.1 billion pounds of hydrocarbon emissions per year. These high emissions are attributed to the design inefficiency of the two-stroke motor....Twenty-five percent of the fuel and required oil that conventional two-strokes use, most of it unburned, is emitted directly into the water and air.** (According to the USFWS 34 million gallons of fuel were used by recreational boaters in New Jersey waters in 19913) *In the US, approximately 75% of all motorized boats and personal watercraft (or 14 million units) are powered by two-stroke engines.** Every year marine two-stroke motors spill 15 times more oil and fuel into waterways than did the Exxon Valdez.*** The EPA estimates that one hour of operation by a 70-horsepower two-stroke motor emits the same amount of hydrocarbon pollution as driving 5,000 miles in a modern automobile.*****

Sources * National Marine Manufacturers Association. ** Andre Mele, *Polluting for Pleasure*, Norton, New York, 1993; also, EPA, *ibid.* *** Eric Nelson, "Polluting for Pleasure?", *Sail Magazine*, November 1994, 26. **** From conversations with William Charmley, Technical Specialist, EPA Office of Non-Road Emissions, Ann Arbor, MI, 1996." [From the Bluewater Network website 4Link to the Bluewater Network website]

“The researchers say rapid wasting disease, so named because it can spread several inches across a coral head in a single day, is all over the reefs of Bonaire and since January has been spotted in Mexico, Aruba, Curacao, Trinidad, Tobago, Grenada and St. John’s in the Virgin Islands, an area spanning 2,000 miles. But more alarming than the spread of rapid wasting disease is the fact that it is only one among many mysterious new diseases that have been discovered attacking corals around the world. In what they are describing as an epidemic, researchers say that in the last few years corals, some centuries old, from the Florida Keys through the Caribbean to places as distant as the Philippines, are quickly succumbing to diseases never before seen. Unlike the many other stresses on corals with which scientists and the public have become quite familiar, including bleaching, sedimentation, pollution and rising sea temperatures, the rash of new diseases has taken researchers by surprise.” (From the New York Times⁵)

One might easily imagine any of these phenomena having dramatic impacts on fish or shellfish availability. And the listing certainly isn't exhaustive. How about the effects of El Nino? The "killer" dinoflagellate *Pfiesteria* (check the North Carolina State University "*Pfiesteria*" website [Link to North Carolina State University *Pfiesteria* website](#)]? Ocean temperature increases altering migratory patterns or reproductive cycles? Inter-species competition? There's a lot going on in our oceans and estuaries that could easily have as much or more impact on the abundance of particular species as fishing, but discussions of fishery management never seem to get beyond the effects of fishing and how to reduce them. Why?

In *The Evolution of National Wildlife Law*⁶ Michael Bean goes back to feudal Europe. Drawing from Blackstone's Commentaries, Mr. Bean makes the point early in his report that the purpose of game regulation in feudal Europe was to keep the kings and barons in their castles and the peasants (Blackstone's "rustici") in their hovels. The focus was obviously on controlling fishing and hunting activities and the objective was to manage the fishermen and hunters, not the fish, not the game and not the habitat that supported them. Since then, while we've gotten away from the concept of maintaining the political status quo by restricting hunting or fishing privileges, we still heartily embrace the tradition of managing fishermen and hunters. Maybe we embrace it too heartily.

There is a full spectrum of factors, both anthropogenic and natural, that interact to determine the abundance of particular species of fish or shellfish in particular areas at particular times. Among the most obvious are water quality, habitat availability, predation mortality, fishing mortality, prey availability, spawning success, water temperature, currents, competition from other species, diseases and parasites. The only one of these capable of control by fisheries managers is fishing. It shouldn't be any surprise, therefore, to see the almost total reliance by today's fisheries managers on controlling fishing. There isn't really much else they can control. But what is the overall impact of their understandably constrained focus on fishing mortality?

Fisheries in which fishing mortality is a critical or a major factor unquestionably need some level of fishing control. The fish, the harvesters and, ultimately, the consumers will benefit from an investment in sustainably managing these fisheries. In fisheries in which fishing mortality plays a minor or insignificant part, however, controlling fishing will be at best an exercise in futility and at worst an expensive diversion, drawing much-needed attention away from the actual causes of stock declines.

If we accept the fact that at this point (recent amendments to the Magnuson - Stevens Act should give greater prominence to critical habitat issues in the future) our management system can only deal effectively with controlling fishing mortality, what should we be doing differently? Determining the relative impact of both recreational and commercial fishing on each fishery being managed would be a logical starting point. This would allow us to commit our limited management resources to those fisheries where they would do the most good. It would also focus some much needed attention on those non-fishing impacts, only a few of which are detailed above, that have almost completely escaped public scrutiny up until now.

References:

- ¹ Restore America's Estuaries site.
- ² Joby Warrick and Pat Stith, *Boss Hog* 1, February 19, 1995.
- ³ Price Waterhouse, National Recreational Boating Survey - Final Report, June 30, 1992
- ⁴ Blue Water Network site.
- ⁵ Carol Kaesuk Yoon, *Mysterious New Diseases Devastate Coral Reefs*, August 19, 1997.
- ⁶ by the Environmental Law Institute for the Council on Environmental Quality, GPO Stock# 041-011-00033-5, 1977)

Fishing impacts: How much is too much?

09/14/97

An increasing amount of attention is being directed towards the effects of various seafood harvesting techniques on the estuarine and oceanic environments. In the capture fisheries the primary focus is on the impacts of mobile gear - trawls or dredges that are pulled behind the fishing boats - on the bottom. Responding to this growing interest, a one day workshop **Effects of Fishing Gear on the Sea Floor** was organized by the Massachusetts Institute of Technology Sea Grant College Program and the Conservation Law Foundation. The workshop was well attended by commercial fishing industry representatives, researchers, fisheries managers and members of the environmental community.

Interestingly, one of the early presentations at the workshop included a transparency that illustrated the prevailing Japanese perspective on producing fish and shellfish in coastal and ocean waters. In Japan, engineered structures and biological manipulations are routinely used to maximize the production of particular species in selected areas. Cage culture of fish, raft and rope culture of shellfish and algae, fish aggregating devices on the surface, and poured concrete habitats on the bottom are all employed to exceed natural limitations on production and harvest.

This perspective represents one end of the "food from the sea" spectrum: an integrated seafood production system that yields a greater economic return, but does so at the expense of the "natural" ecosystem.

Building reefs or disposing trash?

When it comes to enhancing the productivity of the ocean bottom we in the United States are somewhat behind the Japanese. To date the only materials that have been used widely for such purposes in our coastal waters are discarded wastes like demolition rubble, worn-out tires and surplus weaponry “donated” by the Pentagon to create what are somewhat euphemistically called artificial reefs.

The other end of the spectrum was illustrated by the views of some of the participants in the MIT Sea Grant/CLF conference. From their comments, it was obvious they felt that any significant disturbance caused by bottom tending commercial fishing gear or other commercial fishing activities was unacceptable, regardless of the effect it had on increasing the harvest or improving the efficiency of harvest of the targeted species.

There are always individuals and organizations that will staunchly defend what they see as the natural order and oppose any activities that interfere with it. Dealing with them has become a part of doing business for many industries and often we are better off because of their efforts. In the case of fisheries, however, their ideal of “no impact” fishing seems to be increasingly — and possibly purposefully — confused with the popular though somewhat vague concept of “sustainable” fishing. Anything even hinting at further development or increased efficiency in the world’s fisheries is automatically and strenuously opposed.

Impacts unavoidable

Since that time in history that fishing moved beyond the subsistence level unintended mortalities, bottom disturbance, and interference with the behavior of non-targeted species have been the norm. In fact, it’s hard to imagine any cost-effective commercial fishing methods — those allowing a harvest much beyond the personal needs of those doing the fishing — that wouldn’t involve some sort of ecological disturbance. Commercial fishing, after all, is about removing fish from their natural habitat, and that is bound to have some effect on the assemblage of organisms left behind.

Is this inherently wrong? One of the characteristics that differentiates *Homo sapiens* from the rest of the animal world is our ability to manipulate our environment. This ability, coupled with several millions of years of evolution and several thousands of years of agricultural development, is what allows us to produce enough food in the US to support several hundreds of millions of people. Particularly to the point, considering the present situation in Korea, where would we be without it?

Agricultural parallels

But how much of a parallel can we, or should we, draw between food production on the land and food production in the sea? The movement to high-intensity agriculture that began with the so-called “green revolution” a few decades back has had some dramatic and originally unforeseen consequences that we would probably have been better off without.

But without getting involved in a “chicken or egg” discussion of modern agriculture and overpopulation, because of our ability to modify and manipulate the terrestrial ecosystem for food production we have been able to keep up with a too rapidly expanding population in many - but tragically not all - of the countries where an adequate diet isn’t taken for granted. While there have been occasional and sometimes dramatic missteps, overall this surely can’t be considered in a negative light by any but a small handful of environmental zealots.

Viewing the ocean

In view of our growing worldwide protein requirements, should this same philosophy apply to the three quarters of the earth that is covered by water? Should we be looking at our coastal waters or the open ocean as a potential source of far greater amounts of much needed protein than they are supplying today, given “proper” management and development? Or should we be devoting even more effort to maintaining what we decide is the natural balance at the cost of decreased total production?

While it is possible to harvest fish or shellfish with no or minimal impacts on the ocean ecosystem, doing so would be a lot closer to subsistence fishing than to carrying out economically viable business operations. From a global or even national perspective, is this the wisest and best use of our coastal and oceanic resources?

There aren’t any clear-cut answers, or even the beginnings of any, here. First off, we don’t know nearly enough about the particular impacts of fishing activities — let alone the indirect effects of those impacts on the ocean ecosystem — to begin to predict what we might be doing. This was made abundantly clear at the “Effects of Fishing Gear on the Sea Floor” workshop and the organizers should be complemented on their conclusion that more research is sorely needed.

Secondly, we don’t have a public policy-making framework in place that would allow a rational consideration of the benefits to be gained or the costs incurred by major, or even minor, alterations of selected portions of the ocean ecosystem.

Today narrowly-focused political pressure is driving the decision making process that will determine the future direction of the utilization of our oceans for protein production. This is obviously not the way to force the objective consideration of what are exceedingly complex yet increasingly important issues by representatives of all of the involved stakeholders.

Rather, we need an ambitious research program that is designed to evaluate fishing and production enhancement techniques not only in terms of their capacity to alter the ocean environment, but also in terms of their ability to efficiently provide fish or shellfish. We need the ability to model the direct and the indirect impacts of these alterations, and we need a political process that allows balanced decisions to be made accordingly. If the predictions of coming protein shortages are close to accurate, we can't afford to do anything less.

In the meantime, our public policies should reflect a much needed conservatism from a food production as well as an environmental perspective. They should also acknowledge the fact that many of the world's coastal nations might be coming at this issue from a direction more closely aligned with the Japanese perspective. Being committed to fuller utilization rather than preservation in their own waters, they can probably be expected to exert increasing geopolitical pressure to establish international policies reflecting their philosophy.

For all intents and purposes, our ability to control fish and shellfish production and harvesting begins at our coastline and ends at an artificial boundary two hundred miles farther out. This boundary doesn't have much of an impact on those fish and shellfish, and what goes on in waters adjacent to or offshore of our EEZ (or on the other side of the ocean) could affect them. We shouldn't be putting our fishing industry, our consumers, our balance of trade or our fisheries resources in jeopardy because we assume the world's oceans begin and end with our EEZ. Until now, far too much of our fisheries policy has done just that.

(This was modified from an article originally published in the July, 1997 issue of Commercial Fisheries News and is used here with the permission of the editor)

Who deserves the fish - myth and reality

09/28/97

On January 7 of this year New Jersey Congressman Frank Pallone once again introduced legislation "*to prohibit the commercial harvesting of Atlantic striped bass in the coastal waters and the exclusive economic zone.*" The Bill (HR 393) would make it "*unlawful to engage in, or to attempt to engage in*" such harvesting. Assuming that he is representing far more seafood consumers than sportsfishermen and women, we are sure that Congressman Pallone and the Bill's several cosponsors have been convinced that this legislation will in some way help to conserve the Atlantic striped bass stocks and/or provide an economic boost to coastal communities in their districts. But will it? Let's examine some of the arguments put forth by those who advocate so-called Gamefish status and a ban on commercial harvesting and sale of striped bass (or any other species).

Status of Atlantic coast striped bass stocks

In testimony presented at a hearing convened by the House Committee on Resources' Subcommittee on Fisheries Conservation, Wildlife, and Oceans on September 11, 1997, Rolland Schmitt, head of the National Marine Fisheries Service, stated that there were more striped bass available in East Coast waters than there have been at any time since monitoring of the species began.

Myth: The only way to conserve a fishery is to restrict commercial harvesting. **Reality:** From a conservation perspective it doesn't matter whether a fish is killed by a recreational or a commercial fisherman. Dead is dead. What matters is controlling the number and size of the fish that are killed. The commercial harvest, as well as the charter/party boat harvest, can be effectively and precisely controlled. The number of participants can be regulated and what they catch can be accurately monitored. The size selectivity of their fishing gear is the basis for many commercial fishing regulations and is an accepted method of controlling the size of the fish harvested. With no controls whatsoever on the number of people allowed to catch fish recreationally, the mortality by sportsfishermen and women can't be as easily monitored or controlled. Individual catch limits are obviously meaningless when the number of people catching the fish isn't limited. The "catch and release" style of fishing that is touted as one of the primary conservation measures by the recreational fishing industry can result in the death of up to one-third or more of all of the fish being released and the highest release mortality levels are usually associated with smaller, pre-spawning fish. Controlling fishing mortality is one of the more effective tools available in fishery management. It's hard to see any conservation benefit in banning the easily and effectively regulated commercial harvest while allowing the difficult if not impossible to regulate recreational fishery to continue with no limits on how many people can fish.

Myth: Commercial fishermen take more than their share of fishery resources that belong to everyone. **Reality:** Much of the "Make them gamefish" rhetoric focuses on misidentifying commercial fishermen as consumers, ignoring the fact that they are really just the first link in a chain that, whether ending in seafood markets or restaurants, is the only way that 240 million U.S. citizens can benefit from the harvest of our coastal waters. Commercial fishermen allow those consumers who don't wish or can't afford to catch their own fish to have access to public resources that the government is supposed to be managing for everyone. While those few sportsfishermen and women who are trying to turn our coastal waters into their own private playgrounds would like you to think otherwise, it is

they who want exclusive rights to entire, and usually highly regarded on the table, species like striped bass and it is they who are actively campaigning to keep the non-fishing public from enjoying them.

Myth: Striped bass caught by recreational fishermen contribute more to the economy than those that are commercially harvested. Reality: This continues to be one of the rallying points of the anti-commercial fishing, anti-seafood consumer groups campaigning to appropriate entire species for their own exclusive use. They are trying to sell the idea that the recreational fishing industry is dependent on sportsfishermen being able to pursue their quarry without competition from or interference by crass commercial fishermen who are, after all, only catching fish to provide to consumers at a reasonable price. A fresh tuna entree served at a four star restaurant contributes significantly more per pound to the economy than the same fish would if caught on an offshore trip from a half a million dollar sportsfishing yacht.

Of fish and tomatoes

The average amateur gardener probably grows tomatoes in his backyard for something in the neighborhood of \$5.00 per pound. But if the backyard was in Princeton or another upscale suburb, if the use of the property and the cost of the Mercedes used to drive to the garden supply store were factored in, if the gardener was particularly inept at tomato growing and if the accounting were creative enough, tomato production costs could skyrocket to hundreds of dollars per pound. Would this justify legislation banning the efficient commercial production of tomatoes because every pound grown in backyards contributed so much more to the economy than those grown by real farmers and sold in markets at prices any consumer could afford? Would it justify legislation mandating that anyone wishing to enjoy a tomato would have to produce it inefficiently in his or her backyard?

Probably not, but a small handful of sportsfishermen (the fishing equivalent of the backyard gardener), and some of the businesses that are dependent on their infinitely more expensive hobby, are trying to convince us that the economic value of their product, fish caught for fun, is greater than that of commercially caught fish simply because they cost so much more to catch. If there is any logic there, it probably escapes the millions of consumers who benefit from the efforts of the commercial fishing industry to keep costs down so they may enjoy competitively priced, domestically produced seafood.

Myth: Aquacultured striped bass can more than compensate the consumers who would be forced to give up their right to naturally harvested fish. Reality: Real striped bass, a fish that was put out of the reach of virtually every non-fishing New Jersey consumer by the State Legislature several years ago, are not being cultured in commercial quantities anywhere. White bass/striped bass hybrids are being raised in limited numbers in several locations. Advertising claims for these hybrids to the contrary, A.J. McClane, noted sportsfishing author and expert on seafood cookery, states in his **The Encyclopedia of Fish Cookery** "*landlocked populations of striped bass ... (are) inferior to a prime fish taken from saltwater.*" While the farming of a number of species of fish and shellfish has fully matured, for many others, including non-hybridized striped bass, it hasn't yet lived up to its promise (And when it does it's doubtful that it will be able to provide the variety and the quality of fresh seafood that commercial fishermen have been supplying to consumers for generations).

In his section on striped bass McClane quotes from New England's Prospects written by William Wood in 1634 "The Basse is one of the best fishes in the Countrey, and though men are soone wearied with other fishe, yet are they never with Basse." After three and a half centuries striped bass are still counted among the most delectable East coast species. Should the unparalleled experience of dining on ocean-fresh striped bass be reserved for those few thousands of sportsfishermen and women who can afford to catch one themselves, or should they be available in restaurants and seafood markets for everyone to enjoy? It isn't a question of fisheries conservation. It's a question of who has a right to enjoy a natural resource that belongs to us all.

Who is catching striped bass?

In 1995, the striped bass harvest by commercial fishermen was 3,072,334 lbs. In 1996 it increased 34% to 4,130,156 lbs. In 1995, the striped bass harvest by recreational fishermen was 8,364,949 lbs. In 1996 it increased 30% to 10,884,772 lbs. (Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division)

Is this an argument against sportsfishing? It definitely isn't. Sportsfishing is a large and important industry in many of our coastal communities. It is, however, a refutation to the anti-commercial fishing, anti-seafood consuming arguments, hidden behind the banner of "conservation," that some sportsfishing groups are using in attempts to reserve entire species of fish for their own personal use that should belong to everyone.

***Pfiesteria* - Killer Algae or Killer Media Opportunity?**

10/16/97

There has been a recent media onslaught centered on a microscopic, unicellular organism - technically a dinoflagellate - named *Pfiesteria piscicida*. This organism, proven to have caused a number of fish kills in the Chesapeake region and a complex of physical disorders in researchers and technicians working on it, is responsible for a multi-state task force, for a significant decrease in seafood sales affecting much of the Mid-

Atlantic, for a number of “*Pfiesteria*” hotlines, for a tremendous amount of public concern, for several television “specials” and for seemingly countless words giving particular, and possibly self-serving, spins to what is at this point a relatively meager amount of hard data.

Much, if not most, of the information on *Pfiesteria* is available through the World Wide Web. A simple Alta Vista [Link to Alta Vista search page] search for “*Pfiesteria*” yielded over 900 hits. This internet activity illustrates some of the most positive as well as negative aspects of the Web. On one hand, factual and up-to-the-minute research findings are available at the “official” sites (visit those referenced here). On the other, some sites are using the interest in *Pfiesteria* to contribute further to what has already been termed “*Pfiesteria hysteria*.”

What is known for sure about *Pfiesteria piscicida*? It is a single-celled organism, a dinoflagellate, with the complicated life cycle characteristic of the group. Two dozen distinct life stages, including flagellated, amoeboid and encysted, have been identified. It’s not a “new” organism. Research by the U.S. Geological Survey has shown that it has been present in Chesapeake Bay and its tributaries for at least 3,000 years (From the Infobeat/Reuters email news service - www.infobeat.com -10/08/97 - *Pfiesteria* goes back thousands of years).

Pfiesteria-related illnesses have been documented among researchers (particularly Dr. Joann Burkholder, the North Carolina State University researcher who has done much of the pioneering work on the organism, and her colleagues) coming in close, day-to-day contact with the organism. Whether any illnesses can be attributed to people coming in contact with the organism outside the laboratory has yet to be determined [From the University of North Carolina website Link to the *Pfiesteria* page at University of North Carolina website].

While there has been a detectable decline in consumer confidence in locally produced seafood in the Mid-Atlantic, there has not been any indication that consuming fish or shellfish from “infected” waters is deleterious to human health. Quoting from a September 19 press release from the National Fisheries Institute, a trade association representing over 1000 companies involved in all aspects of the seafood industry, “*Pfiesteria is not an infectious or contagious disease - it cannot be caught like a cold. There is no evidence that it can be passed along in the food chain, or passed from fish to human....No cases of seafood poisoning have been reported from eating fish exposed to Pfiesteria. Nor has there been evidence of tainted shellfish, oysters or crabs on the market.*”

There has been a great deal of speculation that nutrient enrichment of the waterways, possibly from agricultural run-off, is causing the *Pfiesteria* blooms. This has not been proven either. (from the American Farm Bureau website).

As mentioned above, the governors of Pennsylvania, Delaware, Maryland, Virginia, West Virginia and North Carolina have formed a Task Force to provide a coordinated *Pfiesteria* research program (Six states join *Pfiesteria* summit, UPI Science News - Yahoo News - Link to UPI Science News - Yahoo News- 9/19/97). Several federal agencies, including the Geological Survey, the National Marine Fisheries Service, the U.S. Department of Agriculture and the Environmental Protection Agency have also been involved. A number of universities and research institutions have initiated aggressive *Pfiesteria* research programs and several millions of dollars have been made available to support this vital research effort.

Finally, there has been a well-coordinated and effective outreach program coming from a number of institutions and agencies providing authoritative and timely information on *Pfiesteria*. Collectively they are invaluable in gaining an understanding of an extremely complex, but by no means catastrophic, situation.

Pfiesteria is a pretty gruesome organism, but is it uniquely gruesome?

When particular aspects of *Pfiesteria*’s life cycle are presented in the popular press, or even in the technical literature, they can appear to be the stuff that horror movies are made of. For example:

“Pfiesteria piscicida has a complex life cycle that includes at least 24 flagellated, amoeboid, and encysted stages or forms. Both flagellated and amoeboid forms are known to be toxic to fish...the cyst (dormant) stages...commonly occur among the bottom muds of North Carolina’s estuaries. Amoeboid stages can be found in the water column as well as among the bottom sediments; they feed on other organisms (bacteria, algae, small animals) or on bits of fish tissues by engulfing their prey. Flagellated stages...can also engulf similar prey, but more often they feed, instead, by attaching to prey cells using a cellular extension called a peduncle and suctioning the prey contents.

Pfiesteria often makes its living as a nontoxic predatory animal, becoming toxic when it detects enough of an ephemeral substance that live fish excrete or secrete into the surrounding water. When fish (e.g., a large school of oily fish such as Atlantic menhaden) swim into an area and linger to feed, their excreta triggers encysted cells to emerge and become toxic. Active amoeboid and flagellated cells which are present also become toxic in the presence of the fish excreta. The small cells swim toward the fish prey and, in turn, excrete potent toxins into the water which make the fish lethargic so that they tend to remain in the area. The toxins also injure the fish skin so that they lose their ability to maintain their internal salt balance. As the skin is destroyed, open bleeding sores and hemorrhaging often occurs. Once fish are incapacitated, Pfiesteria feeds on the sloughed epidermal tissue, blood, and other substances that leak from the sores. When the fish are dead, flagellated stages transform to amoeboid stages and feed on the fish remains or, alternatively, if conditions become unfavorable (e.g., sudden storm), Pfiesteria cells make protective outer coverings and sink out of the water col-

umn as dormant cyst stages. All of these changes can take place in a matter of hours.” (from the NCSU Aquatic Botany laboratory Pfiesteria piscicida homepage Link to NCSU Pfiesteria site)

But compare this to the following description of the life cycle of the parasite *Sacculina*, a member of the order of crustaceans called barnacles that are usually found growing on rocks or boat bottoms delicately sifting small organisms out of the water with their feathery appendages. (The words in parantheses were added for clarity).

“The Sacculina cypris larvae swims about for a time, eventually attaching to a suitable crab. It undergoes a dramatic metamorphosis, in which the whole trunk is discarded and a cuticular tube is formed, through which the remains of the larva gain entrance to the host (crab) body. The parasite is little more than a mass of undifferentiated cells at this stage. It migrates through the host haemocoel (body cavity) and attaches to the intestine. Root-like processes grow out, eventually extending to all parts of the (host crab’s) body while the central mass below the intestine is developing into the mantle and visceral mass of the parasite....at the next molt the central mass (of the parasite) pops out of the host (crab’s) body and hangs down from the external surface, thus becoming an ectoparasite, but with an extensive system of internal roots (remaining in the host crab). For some reason, Sacculina inhibits the host reproductive system, causing the phenomenon of parasitic castration.” (Invertebrate Zoology, Paul A. Meglitsch, 1967, Oxford University Press)

Compared to *Sacculina* (which, we emphasize, has absolutely no effect on the quality or the wholesomeness of crabs coming to market), *Pfiesteria* doesn’t seem quite so horrible or quite so unique. The world out there is filled with little beasts that, were we more familiar with them, would provide us with enough inspiration for a lifetime of bad dreams.

Boating impacts - Just fun on the water?

11/05/97

In the 1963 article **Pollutional Effects of Outboard Motor Exhausts - Laboratory Studies** published in the Journal of the Water Pollution Control Federation, a water body was considered to be at an "extreme critical" boating level, one showing significant toxic effects on fish life, if the boats on it burned 18 gallons of fuel per acre-foot of water (about a third of a million gallons) per year.

Eleven years later in a study funded by the U.S. Environmental Protection Agency and contracted to the recreational boating industry titled **Analysis of Pollution from Marine Engines and Effects on Environment** the saturation boating use level determined for Lake Geneva, Wisconsin was reached when boating fuel use reached 15 gallons/acre-foot/year.

Today in Barnegat Bay, a typical Mid-Atlantic estuary in New Jersey, the calculated recreational boating fuel use is 50 gallons/acre-foot/year. This is at least a threefold increase over what were considered maximum levels of boating two decades ago. If the fuel efficiency of outboard motors has improved significantly in this period, the levels are even higher than the fuel use per acre-foot would indicate. Levels of recreational boating that were unthinkable a few years ago are now accepted as being normal and, considering the dearth of research on the impacts, evidently considered of little or no environmental consequence.

“You’ve been waiting all week to get out on the water. Now you’re idling until you’re out of the marina. In just a few minutes you’ll be able to slam down the throttle. To release your troubles in a single blast. To experience Mercury power - undaunted....More speed. More power. No worries....” (From Mercury Marine website – November 1997)

In **Polluting for Pleasure** (W.W. Norton & Company, 1993) author Andre Mele states that in a technical paper prepared for the Society of Automotive Engineers two outboard motor industry employees report *“...a 70 horsepower outboard spews out 1,529 grams (3.37 pounds, or slightly more than half a gallon) of unburned hydrocarbons per average hour, based on the University of Wisconsin’s duty-cycle studies”*. He then speculates on the fuel use of such a motor and concludes that, assuming it is 5 to 6 gallons an hour, *“...at the very least 1/12th, or 8.3 percent, of supplied fuel and lubricating oil is blown out unburned.”*

Mele then discusses an EPA report that concludes *“...two-stroke outboard motors pass fully 25 percent of their total hydrocarbon intake, fuel and lubricating oil, out the tailpipe and into the environment.”* The E.P.A. has also reported that in one hour an outboard powered boat emits, on the average, as many pollutants as an automobile does in 700 miles of driving.

“A high-performance hybrid...produces an adrenaline-pumping 803 pounds of thrust to blow the runabout performance envelope to shreds.” (from the Kawasaki Personal Watercraft website Link to Kawasaki site)

From another perspective, at a normal cruising speed of 30 mph the blades of the 14" diameter propeller of an outboard or in-board/outboardpowered boat passes directly through 150,000 cubic feet, roughly a million gallons, of water during every hour of operation. A typical generating station pumps a million gallons of water a minute, sixty boat’s worth, for condenser cooling. The hydraulic forces generated are comparable. If you’ve ever observed the turbulence from an outboard motor’s propeller at speed (at 2500 rpm, a point on a 14" propeller’s

periphery is slicing through the water - and anything else it encounters - at over 100 miles per hour), you can imagine the devastating impact it must have on the delicate, slowly swimming organisms that hatch and mature in our estuaries.

Based on an annual average of 40 hours of cruising, the 10 million outboard and inboard/outboard powered pleasure boats in use in the U.S. impact as much water - and the fragile eggs, larval and juvenile fish and shellfish living in it - as 800 base load nuclear and fossil fueled generating stations would in a year, but the boating activity is concentrated in a short boating season which is also the time of maximum biological activity in our estuaries.

To bring this closer to home, in 1990 there were 158,000 power boats registered in New Jersey. Of these, 92,000 used outboard motors (with a median size of 60 horsepower). There are approximately 20,000 boat slips and racks, most of them occupied by outboard powered boats, on Barnegat Bay, one of New Jersey's largest and most heavily used estuaries. If it takes only 60 of these boats to impact as much Barnegat Bay water, and the rich estuarine life contained in it, as the Oyster Creek nuclear generating station uses for condenser cooling over an equivalent time period, what is the combined impact of all of them? Upwards of 30 million gallons of fuel are used by New Jersey pleasure boaters every year, about 20 million by boats powered by outboard motors. The residue from this fuel, estimated by author Mele to be 8% to 25% of the total amount used, is injected directly into the water column in these estuaries, and has been for several decades. It appears as if outboard motors might well be adding one Exxon Valdez equivalent of hydrocarbons to New Jersey's coastal waters every two to six years.

What are the implications of this? Billions of dollars have been and are continuing to be spent on protecting our estuaries and the fish and shellfish in them from the impacts of generating stations. Ditto to control non-point source pollution. Each and every citizen has been paying for this, and what has been the result? In the past ten years production in many of our estuarine-dependent fisheries has steadily declined, and the number of recreational boats has increased just as steadily.

Most importantly, who's doing anything about it? So far, surprisingly, no one. Perhaps because of the influence of recreational boating interests, perhaps because of their importance to the coastal economy, perhaps because public utilities are better targets for "environmental activists" than the average suburban family out for a day of fun at the shore, or perhaps because of some blatant public funding conflicts (see box on left), this issue has been almost completely ignored by the people, the agencies and the organizations with a supposed interest in preserving the ecological integrity of our estuaries for over a decade.

Outboard motors used recreationally last for decades. Fiberglass boats are virtually indestructible. Every year we are adding significantly to what might very well be an environmental catastrophe in the making.

Emissions standards for outboard motors were put in place several years ago. According to Earth Island Institute "*These rules will accelerate the introduction of alternative cleaner outboard engine configurations (four-stroke engines, direct-injection two-strokes and engines with catalytic converters) starting in model year 1998, reducing the average HC emissions of new motors by 75% by 2006, after an absurdly lengthy eight-year phase-in. The regulations will be implemented through a system of tradable emission credits among manufacturers. However, the final rulemaking is highly favorable to industry and fails to sufficiently protect the marine environment from petrochemical discharges. While manufacturers had anticipated a complete ban on the sale of new carbureted two-strokes, the regulations instead effectively sanctioned their continued sale through the averaging provision. As a result, up to 15% of all new marine engines will be completely uncontrolled. In addition, there are no plans to institute a retirement or buy-back program for the 12 million carbureted two-stroke motors already in use. As a consequence, these motors will continue to pollute for up to thirty years, the average life of a motor.*" (From Earth Island Institute's website Link to Earth Island Institute site)

A brief history of "Overfishing" (or, with apologies to Mr. Berra, Deja vu all over again)

12/15/97

It seems as if just about anyone with any claim on the public ear would have it that we are now either on the verge of or well into a "crisis" of world fish production and the health of the world's oceans that is of unprecedented proportions. Supposedly this crisis is a direct result of the severe overharvesting of fisheries resources brought about by modern fishing technologies. Primary among these doomsayers are fisheries managers, environmentalists, and sportfishermen (posing as "fisheries conservationists" in a transparent effort to deflect attention from the impact their "sport" has on fish stocks and the estuarine environment). Even allowing for the increasing ability of the modern media to turn what was once the commonplace into the unique and ominous (recent El Nino coverage is a stellar example), the volume and the stridency of the "sky is falling" attention that fisheries problems are receiving is surprising. But is it justified? Is the fisheries "crisis" we are facing all that unprecedented or, for that matter, all that much a crisis?

In **Hitting bottom - As trawling goes into high gear, undersea coastal habitat is being razed to the ground** from the Winter, 1997 edition of a quarterly journal published by the Natural Resources Defense Council, author Dick Russell states "...by the end of World War II, the era of the trawler had arrived. Diesel-powered boats towing the newly devised otter trawls proved so effective that the schooner fleets could not compete." The quote, of course, leaves the reader with the purposeful impression that trawling is a post-WWII innovation and that prior fishing was done much more "nicely" with low-impact sailing vessels engaged in hook-and-line harvesting a la Captains Courageous. The point of the arti-

cle is that trawling with motorized vessels, a modern technology, is having severe impacts on the ocean bottom and is in large part responsible for the current crisis in the world's fisheries.

Then, from Greenpeace International's web site "...but by far, overfishing is now indisputably the greatest threat to the marine biodiversity in the North Sea. Overfishing in the North Sea has reached crisis levels as the region's governments continue to ignore scientific recommendations to cut fishing levels....Since the North Sea ecosystem faces a crisis, urgent measures are needed....Will they (fisheries ministers) choose to save the North Sea and the fishing industry in the long-term?...commercial fishing fleets are exceeding the oceans' ecological limits....unravelling the intricate web of marine biodiversity....Fisheries research and management institutions everywhere have fallen far behind the rapid advances in fishing technology, which makes overexploitation of fish stocks the rule rather than the exception."

Or from a Sunday, December 14, 1997 article in the New York Times on the plight of the Atlantic Salmon "*Carl Safina, a scientist, researcher and director of the Living Oceans program of the National Audubon Society, said the north Atlantic is the most fished-out ocean in the world. Safina....believes the North Atlantic is on the verge of becoming an ecological disaster zone.*"

These are all descriptions of an imminent and unprecedented crisis brought about by the wide-spread and intemperate use of modern technology. But how unprecedented is the crisis, how modern is the technology?

In his **British Sea Fishermen** William F. Anson writes of a port on Great Britain's west coast facing the North Sea's productive Dogger Bank "*It was not until 1844 that Hull began to develop as a trawling port....The first steam trawler made her appearance at Hull in 1884. Twelve years later there were about two hundred steam trawlers as compared with one hundred and sixty (sailing) smacks. By the close of the century the picturesque, brown-sailed smacks had disappeared from Hull. New fishing grounds began to be exploited. Trawlers began to work off the Faeroes and Iceland about 1889. Then they went south as far as Spain. Northwards - still further - to Bear Island and even more distant grounds in the Arctic circle. 'High altitude' fishing became the chief characteristic of Hull, as well as its mainstay, for after 1936 very few trawlers remained fishing on the North sea.*"

While these early trawlers used beam trawls rather than today's otter trawls, it appears as if power trawling isn't such a modern innovation but has been in widespread use, at least in the North Atlantic, for over a hundred years. How can trawling be held accountable for the "recent devastation" of our fish stocks? And, if we make the relatively safe assumption that these late 19th and early 20th century trawlers were steaming over convenient North Sea grounds to distant waters because there weren't enough fish closer to home, it appears as if the Greenpeace "overfishing crisis" was here before and might not be entirely the result of modern fishing technology.

In **The Historical Development of Fisheries Science and Management** taken from a lecture given at the Fisheries Centennial Celebration (1985) by William F. Royce and available on the NMFS Northeast Science Center's web site the author states that fisheries "...were vital to the early settlers because they provided profitable employment and winter food before the settlers could be sustained by farming. By the middle of the nineteenth century some of the fishery resources (in U.S. waters) had already declined by alarming amounts, as they had in the Northeast Atlantic, where the causes were hotly disputed." Here we have a reference to fisheries declining "at alarming rates" 50 years pre-trawling and 150 years prior to today's unprecedented "crisis." Are we to believe that we're in the hundred and fiftieth year of the imminent destruction of the world's fisheries?

And what of our inshore waters, areas that, sportsfishing "conservation" groups would have us believe, have been transformed from the angling wonderlands of a generation ago into today's biological wastelands by the depredations of modern commercial fishermen? Are today's well-heeled recreational anglers the first to recognize that the only "salvation" of these areas and the fish in them was to grant their exclusive use to those who can afford to fish for their own amusement?

Quoting from Peter Matthiessen's **Men's Lives**, which chronicles the decline of eastern Long Island's baymen and their way of life:

As early as 1924, in an amendment to the state marine fisheries conservation law, it was proposed that all dragging or trawling of any kind be prohibited in (New York) state waters, and that all other netting be so severely curtailed that, in effect, all fishing except angling would come to an end.... Eventually the bill was defeated in the legislature by a vote of 45 to 3. The sportsmen's mutterings continued, however, and a decade later their delegates in Albany were back again with a similar bill: "It shall be unlawful for any person or persons to take fish in any of the tidal waters of Long Island by means of nets, fish pounds [traps], set lines [trawl lines], or beam trawls [dragging], except that minnows or shrimp may be taken for bait....This act shall take effect immediately." Chapter 7 of Men's Lives should be required reading for anyone interested in fisheries allocation issues.

Other proposed measures that year forbade the sale of striped bass and bluefish under a certain size....Eventually this legislation was defeated too, not only because weakfish were plentiful, but because it was clear that recreational fishermen were taking many more than the commercial men.

As Captain Charles L. Tuthill wrote in the East Hampton Star, Feb. 2, 1934: "...We would like to believe that the anglers' grievances concerning commercial fishing methods, the supposed need of conservation measures, are due to a lack of painstaking efforts to get at the true facts.

But if this is not the case, the only sane conclusion to which we can arrive is that this whole conservation propaganda is nothing more or less than a mask behind which is a desire to monopolize Peconic Bay for sports activities alone."

What does this all mean. That's hard to say. It might well mean the current fisheries "crisis" might not require the immediate and drastic solutions that are being pushed by some. Perhaps there really is time for adequate research leading to measured and effective responses. Perhaps the severe economic dislocations to large parts of the seafood industry or entire fishing communities really are avoidable. Perhaps it also means that sportsfishermen are simply continuing their same old tricks to gain exclusive access to what they've decided should be "their" water and "their" species.

Mr. Anson, whose book is cited above, quotes the late Stephen Reynolds, who died in 1919, "*An analysis of the trade of our fishery, which is fairly varied and typical, will probably convey the clearest idea of the longshoreman's situation and of the difficulties with which he has to contend.... were it not for some pleasure boating in summer, as a stand-by, fishing could hardly continue.... Whereas twenty years ago upwards of thirty drifters used to put out to sea, there are now fewer than ten in active service. Fishing has become sad.*" It's evident that hasn't changed much. It still is. The question we should be asking today is why?

Fishing and subsidies and excess capacity

01/07/98

Government subsidies of fishing operations - both domestically and internationally - are being increasingly identified as a primary cause of a worldwide fish "crisis." The theme is used as partial justification for the National Marine Fisheries Service's homage to limited access and quota based management titled **Economic Status of U.S. Fisheries 1996**: "*...a fishery resource is optimally utilized when the amount of fishing effort....is at the point where net economic benefits to the Nation are greatest, or at lowest cost for that level of harvest. This means harvesting only to the point where the additional benefits from harvesting the last fish just equal the additional costs incurred to harvest it.*" It's reinforced by a Scientific American article by Carl Safina reprinted on the Pew Charitable Trust's SeaWeb web site - "*a United Nations report notes that current world fleet cost cannot be matched by revenues at any level of effort, and that, as the opportunities for an increased catch from fishery resources have declined considerably, a continuation of high subsidies can only lead to greater and greater economic distress as well as further depletion.*" And, in a Worldwatch Institute press release - "*subsidies for the global fishing fleet have helped produce enough boats, hooks, and nets to catch twice the available fish, contributing to overfishing and destruction of fisheries.*" It's even being misapplied, as in the Philadelphia Inquirer (**Feeding The World - Seas lose bounty to overfishing**, 11/15/96), when commercial fishermen are rightfully exempted from paying taxes which they were never intended to pay - "*American fishermen, for example, are exempt from a 20-cent-a-gallon federal diesel fuel tax, a subsidy worth about \$250 million a year.*" Like the Boeing 747 comparison (below) this anti-subsidized fishing rhetoric is being echoed by virtually every group committed to "*saving the world's fisheries.*"

The connection between government subsidies and the supposed fishing crisis is the idea that excess fishing capacity - the ability to harvest more fish than the fishery can comfortably afford to have harvested - is a result of subsidies and that excess capacity is wasteful both in and of itself and is, in addition, the primary cause of overfishing.

As far as any negative value being placed on having too much "fishing power" in a fleet, let's consider another situation. Major universities have large, expensive football stadiums. They're empty 99% of the time. They aren't designed for the daily practice sessions held in them. They aren't designed for the run-of-the-mill games played on most fall weekends. They're designed for the homecoming games and the end of the year, winning season games, the games that pay the bills and that keep the school playing football. They are purposely "overdesigned" for everyday football conditions and are wasteful only to the extent that college football is wasteful.

Fish share with football spectators the inconvenient characteristic of not being evenly distributed in either space or time. They are generally found in concentrations that from season to season move from place to place. Much of a fisherman's effort is devoted to seeking these concentrations - his equivalent of practicing. His game begins when he finds one. When he does, when it is big enough, and when he has a boat that has enough capacity, he can turn the fishing equivalent of a run-of-the-mill Saturday game into a homecoming weekend or even the Rose Bowl. This ability to catch the fish when they are there is equivalent to the ability to seat as many spectators as possible when they want to see a game. This ability, which we are now supposed to think is undesirable, is what allows a fisherman to keep on fishing through the lean times. And it applies to fleets as well as to individual fishermen. Sometimes it's financed privately, sometimes publicly.

However it's paid for, it isn't the cause of overfishing in those fisheries that are being overfished. Realistically, considering the growth in the regulatory burden on every fisherman, it's difficult to see how overfishing can be seriously related to anything other than ineffective management and/or inadequate enforcement.

A good crisis doesn't just happen

The National Marine Fisheries Service publication Economic Status of U.S. Fisheries 1996 states that "*In 1993, of the 163 U.S. fisheries whose biological status could be assessed, 40% were classified as overutilized and 43% were fully utilized.*" While this isn't good news, it's not that

bad, either. A not-so-obvious problem with the statement is that it doesn't put those 163 fisheries into any relative context. It would mean a lot more - but could have a lot less impact - if it showed just what proportion of our fisheries are actually being overfished.

The Natural Resources Defense Council, in the Executive Summary of **Hook, Line & Sinking - the crisis in marine fisheries**, reports "*roughly 70 percent of the world's commercially important marine fish populations are now fully fished, overexploited, depleted, or slowly recovering. This situation is mirrored in United States waters, where 80 percent of marine fish populations of known status are classified as fully fished or overexploited.*" While containing the same information as the above NMFS statement, this sounds a bit worse, a bit more ominous. (On a somewhat related note, in a world in which starvation is a critical, ongoing and increasing problem, who wouldn't expect a large percentage of the world's fisheries to be "fully fished" and by what stretch of the imagination could that be considered to be part of any crisis? The compassionate might actually consider it a crisis that there are any fisheries at all that are not being fully fished.)

Then an announcement this week for another "doom and gloom" press conference, this one by the Pew Charitable Trust's SeaWeb, referred to "*...recent reports that roughly 80 percent of marine fish populations in the United States have been fished to or beyond their limit.*" Again the same information, but omitting the three words "*of known status*" and other changes turn it into a declaration of severe problems. It appears that we've gone from an undetermined proportion of our U.S. fisheries being fully or overutilized to "*roughly 80 percent fished to or beyond their limit*" in only two iterations.

Time and again, these extremely pessimistic and prejudicial pronouncements of too much fishing and not enough fish are being peddled, with subtle variations, to an only partially informed public. And they always seem to be carefully crafted to cast the worst possible light on the situation - and the commercial fishing industry's role in it.

Crisis in fishing or in communications and credibility?

Is the condition of our fisheries as grim as it's being made to appear? Are the self-styled "experts" in agreement on the extent of the problems confronting the United States' fisheries? According to the National Marine Fisheries Service - the same Federal agency that originated the utilization estimates that appear to have initiated the above escalating alarms - in its Congressionally mandated **Report on Status of Fisheries and Identification of Overfished Stocks**: "*based on the criteria specified in the Magnuson-Stevens Act, the Report on the Status of Fisheries finds that 86 species are listed as overfished, 183 species are listed as not overfished, and 10 species are considered to be approaching an overfished condition; for 448 species, the status relative to overfishing is unknown. Whenever possible, species were assessed using existing overfishing definitions in FMPs or FMPs under development; the remainder were evaluated using the 1995 edition of Our Living Oceans.*"

The PEW, NRDC and first NMFS statement each creates a distinctly and significantly different impression than the one NMFS conveyed to Congress. According to the Congressional report, 96 species out of 727 are known to be at or approaching the overfished level. That's thirteen percent, far less than PEW's **roughly 80 percent**, and a figure that would obviously have conveyed a much different message concerning the health of our oceans and marine fisheries resources had PEW chosen to use it. One can't help wondering how an organization like the Pew Charitable Trusts, with the vast resources it has at its disposal, could be at such seeming odds with the Federal agency charged with monitoring our fisheries, particularly when that agency, the only one collecting comprehensive data on marine fisheries in U.S. waters, is responding to a Congressional mandate.

So what's really going on? Sure, some fisheries are being fished too hard. Because we can't manage very precisely, some always have been and probably some always will be. But are we on the brink of a crisis? If we are, why don't the real numbers demonstrate it? Why all the semantic, statistical and aeronautical contortions? Lawyers use the expression *res ipsi loquitur*. Perhaps that applies here as well.

A Good Image Is Hard To Find

As we've seen in NJ FishNet before, the image of a Boeing 747 has been used to indicate the perceived perils of the harvesting methods employed in a few of the largest-scale commercial fisheries (fisheries that probably couldn't be undertaken safely or economically using, in keeping with the airplane image that seems so puzzlingly popular in the blame-it-on-commercial-fishing community, Piper Cub - or even DC 10 - sized vessels or gear). While reviewing recent fisheries publications of the "imminent crisis" type, we found that a surprising number of writers/organizations share a bit more than an abhorrence of efficient fishing technology.

- From **The Fish Crisis** in Time Magazine's September 1, 1997 issue: "*...computerized ships as large as football fields. Their nets--wide enough to swallow a dozen Boeing 747s....*"
- From A SeaWeb website background article **World's Imperiled Fish** by Carl Safina originally published in Scientific American "*...and bag-shaped trawl nets large enough to engulf twelve Boeing 747 jetliners.*"
- From the Greenpeace web page **Amazing Facts About The Global Fishing Crisis**: "*one of the world's biggest trawl nets could encircle more than a dozen 'jumbo jet' Boeing 747 aircraft at its opening.*"
- From a U.N. background piece for Earth Summit +5 - **Special Session of the General Assembly to review and appraise the implementation of Agenda 21; The Agreement on High Seas Fishing - An Update**: "*the most notorious nonselective equipment includes nets large enough to envelop twelve 747 airliners*"

- From **Vacuuming The Seas** by Dick Russell in the July/August 1996 E/The Environmental Magazine: “at sea 200 miles southwest of Iceland last summer, the crew of a super-trawler big enough to contain a dozen Boeing 747 jumbo jets.... Each ship was trawling nets with opening circumferences of almost two miles; that's the equivalent of 10 New York City blocks wide by two Empire State Buildings high.” [Link to E/The Environmental Magazine's website]
- From Dr. Sylvia Earle's preface to the National Resource Defense Council's February, 1997 report **Hook, Line and Sinking, the crisis in marine fisheries**: “...trawlers large enough to contain several 747 aircraft....”
- From *The Vegetarian Winter 1994/95* on the Animal Rights Resource Web site: “Fishermen use some dastardly tricks to catch their pound of flesh. Legal drift nets are an incredible 2.5 kilometres in length, large enough to trap 12 Boeing 747 jets, but fishing boats are often suspected of using even bigger nets.”

Considering the amount of attention it's been given, this obviously isn't a trivial issue. Unfortunately, there seems to be some confusion as to whether it's the boat or the net that's poised to engulf, swallow, trap or envelop the aircraft. Perhaps one of our readers in the Seattle area, home of both a large factory trawler fleet and the Boeing Company, might be able to shed some light here. If you do, you will be given full credit in the next **NJ FishNet**. Also, if readers come across other comparisons of fishing vessels or gear with 747s, B-52s or any other large flying objects (no UFOs, please), let us know and we will include them in the web version of this page.

A consumer campaign that missed by a mile

01/25/98

The Rationale

The Pew Charitable Trusts' SeaWeb in 1996 commissioned the Washington, D.C. consulting firm The Mellman Group to conduct a survey “...on U.S. public attitudes toward the ocean and ocean issues.” The survey results, in conjunction with those of a series of focus group exercises conducted the previous year, were evidently used by Pew/SeaWeb in plotting a campaign to increase the U.S. public's awareness of ocean issues. The results are reported in **The SeaWeb/Mellman Group Landmark Poll on US Public Attitudes Toward the Oceans** (but are no longer available at the Pew/SeaWeb website or any other website that I could find, but if you'd like a copy, contact me – N.Stolpe, 01/31/2016). In words from it's introduction, the survey provides “...a strong sense of what will work to engage the public in this issue, but the public still requires educating before acknowledging a problem.”

From the Pew focus groups: “virtually every message we tested increased respondents' concern about the oceans. Three messages proved most salient: raising participants consciousness about the potential benefits from the oceans' unexplored resources; the harm caused by overfishing, and the danger to human health caused by contaminated seafood. Across the groups, it was evident that some combination of these concepts will be most successful in capturing the public's attention and motivating them to change their own behavior and mobilize them to action.... Rejection Of Personal Responsibility Was The Prime Impediment To Action - Some participants were eventually willing to accept responsibility, but were unsure of how they could personally make a difference. They expressed feeling helpless; that they were only one person....”

From the Pew survey: “destruction of our oceans is an issue waiting to be made.... Oceans being destroyed ranks lower on the list (of the respondents' most important environmental problems), with only 14% saying it is one of the two most important environmental problems.... At the same time though, most of the public attitudes required to create a major issue are in place.... All this latent concern about oceans can be translated into significant political action.... Americans Believe The Ocean's Problems Stem From Many Sources, But **Oil Companies Are Seen As A Prime Culprit** - In fact, 81% of Americans believe that oil spills are a very serious problem. This is followed by chemical runoff from large corporate farms (75% very serious), improperly treated water from towns near the coast (69%), contaminated seafood (65%) and trash, oil, and chemical runoff from streets (65%). In contrast, people believe the least serious ocean problems are air pollution from cars and industry (40%), and the killing of sharks (30%).... **Oil, The Plate, And The Critters Are Key Ways Into The Issue - Chronic oil dumping in the ocean most clearly communicates that the oceans are in trouble, and makes people very angry.** People see the fact that 3.25 million tons of oil enters the world's oceans each year as a strong indicator that the oceans are in trouble (71% 'great deal of trouble'). This statement also makes a plurality (40%) feel very angry. Other meaningful indicators that the oceans are in trouble include overfishing and the loss of critical species (61% great deal), beaches being closed 5000 times in the last decade (60% great deal), and marine mammals being destroyed (58% great deal). Surprisingly, what makes people the most angry is shark finning, or cutting the fins off living sharks and then throwing the sharks back in the water to die (42% say it makes them extremely angry).”

What are the Pew Charitable Trusts?

From the Capital Research Center's Foundation Watch, “Pew is composed of seven named charitable trusts with different missions, established from 1948 to 1979. One hundred fifteen employees give out \$180 million each year, making Pew the nation's third largest foundation.” In 1997 the trusts, established by the family that founded the Sun Oil Co., sold off their last stake in the family business (Philadelphia Inquirer,

August 5, 1997). Five of the ten Directors of the trusts are Pews and the trusts had total assets of \$4.5 billion in 1997. According to the Capital Research Center, "since fall 1993, the foundation has pledged at least \$19.7 million to various media enterprises...."

From the Pew Anti-Swordfish Consumer Campaign:

GIVE SWORDFISH A BREAK! A project of SeaWeb and the Natural Resources Defense Council:

- *Tuesday 20 Jan. 1997 - 27 Leading East Coast Chefs Announce They Are Taking Swordfish Off The Menu*
- *Although fresh North Atlantic swordfish are a popular food item in restaurants, at markets and on grills - they need a break. Populations need to be replenished. The fish need a chance to recover from a decade of overfishing.*
- *You Can Help. If you are a chef... don't COOK it. An owner or work at a restaurant or market... don't OFFER it. A fish lover... don't EAT it.*
- *North Atlantic SWORDFISH will be back if we do our part now.*
- *Write the President and ask him to adopt strong conservation measures that will ensure the prompt recovery of swordfish.*

...and the Natural Resources Defense Council?

The N.R.D.C. is the environmental organization that is credited with being the primary force behind the highly controversial Alar apple scare of several years ago. Based on what is reportedly misapplied and definitely controversial scientific evidence, this episode unquestionably cost domestic apple farmers hundreds of millions of dollars. (For an interesting discussion of Alar from a public relations perspective, see "Alar revisited: Yes it was a hoax" at the Inside PR website [Link to Inside PR Website].

The Alar issue is an important one, and not only as it applies to our food supply, the regulatory agencies that protect it and the pressure politics focused on it. The link above will take you to a site that obviously presents one view of the Alar controversy. This view is shared by the American Council on Science and Health [Link to American Council on Science and Health website]. There are others that look at it from the other perspective (RACHEL's Environment and Health Weekly is one). This issue - like many in fisheries and marine resource management - is fairly complex, difficult to understand, easy to "oversell" and definitely not amenable to quick fixes. Without getting too far afield, Cornell University offers a long but very informative piece on Agricultural Biotechnology: **A Public Conversation About Risk** on their website. In the section by Will Erwin titled **Risk Assessment: A Farmer's Perspective** he writes "how do we develop a realistic attitude toward risk? Risk, risk assessment, risk management and risk - to - benefit relationships have all consumed much of our thoughts. But logic does not grab human attention as much as fear does. The body politic wants simple brief explanations. Unfortunately, risk assessment at the citizens level is too often typified by the young mother who came to my wife during the Alar scare smoking a cigarette with her child in her arms and said, 'Will apples hurt my baby?' Public pressure generated by this kind of misunderstanding of relative risks is increasingly driving ocean resource issues as well, and often driving them in the wrong direction.

The Reality:

- Out of the approximately 30 million pounds of swordfish consumed annually in the U.S., nearly two-thirds is harvested in the Pacific - with more than 8 million pounds being harvested by U.S. fishermen. Pacific swordfish stocks aren't classified as overfished. Of the remainder of the U.S. supply, more than 7 million pounds are caught by U.S. and Canadian fishermen in the Atlantic. U.S. and Canadian swordfish fishermen have demanded international management and comply with the strict regulations under the rebuilding program for Atlantic swordfish established by the International Commission for the Conservation of Atlantic Tunas (ICCAT). Two million of the remaining 3 million pounds of swordfish consumed in the U.S. are caught by Brazil and Uruguay in the South Atlantic. The South Atlantic stock is healthy, estimated to be at 99% of its optimum level, and is under strict ICCAT quota management to ensure that it remains that way.
- The remaining 1 million pounds of swordfish consumed in the U.S. is caught by the vessels which may not be fishing in compliance with ICCAT's regulations. Of all the vessels affected by a U.S. swordfish boycott, the few catching these fish would be the only ones that might not be in compliance with ICCAT regulations.
- Approximately 90% of the total Atlantic swordfish harvest is now caught, landed and consumed outside the U.S. market and will be unaffected by any attempted U.S. swordfish boycott. (These statistics, from National Marine Fisheries Service data sheets, were provided by Blue Water Fishermen's Association).

"The 'Give Swordfish A Break' campaign penalizes U.S. fishermen who are already abiding by the law, and it doesn't recognize that we have a rebuilding program in place." Dr. Rebecca Lent, Chief, Office of Highly Migratory Species, National Marine Fisheries Service, U.S. Department of Commerce.

A U.S. swordfish boycott will...

- have no effect on nearly 90% of Atlantic swordfish harvests, which are not currently marketed in the U.S.;
- not stop the major Atlantic harvesters from catching Atlantic swordfish;

- punish U.S. and Canadian fishermen, who insisted on and are complying with a rebuilding program for Atlantic swordfish;
- hurt Pacific swordfish harvesters, including U.S. fishermen, who are fishing responsibly in a healthy fishery and who provide nearly two-thirds of the swordfish consumed in the U.S.;
- result in significant economic losses to the U.S.; and
- prevent American consumers from enjoying nutritious swordfish while having a negligible effect on those nations that are unwilling to effectively regulate their swordfish fleets.

(From the National Fisheries Institute response to the proposed boycott)

So why the boycott?

Given the makeup of the international swordfish fisheries and markets, it's obvious that a consumer boycott in the United States isn't going to have very much impact on the North Atlantic swordfish fishery that Pew and the NRDC are so intent on saving. A very small percentage of the vessels that are not complying with the ICCAT regulations are selling their fish in U.S. markets. If they are closed out of our markets they will easily find alternatives. U.S. (and Canadian) fishermen who are fishing by the rules, dock operators, truckers, distributors, tackle and gear dealers, wholesalers, retailers, restaurateurs and ultimately consumers will pay the price of the boycott. And for what? Pew makes it plain via the Mellman Group report it posted on its SeaWeb website that its aim is to engage the public's interest in ocean issues. The focus group and survey work reported there shows that one of the "hot button" issues for doing that is overfishing (it also shows that oil dumping is the "hottest button") and that to really become "engaged" people must be shown how they themselves can make a difference individually. We've had overfishing in the North Atlantic swordfish fishery, there are a lot of people that can be convinced that a U.S. boycott of swordfish will help the fishery, and that their participation can make the boycott successful, so away we go - along with those folks that brought Alar to the public's attention. A lot of people - almost all of them owners or employees of small businesses - are going to be severely hurt economically and the swordfish aren't going to be significantly better off. But more of the public will definitely be engaged. Is that all that matters?

Flotsam and jetsam

02/24/98

We usually try to devote each FishNet to a single subject. In this edition we find it useful to cover a number of topics in somewhat less detail. Where possible we will expand on these particular areas at the NJ Fishing website and suggest that if you are looking for more in-depth material you start there.

Are habitat issues finally getting their due?

As those of you who have been reading NJ FishNet since its inception are aware, it's our feeling that there are many factors impacting on fish stocks that are of possibly equal or greater significance than fishing pressure. Perhaps it's because of all of the attention that the dramatic - and sometimes tragic - El Nino-related effects have generated, perhaps the high visibility of such vivid examples of habitat deterioration as last year's *Pfiesteria* outbreaks or the Gulf of Mexico's Dead Zone (see box below), perhaps just that our way of looking at estuarine, coastal and oceanic systems is evolving. Whatever the reasons, we've been very pleased to see that in the past several months these non-fishing impacts have been given much more attention than they have been in the past. (See the following discussion on ecosystem management)

"It can stretch for 7,000 square miles off the coast of Louisiana, a vast expanse of ocean devoid of the region's usual rich bounty of fish and shrimp, its bottom littered with the remains of crabs and worms unable to flee its suffocating grasp. This is the Gulf of Mexico's "dead zone," which last summer reached the size of the state of New Jersey. Alarmed, the White House recently commissioned six teams of scientists to begin the first large-scale study of the area, hoping for a remission or cure. The dead zone, researchers say, is emblematic of the growing ills suffered by the planet's seas. Earlier this month, hundreds of scientists, marking 1998 as the international Year of the Ocean, warned that unless action is taken, overfishing, coastal development, and pollution will multiply the kinds of problems that already plague the gulf. The trouble with the dead zone is that it lacks oxygen, scientists say, apparently because of pollution in the form of excess nutrients flowing into the gulf from the Mississippi River. Animals in this smothering layer of water near the bottom of the sea must flee or perish." (from A 'Dead Zone' Grows in the Gulf of Mexico By Carol Kaesuk Yoon - Copyright 1998 by The New York Times [Link to Dead Zone article](#))

Driven by the rapid pace of population growth and economic development, dead zones are a new and largely unstudied problem that is growing more quickly than governments and scientists can keep up with it. Scientists say that in just the past few years, as many as a dozen dead zones have appeared in different areas of the world, all caused by the same combination of agricultural fertilizer and sewage runoff. "No other parameter of such ecological importance has been changed so drastically in such a short period of time by human activities as dissolved oxygen contents in the world's oceans," said Robert J. Diaz, a researcher at the Virginia Institute of Marine Sciences and president of the Atlantic Estuarine Research Society. (from the New Orleans Times Picayune's The Dead Sea article in the Oceans of Trouble series [Link to Oceans of Trouble Dead Sea article](#))

"Risk-Averse" Fisheries Management

Over the past several years some fisheries managers have been promoting management strategies that are termed “risk averse.” The underlying philosophy is that, when uncertainty exists about either the initial condition of the fishery being managed or the effects that the management measures will have on the condition of the fishery, the management measures put in place should be designed to minimize the impacts of fishing on the fish. In essence, the fish being managed are assumed to be much less able to withstand fishing pressure than the fishing businesses are able to withstand the economic penalties that overly-restrictive management measures would bring.

At first glance this seems like a reasonable approach, particularly considering the way in which the risk-averse measures are usually presented. A 20% reduction in the commercial harvest of a particular species might be proposed rather than a “riskier” 10% reduction. The supporters of such a management philosophy, people almost always working for a regular paycheck, equate this to a cut in pay to the affected fishermen, and the difference between a 20% and 10% pay cut isn’t all that great, especially if it’s someone else’s pay getting cut.

But is that the way the affected fisherman or dock operator or wholesaler sees it? Of course not. His or her operating expenses are high and for the most part fixed. The mortgage on the boat, the insurance, the fuel, the amount of wear and tear on the equipment and other expenses don’t diminish as the allowable catch does. A seemingly small reduction in what a fisherman is allowed to catch usually means a much larger reduction in his or her take-home pay and a much greater impact on the viability of his or her business.

This, of course, would have to be acceptable if the fisheries being managed were as threatened as some of the groups committed to “saving the oceans” would have us believe (or if we were reasonably certain that it was fishing pressure that was “driving” our estuarine, coastal and open ocean ecosystems). But their crisis-oriented rhetoric totally ignores the fact that commercial fishing in our coastal and ocean waters has only been restrictively managed for the last ten or fifteen years, that prior to that there were few controls on how, when or where a fisherman could work, that twenty years ago foreign fleets of distant water catcher/processors were intensively fishing with no restrictions a “cannon shot” beyond our beaches, and that our fisheries survived all of that.

To suggest that today’s commercial fishermen, with the gear, area, time, size and quota restrictions they are complying with, could have an impact greater than that inflicted on the stocks in the past seems at best disingenuous. It’s obvious that the fish stocks are capable of surviving much more fishing pressure than that of today’s highly regulated commercial fleets. It’s questionable how many of the small businesses that make up our commercial fishing industry can absorb much more risk-averse management. Once these businesses are lost, for a myriad of reasons they will probably not be replaced.

The case for Ecosystem Based Management

There has been a growing movement in some scientific circles to adopt a more “holistic” approach to living marine resource management. Several years ago, when this movement began to receive some notice, it was termed “Ecosystem Management” and was unfortunately taken by some members of the fisheries management establishment as a threat to what has become the accepted way of managing fisheries - managing fishing effort and ignoring other equally or possibly more relevant factors.

While we plan on devoting an entire FishNet to this subject in the near future, we would like to direct your attention to the article on it that was part of the New Orleans Times-Picayune’s award winning series on the state of the world’s fisheries that is available at both the Pulitzer and Sigma Delta Chi websites.

“Ecosystem scientists argue for a shift away from just managing fishing toward a more comprehensive approach taking into account habitat, current flow and interactions with other species. But the new approaches face many obstacles. Scientists violently disagree, for example, on the role of chaotic changes in fish populations. Many fishery scientists say any chaotic changes will almost always be impossible to separate from other factors that aren’t chaotic. And while agencies such as the National Marine Fisheries Service employ new techniques as they can, they must function in an era when government is shrinking — not expanding its mandates across entire ecosystems. One reason fish management spends a lot of effort on controlling fishing is that’s what the law allows fish managers to control. That has the most immediate impact, and that’s what the public is most concerned about,” said Bradford Brown, director of the Southeast Regional Science Center of the Fisheries Service, who is also an expert on ecosystem modeling. But the biggest problem is history. Institutions are set up and budgets are determined the way they are because agencies have been doing it that way for decades, not because their approaches are the best.” (from **Bold new ‘chaos theory’ says fishery experts way off track** by John McQuaid from **Oceans Of Trouble** - Day 8 of 8 Copyright 1996 by the Times - Picayune, New Orleans, LA)

Legislation and fisheries management

Increasingly legislative bodies are being used to circumvent the science-based management systems which have been put in place to insure that the benefits of the fisheries resources belonging to all of us are utilized in a sustainable and equitable manner. It seems that in most of these instances legislation is sought by small, narrowly-focused interest groups because the appropriate management authorities won’t support their self-serving positions.

This focused political pressure continues to be the reason that well over seven million non-fishing consumers in New Jersey are by law denied the right to enjoy the ocean-fresh striped bass that are so abundant today in our coastal waters. New Jersey legislators have demonstrated a willingness to ignore the rights of the non-fishing majority of their constituents to grant the total harvest of striped bass to a small but vocal handful of sportsfishermen. Emboldened by this and self-righteously proclaiming their agenda is motivated by conservation rather than a desire for the exclusive use of our coastal waters for their entertainment, recreational fishing groups are now intent on using the legislative process to bypass the management system in other fisheries as well.

As we've stated in these pages before, sportsfishing is a large and important segment of the coastal economy in New Jersey. We in the commercial fishing industry recognize that the businesses that provide the recreational opportunities to those citizens who chose to catch their own fish are facing many of the same challenges that we are. We have not suggested - either through the management process or through our elected representatives in Trenton or Washington - that the non-fishing majority that we serve has any greater claim to the fish or shellfish from our rich coastal waters than the sportsfishermen and women do. But, by the same token, we can't agree that the sportsfishing community is exclusively entitled to entire species of fish simply because they chose to - or can afford to - invest the time, effort and money into catching those fish themselves.

In the commercial fishing industry we've made a commitment to strengthening the fisheries management process. That's where our future lies. It's unfortunate that some of our sportsfishing colleagues with the help of a few legislators would rather circumvent that system than improve it. Our fisheries resources and the non-fishing public deserve much more.

Media spin (or what's really going on in fisheries)

03/15/98

When it comes to information on the fisheries resources and the fishing industry in the United States' EEZ, the National Marine Fisheries Service is just about the only game in town. While some universities carry out fisheries research in particular areas, NMFS does the greatest part of the survey work, data collection and analysis. Unquestionably, through its role as the national fisheries information clearinghouse, NMFS is responsible to a much larger extent than any other entity for the public's perceptions of the status of our fisheries. Accordingly, this puts the agency in a position to greatly influence public fisheries policies. Given this level of responsibility (and the fact that much of the agency's work is science-based and many of its employees are scientists), one would expect that fisheries information originating in NMFS - or its parent agency, NOAA - would be totally objective and not subject to the kind of "spin" that has gotten so much media attention recently. Unfortunately it appears as if - in at least one instance - this isn't the case.

A press release from the U.S. Department of Commerce's National Oceanographic and Atmospheric Administration headed **Sharks protected in federal ruling that supports precautionary approach** read "*In a victory for natural resource conservation, Judge Steven D. Merryday of the U.S. District Court for the Middle District of Florida ruled today that strong management measures are justified to stabilize Atlantic shark populations, officials with the Commerce Department's National Marine Fisheries Service announced today. The ruling, which is in response to a suit brought against the agency for reducing shark quotas because of overfishing, confirms that the fisheries service's science is sound.*" It included the statement by Terry Garcia, Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy NOAA administrator that "*this is a victory for sharks and fisheries service management alike.*" Initially we, and undoubtedly other readers, accepted this at face value.

The information in the release seemed unambiguous, a management program of the National Marine Fisheries Service had been challenged in court by the commercial fishing industry, and once again the agency, its science and the fish had been victorious.

The press release was reporting on a ruling on a suit brought by the Southern Offshore Fishing Association and participants in the commercial shark fishery against the Secretary of Commerce. The plaintiffs claimed that the commercial quota for large coastal sharks (LCS) proposed in the Shark Fishery Management Plan was unjustifiably restrictive and based on inadequate scientific information, that the National Marine Fisheries Service failed to consider the economic impacts of the proposed management measures on the affected fishermen, and that the regulations did not allow for the international nature of the fishery.

By way of background (and taken directly from the decision):

- "*In the 1970's and 1980's the U.S. government actively promoted commercial exploitation of the Atlantic shark fishery. The government's objective was to develop a 'presumably underutilized' resource and to relieve the acute fishing pressure on more commercially popular fish stocks. Fishermen, including some of the individual plaintiffs in this case, undertook commercial shark fishing in the 1980's as a result of the government's promotional efforts.*"
- "*U.S. fishermen share the Atlantic shark resource with fishermen from Mexico, Cuba, Nicaragua, and other countries bordering the Gulf of Mexico, the Caribbean Sea, and the Southwestern waters of the North Atlantic Ocean.*"
- "*The initial 1993 LCS (large coastal sharks) quota of 2,436 mt (metric tons) contemplated as a target a 43 percent reduction from the estimated 1991 LCS commercial landings of approximately 4,300 mt.*"

- “On April 7, 1997, NMFS issued the final rule, halving the commercial quotas for LCS from 2,570 mt to 1,285 mt....”

Note that the fishermen who brought this suit had entered into and invested in the shark fishery at the urging and with the support of the same agency, the National Marine Fisheries Service, that is now intent on closing it down.

After receiving the government’s release, however, we read articles from two Florida newspapers that, somewhat confusingly, seemed to be reporting a completely different outcome.

On February 25, Jacqueline Soteropoulos of the Tampa Tribune reported in **Shark catch limits analysis** ordered “*a federal judge criticized the National Marine Fisheries Service Tuesday for failing to weigh the tremendous impact of stringent quotas on commercial sharkers. U.S. District Judge Steven D. Merryday ordered the U.S. Secretary of Commerce to study the economic effects of the quotas and potential alternatives, and submit an analysis by May 1 (subsequently changed by the Court to May 15). In the meantime, the 1997 quotas will remain in effect to protect the overfished shark population.... Merryday ruled the National Marine Fisheries Service failed to comply with a law that requires federal agencies to assess the impact of proposed regulations on small businesses.*”

On the same day St. Petersburg Times reporter Larry Dougherty in **Judge orders officials to review effects of shark fishing limits** wrote “*for the time being, the order upholds the reduced limits on the harvesting of large coastal sharks.... The impact of these rules on fishing businesses needs another look, though, according to U.S. District Judge Steven D. Merryday. The judge ordered the Commerce Secretary to consider the economic effects and potential alternatives to the 1997 quotas.... The judge soundly rejected the National Marine Fishery Service’s contention that no shark fishing operation would be put out of business by the new quotas because they could easily switch to other prey.*” He went on to quote Judge Merryday when referring to part of the agency’s justification for claiming no significant impact on the affected businesses “*....it is a contrivance that imports arrogance.*”

The discrepancies between the newspaper and the agency accounts being so glaring and the decision being of potentially great importance to many members of the domestic fish and seafood industry, we went to the order (**United States District Court, Middle District of Florida, Tampa Division, CASE NO. 97-1134-CIV-T-23C**) filed by the Court on February 24 for a reality check. In agreement with the NOAA release, Judge Merryday concluded “*that the Secretary (of Commerce) acted within his regulatory discretion in setting the quotas*” but that he had also “*failed to conduct a proper analysis to determine the quota’s economic effect on small businesses.*”

The NOAA release reported that the ruling confirmed that the science used by NMFS in the shark stock assessments was sound. However, on page 31 of the ruling Judge Merryday writes “*The (Large Coastal Sharks) modeling studies indicate collectively that, at present, there is no scientifically mature, experientially validated, and ‘proper’ method for measuring and projecting shark stocks. Presumably the ideal method awaits the assimilation of more complete data, the restoration of old data, the development of more refined modeling, more conclusive studies on stock and fishing migration, and the enlightening passage of time and events*” and later (page 35) “*undeveloped science and incomplete data currently preclude precision.*” Judge Merryday did conclude that, based on the uncertainty regarding the status of the shark stocks, the Secretary was acting within his discretion in setting the quotas. It’s difficult to imagine how this can be interpreted by NOAA to be a confirmation of the soundness of the underlying science.

Both newspapers reported on the failure of the agency to analyze economic effects of the proposed regulations (the Regulatory Flexibility Act - RFA - requires Federal agencies to consider effects of proposed regulations on small businesses and design mechanisms to minimize adverse impacts). NOAA addressed this issue with the statement “*Judge Merryday ordered that shark quota reductions remain in place pending further analysis of economic impacts on fishermen....*”

This glosses over a significant and extensive, though unflattering to the agency, portion of the decision. NMFS initially certified that the proposed reduction in the commercial LCS quota would have “no significant impact” on the types of businesses specified in the RFA and accordingly failed to prepare an Initial Regulatory Flexibility Analysis (IRFA). On this point Judge Merryday wrote in his decision “*The RFA watchdog, the Small Business Administration, also strongly criticized NMFS’s ‘no significant impact’ certification, stating that it was ‘perplexed’ and ‘bewildered’ by the ‘illogical’ certification.... Even ‘crude’ calculations, SBA explained, demonstrate that the Commerce Department’s RFA thresholds were met.*” Then, looking at NMFS’s Final Regulatory Flexibility Analysis (FRFA), Judge Merryday wrote:

- “*Ultimately, perhaps recognizing the tactical mistake of not preparing an IRFA, NMFS prepared an FRFA..... The FRFA added little of substance to NMFS’s prior ‘no significant impact’ certifications.... This effort partakes of an artifice to feign good faith, statutory compliance.*”
- “*The lapses and inconsistencies in the record most likely stem from NMFS’s failure to prepare an IRFA in the first place.... an IRFA would have required NMFS to engage in a careful and meaningful study of the problem.... the public could have engaged the agency in the sort of informed and detailed discussion that has characterized this litigation. Instead NMFS chose an insular approach designed to block further investigation and public scrutiny.*”
- “*NMFS’s refusal to recognize the economic impacts of its regulations on small businesses also raises serious questions about its efforts to minimize those impacts through less drastic alternatives.*”

Accordingly the Court remanded the RFA determinations to the Secretary “with instructions to undertake a rational consideration of the economic effects and potential alternatives” to the LCS quotas and to submit to the Court “an analysis that complies with applicable law” by May 15, 1998. The quotas that had been set will be kept in place pending this analysis.

This is a significant victory for the commercial fishing industry in particular and for small businesses in general. The fisheries management system has been increasingly ignoring the economic interests of those affected by its management plans. Among other things, Judge Merryday’s decision has shown that this trend won’t be allowed to continue.

Of greater possible significance, however, is NOAA/NMFS’s apparent willingness to “spin” its communications, something that both the shark decision and the subsequent agency release graphically demonstrate. NMFS is for all practical purposes the sole source of information dealing with marine fisheries issues in the United States. If it, or its parent agency NOAA, can distribute such a one sided and obviously self-serving interpretation of a court decision, how much trust can we have in the other information it releases to the public or in the decisions that are made based on that information? The public should expect more objectivity, even if that objectivity might possibly damage the agency’s public image.

David Frulla of Washington, D.C.’s Brand, Lowell & Ryan, counsel to the plaintiffs, stated that he and his clients are grateful for the attention and consideration that Judge Merryday provided. Mr. Frulla observed that the very strong language the court used to condemn NMFS’ failure to follow the law means this case is far from over. He explained, “Any rational consideration of the directed shark fishery, the economic impacts of the 50% quota reduction, and the available alternatives will compel NMFS to modify the 1997 50% large coastal shark quota reduction. NMFS cannot obey the Judge’s order by turning in the equivalent of a junior high school book report on economic impact and returning to business as usual.”

The Future of Commercial Fishing (Part 1)

04/09/98

NOTE: While the following addresses New Jersey in particular and the East coast of the United States in general, we expect that the situation relative to “misinterpretation” of existing data is limited to neither that state’s nor that coast’s fisheries. Anti-commercial fishing groups have assaulted commercial fisheries in many areas, their tactics are more or less identical. So are the liberties they take with the available data.

We’re going to devote this and the next FishNet to a discussion of where the commercial fishing industry seems to be headed. However, we thought it might be helpful to first talk about where the industry has been and where, in our opinion, it is today. In this way we hope we can provide readers interested in fisheries issues a somewhat broader context than is usually presented to them.

“Commercial” fishing has been around for quite a few years. Fish and shellfish have been an important part of humankind’s diet since our first ancestors stumbled onto a beach. The earliest fishermen and women used simple gear - hands first, then spears, then hooks - to harvest water dwelling creatures one-by-one. Considering the obvious limitations of such techniques, fishing could not have become an efficient means of feeding larger numbers of people until the development of nets, either fixed in place and set in wait for the fish, or movable and used to pursue them through the water. In either case, the nets served simply to strain the fish out of the water column. As far as the basics of catching fish are concerned, not much has changed since then.

As we’ve written in earlier FishNets, fishing on what is sometimes referred to as a truly commercial scale has been practiced for well over a century. For most of this period it was more or less smooth sailing for the commercial fishing industry. Barring the occasional attempts by groups of sportfishermen to grab entire species (successfully with striped bass in New Jersey) or areas, and several World Wars, commercial fishermen went quietly about the business of providing the non-fishing public with their share of what was a bounteous public resource without interruption. But in the Sixties our waters were invaded - legally, of course - by huge fleets of foreign factory ships and the catcher vessels that supported them. This invasion, and the resulting public outcry, was the impetus for the drafting of the Magnuson Act in 1976. This legislation eventually resulted in virtually halting foreign fishing in our Exclusive Economic Zone. It also established the Regional Council centered fisheries management system that is still in place today.

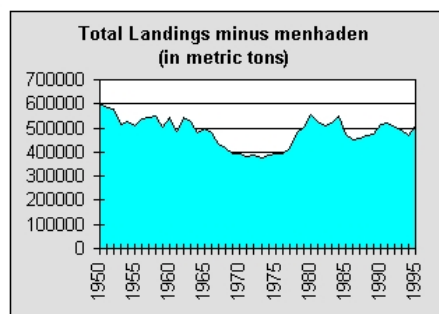
From the brochure Fishery Products from the Northwest Atlantic Available for Export published by the Fisheries Development Division of the National Marine Fisheries Service in 1979 “Since the enactment of the Fisheries Management and Conservation Act in 1977 it has become obvious that many opportunities exist for exporting U.S. fisheries products abroad....The species identified (including dogfish, silver hake, scup, Atlantic mackerel, American eels, herring and monkfish) are by no means the only products available for export. They do represent those for which expanding harvesting potential exists.”

Starting just about twenty year ago, and spurred by the enthusiasm generated by the phased removal of foreign fishing boats from our coastal waters, a major initiative in Washington - one that was echoed in most coastal states - focused on expanding our commercial fishing industry. State governments, usually in partnership with Federal agencies, were competing to build integrated seafood processing centers on undeveloped coastal sites; government loans and other financial incentives were readily available for vessel and onshore handling and processing con-

struction; fisheries that were “underutilized” were identified and utilization plans were designed to remedy this situation; and new markets were being sought for U.S. seafood products worldwide. To whatever extent overcapitalization is a problem in our fisheries today, this is the period when most of it occurred. And it occurred not only with the approval, but most usually with the very active support of those same agencies that are now convinced it is the greatest problem our fisheries are facing.

Less than two decades ago commercial fishing was considered a growth industry, one deserving of the serious attentions of governmental agencies and private investors. In stark contrast, in recent years few other industries have come under the level of public scrutiny, and fewer still have generated the focused antagonism, that commercial fishing has. Media assaults on various aspects of commercial fishing have become commonplace, and severely restricting seafood harvesting - and, of course, restricting the consumption of domestic seafood - has spawned its very own group of dedicated “conservation” organizations.

Various technological innovations - progressing from sail to steam to diesel power, from beam to otter trawls, from cotton nets to synthetics, from dead reckoning to radio direction finders to loran to GPS, and from sounding leads to precision sonar units - have supposedly all conspired to make today’s commercial fishermen too efficient for their own or anybody else’s good. In spite of this supposedly out-of-control fishing efficiency, as the box below and the chart to the left show (and assuming Mr. Cunningham’s research was at least as accurate as NMFS’s), the annual harvest from New Jersey’s and the entire East coast’s waters has remained remarkably stable for the better part of a century. While it’s beyond our abilities to prove it, it’s hard to imagine that the slight overall decline is a reflection of anything other than significant and continuing habitat loss and water quality degradation.



The increase in fishing effort that is generally assumed, at least by everyone with what increasingly appears to be an anti-commercial fishing rather than a save-the-fish bias, to be dooming our fisheries isn’t reflected in the commercial landings. Not in New Jersey’s total commercial landings going back a century or the East coast’s for fifty years. Granted there have been significant technological advances that allow today’s commercial fishermen to fish much more efficiently than they did fifty or a hundred years ago (an interesting exercise that we’ll be getting to in an upcoming FishNet will be a comparison of technological innovations in recreational and commercial fishing). But the landings seem to demonstrate that this efficiency isn’t really affecting the overall fisheries. While today’s commercial fishermen are surely capable of catching more fish than they were at any time in the past, there is a compelling amount of evidence indicating that they aren’t.

John T. Cunningham wrote in *The New Jersey Shore* (Rutgers University Press) in 1958 “...*New Jersey fishermen still bring in some 30,000,000 to 40,000,000 pounds of edible fish each year - about the same as 50 years ago....*” According to the National Marine Fisheries Service, in 1950 commercial landings of edible fish in New Jersey were 28,589,000 pounds (total reported landings minus menhaden, crustaceans, mollusks and freshwater species), a figure very close to Mr. Cunningham’s target. In 1996, again according to NMFS’s data, they totaled 43,800,000 pounds, indicating a significant increase. However, Atlantic mackerel accounted for 18 million pounds of the total in 1996 and less than 2 million in 1950. “Correcting” for mackerel - a fishery made up of newer, larger vessels that takes place beyond the New Jersey commercial fleet’s traditional grounds - the total was 25,800,000 pounds in 1996 and 26,900,000 pounds in 1950.

Those with an interest in things environmental have in recent years enthusiastically adopted the term “sustainable.” This is used to describe that desirable condition in which our demands on the productive capacity of those components of the natural world that we find useful are in balance with the ability of the natural world to replace what we use. Either due to fishing pressure or any of a number of other natural or unnatural causes, the availability of particular species in the East coast fisheries rises and falls. However, the apparent steady state of the overall landings of the commercial fishing industry, regardless of these species-by-species variations and the evils of improved harvesting efficiency, seem to us to indicate a level of sustainability that should be the goal of other natural resource-dependent industries rather than the target of a large part of the environmental community.

If, once we allow for the impacts of habitat destruction and pollution, the overall level of commercial landings has remained more or less constant for several generations, what has changed?

The fishing industry's ability to adapt to varying conditions has been destroyed. Before modern fisheries management, fishermen could switch from species to species when conditions in the fishery - evidenced by declining catch rates - warranted it. The species-by-species management in force today precludes this. Fishermen and fish are paying the price.

Public perceptions about commercial fishing have been severely distorted. This is in spite of easily accessible information showing that the domestic fishing industry on the East coast hasn't been rapaciously expanding its harvest from year to year. It's also in spite of the fact that participants in today's so-called "overfished" fisheries are there at the invitation and with the support of the same management establishment that is now, with the enthusiastic backing of a vocal anti-commercial fishing movement, blaming them for there not being enough of particular species of fish.

Our estuarine, coastal and ocean ecosystems have changed, or been changed, in ways that without question are significantly affecting the fish and shellfish species that depend on them. In the last century we've lost over half of our wetlands to development [Link to Wetlands page to a page on wetlands]. We've turned the remaining estuaries into the recreational boating equivalents of the Garden State Parkway [Link to Boating Impacts article to an article addressing boating impacts]. We've added untold tons of noxious chemicals to our coastal waters and bottom sediments. And our weather patterns have changed dramatically - as have the oceanographic processes that are determined by them.

All of this has had a major impact on the fishing industry. Unfortunately the commercial fisherman has become a scapegoat for inadequate, underfunded science and politically distorted public policies. We'll discuss what changes could remedy this and the consequences of those changes in the next FishNet.

The future of commercial fishing in the United States (Part II)

06/06/98

For the last several weeks we've left our readers to ponder the future of commercial fishing in the United States. We hope that nobody is expecting to read anything of a definitive nature on this important subject here. From our perspective, when questioned on our ideas of where the fishing industry will be in the future, we can only offer a resounding "it depends" - and to a large extent what it depends on are decisions made by a number of people who are now reading this.

One of the factors most important to the future of commercial fishing is the question of whether the individual coastal states and the Federal government can develop rational and balanced marine resource management and coastal development policies. At this point they haven't been able to. While there has been some movement in that direction, it doesn't take more than a casual acquaintance with fisheries issues or a drive along ten or twenty miles of coastline anywhere in the continental United States (right behind a "sport utility vehicle" towing two jet skis would be most appropriate) to know we've got a long way to go. As a somewhat perverse result of this lack of coherent policies, over the last few years any suggestions that seafood harvesting methods can be improved, fishermen can work with more efficiency, new fisheries can be developed or existing fisheries expanded have been met with fierce opposition; opposition unfailingly originating from members of a coalition of groups that, regardless of their original charters, can best be characterized today as anti-fishing.

Resource management decisions with overwhelming impacts on working fishermen, the communities they belong to and the businesses they support are increasingly being made as a response to the misinformed or manipulated public opinion resulting from the activities of these anti-fishing groups and individuals. However, fishing and related businesses aren't the only ones paying the price. Restaurateurs and health conscious consumers in the developed nations and the increasingly hungry populations of the less protein-rich areas of the world are all paying as well.

There are a number of factors that have contributed significantly to the present situation regarding our fisheries. The listing we offer here isn't meant to be exhaustive, but it does include issues that anyone interested in fisheries or coastal policies should be familiar with. We'll offer some possible solutions in the next FishNet.

The willingness of anti-fishing groups to manipulate reality to support particular positions:

Coastal and oceanic ecosystems are both complex and dynamic, and are influenced by many natural and anthropogenic factors. We haven't been able to identify, let alone predict or control, most of these factors. In spite of this, the groups and individuals that are intent on attacking working fishermen at every opportunity unfailingly manage to blame fishing-related activities for every perturbation, natural or man-made, in what they claim is the natural order in the oceans. They are aided in their attacks by a fisheries management system that can't manage anything other than fishing.

"For most of those who spread phony statistics or make wildly inaccurate predictions about the probable effects of public policy, there is no downside. They are never called to account; their bungles are forgotten, and they are left free to fudge the numbers again." David Boldt in Agenda setters paint pictures of doom and gloom by the numbers, The Philadelphia Inquirer, June 2, 1998.

It's doubtful if any natural systems that are even fractionally as complex as our coastal or oceanic ecosystems are capable of "sound bite" analyses, yet the anti-commercial fishing forces would have us believe that most of the ocean's ills can be blamed on the impacts of efficiently catching fish for sale - not, of course, for sport or relaxation. Due to some subtle biological phenomena, those fish killed by our recreationally oriented colleagues, some would have it, experience a demise much less injurious to the natural world.

The Recreational Fishing Alliance, with Robert Healey, who runs Viking Yachts in New Gretna, New Jersey as Chairman, announces on its website it is "*on a mission to end longlining in America!... The Longliners, Pair Trawlers, Purse Seiners and the rest of the big industrial fleets...have been successful in shaping policy to their advantage and that is why today, we have marine fish stocks that are near total devastation. They have been 'strip mining' our oceans!...When the rules are slanted in favor of the industrial fishing fleets, recreational anglers, and our already-depleted fishing stocks suffer.*" The entire U.S. longline fleet fishing off the East Coast, the fleet Mr. Healey and the RFA characterize as big and industrial, numbers less than 200 vessels. They range from 40 to 110 feet in length (only 20 are over 78 feet long and the average is around 60 feet) and over 95% are owner operated. With an average replacement value of approximately \$250,000 each, we'd guess that the cheapest fiberglass yacht that pops out of one of Mr. Healey's molds in New Gretna costs significantly more.

The "villainization" of fishermen

From somewhere near the beginning of this decade, the public opinion of working fisherman has been steadily eroded. From any objective perspective, the reasoning behind this is obscure. Every year there are less fishermen complying with more management-imposed restrictions, catching fewer fish in an increasingly sustainable manner. In spite of this, there is an increasing anti-fishing clamor, and it always originates from and is buoyed by particular segments of the environmental and recreational angling communities.

(A related issue is the misleading characterization of working fishermen as seafood consumers rather than the first link in a chain that gets seafood from the oceans to the real consumers. Due to what is undoubtedly some more "obscure" reasoning, consumers - and their interests - tend to get purposefully left out of any fisheries discussions.)

The continuing development of coastal areas

The second half of this century has seen a continuous and accelerating shift of the population to the coastlines. Unfortunately, the people when shifting are usually accompanied by 6,000 pound GVW sports utility vehicles, 200+ horsepower outboard motors, 1200 cc personal watercraft, strip malls, tee shirt shops, "lawn care" services, central plumbing, household pets and all the other cultural artifacts that are generally considered to be slightly less than friendly to the neighborhood estuary. Estuaries, and the water flowing through them, are tremendously important to the health of the inshore and near-shore ecosystems, but we're still destroying or degrading them at an alarming rate.

The unrestrained growth of recreational boating

Virtually all of the watercraft sold for recreational use today are made of fiber reinforced plastic (aka "fiberglass"). One of their most notable characteristics is that about the only way to get rid of them is to burn them - a not-too-common occurrence on the water. In boat terms, they are immortal. Hence the hundreds of thousands of sportsfishing boats, personal watercraft, cruisers, luxury yachts and ski boats that are sold each year are added to a huge fleet already on the water. Imagine what it would be like if automobiles remained operational for thirty-plus years and there were no restrictions on who could use them and few on how they could be used. We have an on-the-water equivalent.

Unfortunately, most boating use is on the vitally important estuaries that are already reeling from the afflictions brought about by the mass population movement to the coast.

The dependence of fisheries management agencies and personnel on recreational angling and boating expenditures

The Wallop-Breaux Act imposes a "tax" on the sale of recreational angling and boating equipment and recreational boating fuel. The revenues collected are distributed to state fisheries agencies, based on the amount of recreational boating/angling activities in that state's waters. Since the program was started, over \$3 billion have been distributed to the state agencies. Bureaucracies being what they are, it's impossible to imagine that this doesn't encourage policy recommendations supporting the expansion of recreational angling/boating at the expense of competing activities - such as commercial harvesting - that aren't accompanied by such direct fiscal incentives. Simply stated, a state fisheries agency that allocates more fish to recreational anglers (and less to the non-fishing public) will generate increased recreational boating/angling expenditures and a corresponding increase in the size of its budget.

The next anti-fishing "Frontier"

06/24/98

In a **Planet Watch** piece in the June 15, 1998 issue of **TIME** magazine, David Bjerklie identifies bottom trawling as an aquatic Armageddon, quoting the National Audubon Society's Carl Safina's sound bite friendly term for it - "scorched earth fishing." Mr. Bjerklie's somewhat lop-sided coverage cries out for an attempt to put bottom trawling and related fishing activities into a real world perspective. This perspective is one that he and many of the people intent on remolding the public view of fishing unfailingly ignore.

How much of the ocean's bottom is impacted by trawling?

Oceans cover about 70% of the earth's surface. Their mean depth is 3795 meters. Almost 90% of the world's ocean waters are deeper than 1000 meters (see table below). Because of primarily technological limitations, bottom trawling is for all practical purposes limited to waters that are generally much less than 1000 meters deep (While not documented, probably 75% of the bottom trawling done off the East coast of the U.S. is in waters less than 200 meters deep). Even if bottom trawling were as "destructive" as Mr. Bjerklie and Dr. Safina would like us to believe, it doesn't require a particularly rigorous analysis to determine that it isn't about to turn a large part of the sea bottom into a biological desert.

Depth Interval (meters)	Atlantic	Pacific	Indian	All Oceans
0-200	13.30%	5.70%	4.20%	7.60%
200-1000	7.10%	3.10%	3.10%	4.30%
1000-2000	5.3	3.9	3.4	4.2
2000-3000	8.8	5.2	7.4	6.8
3000-4000	18.5	18.5	24	19.6
4000-5000	25.8	35.2	38.1	33
5000-6000	20.6	26.6	19.4	23.3
6000-7000	0.6	1.6	0.4	1.1
>7000	0.2	0.1

from Table 5 Percentage area of depth zones in the oceans (Kosinna, 1921)(from The Oceans, Their Physics, Chemistry and Biology; H.U. Sverdrup, M.W. Johnson and R.H. Fleming; 1942; Prentice-Hall, Inc.)

Making some reasonable assumptions (necessitated by a chronic lack of data pertaining to what real fishermen are doing in the real ocean), we estimate that there are 2,500 trawlers fishing in the Atlantic EEZ (in Fisheries of the United States 1992 the National Marine Fisheries Service reported that in 1990 there were about 7500 documented commercial fishing vessels from Maine to Florida. We are assuming that 1/3 of these are engaged in the ocean trawl fishery). If each of these boats is using a net with a 100 foot opening (the few Boeing 747-swallowing nets in use [Link to 747 quotes] are balanced by the much smaller ones used by most trawlers), and tows that net for ten hours a day at 3 miles an hour, and fishes for 200 days a year, in a year the entire fleet will have covered about 300,000 square miles of bottom. Coincidentally, that is a reasonable approximation of the area of the EEZ off the East coast. That means that, were the fishing effort evenly distributed, each square foot of bottom would get fished over once every year.

But fishing effort isn't evenly distributed. Some areas are, for physical or administrative or regulatory or political reasons, beyond the reach of the fishing fleet. In some areas, the fish just aren't there. So, in reality we have a situation where small, localized areas - Georges Banks off Cape Cod, for example - are, because of their accessibility and their suitability for producing and/or attracting and holding large concentrations of marketable fish, heavily fished. Other areas are fished lightly if at all. So in reality a small proportion of the only 10% of the total ocean area that could be fished by bottom trawls actually is. That leaves in excess of 90% of the ocean seabed intact - at least as far as working fishermen are concerned - and performing all of those biological functions that ocean bottoms are so important for. Dr. Safina's "scorched earth fishing" doesn't seem a large-scale conflagration. Maybe a brushfire, but read on....

Can we harvest fish and shellfish from the world's oceans without changing the ocean environment?

Of course we can. Just as we could have harvested plants and animals from the North American continent in a manner that might have been acceptable to Dr. Safina and Mr. Bjerklie. That's what the Native Americans did for centuries (give or take the odd brush fire they might have set). If either of these "scorched earth" proponents was in charge of agricultural policy, however, we wouldn't be supplying the protein needs of several hundreds of millions of people today. Maybe a million or two, but that would take an awful lot of deer, squirrels, bunnies, roots, bark and berries. Modern terrestrial food production technology - we also call it farming - entails a certain amount of interference with the natural world. Generally that interference is along the lines of clearing the land of trees and rocks and weeds and other "natural" impediments, preparing and treating the soil, etc., etc., etc. (A process not far removed from that of intensive trawling on the ocean bottom.)

This is what keeps us, a lot of us, in Big Macs, Fritos and Pop Tarts - and most of the "organic" produce that is so popular today. Would Dr. Safina actually refer to modern agriculture as "scorched earth farming" and campaign for its elimination? Would Mr. Bjerklie carry on in TIME magazine about it? They might respond "but there's a difference." But is there?

Modern bottom-tending fish harvesting gear has been in intensive use in some areas for generations. It is used there because it is an efficient method of getting fish from the ocean floor to the consumer. It definitely changes the character of the bottom. If it is done effectively, however, it demonstrably doesn't destroy the area's capacity to produce the fish being harvested. That's why the fish, and the fishermen, keep coming back. Of course the system can get out of balance, just as - witness the Dust Bowl - agricultural systems can. But as long as well over 90+ percent of ocean bottom is undisturbed by trawling and producing new recruits - the fry, fingerlings, larvae, eggs, cysts, etc. that are the equivalent of seed - and as long as the mesh size of the trawl nets in use allows smaller fish and invertebrates to pass through, no bottom, no matter how heavily trawled, is being turned into a lifeless, unproductive "desert."

The effect of demersal trawls on finfish assemblages

From: Ecosystem Effects of Demersal Fishing: A European Perspective by S.I. Rogers, M.J. Kaiser and S. Jennings (in Effects of Fishing Gear on the Sea Floor of New England edited by E. Dorsey & J. Pederson, Conservation Law Foundation, 1998)

Note: The following was taken from the Conservation Law Foundation report to show that, when it comes to the impacts of bottom tending gear, the scientific community seems to agree on little other than the fact that much more work needs to be done before any conclusions can be drawn. While there are those like Dr. Safina who believe that any disturbance of the "natural" sea bottom should be prohibited automatically, there is a sizeable and growing body of work describing the actual results of those disturbances and, as is shown in the following, these results aren't necessarily detrimental to the fish stocks.

The references to other papers have been omitted. Copies of the full report (MIT Sea Grant Publication 98-4, ISBN 1-892787-00-8) are available from the Conservation Law Foundation at 62 Summer Street, Boston, MA 02110 (phone 617 350-0990)

"The direct effects of trawling on target species is clear and has resulted in high levels of fishing effort on most of the important European stocks. The development of the heavy beam trawl in the 1960s allowed the introduction of a targeted flat-fish beam trawl fishery in an area of the southern North Sea that had already experienced constant otter trawling effort for many years previously. Another important direct effect of fishing is that it has provided food for other species in the ecosystem by discarding unwanted bycatch and by killing benthic animals in the passage of the gear.

*Recent studies of long time-series of data, some taken in research vessel cruises before the first World War, have revealed patterns in fish abundance which cannot always be associated with the deleterious effects of commercial fisheries. One group that is considered vulnerable to the effects of increased fishing effort are the elasmobranchs, which generally have low fecundity and high age and length at maturity. However, not all species appear equally sensitive, and those with a relatively low length at maturity such as the starry ray, *Raja radiata*, have proved to be resilient. Survival experiments using fish bycatch taken from beam trawls have shown mortality rates of up to 40% for *Raja neavus*, compared with higher rates of 60 to 90% for dragonet, *Callionymus lyra*, and for plaice and dab, *Limanda limanda*.*

In the 1960s and 1970s an increase in growth rate was reported for both plaice and sole which could not be related to changes in temperature, but which did coincide with increases in both beam trawl effort and eutrophication in coastal waters. There is some evidence that eutrophication has enhanced populations of polychaetes and brittle stars in coastal waters, thereby increasing the food supply for fish. Some of the most important consequences for the production of demersal benthic organisms result from the presence on the sea bed of (1) damaged or dead organisms resulting from the passage of the trawl and (2) discarded target and non-target species (bycatch). It is estimated that 475,000 mt of fish, offal, and benthic invertebrates are discarded in the North Sea annually. Kaiser and Spencer observed 35 times as many fish aggregating over a recently beam trawled line compared with adjacent unfished areas, which implied that fish moved into areas of disturbance. Similarly, gadoids were observed to aggregate around newly disturbed pits in sandy sediments. Analysis of plaice and sole growth rate confirmed that increases for intermediate plaice size classes (15-30 cm) may have been due to a combination of beam trawl and eutrophication effects because of the spatial overlap of these effects and of these fish size classes. Increases in mean length at age for sole since the 1960s was significantly correlated with increased beam trawl effort. Although the small mouth size of sole suggests that this species may not be able to benefit directly from damaged benthos, the longer term effect of trawling would tend to encourage smaller opportunistic benthic invertebrates, which form a large part of its diet. As the fishery operates outside the 12-mile limit, these effects would tend to benefit older individuals.

*Dietary analyses of gurnards (*Trigla* spp.) and whiting (*Merlangius merlangus*) caught on recently beam trawled and undisturbed areas also revealed that both species consumed significantly greater numbers of the amphipod, *Ampelisca spinipes*, within the fished area. This amphipod constructs a tube that protrudes from the surface of the sea bed, which makes it vulnerable to contact with bottom fishing gear. Interestingly, gurnards normally eat large prey items such as shrimps, Crangon spp., and swimming crabs, *Liocarcinus* spp., but preferentially selected *A. spinipes* when feeding within the trawl tracks.*

*This switch in diet implied that large numbers of amphipods were made available to predatory fish as a result of trawling. Adult queen scallops, *Aequipecten opercularis*, do not occur in the diet of whiting under normal circumstances. However, the distinctive orange gonads of these bivalves were recorded in whiting stomach contents after trawling, indicating that these*

molluscs had been damaged by the trawl. Large numbers of the bivalve A. islandica are damaged by trawling at times of intensive otter trawling in Kiel Bay, and at these times this species is common in the stomach of cod, Gadus morhua.

Similar responses to fishing disturbance were also recorded for dab, which were attracted to animals damaged by the trawl within 20 minutes of its passage and increased to three times their former abundance after 24 h. In addition, the diet of dab captured in the trawled area consisted mainly of the oral discs of the brittle star, Amphiura spp., in contrast to those in adjacent undisturbed areas, which consumed only brittle star arms."

Then there are natural bottom disturbances:

A sea surface wave with a height of ten meters (not an excessive height in storms off our coast - see Sebastian Junger's The Perfect Storm Link to The Perfect Storm review) can induce a particle velocity of 40 centimeters per second 100 meters under the surface (see the table below). This approximates the velocity (actually 49 cm/sec) 2 meters under a wave with a height of one meter. Dive six feet beneath a three foot high wave and you'll know that a lot of water is being moved pretty rapidly down there. A 30 foot wave can have the same effect 300 feet deep, and most of our bottom trawling is done on shallower bottom. Can a trawl cause as much disturbance of the bottom in these shallow waters as a run-of-the-mill Nor'easter? More importantly, is anyone comparing the impacts?

Period Length (seconds)	Velocity (cm/sec)	Length (meters)	Height (meters)	Velocity at surface (cm/sec)	Velocity at 2 meters (cm/sec)	Velocity at 20 meters (cm/sec)	Velocity at 100 meters (cm/sec)
2	312	6.2	0.25	39	5.2	0.0	0.0
4	624	25	1	79	49	0.5	0.0
10	1561	156	7	220	203	99	4.2
16	2498	396	10	197	190	143	40.6

Table 60 Velocities of water particles at different depths in surface waves of different periods, lengths and heights
(from The Oceans, Their Physics, Chemistry and Biology; H.U. Sverdrup, M.W. Johnson and R.H. Fleming; 1942; Prentice-Hall, Inc.)

And hook-and-line fishing:

The anti-swordfish consuming campaign that we reported on a few issues back [Link to FishNet on Swordfish Boycott] is still hanging on. As part of that campaign, Audubon's Dr. Safina contributed an op-ed piece to the New York Times on April 14 titled Fish Market Mutiny. In it he railed against longlining (fishing in which baited hooks on long leaders are suspended at intervals of hundreds of feet from horizontal "long lines" designed to follow the edges of productive offshore water masses - because that's where the fish are).

We've always assumed a fish hook was a fish hook, whether attached to a long line with a working fishermen standing in oilskins at the end or dragged behind a half a million dollar yacht with a retired CEO in a - sort of - equivalent position (only strapped into a \$5,000 fighting chair and holding a \$2,000 fishing pole). They all have similar effects on the creatures that are unfortunate enough to eat them. With the intention of putting the longlining "threat" into a realistic perspective, we've done some hook to hook comparisons.

The East coast U.S. pelagic longline fleet - those boats that fish in the EEZ off the Atlantic states for tuna, swordfish, mahi mahi and shark - numbers less than 200 vessels. They fish an average of 600 hooks each for under 100 days a year (personal communication from Blue Water Fishermen's Association). Assuming 200 boats, 100 days and 600 hooks, that's 12 million hook-days (one hook in the water for 1 day) a year for an entire fleet that is being treated as the scourge of the ocean, right in line with Dr. Safina's "scorched earth" bottom trawlers.

Thanks to the National Marine Fisheries Service's statistics people [Link to NMFS Recreational Trips document (Adobe Acrobat format)note: this is a link to an Adobe Acrobat PDF file. You must have the Acrobat Reader plug-in installed to access it] we found that in 1995 sports anglers on the East coast were estimated to have made slightly over three million trips fishing from party and charter boats, 18 million trips fishing from shore, and 18 million trips fishing from private and rental boats. Assuming an average of three hooks per angler (extensive personal observation would bear this out), that's almost 120 million hook-days. It's difficult to imagine how in any rational world one user group can be made the target of an international campaign backed by reputable environmental organizations when another group, using the very same gear but with a total effort an order of magnitude greater, can be ignored completely. It brings to mind the pop song popular back in the Eighties titled "Who's zooming who?"

What's really going on?

There are some valid questions about the possible environmental impacts of seafood harvesting techniques that have been in use, and taken for granted, for generations. These are being looked at. When it comes to issues of ocean quality, fishermen have been in the lead in identifying problem areas and in coming up with solutions for longer than many of today's environmental organizations have been in business. If you are a working fisherman today you realize that when it comes to estuarine, coastal or ocean habitat degradation, it isn't your job that's at risk, it's

your way of life. There are definitely more than enough real habitat-related issues of far more significance than bottom trawling impacts to keep us all busy.

So why put the “doom and gloom” machine into motion because of the yet-to-be identified effects of fishing techniques that have been in use for generations - and in use, we have to emphasize, on a very small part of the sea floor - and that are in all probability minimal compared to “natural” processes like the storms that occur every year? And why proclaim that the use of a particular technology by one group is completely unacceptable while ignoring the impacts of that same technology used by a far larger group? It almost seems as if these “causes” are being manufactured. If that’s the case, we can only ask why?

The commercial fishing industry - target of opportunity?

07/23/98

The negative impacts - sometimes actual but more often exaggerated - of seafood harvesting have made up a large part of the ocean dialogue for over a decade. In recent years there have been attempts to relate virtually every out-of-the-ordinary occurrence in any body of salt or brackish water to one commercial fishing activity or another. Every time a recreational angler needs an excuse for why, with a \$50,000 outboard motorboat and \$10,000 worth of fishing poles and fish-finding and navigational electronics, he didn’t catch enough fish, he can blame commercial fishing. Every time an environmental organization needs a boost in membership, a larger foundation grant, a cause to flog or a “let’s get the bad guys” sound byte, there’s commercial fishing. And whenever anyone suggests that the U.S. taxpayers might not be getting much return from their half a billion dollar a year investment in fisheries management, the response from the managers always seems to include shifting blame to the commercial fishermen.

In the last decade various people and organizations have become exceedingly adept at pointing out in elaborate, usually overblown, detail what’s wrong with commercial fishing. It seems to have become an almost guaranteed way to attract high levels of funding at a time when the quest for research dollars has become exceedingly competitive. While it’s probably not necessary to state it here, finding - or manufacturing - fault with commercial fishing has become a sizeable industry.

The commercial fishing industry - what is it good for?

At the same time we seem to have lost sight of the enduring and ongoing contributions that working fishermen and the results of their labors have for generations made to our health, our economy, our quality of life and our coastal heritage.

- Starting with the most obvious and stated most simply, fishing provides an awful lot of high quality protein. As a global community we need to efficiently harvest and distribute the sea’s bounty (and, of course, other forms of protein) to avoid mass starvation. That would seem to be evident to just about anyone with either a television and a social conscience or the tragic misfortune to have been born in the wrong place. However, a handful of people who are fortunate enough to be from protein-rich nations like the United States have the luxury to rhapsodize about zero-impact, low efficiency, sustainable fishing and try to impose their vision on the rest of the world. Understandably, that rest of the world is much more interested in whichever management techniques will allow them to most effectively wring the maximum amount of protein from the coastal and ocean waters they control. Unfashionable as it might be in our well-fed, home-grown ocean advocacy circles, they probably consider their practical approach to fishing to be somewhat better than starvation and somewhat easier than population control. From any kind of global humanitarian perspective, non-impact fishing should probably be considered a non-starter. The idea of automatically condemning efficient fishing techniques should be unconscionable anywhere in a world in which thousands of people are starving every day, yet it is in vogue in the “right” environmental circles.
- The dietary benefits of seafood are obvious to those of us who can afford the luxury of controlling our diet. For us, seafood will keep us alive longer. This can’t be said of any other kind of animal protein.
- The environmental benefits of harvesting seafood from the wild as compared to culturing it in controlled systems are becoming more apparent as aquaculture production, and the scrutiny applied to its impacts continues to increase worldwide. Until - or if - closed system aquaculture becomes practical on a large scale, any significant fish or shellfish farming operation is going to come with built-in environmental liabilities.
- While we’re saving an in-depth treatment for a future FishNet, the cultural contributions that fishing has made to our coastal communities are so significant (and appealing) that tourist attractions such as San Francisco’s Fishermen’s Wharf and Monterey’s Cannery Row strive to maintain their fishing aura even after the largest parts of their fishing industries have moved on. And anyone who has spent time in coastal New England knows how pervasive the fishing traditions and atmosphere are and what importance they have had in developing the character of the communities there. The same can be said, perhaps on a lesser scale, of other towns and cities up and down both coasts.
- On a related note, commercial fishing is the major - and in many instances the only - source of year-round employment in those coastal communities that are otherwise dependent on the vagaries of expenditures by seasonal vacationers.
- We’ve discussed the significant positive impact of domestic fish and seafood production on the balance of trade in a previous FishNet. In view of the rapid growth of our trade deficit as a response to the economic troubles in Asia, seafood exports are even more important today.

- Then there are the simple contributions, usually taken for granted, that working fishermen make to the quality of all our lives. What would a trip to the New Jersey shore be without a dinner of ocean-fresh bluefish or scallops or fluke - preceded, of course, by half a dozen cherrystone clams on the half-shell? A trip to Maine without a steamed lobster? Boston without a cup of chowder and baked scrod? Baltimore and no blue crabs? And the list goes on and on.
- While its importance has been completely ignored by an environmental community that would normally be expected to recognize and capitalize upon it, working fishermen provide the most important link between the public and solid ocean values. Increasingly the oceans are viewed as some larger, slightly less predictable version of a Disneyworld or Three Flags over wherever theme park. You splash in them, swim through them, observe other people exploring them, and watch trained, costumed dolphins and orcas and seals perform in them. Located on them are an ever increasing number of floating mega casino-resorts that let you spend a week "at sea" without tasting salt spray or smelling salt air and they're where you tear about on your jet ski after you get it off the trailer. And, of course, they're where you catch fish for fun.
- When was the last time anyone agonized over the loss of natural habitat in Orlando or Las Vegas? Actually, when was the last time anyone thought, or cared, that there was any natural habitat left in either? When was the last time you saw someone watching a nesting osprey from an idling jet ski [Coincidentally, two weeks after writing this we came across a sign in front of a watersports concession in Corolla on Cape Hatteras, NC that advertised both jet ski rentals and ecotours. Perhaps a candidate for the most internally inconsistent sign of the decade?]. But as we've seen - fortunately much less frequently in recent years - the public responds immediately, loudly and convincingly whenever there's an assault on the quality of their local seafood. When it affects what's on their table, ocean quality issues become very significant to people very quickly. Commercial fishing provides tangible proof that our waters have a value that far transcends their use for recreation, entertainment and transportation.
- Finally, and this is another one of those seemingly self-evident benefits that tend to be ignored, commercial fishing docks are much more environmentally benign than anything likely to replace them. With the rampant development that our coastal states are afflicted with, we don't need any more condos, motels, golf courses, marinas, jet ski/parasail concessions or night clubs on our waterfronts. Zoning or no, what are the chances that any commercial fishing dock, minus the commercial fishing, is going to be transformed to a less intensive use?

VIRUSES MAY POSE RISK TO LOCAL SHRIMP

By Jerald Horst

"At the end of July, about 90 scientists, environmentalists and shrimp industry representatives met in Kenner to discuss the risks posed to native shrimp populations by foreign shrimp viruses. These deadly viruses came to their attention when shrimp farms in Asia and Latin America experienced high losses from infection.

These were followed by virus outbreaks on shrimp farms in Texas and South Carolina that farmed non-native Pacific white and blue shrimp. About 80 percent of the shrimp consumed in the United States are imported; half of them are produced on farms.

The major issue is whether importing these non-native shrimp for either aquaculture or consumption will spread these viral diseases to native Gulf of Mexico shrimp, and if they are infected, what the effects will be.

Scientists at the workshop said viruses causing four shrimp diseases are present and will continue to be present in imported shrimp. Pathways for the viruses to reach wild native populations were identified as escape of non-native, infected shrimp from U.S. shrimp farms; water discharge and storm tide flooding of these farms; direct discharges from seafood plants that process imports; seagulls feeding at landfills containing shrimp wastes; and the recreational use of infected bait shrimp.

Where the scientists disagreed was on the impact of this spread. Little is known about how infectious and deadly these viruses would be on native shrimp in the wild. If native wild brown, pink and white shrimp are affected in a way similar to non-native Pacific shrimp on farms, thousands of jobs in the domestic shrimp industry could be lost." (from The Times-Picayune, New Orleans, Louisiana, August 6, 1998)

The commercial fishing industry - can we keep it around?

It would seem there are compelling reasons for maintaining a healthy, economically viable commercial fishing industry. But are we?

This is the big question. Commercial fishing is facing challenges today that few people outside the industry are aware of, challenges that are having dramatic cumulative impacts on the small businesses that make up the domestic fishing industry, impacts that many of these businesses aren't capable of absorbing. In this FishNet we've tried to show you what's at risk. We'll be looking at the specific challenges and the effects they are having - on the fishing businesses and on the communities they are an integral part of - over the next several months.

The Natural Resources Defense Council - that group that brought us the Alar apple scare a few years back, is one of the leaders in the anti-commercial fishing movement. With their publication Hook, Line, and Sinking - the Crisis in Marine Fisheries they "make their case" for inflicting on working fishermen the equivalent of the impacts their Alar hysteria had on the agricultural industry. But are the conditions in the fisheries all that bad? Following are parts of titles of NRDC publications listed on their web site. While such titles would seem to be more appropriate to the shelves overlooking supermarket check-out counters, they've evidently become quite important in influencing public opinion*. We'll leave it to our readers to judge how justified the levels of hysterical alarmism they reach actually are.

"Year of Living Dangerously.... Public Health Threats From.... Arsenic, Radioactive Radon, and Trihalomethanes in Our Drinking Water.... Failure of the Nation's Drinking Water System to Protect Public Health.... Politics and Pollution.... Congress' Continuing Attack on the Environment.... Gutting Environmental Protection.... Congress' Assault on Clean Waters.... Are Children Its First Victims?... Exposure and Toxicity to Infants and Children.... Out of Breath: Children's Health and Air Pollution.... Our Children at Risk:.... No Safe Harbor:.... Violations of Federal Health Standards in Tap Water.... Hog Wash: Factory Farm Giveaways.... Testing the Waters VI: Who Knows What You're Getting Into.... Healing the Waters of Greater Cleveland: Poison Runoff Problems.... Children and Environmental Carcinogens.... Getting the Dirt on Your Electric Company.... Gathering Storm: Coming Environmental Battles.... Forests on the Line.... Flying Off Course: Environmental Impacts of America's Airports.... Falling Trees and Fading Promises.... The Dirty Little Secret About Our Drinking Water:.... Whale Sanctuary 'In Danger'.... Damage Report: Environment and the 104th Congress.... Contaminated Catch: The Public Health Threat from Toxics in Fish.... Breath-Taking: Premature Mortality Due to Particulate Air Pollution.... Breach of Faith: How the Contract's Fine Print Undermines America's Environmental Success."

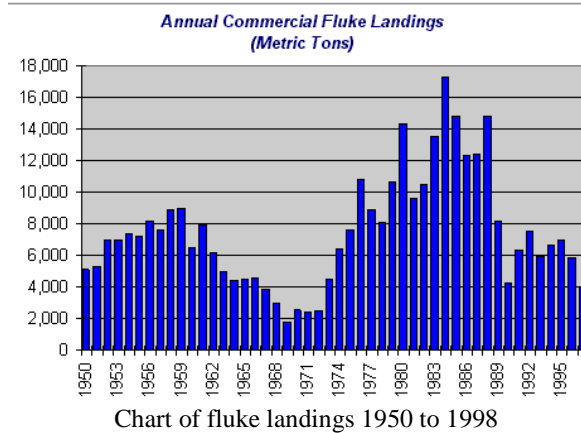
*Surprisingly, in the titles of over 20 listed publications dealing with nuclear power, research or weaponry - in various countries including China, Iran and India - the NRDC's vocabulary doesn't get much stronger than difficult or alert. Kind of makes you wonder who's setting their priorities?

The fluke fiasco

10/07/98

The summer flounder, also called fluke (*Paralichthys dentatus*), is one of the most popular fish with both recreational anglers and seafood lovers in the Mid-Atlantic region and southern New England. Historically the total catch of this highly desirable flatfish has been about evenly divided between the sports and commercial harvesting sectors, contributing hundreds of millions of dollars to the coastal economy of the region every year. The fishery has been the mainstay of a large part of the party/charter boat fleet and many commercial boats, both large and small, for generations.

Like many fish species, the numbers - and the landings - of fluke tend to fluctuate widely. As the chart below shows, in the 47 years beginning in 1950 commercial fluke landings, which averaged about 6,200 metric tons a year for the total period, ranged from a low of 1,782 tons in 1969 to a high of 17,255 tons in 1984 - a variation of an order of magnitude. (recreational landings, which were only available beginning in 1981, show the same pattern of variation.)



Responding to what was represented by the management establishment as an imminent collapse of the fluke stocks in the early 1990s, severe restrictions were placed on both the recreational and commercial harvest. The commercial landings, 4246 tons in 1990, bounced back up to 6291 tons in 1991 - production equal to the average landings for the fishery since 1950. Ignoring the low 1990 landings, the only indication of any "collapse" of the fishery evidenced in commercial landings would be their declining to a level that is almost exactly the 48 year average.

To prevent the "imminent collapse," restrictions on commercial harvesters included a small coastwide quota implemented on a state-by-state basis, an increased minimum fish size and a minimum net mesh.

Each state was granted a commercial quota and the authority to decide how to allocate it among the permitted harvesters. New Jersey divided the year into three seasons with a part of the statewide quota available at the beginning of each season and the season remaining open until all of that part of the quota was caught. To fairly divide the harvest between the larger and smaller boats allowed to land fish in New Jersey, per-trip catch limits, which vary from season to season, were also established. The entire New Jersey quota for the season which opened on September 1, 1998 was taken within three weeks.

The angling measures put in place to meet target fluke mortality levels in response to the perceived crisis were both bag and size limits. Due to an oversufficiency of the supposedly threatened species, in 1996 the sportsfishing target quota was exceeded by almost 50% and in 1997 by about 60%. Projections are that in 1998 the target quota may be exceeded by 100%.

In the commercial fluke fishery....

Taking all of the restrictions on the commercial fluke fishery into account, the boats are employing perhaps a quarter of the total fishing power that was directed at fluke a decade or two ago. Back then there were no limits on how many boats could participate in the fishery. They could fish with any type of gear for up to 365 days a year (realistically, a boat could fish for fluke off New Jersey for at least 200 days a year, depending on its size) and keep any size of fish that could be sold. At the time there was a large market for what are now sub-legal fluke so many of the smaller fish were kept. .

Today the New Jersey fluke boats fish less than 40 days a year, using nets with a mesh that allows the smaller fluke to escape, and the reduced number of boats is strictly limited. Yet even with these restrictions the much smaller fleet is able to catch half as many fish as it did in the unregulated fishery of years past in much less than half the time. Given this level of fishing success and looking at the landings patterns, it's difficult to see the crisis that supposedly necessitated such drastic restrictions on fishing .

As a result of this management regime, what used to be a year round supply of highly desirable fluke fillets has become sporadic and unpredictable. Many dealers have been forced to switch to imported flatfish, a move that has driven down the price paid to our fishermen for their fish. Fluke used to be one of the most valuable species landed in the Mid-Atlantic. Today, thanks to a management system that is completely insensitive to the realities of international seafood marketing, it doesn't return any more to the fishermen than any of the other commonly caught species. By being restricted to catching less fish and getting lower prices for those they do catch, the domestic fleet is suffering a "double whammy" and they are suffering it at a time when the ocean is arguably filled with fluke.

And the recreational....

The past several years have shown a resurgence in the recreational fluke, striped bass and weakfish fisheries. There hasn't been a redirecting of angling effort to account for a greater fluke catch. A notably high number of large fluke have been caught this year (see box on right) but other sizes have also been available to anglers. The inescapable conclusion is that there are a lot of fluke waiting to be caught.

From John Geiser's sports fishing columns in the Asbury Park Press, Asbury Park, NJ

- **This season is no fluke, it's one for record books** - *"This season is going into the record books as the year of the big fluke, and new names are being written into the annals."* July 21, 1998.
- **Regulations spoil solid fluke fishery** - *"The presence of a record number of big fluke has masked the fact that this season was prevented by regulation from being a great fluke year."* July 24, 1998.
- **A record fluke may still be out there** - *"The year of the big fluke needs only a record-breaking flatfish to make it complete."* September 15, 1998.
- **Fluke approach record size** - *"The record-breaking fluke has not been caught — yet, but the gap is narrowing."* September 22, 1998.

In spite of what seems to be compelling evidence - at least considering the catch in the commercial and sports fisheries - that fluke stocks have undergone a dramatic recovery (assuming that a collapse really was imminent when the "doom and gloom" machine focused on this species a few years back), several environmental organizations have petitioned the management establishment to "save fluke" even more severely by completely closing the recreational fishery. Some commercial fishing organizations have also joined this effort, but their motivation is that if the recreational harvest continues at high levels and overall quotas aren't adjusted, the commercial quota will be reduced to compensate.

The question that most immediately comes to mind is "how much saving does the fluke fishery really need?" Looking at both the commercial and the recreational fisheries, it appears as if there are - and have been for several years - more than enough fluke to go around. In fact, knowledgeable fishermen argue there are more fluke available than there have been for years. But in spite of this, and propped up by statistical models based largely on commercial and recreational catch data that intuitively screams otherwise, fisheries managers - with reinforcements provided by the environmental community - are insisting that the fishery has not recovered and that even more stringent restrictions are in order. Existing restrictions are already draining many millions of dollars from the economies of the coastal states from North Carolina to Massachusetts. If the environmentalists are successful in their efforts, this will increase by millions more. And their justification is that too many fluke are being caught. In some sort of fisheries Catch 22, the fact that they're only being caught because they're so plentiful counts for nothing.

While at first glance this seems to be a subject important only in the Mid-Atlantic, it is actually symptomatic of problems in many other U.S. fisheries. Management decisions are increasingly based on measures of fishing performance (cheap) rather than direct observations of fish in the oceans (expensive). However, fishing performance - both commercial and recreational - is dependent on many more factors than the condition of the stocks. The thousands of dollars we're saving in scrimping on at-sea observations are costing millions of dollars in lost economic activity. This is a false economy we can't afford.

NOTE: In spite of the controversy about the condition of the fluke stocks (and the millions of dollars that depend on that condition), at the Mid-Atlantic Fishery Management Council meeting in Philadelphia on October 6, the National Marine Fisheries Service wasn't willing to commit to an immediate stock assessment, which would very possibly bring their statistics more in line with fishermen's observations.

- The Oil Slick -

From **Fish Market Mutiny** on The New York Times Op-Ed Page on April 14, 1998, Carl Safina, Director of National Audubon Society's **Living Oceans program** wrote: *"Royal Caribbean and Celebrity Cruise Lines, being good mariners, have announced that they will deftly steer clear of swordfish...."* (this was written by Dr. Safina in support of the controversial Pew Charitable Trust sponsored consumer swordfish boycott).

From **Royal Caribbean fined \$1 million for pollution**, a Reuters article by Jim Looney posted on InfoBeat on September 16, 1998: *"MIAMI - A U.S. judge Wednesday ordered Royal Caribbean Cruises Ltd, the world's second largest cruise line, to pay a \$1 million fine for dumping oily bilge waste into the ocean and lying about it, a U.S. prosecutor said. The penalty was part of a plea-bargain agreement reached in June that will see the company pay a total of \$9 million, the largest pollution fines ever assessed against a cruise company, for dumping oil into Caribbean and Atlantic waters, Asst. U.S. Attorney Tom Watts-Fitzgerald said."*

From **Ocean Fund Awards \$537,000 In New Grants**, a press release from Royal Caribbean Cruises Ltd. dated Thursday October 1, 1998: *"in the two years since its launch, The Ocean Fund now has donated \$1,382,000 on behalf of Royal Caribbean International and Celebrity Cruises to 22 organizations working to protect the marine environment.... Previous recipients have included The Nature Conservancy, National Audubon Society's Living Oceans program and EarthWatch Institute"*

From **Royal Caribbean fined \$8 million for oil spill** - Reuters article from InfoBeat on 10/14/98 - *"Royal Caribbean Cruises Ltd., the world's second-largest cruise line, was ordered Wednesday to pay \$8 million for dumping oil and lying to the U.S. Coast Guard about it, the Justice Department said. The sentencing in San Juan, Puerto Rico, was in addition to a \$1 million fine levied in a Miami court last month. The two court cases were part of an overall plea bargain by Royal Caribbean that involves five years of monitoring the line's environmental conduct."*

Conflict of interest and fisheries management

11/07/98

During the last reauthorization of the Magnuson Fisheries Conservation and Management Act a lot of attention was directed - particularly by the anti-commercial fishing interests - to commercial fishermen or others associated with the industry who had voting seats on the regional management councils. According to the arguments used then, the effectiveness of the entire system was being severely compromised by the conflicts of interests that this allowed. As an example of how "compromised" the management system actually is, 5 voting members out of a total of 21 on the Mid-Atlantic Council work for the commercial fishing industry.

However, from a commercial fishing/seafood consumer perspective, there really is a serious cause for concern about financially compromised fisheries management decision making. This revolves around the Wallop Breaux program that provides the fiscal underpinnings of every state's fisheries research and management programs.

What is Wallop Breaux? As explained in the House Resources Committee's Subcommittee on Fisheries Conservation, Wildlife and Oceans' oversight plan *"Federal Aid in Sport Fish Restoration Act of 1952 (Sport Fishing and Boating Enhancement Fund or the Wallop-Breaux Trust Fund): This fund is derived from fees, taxes, and duties imposed on (recreational) fishing equipment, (non-commercial) motorboat fuel, imported watercraft, and fishing tackle. The revenues are allocated to the States, on a formula basis, and are used to protect natural resources and enhance recreational (fishing and boating) opportunities for millions of Americans. Since its inception, more than \$2 billion has been collected and allocated to the States."* In recent years this fund has provided over \$350 million annually to the various State agencies responsible for managing fresh and salt water fish. Understandably these funds are dedicated to recreational boating and fishing programs and projects, on face value an example of users paying the fees and getting the government services in return. But is it really that simple?

The Magnuson Act specifies that the heads of each states' fisheries agencies, along with recreational and commercial fishing representatives, are voting members of their region's Management Councils. As the chart below shows, they make up a significant voting block on each Council. The same officials also have one-third of the votes on the Atlantic, Gulf and Pacific States Marine Fisheries Commissions. So far this seems reasonable. They are representing the particular interests of all of their State's citizens, including the non-fishing majority. It's to be expected that they - and the agencies they head - do this equitably, not favoring one user group over another and objectively considering fisheries and habitat issues for the "greater" good. Without Wallop Breaux funding there would be no reason to question this.

However, the millions of Wallop Breaux dollars pumped into their agencies' budgets every year might well call that objectivity into question. Looking again at the Mid-Atlantic, the 7 state fisheries agencies whose directors hold one third of the votes on the regional management council are collectively receiving over \$20 million a year from recreational fishing and boating expenditures in their States. In the chronically under-

funded fisheries research/management world this can't be seen as anything other than a bureaucratic gold mine. (To provide a frame of reference, there aren't half a dozen commercial fisheries in the Mid-Atlantic that produce \$20 million of fish a year.)

Regional Council	Percentage of members who are state agency heads	Wallop Breaux funds going to member states
New England	30%	\$9 million
Mid-Atlantic	33%	\$21 million
South Atlantic	31%	\$13 million
Gulf	29%	\$22 million
Pacific	29%	\$21 million
North Pacific	27%	\$18 million

But, we might argue, these are dedicated professionals who wouldn't let an issue as trivial as where their agency's funds are coming from influence the decision-making process that they are such an influential part of. Unfortunately, it appears as if this might not be the case. Quoting from a guest editorial **Reaching Out to a Non-angling Public** in the current American Fisheries Society's journal Fisheries that was written by Doug Alcorn of the U.S. Fish and Wildlife Service:

“Higher rates of fishing and boating participation mean more license sales as well and Wallop-Breaux funds that support state resource management programs....” Joe Janisch, president of the (AFS) Fisheries Administrators Section and chief of fisheries for the Arizona Department of Fish and Game, concurs, *“....As biologists or administrators there is only so much we can do without customer support. Marketing to maintain or increase a recreational market share is where our power base lies. If we don't have the public (anglers and boaters) on our side, seeing the issues from our point of view, they will be on the other side asking us why.”* Mr. Alcorn's editorial certainly makes it look like it isn't - and we suspect that every State fisheries director with a vote on a regional management council is a member of the Fisheries Administrators Section of the American Fisheries Society that Mr. Janisch is speaking for. If the “other side” Mr. Janisch refers to is the commercial fishing industry and the non-fishing (and non-Wallop Breaux contributing) seafood consuming public it supplies, we would suggest that same public might have an interest in where his increased recreational market share is coming from.

What could this mean outside the fisheries research/management bureaucracy? The most obvious implications concern resource allocation decisions between the commercial and recreational harvesting sectors. [Link to artificial reef section for a look at a possible "real world" example of the results of such an allocation conflict]. Stated most simply, it boils down to a simple “an increase in the fish available to recreational anglers equals an increase in the Wallop Breaux funds available to the State fisheries agencies.”

With millions of Wallop Breaux dollars already pouring into the various State's fisheries agencies and with so many of our fisheries reportedly overfished, would any rational management system want more funds to support even more fishing? In Survey of Future Sport Fish Restoration Fund Needs, 1993-2003 (completed by the International Association of Fish and Wildlife Agencies for the U.S. Fish and Wildlife Service and the American League of Anglers and Boaters) the 1996 apportionment of (Wallop Breaux) Sportfish Restoration Funds to all States was reported as \$197,136,893. The results of a state-by-state survey indicated that, to meet the collective states' expectations, the fund would have to provide \$470,365,820 a year in the year 2003. The American Fisheries Society's comment: “In order to continue to provide excellent recreational opportunities through the conservation of our nation's sport fisheries and access to boating facilities, this need must be met.” [Link to AFS Wallop Breaux Future Needs page link to the AFS "Future Needs" page]

From **Restoring Our Nation's Sport Fisheries** By D. Crandall and V. Floyd (the American League of Anglers and Boaters) *“some-time this year, Congress is expected to revisit the decades-old Sport Fish Restoration Act, also known as the Aquatic Resources Trust Fund, when legislators deliberate reauthorizing the allocation of motorboat and small engines gas tax transferred annually from the Highway Trust Fund. The gas tax portion of the Sport Fish Restoration (SFR) program netted \$245 million in 1996....Overall, this important aquatic resources program, paid for by anglers and boaters from taxes on fishing gear and boat fuel, generates more than \$350 million annually, making it a financial backbone, indeed lifeline, for state fisheries.”*

While the American Fisheries Society - an organization that is consistently outspoken in condemning commercial fishing practices - has taken a commendable position on Wallop Breaux funded fisheries “conservation” efforts, at the same time it seems to ignore the fact that tens of millions of Wallop Breaux dollars are being used to increase recreational fishing and boating access. According to a press release provided on the American Fisheries Society's web site *“Wallop Breaux program partners accomplished the following between 1986 and 1993: 1,600 new public boat launching ramps and related facilities built; 9,700 public boat ramps improved; 600 roads built to provide access to public waters; 1,500 new fishing access sites developed; and at least 170 properties and over 50,000 acres acquired to improve access to public waters.”* It's a little difficult to reconcile the Fisheries Society's zealous pro-conservation posture (exclusively focused on commercial fishing, of course) with its pep rally enthusiasm for projects that encourage ever higher levels of recreational boating and fishing. As far as we know neither of these conserve anything but the level of Wallop Breaux funding going to Society members. But, in spite of the seeming contradictions and assuming that the Society's institutional heart is really in the proper pro-conservation place, one question still remains: **Where are the fish com-**

ing from to support this increased level of recreational angling, to entice more and more people to spend more and more money to catch more and more fish?

We hope they aren't coming from U.S. consumers via reduced commercial allocations but we'd be surprised if they weren't. The fisheries management establishment has much to gain and nothing to lose by increasing allocations to the recreational anglers whose leisure-time expenditures support it. Is such an arrangement adequate for meeting the needs of the non-fishing seafood consumers and equitably allocating fish between competing recreational and commercial users?

Note: Over the years we've been fortunate to know and work with many professional fisheries managers and our intentions here aren't to question their or any of their colleague's individual objectivity or integrity. Our concerns rest entirely with the bureaucratic system they are a part of.

Artificial Reefs - more fish for the anglers and more dollars for the managers, but who's watching out for the consumers? (or the environment?)



Artificial reef remnants on a Pine Knoll Shores, NC beach after hurricane Bonnie (Philadelphia Inquirer August 29, 1998)

The New Jersey Artificial Reef Program

"Since the inception of the State's Reef Program in 1984, 1,015 patch reefs have been built on New Jersey's network of 14 ocean reef sites. A patch reef is a one-half to several acre reef created by sinking a ship or placing a barge-load of other material on the sea floor. In 1996, 107 patch reefs were constructed, bringing the total to over 1,000 for the 13 year project.....Recognizing that reefs in the mid-section of the state are outside the range of demolition contractors, we have targeted these sites for ballasted tire units, army tanks and small vessels."

Another aspect of the management establishment's tremendous reliance on Wallop Breaux funding and the attendant emphasis on increasing recreational fishing and boating expenditures are the so-called "artificial reef" programs. These programs, most of which could just as accurately be termed "dump it in the ocean" programs, have been enthusiastically embraced by many coastal state's fisheries agencies - including New Jersey's.

In these programs large amounts of refuse - historically old tires and construction rubble, more recently weaponry no longer needed by the Pentagon - are disposed of on designated areas of ocean bottom to attract fish (and to increase Wallop Breaux taxable expenditures). Unfortunately - at least for consumers - these "reefs" attract fish through several different biological mechanisms. It's generally agreed that, while they increase overall fish production by adding more solid substrate, they also attract fish from surrounding reef-less areas. Closing off the area around the reef to commercial harvesting doesn't reserve just the "extra" fish that the reef produces for recreational anglers, it is also removing fish from the areas that remain open to commercial harvesters and reserving them for the recreational anglers as well. The commercial fishermen lose not only the ability to fish on the area of productive bottom surrounding the reef, they also lose many of the fish from the areas that remain open to commercial harvesting. The programs provide more fish for the recreational anglers, more Wallop Breaux funds for the fisheries managers, and less fish for the non-fishing public.

- The Oil Slick -

From the National Marine Manufacturers Association website's **Frequently Asked Questions About Recreational Boating And Water Quality**: "*The scientific data clearly indicates that although 20-to-25 percent of the fuel consumed by an outboard bypasses the combustion process and exits the exhaust, only a fraction goes into the water.*" Considering the hundreds of millions of gallons of fuel used annually by recreational boaters and fishermen, that "fraction" probably represents a whole lot of gasoline, oil and additives. But in spite of that, in 20 years no serious research has been done on either what that fraction is, what it does, or what the combustion products of those same outboards are or do. More Wallop Breaux influence?

The new conservationists

02/09/99

"**Conservation**" is the controlled use and systematic protection of natural resources

At the end of the 19th and into the early 20th centuries people of the stature of John Muir, Aldo Leopold and Henry Beston were redefining the word "conservation" and establishing a new, and at the time revolutionary, way of thinking about humankind and our relationship to the natural world. In reading Leopold's **A Sand County Almanac**, Beston's **The Outermost House** or in contemplating the thousands of square miles of wilderness that are an important part of our heritage thanks to Muir's unique vision, it is impossible to imagine people with lives more in tune with the natural world.

Anyone recently involved in fisheries issues can't help knowing that the torch they lit has supposedly been passed down to modern self-described "conservationists" who only a few years ago were just people whose hobby was catching fish or whose businesses involved catering to those hobbyists. Today these people, who we'll call New Conservationists, band together in "conservation" organizations and actively - and sometimes successfully - pursue political agendas ostensibly based on the proud legacy of those men who created the conservation movement. But let's take a look at how in tune these New Conservationists might be with the conservation ethic that Muir and Beston and Leopold so successfully established.

For a fictional journey into the psyche of a mythical New Conservationist, we refer you to Rocky Saxatalis' letter on striped bass which is down below. Rocky's attitude, which we have unfortunately found isn't all that fictional, provides the basis for a coming FishNet that will explore New Economics, a discipline that appears to have arrived concurrently with New Conservation.

A note for the sensitive: Several people - we would assume New Conservationists - who stumbled upon this letter took such offense at it that they directed the attention of various elected officials and fisheries managers to it to share their outrage. Needless to say, for anyone so inclined we encourage such referrals. Probably as needlessly, if any of those who were referred to the letter shared any outrage, as yet we haven't heard about it.

One of the easiest ways to recognize a New Conservationist is to identify the vehicle he or she is driving. The sport utility vehicle is the New Conservationist's hands down favorite. The four wheel drive pickup truck is a close second. Whichever the choice, it will probably be festooned with racks to proudly display fishing poles and ice chests. If a vehicle weighs several thousands of pounds more than it has to, if it gets less than half the gas mileage that it could, if it has four wheel drive, big knobby tires with raised lettering, and a trailer hitch on the back, there's a good chance there's someone driving who thinks of himself as a conservationist. If the truck or SUV is parked in a garage, driveway or parking lot located on what used to be a salt marsh or other coastal wetland, the chances are even greater.

Where this sport utility vehicle or other vehicular behemoth is being driven is another indication of whether a New Conservationist is the owner. If it's up and down the beach - something that would undoubtedly make Henry Beston throw up his hands in bewilderment but seems to be the primary activity of many of the New Conservationists - or to the closest marina or boat launching ramp, you can be almost totally assured that the driver and passengers are basking in the glow of the conservationist's torch. And basking in multi-speakered, air conditioned comfort at ten or fifteen miles per gallon.

When reaching the marina or launching ramp, what is our boat-based New Conservationist most likely to do? Probably climb into a fiberglass craft that might well last until the next ice age, crank up the one or two - or more, if we can actually believe what we see in boating magazines - 100+ horsepower outboard motors, and go roaring off at 40 mph in pursuit of the "fish of the day," leaving behind a remembrance of his passing in the form of a petrochemical slick on the water and a cloud of haze in the air. Meanwhile, back on the beach his land-based compatriot is cruising up and down the strand in his quest for fish, turning areas that were once the exclusive domain of sand pipers, piping plovers, frisbee tossers, sun bathers and nesting turtles into a slower-speed version of the freeways back home.

Up until now it might be somewhat difficult to understand how these supposed disciples of Muir, Beston and Leopold think they are carrying on the conservationist tradition. But, on the fishing grounds once they've caught and killed all the fish they want to take home to either eat or hang on the wall as "trophies," they stop throwing their catch into their buckets or coolers and begin practicing what's known as "catch and release." Catch and release is a process involving hooking a fish, allowing it to struggle at the end of the line until exhausted enough to be reeled in, taking it off the hook and putting it back in the water, supposedly to live to "fight another day." This is done until they've fully satisfied their urge to fish or the fish stop cooperating and is the primary way the New Conservationists think they conserve. (We must note here

that catching and releasing isn't inflicted only on the fish the anglers don't want to eat or to hang on their walls. Fish are also caught and released because they are too large, too small, out of season or of the wrong species to be legally kept.)

"Over 75 per cent of small snapper caught during NSW Fisheries 'angling trials' survived in the long term." (Fishing for the Future - Catch and Release Fishing Fishnote DF/27, W. Talbot, Technical Officer S. Battaglene, Biologist, Brackish Water Fish Culture Research Station, Port Stephens, New South Wales)

"Bait caught fish typically suffer a much higher hooking mortality than fish caught on flies and lures. At least 1 out of 3 fish caught with bait will die after release. Over 60% of deep hooked fish die....When fishing deep water (deeper than 30 feet) most fish caught cannot be released with any assurance that they will survive....Fish that are already stressed by warm water temperatures or low dissolved oxygen conditions cannot handle the added stress of being caught and most likely will not survive after being released." (Utah Division of Wildlife Resources - Catch & release fishing information and techniques) [Link to State of Utah Catch and Release page](#)

"Catch-and-release ideologies aside, one camp maintains that the well-intended effort may serve scant purpose. The large specks (speckled sea trout) more than 25 or 26 inches long cannot handle the stress created by catch-and-release. Most die within days, even hours, of being turned free. Or, so the detractors claim....We've consistently had survival rates of 90 percent on 'school trout' caught on rod and reel and maintained for research purposes....The survival rate following catch-and-release of 'trophy class' trout remains unconfirmed; however, the biologists do have opinions based on their work with coastal finfish. They conclude that, under proper circumstances, big trout have at least a 50 or 60 percent chance of survival." (Joe Doggett - Saltwater Action column - Texas Fish and Game magazine) [Link to Texas Fishing page](#)

"PHYSIOLOGICALLY SPEAKING - According to Dr. Bob Reinert of the University of Georgia, the stress that fish exhibit after being caught is caused when hormones, known as catecholamines and corticosteroids, are generated in the fish's body. They dramatically increase blood flow in the gills and muscles, imbalancing the fish's blood electrolytes and building up lactic acid in the blood. If the blood becomes too acidic, osmotic shock can set in, rapidly killing the fish. Even if osmotic shock doesn't kill the fish, its immune system can shut down from the stress, resulting in the fish's death from disease days later." (Bill Byrd - Catch and release that works - Fly Fish America) [Link to Fly Fish America Catch and Release page](#)

"BUT, IS CATCH AND RELEASE THE ONLY ANSWER? What about angling ethics? Is it ethical for a skilled angler to catch and release thirty, forty, fifty fish or more in a single day? I've done that myself and I'm not proud of it. Today, I know that delayed mortality probably resulted in the death of many of those fish. A dead fish is a wasted resource and perhaps the fish and we would be better off if we caught a limit of eaters and went home." (Tony Dean - South Dakota Outdoors- Is It Time To Take Stock?) [Link to South Dakota Walleye fishing page.](#)

Unfortunately, many of the fish caught and released by New Conservationists - or by anyone else, for that matter - don't live long enough to fight on that other day. Research indicates that a significant percentage of released fish don't survive this kind of conservation, in short order becoming crab, shark or seagull food. While the New Conservationists consider any fish not remaining belly-up at release a healthy and happy survivor, this isn't necessarily so. Delayed catch and release mortality, which can reach 20 or 25 percent, has real conservationists rightfully concerned.

Catching and releasing is one of two activities that distinguishes New Conservationists. The other, of course, is condemning commercial fishermen at every opportunity for catching and keeping - and providing to consumers - those same fish the New Conservationists want for themselves. Try as they might to cloak it in self-righteous rhetoric, the New Conservationist's brand of "blame someone else, I'm not the problem" conservation is nothing like the real thing. But they've found that it's too hard to look in the mirror - those big SUVs and fancy boats must be tremendously appealing to them - and easy to point a finger at the other guy. The first "other guy" is a commercial fisherman but behind him are millions of seafood consumers.

CONSERVATION QUESTION: Is it better to catch and keep two or three fish for personal consumption then go home and wax the SUV, or to catch and release twenty or more, knowing that a significant proportion aren't going to "live to fight" another day?

Please Note: We know some recreational anglers who are as concerned with the "footprints" they themselves leave in the natural world as those that are left by others. True conservationists, they are environmentally aware and responsible and their lives reflect it. These comments aren't directed at them. Their houses are in order and they aren't built of glass.

And on fishing vessel safety

The tragic loss of ten crew members of four ocean clamming vessels that sank in a two week period has riveted attention on the issue of safety in the commercial fishing fleet. Both the U.S. Coast Guard and the National Transportation Safety Board are investigating these losses, the first in the clamming fleet since 1992.

Without question, commercial fishing is a dangerous profession. The ocean can be a sometimes inhospitable and occasionally dangerous workplace and the periods of inhospitality or danger aren't always predictable. Stringent federal safety requirements recognize and all the people

who work on commercial fishing boats realize this. (the Commercial Fishing Vessel Safety Act of 1988 - 46CFR28 - that established industry safety standards is described in the box below.

As they do in every workplace, accidents happen on commercial fishing boats. When these accidents happen at sea, and when the forces of nature are stacked against the vessel, the results can be tragic.

THE US COAST GUARD ON THE COMMERCIAL FISHING INDUSTRY VESSEL SAFETY ACT OF 1988

"According to the National Research Council, the fishing industry is the most hazardous in the United States. Fatality rates for commercial fishers are significantly higher than any other industry. The commercial fishing industry comprises about 50 percent of the employment in the entire maritime industry. Of the 140,000 commercial vessels regulated by the Coast Guard, more than 80 percent are fishing vessels.

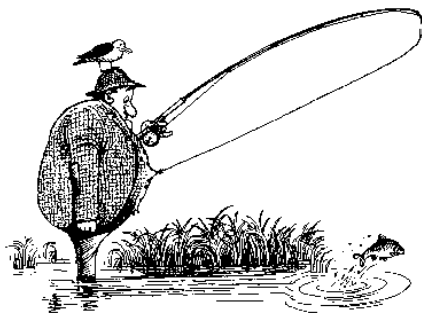
To address and correct the unacceptable safety record of the commercial fishing industry, Congress passed the Commercial Fishing Industry Vessel Safety Act of 1988. In response, the Coast Guard developed regulations which took effect in 1991. The regulations require vessels to carry safety equipment, including lifesaving equipment, survival craft, communications equipment, distress signals, Emergency Position Indicating Radio Beacons, fire extinguishers, emergency alarms and bilge pumps. The new regulations also developed guidelines for watertight integrity and stability.

The act established a Commercial Fishing Industry Vessel Advisory Committee made up of fishers, marine-safety and insurance representatives and safety equipment vendors. The committee meets annually and provides the Coast Guard with recommendations on safety and equipment items. The committee plays a part in the development of realistic regulations. This has fostered greater industry acceptance of the requirements. The core program is a no-cost, no-fault, voluntary dockside safety examination program. Fishers can request a Coast Guard vessel examination to ensure they have the proper types and quantities of safety gear. This is non-adversarial, and the examinations are used as an educational tool, as well as a means to encourage future compliance.

The voluntary exams are complemented by the Coast Guard's at-sea law enforcement program. Critical safety items are checked at sea during fisheries law enforcement boardings. Citations are issued for safety deficiencies, and, in more serious cases, vessels may be ordered back to port. The Coast Guard's success has been measured by the steady reduction of commercial fishing deaths since 1992. The combination of regulations, industry awareness and participation is helping make a dangerous occupation safer."

(from "Protecting America's Fisheries" by LT John Garofalo in the May, 1998 issue of Coast Guard)

The Flopping Flounder Fishing Club*



Fish For (us conservationists) Tomorrow, Never for anyone else

Belhaven, NJ

06/08/98

Dear Senator (or Assemblyman or Assemblywoman) _____:

I am writing to you about the Bill recently introduced by Assemblymen Asselta and Imprevuto that would let netters catch and just about anybody eat striped bass in New Jersey. I and all my buddies down at the Flopping Flounder Fishing Club oppose this. I know that the netters are saying that this is legislation for New Jersey consumers and doesn't have much to do with fishing, but let me set the record straight. The netters are using this as a foot in the door. Today they want to be allowed to keep a small part of the commercial striped bass quota that the Atlantic States Marine Fisheries Commission has already allocated to them. Tomorrow they'll want more, and we know those industrial, search and destroy, converted aircraft carrier and nuclear submarine, foreign owned factory trawler fleets that they're in cahoots with are anchored just over the horizon, just waiting to get to our New Jersey strippers.

I'm a committed conservationist (I used to be a sportsfisherman, but if we don't call ourselves that no one will think we kill as many fish as we do) and am a proud, card carry-ing member of the angling fraternity. We've shown time and again with real, scientific studies that we've paid good money for that we contribute more to New Jersey's economy every year than just about anybody else. As proof, let me share with you my sportsfishing....oops, I mean my conservation expenditures for last year alone (I've been keeping careful records since I caught my first striper back in '91):

Item	Amount	Explanation
Car payment (Chevy Suburban)	\$6,000.00	If I didn't need this a dozen times a year to drive around on the sand, my payments would be much less
Gas	\$2,000.00	2,000 miles/month @ 10 mpg
Car maintenance/upkeep	\$6,500.00	Boy, that sand and salt water really tears up all the four wheel drive mechanical stuff
Bait	\$50.00	Those menhaden netters are really gouging us
Box Lunches	\$37.00	
Beverages	\$1,200.00	
Airfare/motel	\$4,500	My cousin, his wife and three kids flew in from the coast in August for our Aunt Harriet's 3rd wedding. I took him fishing once while they were here.
Emergency room visit (hook removal)	\$350.00	My wife got too near a back cast on one of our trips (I thought by this time she'd know better!)
Follow-up care	\$150.00	Who would have thought a little bit of menhaden on that small a hook could cause a serious infection?
Physical therapy (14 sessions at \$75)	\$1,050.00	Her hand's almost as good as new, and you can't hardly notice the scars.
Marriage counselling ((28 sessions at \$70))	\$2,800.00	But she's lost her sense of humor completely.
Fishing tackle	\$2,500.00	What with being laid off and the expense of the physical therapy, which we're finally done with, and counseling (still going), I didn't feel right spending more.
Total	\$27,137.00	

If you'd like to check any of these numbers, I'll be glad to put you in touch with my Chevy dealer and his mechanic (if you want to know how important fishin....er, conservation is to the economy, ask them how they'd like me to go back to driving a four cylinder, 32 mpg Saturn), our marriage counselor, the physical therapist or my bait shop.

And last year, because there wasn't any striped bass catching - or eating - allowed in New Jersey for anyone but us sportsfis....darn, sorry again, conservationists, I caught 14 keepers that totaled 87 pounds. That's almost \$300 a pound - and I didn't even count the cost of the Boeing 747 that Vinnie and his family flew in on or that fine for the Piping Plover nesting incident down there on the beach. (I've gotta be honest here and tell you that my beverage expenditures this year won't be anywhere near as much. Since the accident, the only way my wife will get into the Suburban is if she checks the coolers and the only thing she sees is Diet Coke.)

The netters want 200,000 pounds of our striped bass. At the \$300 I've shown you we spend on every pound of stripers we catch, giving them those fish will cost the New Jersey economy \$60 million dollars - just because they weren't caught and eaten by us conservationists (nailed it that time!). All they'll do is sell those fish to restaurants and fish stores where just about anybody could eat them. Is that right? I mean, whose ocean is it, anyway?

The way me and the guys at the Flopping Flounder feel, these are our striped bass and no one else's. Just the other night we sat down and figured out that in the last ten years we spent a total of 43 years fishing for other species, just to give the stripers a chance to come back. Believe me, you're talking serious sacrifice here. Did you ever have to catch a bluefish when what you really wanted was to sink your hooks - then your teeth - into a striper? No joke, we actually did that more than once. Those seven million plus citizens of New Jersey who can't be bothered or can't afford to catch them for themselves have gotten along without our striped bass for years and probably most of them don't even miss them anymore. Besides, the restaurants and seafood markets can always sell those farmed striped bass/perch hybrid things - they're almost as good, I've been told (of course, I don't know that for sure because me and the other Flopping Flounders are among the few people who're allowed to eat real striped bass fresh out of the water here in New Jersey - and, right or wrong, we're going to do whatever we have to do and say whatever we have to say to keep it that way!)

Remember, netters are only killing fish for food, but every fish us conservationists kill might have been a trophy! It's about time you guys in Trenton got your priorities right. Are you there to represent everybody in New Jersey, those seven and a half million people who don't know one end of a fishing pole from another, or are you there to represent us sportsf...er, conservationists and to make sure that no one else ever gets to eat one of our striped bass? There aren't a lot of us conservationists (bingo...twice in one day!), but we sure can yell loud - and when's the last time you saw someone yelling at a waiter in a New Jersey restaurant because he couldn't eat one of our stripers? Down at the Flopping Flounder we say anybody that feels that way can go to a restaurant in some other state.

Let them eat cake - or orange roughy,

"Rocky" Saxatalis



Sergeant at Arms
The Flopping Flounders

p.s. If you and your buddies over there in Trenton do the right thing and shoot this Bill down, us Flopping Flounders will be glad to send an ocean-fresh striper in your direction. It'll make a meal you'll never forget - and if we get our way it'll be the only one you'll ever legally taste in New Jersey unless you catch it yourself.

* Note: This fictional letter was created to emphasize - through exaggeration - how unsupportable we feel some of the arguments are that are being used to justify a continued ban on the consumption of striped bass by New Jersey's non-fishing citizens. There is no Flopping Flounder Fishing Club, "Rocky" Saxatalis is not a real person, his wife has neither a scarred hand nor physical therapy bills, and some Chevy Suburbans might get more than 10 mpg. Our intention wasn't - and still isn't - to offend the many responsible recreational fishermen who are committed to a future with healthy fisheries. For those who truly find our attempt at humor offensive, we offer our most sincere sympathy. *"Never say a humorous thing to a man who does not possess humour. He will always use it in evidence against you."* (Sir Herbert Beerbohm Tree).

Anatomy of an anti-fishing campaign

05/08/99

In their latest assault, the anti-commercial fishing interests are attempting to equate the use of bottom-tending trawls and dredges to the supposed environmental catastrophe called timber clear-cutting (actually an environmentally sound forestry technique when properly used but one that has been "demonized" by anti-logging activists). Through the clever use of words and statistics, they are trying to make it appear as if fishing techniques which have been in use for generations are turning huge areas of sea floor into biological desert, lifeless areas presaging the end of biological diversity in the world's oceans. Like so many of the anti-fishing arguments that are being circulated, however, these are based on misinterpretations and distortions of the most meager of scientific observations.

Two marine researchers supported by the same Pew Charitable Trusts program that seems determined to put the East coast swordfish fleet out of business kicked off the most recent anti-fishing ruckus in an article published in the December 1998 issue of **Conservation Biology**. In **Disturbance of the Seabed by Mobile Fishing Gear: A Comparison to Forest Clearcutting**, Elliot Norse and Les Watling go through a series of exercises to conclude that trawling and dredging by commercial fishing boats is *"an activity that each year disturbs an area of seabed as large as Brazil, the Congo and India combined...."* Then in a fund-raising letter for the American Oceans Campaign Ted Danson, the model turned actor most widely known for his bartender role in the series Cheers, states *"each year the number of forests clearcut (that is, stripped bare of trees) equals an area the size of the state of Indiana. By comparison, the annual worldwide trawling of seabeds takes place over an area greater than the U.S. and Mexico combined. That's more than 100 times the size of forests clearcut."* Extending this geographic theme farther, in draft Federal legislation being discussed in Washington is *"the practice and technology of bottom trawling and use of other mobile fishing gear on the seabed has increased to the point that an area of seabed twice the size of the contiguous United States (6 million square miles) is affected by these practices each year."* While there is some apparent disagreement as to which comparisons are most appropriate, the point seems to be that fishing affects an area of ocean as large as several medium-sized land masses.

(Note - Norse's and Watling's "estimate" equals 6 million square miles, Mr. Danson's is "greater than" 4 million square miles, and Washington's is 6 million square miles. We might have the start of an anti-fishing benchmark to rival the "nets big enough to swallow a 747" mantra that was so widely used by the antis a while back. Might this indicate that the anti-fishing activist's possess some kind of equivalent of schooling behavior?)

Fun with numbers

In each of these examples, some statistics were apparently manipulated to force seemingly startling conclusions regarding the extent of mobile fishing gear use. But how valid are such exercises? Let's apply the same techniques to what might be a more familiar situation.

NOTE: There are without question areas of the sea floor that should be made off-limits to all types of anthropogenic disturbances - including trawling and dredging. We aren't disputing that here. Any responsible member of the commercial fishing industry would support such a concept if it were based on scientifically supportable, objectively determined criteria. Unfortunately, the anti-fishing agenda is focused solely on closing off large areas of ocean bottom to only two specific types of fishing gear, ignoring all other impacts and based only on the fact that these gear types change the character of some types of bottom communities.

Starting a little closer to home - and the familiar - we applied the methodology used by Norse and Watling in their paper to determine the threat of damage to wildlife habitat that motorized vehicles pose in New Jersey. There were 4.3 million cars, trucks and busses registered in New Jersey in 1997. We assume that the average tire tread width of these vehicles is one foot (at least two tires on each side, each tire at least 6

inches wide), and that each vehicle is driven at least 6,000 miles each year. Using these conservative figures and some reasonably simple mathematical manipulations, it's easy to "prove" that the tire treads of New Jersey's fleet of motor vehicles could crush every square inch of New Jersey's 7,500 square miles of land area at least 600 times every year. In total, almost 5 million square miles of terrestrial habitat could be flattened into unrecognizability by New Jersey's vehicular traffic annually, almost twice the total land area of the contiguous 48 United States (or over one hundred and fifty times the size of forests clearcut).

But a reader familiar with driving patterns in the U.S. might well argue that this is misleading. In spite of all the SUV commercials which would lead us to think otherwise, New Jersey's 4.3 million vehicles do virtually all of their driving on highways or in mall parking lots. That traffic isn't evenly distributed over all of New Jersey's real estate.

Unfortunately, few of us are as sophisticated about fishing patterns as we are about driving patterns. When a commercial fishing boat leaves the dock at the beginning of a trip it's captain doesn't start aimlessly or randomly towing a trawl or dredge across the ocean bottom. He heads for where the fish are – and that's generally where the fish have been since there have been commercial fishermen. Year after year, decade after decade and generation after generation particular areas on the sea floor have come to be known as reliable "producers" of particular species during particular seasons – and every year the fishermen return to these areas and use the same types of trawls and dredges to harvest those fish. Norse and Watling even report that some areas of sea floor actually "...can be trawled an astounding 40,000% annually" while other areas – usually where the fish aren't – might be fished only once every several years, if at all. This means that, like the effects of vehicular traffic in New Jersey, fishing effects aren't close to being evenly distributed. Cars and trucks go where the concrete and blacktop are and fishing boats go where the fish are.

The actual extent of the "problem"

Our traffic example sounds much more compelling when we project the effects to seemingly huge areas, but in actuality the effects are (relatively) minimal because they are focused on areas that can resist those effects. In the same manner the effects of trawls and dredges aren't spread out over an area seven times the size of Australia, but are concentrated in limited areas that have been proven to consistently produce fish. Likewise, this would seem to argue that the effects of the gear were minimal (if not, the fish would probably not still be hanging around). However, the real picture having neither the requisite dramatic impact nor the proper anti-fishing spin, let's bring in the land masses and clear-cutting analogy.

How much of New Jersey's wildlife is being destroyed by vehicular traffic each year? Certainly too much, but by no stretch of the imagination is the Garden State being turned into a biological desert by the "pulling, ripping and crushing" (Mr. Danson's words used to indict trawling and dredging) of the tires of over four million motor vehicles. By the same token, no matter how the figures are presented, and no matter how significant the local effects, fishing is concentrated on only limited areas of the ocean bottom. And, somewhat confoundingly for the antis, these areas continue to produce fish.

How much of the ocean's bottom is really fishable?

According to Watling and Norse "*people trawl almost anywhere they want, and the sea's equivalent of ancient forests are becoming cattle pastures....*" This is not quite the case. More than 80% of the total area of the world's oceans is more than a mile deep, and this is a depth that is well beyond the reach of the vast majority of modern fishing vessels. Of the remaining 20%, much is inaccessible because of geographic, political or economic considerations and some because it has been claimed by fixed-gear fishermen. While the image of threatened "ancient forests" is another compelling one, it would appear that whatever the ocean-equivalents of these forests might be, in the greatest part of the world's oceans they would be safe from the supposed ravages of today's commercial fishing fleets.

Note: It's generally agreed that the surge generated by storm waves regularly affects the sea-floor, and the bottom communities there, to depths of several hundreds of feet. In such areas - and Georges Bank is a prime example, exposed to the full fury of the Nor'easters that routinely pummel the New England coast every year - the effects of bottom-tending fishing gear pale by comparison.

The Clear-cutting analogy

More supposed fuel for the anti-commercial fishing fire is the idea that fishing with trawls and dredges changes the bottom, and that such changes are not acceptable. While the clear-cutting analogy (as clear-cutting is popularly perceived) serves this argument well, it certainly isn't the most accurate. While to the knowledgeable – or truthful – it is obviously not, clear-cutting is supposedly a one-shot harvest of all of the useable timber in an area, tearing up the terrain, destroying all the non-useable trees and leaving behind a biological wasteland with no provisions for or thought of future logging or any other natural or unnatural use. It would seem, particularly in the face of inarguable proof that areas of the ocean bottom have been trawled and dredged for generations and have produced fish continuously, that these fishing techniques are much closer to agriculture than to clear-cutting. The fishing grounds aren't cropped once and abandoned. After harvesting, the fishing grounds aren't left in a condition that would prevent them from being harvested again for decades. And there is evidence that the changes brought about by trawling or dredging will in some instances actually increase the production of the species being harvested. The dramatic impact and the anti-fishing appeal of the clear-cutting comparison is obvious. The accuracy, however, in the supposed impacts of both is seriously lacking.

The agricultural analogy is much more troubling to the anti-fishing forces. The idea of continuously producing a food crop from an area of ocean bottom – even accepting the fact that harvesting that crop might be altering the bottom – would certainly seem to be more acceptable to the public than “clear-cutting” the bottom, and successful PR campaigns aren’t built around attacking acceptable practices.

Of dogfish and overfishing and productive capacity

06/20/99

Out of the many thousands of species of fish and shellfish found in the coastal and offshore waters off the mid-Atlantic and New England, perhaps three or four dozen are primary targets of commercial and recreational fishermen. Of these, perhaps a third occupy what biologists would consider similar niches. Simply stated, this means those species inhabit the same general areas during approximately the same seasons and feed on the same or similar organisms. These species could be considered to be in competition with each other; in competition for food and in competition for space.

One of the few more-or-less stable characteristics of a given area of ocean or estuary is its productive capacity; that is, its ability to produce a given mass of plants and animals. This productive capacity is determined by the amount of sunlight - the ultimate energy source for most of the world’s oceans - incident on the water surface and the nutrients available in the water column (or actually, the maximum availability of whichever nutrients are most limiting). Obviously - barring minor fluctuations due to weather/climate - the amount of sunlight remains constant. So if we assume constancy in the nutrient input (equally obviously, not always a given), the amount of plant and animal material produced by a particular area of ocean is going to remain about the same from year to year. But the form that production will take - the species and size composition - can and does vary significantly.

With those species that occupy the same or similar niches, it’s safe to say that there’s some interchangeability between species, but the total production of all of them from a given area will be about the same year after year.

The case with dogfish

Not too many years ago dogfish were considered an underutilized species. This meant there were a lot of them in the U.S. Exclusive Economic Zone, there was very little fishing pressure on them, and there were existing or developable markets for them. Realizing this, and realizing as well that there was too much fishing pressure on many of the traditional species in the same areas off the Mid-Atlantic and New England states, the federal government started to encourage the harvest and sale of dogfish. Incentives of various sorts were provided to get fish and seafood businesses involved in catching, processing and selling them. As a result a number of U.S. fishermen, docks, processors and exporters (the domestic market for dogfish was and still is very limited) got seriously into the dogfish business.

As the build-up of the dogfish business - dependent, of course, on the eventual high level of landings of dogfish - continued it appeared as if the management establishment had forgotten about the fishery. More and more boats, many of them moving from other so-called “overcapitalized” fisheries, fishing more and more gear came into the fishery. Processing capacity and overseas markets expanded to keep up with the increased landings.

And then two or so years ago the management establishment decided - with some nudging by Congress via the Sustainable Fisheries Act and a great deal of concern expressed by some anti-fishing groups - that it was time to start managing this only recently underutilized fishery. So, after the requisite number of meetings, public hearings, etc., it was determined that dogfish were being seriously overfished and that, starting sometime in 1999, the directed fishery for dogfish would be completely shut down. All of the fishermen, docks, processors and exporters who had, at the urging and with the support of their government via the U.S. Department of Commerce’s National Marine Fisheries Service, invested time and money into the dogfish fishery were all of a sudden to be kicked out of the fishery.

A sad story for the businesses involved. But one, our conservation-minded colleagues might argue, that will have a happy ending because the overfished dogfish stocks will now be allowed to recover. And, after all, what would the oceans be without dogfish?

But how likely was it that we were going to run out of dogfish?

Several times a year the National Marine Fisheries Service conducts trawl surveys of the waters offshore of the mid-Atlantic and New England states to determine the relative abundance of particular species of fish and shellfish. Looking at the report from NMFS’s most recent spring bottom trawl survey, that conducted by the R/V Albatross from March 1 to April 22, 1999 (from the “Fishermen’s Report” of this survey), we see that over that time period 329 sample tows of 1/2 hour duration using modified commercial fishing gear were made in the waters from the Maine to Cape Hatteras. In the words of the report, “*Because of the 30 minute tow duration, and random selection of station locations, catches can be light compared with commercial tows.... Nevertheless, these data can provide fishermen with useful information about the distribution and relative abundance of species inhabiting the survey area (Cape Hatteras to the Gulf of Maine).*” Considering the fact that the economic rug is in the process of being pulled out from under all of those businesses that have invested so recently in the dogfish fishery, one would be justified in expecting the abundance of dogfish to be quite low relative to the other species sampled in this survey. But are they?

How many dogfish are out there?

According to the data provided in the report and reproduced below, over 40% by weight of all of the fish caught in the March/April bottom trawl survey this year were dogfish, and the tows in which dogfish were caught weren't concentrated in one or several areas, they were spread out over the entire area sampled. Throughout the entire range of the survey over one pound of dogfish was caught for every pound and a half of other fish species. And they were caught in well over half of the areas sampled. One hesitates to think how many dogfish there would be in the ocean if they weren't being so heavily overfished as to justify closing down the fishery.

Species	Lbs.	%	Species	Lbs.	%
Spiny dogfish	36434	41.5%	Summer flounder	308	0.4%
Winter skate	2687	3.1%	Yellowtail flounder	1107	1.3%
Little skate	13095	14.9%	Winter flounder	1408	1.6%
Atlantic herring	5006	5.7%	Witch flounder	112	0.1%
Silver hake	1243	1.4%	Windowpane flounder	278	0.3%
Atlantic cod	2407	2.7%	Atlantic mackerel	2159	2.5%
Haddock	1709	1.9%	Butterfish	862	1.0%
Pollock	380	0.4%	Acadian redfish	2238	2.5%
White hake	454	0.5%	Longhorn sculpin	1397	1.6%
Red hake	669	0.8%	Ocean pout	1221	1.4%
American plaice	367	0.4%	Goosefish	604	0.7%
Summer flounder	308	0.4%	American lobster	641	0.7%
Yellowtail flounder	1107	1.3%	Longfin squid	1253	1.4%
Winter flounder	1408	1.6%	Other	9744	11.1%

Management implications

As the survey results indicate, dogfish inhabit the same waters at the same time as many of our other commercially and recreationally important species. And they feed on many of the same prey species. But there's a significant difference between dogfish and these competing species. Every several years female dogfish give birth to a dozen or so live, fully functional miniature dogfish. Compared to other fish species their reproductive potential is very low. The anti-fishing activists argue that this low fecundity makes dogfish particularly susceptible to overfishing. Unfortunately, from the point of view of the more valuable fish species that are trying to share the same aquatic neighborhood with them, this isn't quite the case. While a large female codfish, for example, will lay millions of eggs, the probability of one of those eggs maturing into an adult codfish is infinitesimal. At any stage of its development a larval or juvenile codfish is fair game for anything larger than it is. While the same is true of dogfish, they start out at a size much larger and in a condition much more formidable than virtually every other species they are competing with - and looking at the trawl survey data, the results are obvious. By factors of from 3 to 500 there are more dogfish available than any other species.

Are dogfish being overfished? According to the managers, the abundance of dogfish is decreasing and the ratio of male to female dogfish indicates problems with the population. The conclusion seems to be that, because there are less dogfish today than there were a few years ago, too many are being caught. So, in spite of having enticed boats into the fishery a few years ago, and in spite of the heavy subsequent investments fishermen, dock operators, processors and exporters have made, the managers have declared them "overfished" and are in the process of shutting the fishery down.

But what would happen if dogfish were reduced from their current high levels of abundance? Most obviously - assuming that the waters off the mid-Atlantic and New England will continue to produce an equivalent tonnage of "competing" species in the place of dogfish - we would have higher populations of these other species. And, along with bluefish and mackerel and the like, these would include higher value/higher demand groundfish species whose recovery from excessive fishing pressure in recent years is almost surely being retarded by all of the dogfish they are now competing with.

Should our management philosophy extend no farther than the biologically impossible task of futilely attempting to return all of our fisheries to previous levels of abundance or should it consider manipulating stocks - through directed fishing efforts - to optimize the production of more desirable species? As the science of fishery management begins to mature, it is going to have to address this and related questions. Our living marine resources are far too important to do otherwise.

Fisheries management and funding conflicts

07/24/99

We're from the government and we're here to help you

It wasn't too many years ago when that's all that people in the commercial fishing industry heard. The government was going to help them buy new boats. The government was going to help them catch more fish. The government was going to help them handle those fish better and sell them to more people for more money. The government even provided a multimillion dollar fund to pay for it all. From the National Marine Fisheries Service (NMFS) budget request for the year 2000 "The American Fisheries Promotion Act (AFPA) of 1980 authorized a grants program for fisheries research and development projects and a National Fisheries Research and Development Program to be carried out with Saltonstall-Kennedy (S-K) funds. S-K funds are derived from duties on imported fisheries products."

The United States imported more than \$8 billion in seafood last year. So there should still be a big pot of money available to the National Fisheries Research and Development Program, and there are definitely research and development projects that could be done to help the industry. Somewhat puzzlingly - particularly when considering the NMFS description of the intent of Congress above - only 1.5 million S-K dollars (minus NMFS administrative costs, of course) will be available in industry grants for this coming year, and these grants are only to (again in the agency's words - these from the Federal Register notice announcing the grant program): "1. eliminate and prevent overfishing and over-capitalization, 2. attain economic sustainability in fishing communities, and 3. develop environmentally and economically sound marine aquaculture." Further in the Federal Register announcement NMFS elaborates on how these funds will be used to "attain economic sustainability." Projects considered for funding will address "retraining of fishermen for alternative employment, alternative uses for existing fishing industry infrastructure, and planning for fishing capacity reduction."

So, to "promote" commercial fishing, NMFS has decided to spend a miniscule part of the available S-K funds on projects further cutting back on harvesting and getting even more people, buildings and boats out of fishing. Some promotion!

Or how about "we're from the government and we're here to help ourselves?"

What about the rest of the S-K revenues raised? Going back to the NMFS budget request, we see that "An amount equal to 30 percent of these duties is being transferred to the Department of Commerce from the Department of Agriculture (we don't know what the USDA does with the remainder, about \$150 million, but it surely isn't going to helping fishermen). The FY 2000 Budget estimates this transfer at \$66.4 million. Of this \$66.4 million, \$1.5 million will be used for the S-K grants program to develop a healthy fishery based industry (including costs of program administration). The remainder of the transfer (\$64.9 million) will be used to offset the Operations, Research, and Facilities (ORF) account (of NMFS)." So we not only have the agency that is in charge of managing our nation's fisheries "profiting" from its inability to manage those fisheries, we also have it using money intended by Congress to promote the industry being used instead to downsize the industry even more. And, of course, encouraging even more imports. Nice work if you can get it.

Isn't drastic downsizing of the fishing industry really necessary?

Most of us have read the various predictions of imminent or existing crises in fisheries around the world, including those in the United States' being managed by NMFS and the regional councils. In view of these supposed widespread crises and in view of our evidently uncontrollable - at least in the estimation of the agency in charge - urge to keep on fishing, shouldn't we be cutting back across the board on our ability to harvest? If one buys into the crisis pandering arguments of NMFS and the various anti-fishing groups, one would certainly think so. But let's take a look at the stated goals of the NMFS's National Recreational Fishery Resources Conservation Plan that is on that agency's website. Among them are: "*Provide for increased recreational fishing opportunities nationwide through the conservation, restoration, and enhancement of aquatic systems and fish populations, and by increasing fishing access....Support and encourage programs and projects designed to enhance marine recreational fishing opportunities....encourage environmentally responsible acquisition and/or expansion of public access opportunities for anglers and boaters.*"

The NMFS leadership is committed to reducing the size of the commercial fishing industry - which at the same time will, happily for it, increase seafood imports and the amount of Saltonstall-Kennedy funds available to swell their budget - supposedly because of the sorry condition of the fisheries they manage. But at the same time they are committed to increasing and enhancing recreational fishing opportunities. And - again coincidentally? - by swelling recreational fishing and boating expenditures they will be increasing the Wallop-Breaux funds available to enhance recreational fishing and boating opportunities and access even more.

So what about recreational angling?

But perhaps recreational fishermen and women don't kill enough fish to make a difference. Or perhaps the commercial fishermen aren't responding to the best efforts of the managers the way they should. Perhaps they really need to have their infrastructure yanked out from under them to get them to toe the management line. To see what's going on we retrieved from the NMFS website the annual recreational catch [Link to NMFS recreational fishing data page] and commercial landings data [Link to NMFS commercial fishing data page] for the major inshore fish species (fluke, winter flounder, bluefish, scup, sea bass, striped bass - note that there is no commercial fishery for striped bass in New Jersey - and weakfish) for New Jersey for the years 1992 to 1996. They are graphed below. Assuming that the average weight of each of these fish caught by New Jersey anglers is a pound or two, and assuming that half the fish caught by recreational anglers are released and don't subsequently die, for these most popular species the mortality due to recreational fishing in New Jersey is far higher than the commercial landings.

And, most significantly, it's been growing for the past five years while commercial landings have been dropping precipitously. From what we know of other states in the Mid-Atlantic and on south, we doubt it's very different elsewhere. So why the total focus by NMFS on reducing commercial fishing effort?

Where is the increase in fishing mortality by recreational anglers coming from?

We've previously mentioned the seeming "immortality" of fiberglass, the nearly indestructible construction material of choice for virtually all recreational vessels built today. Going to the recreational boating/personal watercraft industry's major trade group, the National Marine Manufacturers Association, we find that from 1997 to 1998 almost 600,000 boats were added to the U.S. recreational boating fleet. This is an annual growth rate of about 3%, which corresponds - coincidentally yet again? - to the average increase in the NJ inshore recreational angling catch for the last 4 years. Anyone familiar with the congestion of recreational tuna boats in the Mid-Atlantic's offshore canyons knows the same growth is taking place there as well. And, without limits on the number of recreational boats or recreational fishing effort, there's certainly no limit on what all these anglers collectively catch

The bottom line

It doesn't take much insight to see that an increased number of boats, recreational or commercial, means an increased amount of fishing and a corresponding increase in the attendant levels of fishing mortality. So why is NMFS, the federal agency that is responsible for managing our nations fisheries and setting national fisheries policy, doing everything it can with one hand to reduce the size and the efficiency of the commercial fishing fleet while with the other it has embarked on an ambitious program to enhance and increase recreational fishing opportunities and access? Why has that agency been put in the position of increasing the size of its budget with every boat it removes from the commercial fishing fleet, every fish that it takes from the net of a commercial fisherman, and every dollar it adds to our trade deficit, and why has the fisheries management establishment been put in the position of increasing its budget with every fish landed by a recreational fisherman or woman and every boat bought by a recreational boater? How important are these apparent conflicts in molding the policies of NMFS, the regional Councils and the state fisheries agencies that depend on Saltonstall-Kennedy and Wallop-Breaux funding for large parts of their budgets? And most importantly, how believable can the dire warnings of commercial overfishing be when the agency that generates all the data they are based on applies them only to harvesting fish commercially and disregards them completely when it comes to its official policy of "increasing and enhancing" recreational fishing?

Each year the National Marine Fisheries Service becomes more strident in its attempts to reduce the size of the commercial fishing industry and devotes more of its energies and resources to accomplishing that task. Each year the members of the commercial fishing industry have less faith in the agency and in a management system that, while attempting to drive them out of business, appears to be seriously conflicted and blatantly committed to allocation decisions based on inadequate science and what appears to be an inconsistent and unfair philosophy. Can the industry be blamed? And is the federal impetus to downsize the commercial fishing industry, which is now parroted by anti-commercial fishing groups hiding behind the "conservation" banner, really driven by biological necessity which for some reason doesn't apply to recreational angling, or is it a predictable response to the self-serving interests of an agency with values severely distorted by these apparent conflicts?

The Oil Slick

From a National Fish and wildlife Foundation release: "*July 1, 1999 is the pre-proposal deadline for submitting matching grant proposals for the National Fish and Wildlife Foundation and Shell Oil Company Foundation program to fund projects that protect, conserve, or enhance the Gulf of Mexico ecosystem.*" Then from CNN: "*On July 6, 1999, about 4,500 fishermen and 500 shrimp vessels were reported to have established a blockade around a state-owned petroleum refinery at Ciudad del Carmen in the southern Gulf of Mexico, accusing the facility of damaging fisheries by pollution.*" (From the CRS weekly fisheries update). Perhaps the fishermen should have applied for a Shell grant instead?

Is there such a thing as a media mugging?

08/17/99

In several previous editions of FishNet we've pointed out inaccuracies, distortions and misstatements being spread by various groups or individuals. Playing on the public's lack of understanding of complex fisheries and ocean issues, the involved governmental agencies' seeming unwillingness to get publicly involved, and a conventional wisdom that has it that anti-fishing activists have no axes to grind other than representing the fish or the oceans or some other such vacuous nonsense, they are carrying on a relentless onslaught against the domestic commercial fishing industry while the fishing fleets of other nations continue to fish, to export their fish to the U.S. and to rake in U.S. dollars at an ever-increasing rate.

Recently the Standard-Times of New Bedford, Massachusetts (the center of the sea scallop fishery on the Atlantic coast) published an op-ed piece by Ron Huber, identified as the director of the Coastal Waters Project in Rockland, Maine. Mr. Huber's article con-

tained some of the most obvious misstatements relating to the fishing industry that we have been unfortunate enough to come across. It isn't our intent to lend any credence to his assault on commercial fishing in general and scallop dredging in particular by discussing it here. However, because he uses many of the specious arguments that have become the vocabulary of the anti-fishing activists, and uses them in an attempt to paint an even more dismal picture than is usual for that group, we thought it would be helpful to FishNet readers if we took a closer look at what he wrote.

For those readers not familiar with the New England fisheries, Georges Bank is a raised area on the sea floor off Cape Cod that has been the focus of the offshore commercial fishing fleet of New England for centuries. Initially supporting groundfish fishermen harvesting cod, haddock and yellowtail flounder, in recent years it has also provided large catches of sea scallops. In a cooperative effort by the National Marine Fisheries Service, the commercial fishing industry and researchers from the University of Massachusetts at Dartmouth and the Virginia Institute of Marine Science, a large area on Georges that was previously closed to fishing was recently reopened to limited and controlled scallop dredging. This fishing is rigorously monitored.

Starting out, Mr. Huber claims "*as is painfully obvious from underwater video footage, a century of continuous scraping by the incredibly primitive, completely inappropriate drag and scrape technology has flattened the once complex seafloor environment of Georges Bank almost beyond recognition.*" The "drag and scrape" technology he refers to is that employing bottom trawls and dredges and in use in possibly three-quarters of the world's fisheries for generations (actually, from farther along in Mr. Huber's article we see that this technology has been in continuous use for over 600 years in the United Kingdom). The bottom of most of Georges Bank could be accurately described as "flattened." However, the flattening isn't the result of trawls and dredges, but rather of a combination of open-ocean storms and strong currents constantly working on the bottom (see the note at the top of the following page), which is composed almost entirely of sand, gravel and cobbles that were left by the last glacier. As anyone with a rudimentary knowledge of marine biology can attest, such unconsolidated bottom sediments are not capable of supporting any "complex" biological communities when they are in the kind of high energy environments that are exemplified by Georges Bank. Stated most simply, the bottom is so unstable, being moved around so much by wave surge and currents, that no organisms can achieve the necessary foothold (or invertebrate equivalent) to colonize the surface. What is sand, gravel and cobbled bottom on Georges Bank today has been sand, gravel and cobbles since the sediments were deposited there by the last glacier. Trawling and dredging haven't done anything beyond moving those sediments around a bit, and that's only been a fractional amount compared to the average Nor'easter.

Mr. Huber then goes on to bemoan the loss of "*...thousand-year-old stands of tree coral that covered hundreds of square miles of the Georges Bank plateau.*" The physical characteristics of Georges Bank argue persuasively against the establishment of the tree coral colonies that are found in some deep water canyons off the coast of Nova Scotia. In his brief paper on these corals (in *Effects of Fishing Gear on the Seafloor off New England*, Conservation Law Foundation, 1998), Mark Butler reports "except for a couple of places, these corals occur out on the edge of the continental shelf in water deeper than a hundred fathoms.... the corals live attached to a hard substrate." This is difficult to relate to Mr. Huber's "hundreds of square miles of the Georges Bank plateau" or of hundreds of square meters, for that matter. In the same report cited above, Editor Ellie Dorsey describes the shallower areas of Georges as made up of ridges and dunes composed of medium-to-coarse sand and migrating "...at variable rates, up to 60 meters in three months.... on deeper parts of the bank, the sea floor is smoother and the grain size becomes finer." It would seem that, for Mr. Huber's contention that large areas were covered by tree corals to hold up, the characteristics of Georges, including the sediment types it is composed of, would have had to have changed completely. They didn't. Georges is still covered with the same glacial deposits - minus the finer sediments that have washed off into deeper water - that it was built of thousands of years ago.

Of course, there's a conspiracy theory

Of the fishing industry and the government "conspiring" to keep secret what trawling and dredging are really doing to Georges Bank, Mr. Huber writes "*the industry has forbidden our government to videotape or photograph them while they are carrying out their crude and destructive scrape fishery.*" Georges Bank has been the locus of a tremendous amount of research over the past several years. Much of this research has been accomplished by fishermen, academicians and government researchers working cooperatively and openly. In referring to Mr. Huber's words, Michael Pol of the Conservation Engineering section in the Massachusetts Division of Marine Fisheries, wrote to FishFolk, an internet listserve "*in cooperation with fishermen, independent scientists, and the Massachusetts Division of Marine Fisheries, undersea and deck footage of scallop dredges has been collected as recently as last month. Several hours of scalloping footage are available for viewing by the public at our office. (One tape was a gift from Jim Kendall.)*" - Note: Jim Kendall is on the New England Fisheries Management Council, is an industry leader and an ex-scallop fisherman.

In a paper presented at the recent American Fisheries Society's annual meeting three University of Rhode Island researchers (Skrobo, DeAlteris & Hammond) presented a paper titled **Seabed Disturbance by Mobile Fishing Gear Relative to Natural Processes: Application of a General Model to the Southern New England Continental Shelf**. Among their conclusions were "*In shallow waters along the coast and around the southern tip of Block Island, seabed disturbance is dominated by unsteady, wave generated bottom currents, whereas in other deeper areas, steady storm generated bottom currents are the controlling force disturbing the seabed.*"

Scallops as weeds?

In what is probably the most startling paragraph in the whole article, Mr. Huber contends "*sea scallops are the early successional 'weed' of choice that marine nature prefers offshore. As these animals live and grow, their shells pile up and form a healing scab upon the scraped-over sea floor. Sea anemones, corals, sponges and other animals find these bumpy living and non-living carpets suitable to grow upon. The more cover, the more groundfish survive their youth. That's why there was no offshore sea scallop fishery in the earlier part of this century. They simply weren't out there in any appreciable numbers until the vast coral forests and other living sea floor environments were torn away. Check the records.*" We did. There was certainly no offshore scallop fishery in the early part of this century. However, according to Auguste Foote Arnold, author of the 1901 classic naturalist's **handbook The Sea Beach at EbbTide** (reprinted by Dover Publications, Inc. in 1968) "*In Maine these large (sea) scallops are eaten, but they have not found wide favor in the city markets.*" He then explains how sea scallops could be caught by simply dragging a fishing line along the bottom until a scallop shut its valves on it and could then be drawn into the boat. He later describes the bay scallop as the "*true scallop of the Boston and New York markets.*" According to Mr. Arnold, sea scallops were available in the early part of this century in such numbers that they could be caught on a fishing line and were not harvested commercially because there was no market demand for them. But Mr. Huber's version sure props up his anti-fishing argument a lot more effectively, doesn't it?

How about those 400 invading ships?

In Mr. Huber's words "*scrapists in more than 400 ships have invaded Georges Bank*" to catch scallops in the formerly closed area. The National Marine Fisheries Service has gone to the trouble of providing us with a website documenting the progress of the closed area fishery.

It's too bad Mr. Huber didn't take advantage of the information NMFS had provided. As of August 27, one hundred and fifty vessels have participated. The largest of these "ships" is about 125 feet long, and the average length is not over 80 feet. While the dramatic impact of Mr. Huber's "400 ships" can't be denied, 150 boats is an accurate representation of the scallop fleet working in Closed Area II.

And they're killing the baby scallops?

Not to miss a beat, Mr. Huber then writes "*at a scant four years of age, the Bank's still-juvenile scallops had reached a size where they could be killed legally. Scallops can live at least 18 years. They don't produce that many eggs until they reach 10 years of age. That the scrapers would be killing juvenile scallops didn't matter.*" The literature we reviewed indicated sea scallops can spawn in their second year and by year five or six may produce millions of eggs. At maturity their shells measure 12 to 15 cm across, which is the size of the scallops being taken from the closed area of Georges today.

The final point we'll cover is Mr. Huber's "*people have been trying to get rid of draggers and dredgers for more than 600 years. Back in 1376 A.D., hook fishermen appealed to England's King Edward III, begging him to outlaw the wondyrchoun, the newly invented beam trawl that was laying waste the Thames River estuary.*" While we weren't there, looking at analogous situations today it appears as if this might have been an example of fishermen using one gear type - hooks - trying to unfairly eliminate fishermen using another. It wasn't game keepers or fish wardens or proto-environmentalists that were begging the King. It was competing fishermen. Mr. Huber's right in one thing, at least. History has certainly repeated itself.

Mr. Huber has pushed all the hot buttons; loss of a pristine coral "forest" by an "invading" fleet of ships, killing baby scallops, the natural ecosystem altered beyond recognition, an industry-forced conspiracy of silence, historical opposition to what's always been recognized as a ruinous practice, and (and most cleverly) a gradual segue into the use of the term "scrapists." How much of it is accurate? We'll let you decide. How much of this type of writing, perhaps more cleverly crafted, is used by the major anti-fishing groups? Again, you be the judge.

The Sustainable Fisheries Act, MSY and the future of fishing in the EEZ

01/11/00

It's an accepted ecological principal that a given area of land or water is, as long as the input of energy and other "raw materials" remains constant, under natural conditions will produce a relatively constant biomass over time. The form of that biomass – the species mix – can vary significantly, but the total amount will remain about the same. Thus, for example, minus a major change in the amount of energy (sunlight) or nutrients (from run-off and upwelling), the waters of the New York Bight will produce the same tonnage of fish year after year. The relative amounts of particular species, however, can vary tremendously.

In particular areas, many of the commercially and recreationally important fish species occupy similar or overlapping niches (a niche is most simply defined as "ecological address.") That is, they are found in the same areas at the same times, pursue the same prey and are pursued by the same predators. To a large extent they can be considered in competition with each other for space, food or shelter. In some years there will be a large number of a particular species and, because of the ecological limits of the area to support total biomass, lessened numbers of "competing" species. Thus, in the New York Bight, for example, over time we will have years when bluefish are extremely plentiful and striped bass and weakfish aren't or, as has been the case since 1997 or so, there are striped bass all over, large numbers of fluke, and relatively few bluefish. The numbers of particular fish species cycle over time in a particular area, but the total biomass (at a particular trophic level) remains constant.

The "Maximum Sustainable Yield" (MSY) of a fish species or stock must necessarily be defined as the harvest from that stock or species when its population is at a peak in a given area. Thus, the MSY for bluefish in the Mid-Atlantic is determined based on the biomass of bluefish available when the bluefish population was at its peak. Ditto for weakfish, for striped bass, for fluke, etc. The years of peak production of these species didn't, and in fact couldn't, coincide. Ecological production limits wouldn't allow it.

But, under the provisions of the Sustainable Fisheries Act (SFA), at any point when the populations of each of these competing species aren't at their maximum levels - an ecological impossibility – those species that aren't are considered to be "overfished" and stringent harvest restrictions are required to be implemented. Out coastal waters are expected in the SFA to support a level of production that is ecologically impossible, and fishermen, both recreational and commercial, are being expected to reduce their catch to meet what is an impossible standard.

This has been our primary concern with the species-by-species management philosophy that has proved so ineffectual since the passage of the Magnuson Act. It is, as far as we can tell, the reason that the New England Council has voted for a large dogfish harvest (over 20 million pounds) and the Mid-Atlantic Council, using the same data and managing under the same guidelines, has voted to virtually close the fishery down (less than 3 million pounds). The New England council members realize that if the biomass of dogfish is allowed to build up to huge levels, it will do so at the expense of "competing" (and much more desirable/valuable/depleted) species and have acted accordingly.

The situation isn't limited to dogfish. Unfortunately, as the limits required by the Sustainable Fisheries Act come into play over the next year or two, we are going to find the end result will be, along with the financial devastation of many fishing businesses, the loss of critical fishing industry infrastructure that, considering development demands in most coastal areas, will never be replaced. And this is all going to be done to meet the biologically impossible goal of having all species at their MSY level simultaneously.

Very possibly exacerbating this situation are several other factors that might have led to unnaturally high levels of production for particular species in the past that led to even more inflated expectations of MSY:

- It appears as if many of our fisheries models were based on high population levels from several decades back. It has been argued that, culminating in the 70s or early 80s, we had significantly "enriched" our inshore and coastal waters with untreated (or lightly treated) municipal and industrial wastewater. While some of these effluents were toxic, many were simply nutrients, which might well have increased production of fish and shellfish (Managing The Waterways -- Too Clean For The Fish? By Alan Mearns, Lincoln Loehr and Herbet Curl. The Seattle Times. July 19, 1998).
- At the same time, we had seriously reduced the populations of cetaceans (whales, dolphins, etc.) and pinnipeds (seals and sea lions), very efficient predators of many of the same species we harvest (or the species they prey on).

Since then we have stopped almost all of the point-source enrichment (from a nutrient perspective) of our estuarine and coastal waters, possibly decreasing overall production in these waters, and marine mammal predation on fish and shellfish has increased dramatically worldwide as their populations have recovered (as a matter of fact, two Japanese researchers have just released a report that estimates that cetacean predation could account for from two to six times as much fish mortality as does the world's fishing fleets Menakhem Ben-Yami. Sea Mammals Spectre. World Fishing. July, 1998). We have also seen the unintended and uncontrolled spread of various materials (herbicides, pesticides, PAHs, etc., etc., etc.) of very likely deleterious impacts in every oceanic or estuarine area where we have looked. Finally, over the same period we have lost a significant amount of our coastal wetlands to development, and with them a corresponding amount of vital spawning and nursery area for many fish species.

What does this all mean? It appears as if, with every good intention the Congress of the United States has painted recreational and commercial fishermen into an ecological corner. Individual fish stocks are expected to be returned to very possibly unreachable levels of former abundance (given today's ecological realities), and they are expected to reach those levels simultaneously, something that's far beyond the productive capacities of the areas involved. And when this doesn't happen, more and more stringent management measures will be instituted in spite of the fact that many of the involved stocks are already rebuilding towards or have reached reasonable levels of abundance.

What are wetlands and what do they do?

02/27/2000

“Wetlands may be viewed as one of the most productive environments in the world, covering about 4 percent of the planet. They provide tremendous economic benefits to people through their production of fisheries resources, the maintenance of watertables for agriculture, timber production, water storage and reduction of natural impacts such as watershed flooding and shoreline erosion.” (Schultink and van Vliet, 1997, http://rdserv1.rd.msu.edu/wetlands/wims/wims_nort.html) “Historically, wetlands were not widely recognized as valuable or appreciated. In fact, wetlands were often regarded as ‘wastelands’ and breeding grounds for insects, pests and disease, and were considered impediments to development and progress. Wetlands were not useful because they were too wet to farm, and too shallow for swimming. As a result of this reputation, wetlands were readily converted to other land uses.” (USFWS & Texas Parks and Wildlife, 1998, <http://www.tpwd.state.tx.us/conserve/wetlands/loimp.htm>). “Approximately 75% of the Nation’s commercial fish and shellfish depend on estuaries at some stage in their life cycle. Estuaries themselves depend on their wetlands to maintain water quality and provide the basis for food chains that culminate in human consumption of seafood. Many estuarine-dependent species have even closer ties to wetlands in that they feed, take refuge, or reproduce in the wetlands themselves. Without wetlands, these fish and shellfish cannot survive” (Stedman & Hanson, 1998, <http://www.nmfs.gov/habitat/publications/habitatconnections/num5.htm>).

And what are we doing to them?

“Some estimates show that the world may have lost 50% of the wetlands that existed since 1900; whilst much of this occurred in the northern countries during the first 50 years of the century, increasing pressure for conversion to alternative land use has been put on tropical and sub-tropical wetlands since the 1950s.” (Moser, Prentice & Frazier, 1996, http://www.iucn.org/themes/ramsar/about_wetland_loss.htm). “According to a survey performed by the U.S. Fish and Wildlife Service, approximately 392 million acres of wetlands existed in 1780 in lands that now form the United States. Of that, 221 million acres were found in the lower 48 states. Since that time, humankind has caused a significant reduction in wetlands. Currently, the lower 48 states support only an estimated 104 million acres, or 47% of the original wetland acreage.” (USFWS & Texas Parks and Wildlife, 1998, <http://www.tpwd.state.tx.us/conserve/wetlands/loimp.htm>).

California	90%	New Jersey	46%
Connecticut	74%	Rhode Island	37%
New York	60%	Washington	31%
Mississippi	59%	Massachusetts	28%
Louisiana	>50%	South Carolina	27%
Alabama	50%	Georgia	23%
Texas	50%	Maine	20%
North Carolina	50%	Hawaii	12%
Florida	46%	New Hampshire	9%

Total wetland losses for coastal states

(from Stedman & Hanson <http://www.nmfs.gov/habitat/publications/habitatconnections/num5.htm>)

Some specifics

“Channel deepening, maintenance dredging, and dredging and filling to create uplands, have resulted in the loss of 44% of the original (100-year study) wetlands bordering Tampa Bay. In Sarasota Bay, changes in wetland habitat acres from 1948 to 1987 include losses of 35% of its seagrass beds, 45% of mangrove swamps, 85% of tidal marshes, and an increase of 16% of oyster beds. Wetland changes in Charlotte Harbor from 1945 to 1982 include losses of 29% of its seagrasses, 51% of salt marshes, 39% of oyster reefs, and an increase of 10% in mangroves.... In Louisiana, a significant change in acreage in coastal wetlands occurred between 1956 and 1978, when approximately 51% of the state’s emergent marsh and 59% of forested wetlands were lost. During that time period, there was a concurrent 272% increase in acreage used for disposal of dredged material. Other studies have shown that approximately 34% of Louisiana marsh was changed to non-marsh from 1945 to 1980, and that currently there is a net wetland loss of approximately 39 sq. mi. (101 sq. km) annually in coastal Louisiana.... A study in Mobile Bay, Alabama revealed that emergent marsh habitat declined by more than 10,000 ac (4,000 ha), or 35%, between 1955 and 1979. Half of this loss resulted from industrial, commercial, and residential development; other losses were the result of erosion and/or subsidence. Another survey described a loss of 50% or more of

submerged aquatic vegetation. The most significant impacts noted in these studies were the direct and indirect effect of dredging.... A decline of the area covered by seagrass and a decline of seagrass species has occurred in Mississippi Sound. Seagrass acreage in 1975 was approximately 60% of that found in 1969, and losses are continuing." (Duke and Kruczynski, 1992, <http://pelican.gmpo.gov/data/submerg.html>).

The preceding quotes are just a representative sampling from a wealth of information available on wetlands (Note: Full bibliographic citations and links are available on the web at <http://www.fishingnj.org/netusa12.htm>. If you do not have web access and would like a copy, fax your request to 215 345-4869). Even a cursory review of the literature indicates that 1) our inland and coastal wetlands are critical to the ecological integrity of our coastal waters, 2) in the last several centuries we've destroyed about half of them, and 3) the destruction is ongoing.

Wetlands and fisheries

Estuaries, bodies of water connected to the oceans and influenced by the tides, are extremely important to the productivity of our recreational and commercial fisheries. But, while we've destroyed half of the wetlands that are so necessary to the health of these estuaries, this fact gets scant mention in any discussion concerning the plight of today's fisheries and even less attention from the individuals and organizations responsible for the health of our fisheries. The fisheries literature is replete with references to the good old days. Whether those are the days of the first settlers in the New World, the days of the tub trawlers on the Grand Banks, the days of our grandfathers going to the beach or jetty and catching a barrelful of fish whenever they wanted, or the days back in the sixties or seventies before the "netters" took over, they are always wistfully and reverentially used as a glowing example of the way things were "before there was too much commercial fishing." Never any mention of the intervening wetland loss or coastal development. Given how critical wetlands are to our fisheries, an equally or more compelling argument could be made for those good old days being good because they were "when we had enough wetlands," but not in the fisheries management world, or in the anti-fishing rhetoric that is playing such an important part in forming public opinion today.

Is this because, after a period of rampant coastal development, today we're doing such a good job preserving and protecting our remaining wetlands and estuaries and fishing is the only activity that we have left to control? According to Duke and Kruczynski (1992) and other researchers, we're still destroying wetlands at an alarming rate - and demographic trends in the U.S. or a weekend drive to the nearest beach will bear their observations out. In the decades from 1960 to 1990 the population density in the coastal United States increased from 275 to 400 people per square kilometer, and today in the area between Boston, MA and Washington DC it's 2,500 per km² (Hinrichsen, 1998, http://state-of-coast.noaa.gov/natdialog/coastal_trends/pdf/3hinrichsen.pdf). To keep up with our leeming-like march to the coast we're building residential and commercial developments in any available space, natural wetland or not. And this clumping of people along the coasts isn't restricted to the United States. According to Hinrichsen, "*Humankind is in the process of annihilating coastal and ocean ecosystems. At the root of the problem are burgeoning human numbers and their ever-growing needs. Population distribution is increasingly skewed. Recent studies have shown that the overwhelming bulk of humanity is concentrated along or near coasts on just 10% of the earth's land surface. As of 1998, over half the population of the planet — about 3.2 billion people — lives and works in a coastal strip just 200 kilometers wide (120 miles), while a full two-thirds, 4 billion, are found within 400 kilometers of a coast.*"

A major threat?

At the same time, and particularly in the U.S., we're allowing intensive recreational uses of our estuaries to expand in an uncontrolled manner. The United States Environmental Protection Agency wrote back in 1996 "The number of recreational boats in the United States almost doubled from 1970 to 1990 (16.2 million), and is expected to increase by a further four million by the year 2000" (NOAA, http://www.yoto98.noaa.gov/yoto/meeting/tour_rec_316.html). Note that the EPA's growth estimate is lower than that put forth by the National Marine Manufacturers Association, but percentage-wise the EPA estimate corresponds quite well to the boating expenditure increases estimated by the NMMA.

According to the NMMA, in 1997 of the almost 12 million powered recreational vessels in use in the U.S., 7.9 million were propelled by outboard motors. In the words of the NMMA (on the Environmental FAQ section of the Association website) "The scientific data clearly indicates that although 20-to-25 percent of the fuel consumed by an outboard bypasses the combustion process and exits the exhaust, only a fraction goes into the water." (NMMA, 2000, <http://www.nmma-medialink.com/faq.htm>). We can estimate that about half of the recreational boating activity in the U.S. is in coastal states, and in 1989 the EPA estimated that the average annual fuel use by boats in coastal states was 111 gallons (EPA). Thus, given the EPA predicted increase in the size of the recreational boating fleet, about 100 million gallons of unburned fuel (gasoline and additives - such as MBTE, the highly soluble octane enhancing ether that has been found contaminating thousands of municipal waste supplies across the country - see <http://trg.ucdavis.edu/clients/trg/research/mtbe.html> for a discussion of MTBE contamination of reservoirs through boating activities) are being released by boaters in pursuit of their sport every year. If the "fraction" released that the NMMA refers to is "only" 25%, that's still 25 million gallons of gasoline, etc. making their way into our estuaries and coastal waters every year.

(Note: For more information on the spectrum of impacts of boating on estuarine productivity, see the proceedings of the Woods Hole Oceanographic Institution's The Environmental Impacts of Boating workshop at <http://www.whoi.edu/coastalresearch/boatingimpact/TitleAcknContents.html>), and for more on the environmental impacts of two-stroke marine engines see the Blue Water Network's website at <http://www.earthisland.org/bw/impact.shtml>.)

What can be done?

As far as the population growth on the coasts, this appears to be a worldwide trend that is probably beyond the ability of any organization to control, as is much of the nonpoint source pollution that will inevitably accompany it. We have slowed wetland loss in the U.S., which is a positive sign. As far as estuarine decline, as we've discussed before (FishNet USA #4, <http://www.fishingnj.org/netusa4.htm>), the fisheries management establishment has a large and vested interest in maintaining and expanding the recreational use of our waterways. This interest is expressed through the programs and actions of our fisheries managers at the state, regional and federal levels. Until this situation is addressed, it's hard to imagine any substantive steps being taken. From an overall resource management perspective, an objective apportionment of the blame for declining fisheries, rather than a knee-jerk "blame it on overfishing" response, would at least force us to begin to consider the problems caused by wetland loss, coastal development, and the unhampered growth in the recreational use of our waterways.

Heroes to heels

06/11/00

It wasn't too long ago that commercial fishermen enjoyed the respect, if not the unqualified admiration, of the general public. This was reflected in the popular literature of the day. Writers as diverse as Rudyard Kipling, Herman Melville, Peter Benchly, Robert Ruark and Ernest Hemingway have all represented fishermen, albeit with blemishes intact, as nearly legendary figures embodying the best of the "manly" virtues while at work and struggling in a harsh environment alien to most readers.

More recently the trend has been to depict fishermen either as unnatural predators in our ocean ecosystems, or as despoilers of those same ecosystems. However, this "downsizing" of the public's image of working fishermen hasn't been due to the efforts of working writers. Rather, it's been the result of a focused, extremely well-financed and apparently well-coordinated campaign by various groups and individuals, collectively referring to themselves as "marine conservationists." They have become adept at attracting and holding the attention of the print and broadcast media by attacking the commercial fishing industry through the selective and often distorted use of isolated snippets of fisheries data, out-of-the-larger-context illustrations of uncommon fishing practices, and grotesque oversimplifications of exceedingly complex and poorly understood natural processes. It's unfortunate that none of the reporters, researchers or producers that are so diligent when covering the supposed failings of today's commercial fishermen exhibit a corresponding diligence in gathering background information on those fishermen, their fisheries or on other conditions in the oceanic or estuarine ecosystems they depend on. We've seen nothing that comes close to questioning the scientific underpinnings of the campaigns that these "conservationists" are spending millions of dollars to prosecute. Or where they are getting those millions of dollars. Likewise, the media is studiously ignoring what their possible motives - beyond, of course, that inherent altruism that is such a significant part of our multi-billion dollar environmental industry today - might be. In this and the following FishNet we'd like to at least begin to fill some of the more obvious information gaps that are critical, we feel, to a full understanding of the actual condition of the United States' and the world's fisheries.

The specter of overfishing

The marine conservation movement has made much of the fact that many of the world's, and our nation's, fisheries are at or approaching the level of being "overfished." Obviously, having a fishery in an "overfished" condition is undesirable. Just as obviously, one would think (if one were dealing in a rational world) that a fishery could only reach the undesirable condition of being overfished through too much fishing. But that's not the case in the waters under U.S. jurisdiction. As we discussed in a previous FishNet (<http://www.fishingnj.org/netusa10.htm>), in accordance with a recent amendment to the Magnuson-Stevens Act (the federal legislation that sets out how fisheries will be managed in the U.S. Exclusive Economic Zone), any fish stock that isn't at some arbitrary, and arbitrarily high, level of abundance, no matter what the reason, is termed "overfished." Too much pollution and not enough fish? Overfishing at work. Filled in wetlands and not enough fish? More overfishing. Low year in the natural cycling of a stock of fish due to el Nino or la Nina? You guessed it - overfishing yet again. Whenever we have a fish stock that isn't at a high point on the population curve, and no matter what the reason, it's overfishing that's held responsible and it's fishermen who get the blame.

The Mid-Atlantic/New England dogfish fishery, which the managers were actively recruiting fishermen to enter a few years ago, is a graphic example of how this concept of "overfishing" is distorting the system. In the most recent Northeast survey, the National Marine Fisheries Service reported half of the fish by weight caught were dogfish, yet "by the book" the species is considered overfished. Accordingly, the fishery was closed down in April. The many industry members who had invested in the fishery at the invitation of the managers had their investments rendered valueless by those same managers because the first management measure instituted was closing the fishery. (for a link to a FishNet issue that addresses dogfish management <http://www.fishingnj.org/netusa7.htm>).

Because of the fact that any noxious material that's on the land or in the air or water is going to eventually end up in close proximity to a fish or two, there's a fairly obvious relationship between environmental quality and the health of fish stocks. So, you would think (remember that rational world referred to up above), people and/or groups with an interest in environmental quality - ostensibly marine conservationists fit in here - would do all they could to focus attention on the anthropogenic whys of fish population fluctuations. But, somewhat puzzlingly, this is not the case. Instead, these supposedly environmentally aware folks support this rather incredible method of determining "overfishing" and

have taken advantage of it in every media outlet that's bought into their doom and gloom pronouncements or whichever courtroom they've sued their way into. Their goal hasn't been to help the fish.

Determining the actual causes of fish population declines and then pushing for whatever corrective measures, if any, were appropriate would do that. With their slavish and all-consuming focus on making overfishing appear to be the cause of every fishery's ills, however, it's hard to imagine that their goal is anything other than to heap blame onto the figurative shoulders of the fishing industry. If it were, their understanding, their agenda and their media outreach would extend far beyond the simple equation "not enough fish equals too much fishing."

This completely misleading method of representing the health of a fish stock surely isn't of any value to an understanding of what's going on in our estuarine, coastal and offshore waters. If too much fishing is the culprit, identify it as such and then fix it. But if fishing isn't to blame, identify what really is and then fix that. But this is a path seldom if ever traveled by the "conservationists." Rather, they support a policy that automatically turns commercial fishermen into bad guys; targets ripe for their expensive multimedia campaigns. Should such a jaundiced perspective be a part of any rational fisheries management policy?

Congress obviously thinks so, or at least thought so when the Magnuson-Stevens Act was last amended, and when the conservationists, with the assent of the managers in Washington, extended extreme pressure to have it included. However, the distortions it's causing in the management system are obvious (see the box on the current dogfish situation). The attendant economic and social damages to fishing communities up and down the coasts, while not so obvious, are severe.

Then there's bycatch

Bycatch refers to those organisms that are harvested inadvertently along with the targeted species that fishermen are seeking. Sometimes bycatch species are valuable, are retained by the fishermen, and are sold along with the targeted harvest. Sometimes bycatch has no value and is returned to the ocean, sometimes alive and sometimes not. And sometimes bycatch could be sold except for the fact that management regulations won't permit it. This is termed "regulatory bycatch" and is responsible for the senseless waste of many tons of high quality seafood every year.

Generally speaking, commercially and recreationally desirable fish and shellfish species are found in our estuaries and oceans in intermingled assemblages. It's not uncommon to find individuals of several species intimately associated, either on the same area of sea floor or in the same volume of water. Even vast schools of particular species will have other species mixed in or on the periphery. This makes it exceedingly difficult - at least when considering commercial fishing gear efficient enough to provide consumers with affordable seafood or recreational fishermen possessing average skill levels - to harvest only the targeted species. However, the talent of the fisherman, whether commercial or recreational, and gear modifications can minimize bycatch. This is something that every fisherman is committed to, not just because the idea of needless killing is repugnant, but also because catching fish or shellfish that you can't sell comes with a serious set of economic disincentives including increased wear and tear on the fishing gear and increased crew expenses for culling (sorting) the catch.

But how bad, biologically speaking, is bycatch? Like almost every other question dealing with fisheries issues, it depends. It depends on the species taken as bycatch, on the age/size of the species, and on where the fishing is taking place.

Bycatch has been turned into an issue in the longline fishery by the simple expedient of declaring that marlin and sailfish caught in U.S. waters can't be sold. Thus the longline fishermen are forced to discard these fish when they inadvertently catch them, and the conservation community is using this waste of valuable fish - a prime example of the sheer stupidity of management actions requiring regulatory discarding - as justification for closing down the fishery. In the rest of the world longlining is recognized as the selective and efficient method of fishing that it actually is. (<http://www.fishingnj.org/dirsword.htm> to the introductory page on Swordfish)

Marine fish and shellfish are characterized by their high fecundity, particularly when judged by terrestrial standards. Many release millions of eggs, and even the sharks - whose supposedly "low" reproductive potential puts them, in the conservationists agenda, in danger of overfishing - produce from several to dozens of fully functional young every year. Needless to say, this high reproductive potential is balanced, is in fact required, by naturally high mortality levels. If it weren't, in fairly short order we'd be up to our ears in dogfish or codfish or scallops. In fact, it's probably safe to say that at least 99.99% of all marine organisms spawned in the world's oceans never come close to reaching maturity. As far as the biological success of those species are concerned it doesn't matter what the source of that mortality is. On the average one spawning pair of red snapper in the Gulf of Mexico will produce two mature red snapper. Millions of fertilized eggs, hundreds of thousands of larvae, thousands of juveniles and hundreds of immature snapper produced by these spawners will die every year. Whether they become dinner for a larger fish, are a casualty of "catch and release" recreational fishing size limits, or end up on the deck of a shrimp makes no difference to the overall red snapper population.

What does make a difference is whether large enough numbers of a particular size/life stage of a species survive the various forms of natural and man-made mortality to sustain the species at a desirable level. Seeing that fish stocks reach this level, rather than automatically condemning all forms of bycatch, should be the immediate focus of bycatch reduction efforts in fisheries management. Our ultimate goal is, as it should be, the elimination of all bycatch mortality, for practical as well as philosophical reasons. Bycatch costs fishermen money. If bycatch mortality for a particular life stage is keeping a species below the "sustainable" level, then we should certainly be doing as much as we can to correct the

situation, but to attempt to demonize the entire commercial fishing industry for bycatch mortality that has no impact on particular fisheries, particularly when the industry is doing all that it can to reduce that mortality anyway, makes no sense, either biologically or economically.

Tunas and marlin and swordfish, oh my....

09/11/00

Over the last several months a battle has been waged over who has the right to the tunas and billfish (swordfish, marlin and sailfish) found in the waters off the coasts of the U.S. These fish are generally found far offshore, well beyond the range of most recreational fishermen, and are the usual quarry of large sportfishing yachts on the recreational side and commercial longlining fishing vessels like the ill-fated Andrea Gail pictured in *The Perfect Storm*. Some - as discussed below, definitely not all - of the sportfishing organizations have determined that they don't want to share these offshore waters, or the fish in them, with the longliners or with the consumers that buy their products. Deciding that for some reason they deserve the exclusive rights to fish there, they have initiated a political and public relations campaign to ban longlining in what they evidently have come to consider their ocean. They've enlisted New Jersey Congressman Jim Saxton, Chairman of the House Fisheries Subcommittee, as their "champion" in Washington and the issue is well on the way to polarizing the voters in the district he represents.

The Fish:

These species cover thousands of miles of ocean in their annual migrations. Because of this they are referred to collectively as highly migratory species (HMS). Their migrations take them through waters which lie within the management jurisdictions of many countries as well as the international waters beyond; accordingly they are managed by international bodies (in the case of the HMS in the Atlantic, the management body is the International Commission for the Conservation of Atlantic Tunas or ICCAT) rather than the fisheries agencies of individual countries.

Highly migratory species are prized both as table fare and as sportsmen's trophies. On the commercial side, consumers the world over have an enduring appreciation for fresh tuna, marlin and swordfish, and in the U.S., where swordfish and tuna have long been consumer favorites, we're beginning to catch up to the rest of the world in recognizing the culinary appeal of fresh and smoked marlin (though U.S. regulations prohibit the sale of marlin from Atlantic waters). While the harvest from the HMS fisheries, in terms of pounds landed, isn't that great, the high value per pound of the fish produced and their popularity with consumers makes them extremely important to the fishing ports where the commercial HMS vessels dock. Recreationally, the goal of many anglers is to successfully battle one of these offshore "big game" species to the boat, and those anglers collectively spend millions of dollars each year to catch them. Adding to the mystique of the recreational HMS fishery, each year in dozens of billfish and tuna tournaments up and down the coast anglers in million dollar yachts will compete for cash prizes that can reach hundreds of thousands of dollars for bringing in the largest fish (it was just reported in the *Asbury Park Press* that a sailfish caught in an Ocean City, MD tournament was worth over half a million dollars to the angler and crew that killed it). These species are beyond the reach, both physically and economically, of the vast majority of the recreational anglers and catching them since the early part of the last century has been considered a "rich man's" hobby.

The Fishing Techniques:

A small fleet of commercial fishing vessels called longliners catch the bulk of the commercially harvested swordfish and tunas off the East coast. These boats fish with long lengths of monofilament line from which are suspended shorter vertical lines terminating in single baited hooks. The longlines can range up to 20 to 40 miles in length with hooks spaced every 250 to 350 feet apart (for a mostly accurate though somewhat dramatic view of how longline gear is fished we refer you to the movie *The Perfect Storm*). There are under 200 vessels in the East and Gulf coast HMS longline fleets.

[For a discussion of the longline fishery [Link to longlining section](#)]

The size of the offshore recreational fishing fleet is unknown. In identifying the recreational HMS fleet - or any other recreational fishing fleet, for that matter - all we can do is estimate. Any U.S. boat targeting Atlantic tunas requires an Atlantic Tunas Permit issued by the National Marine Fisheries Service. Considering that there's a significant charge for the permit and that the application process is reasonably arduous, it's safe to assume that virtually all of the recreational fishing boats that possess one of these permits fishing out of East coast ports will target HMS. In 1998 over 12,000 Atlantic tuna permits were issued to Angling and Charter/Headboat category vessels.

These boats employ one of two fishing techniques; chumming - also called chunking - or trolling. In chumming, crew members on a drifting or anchored boat spread chopped up bits of fish over the side, establishing an oily slick that can extend for miles and will attract any fish that happen upon it and lead them to the baited hooks. In trolling, the much more widely used methods, the boat drags from four to a dozen (or more) artificial lures or natural baits through likely bits of ocean at speeds of up to 10 miles an hour.

The Fishing Effort:

The anti-commercial fishing argument in the HMS debates, of course, is that the longliners are using up all the available water with their gear and catching all of the fish, leaving few for the sportsmen who are willing and able to spend a thousand dollars a day trying to catch the same

fish (though it's important to note that not all of the HMS recreational fishermen are engaged in these debates; several large and influential recreational fishing organizations are working with the longliners to solve the real problems in the fishery). Quoting from a recent advertisement by a fishing club called the Recreational Fishing Alliance "There are 60 million sportfishermen in America and approximately (sic) 458 licensed drift longline boats. Yet the longliners kill more fish without regard to size or species than all the sportfishermen combined." The implication is - but, of course, by using some fairly clumsy verbal "sleight of hand" the writer is careful to not commit to such a glaring misstatement - that these few longliners catch more fish than all of America's (we think the writer meant the United States') recreational anglers.

"...in fact, a recent survey we conducted indicates that 41 percent of our readers are fishing more often than they did two years ago, with nearly half of these folks saying "a lot more." So, we can expect plenty of company on the water in the coming weeks. Let's face it, the most productive spots, be they out over the canyons (where most recreational angling for HMS takes place) or in the quiet backwaters, get more crowded ever year." (from an editorial in the September, 00 issue of Saltwater Sportsman, a leading recreational fishing magazine)

According to the NMFS Large Pelagics Survey, in 1997 a total of 150,000 recreational trips were taken for HMS from Virginia to Maine. While the type of fishing practised on each trip wasn't specified, we're going to assume that two-thirds of them were devoted to trolling. At an average speed of 8 miles per hour and assuming 6 hours of fishing per trip, about 5 million miles of ocean were covered by recreational fishing boats trolling for HMS in a single year off the Mid-Atlantic and New England. Considering the popularity of recreational fishing in the southern states, and the more favorable weather allowing much more time on the water, we'll assume about double this effort from North Carolina to Florida. Possibly 15 million miles of water are being trolled for HMS by recreational boats annually. And over every mile each of these boats drags up to a dozen baits or lures - and various other fish-attracting devices - behind them (for a description of how a sportfishing yacht "rigs" for offshore tuna fishing - with up to 28 lures behind it - see John Geiser's Asbury Park Press column on August 28 Link to Asbury Park Press how to column).

Because of recent advances in fish-finding and positioning technology much has been made of the increased efficiency of the modern commercial fishing fleet. Today that same technology is available to, and has been widely adopted by, the recreational fishing fleet as well. But there is one extremely significant difference in how the technology is applied. Having displacement hulls, commercial fishing boats are limited to speeds of about 10 mph. Recreational fishing boats, on the other hand, are generally built on planing hulls and their speed is only limited by the size of the engines that can be crammed into them. The large offshore yachts that go after HMS are capable of speeds of 30 to 40 miles an hour, allowing them to cover much larger areas in much shorter times and to reach reported or suspected concentrations of fish in hours rather than days.

As we've reported before, the East coast pelagic longline fleet numbers less than 200 vessels. Each fishes between 20 and 40 miles of longline gear for an average of 100 days a year (note: these statistics were supplied by Blue Water Fishermen's Association). That's 20,000 days that are fished each year by the longline fleet and, assuming an average longline length of 30 miles, about 600,000 miles of water are covered.

When comparing longlining to recreational fishing, the anti-commercial fishing groups try to equate the level of fishing effort to a simple matter of the number of hooks being fished. This seems a particularly inept - if not purposely misleading - comparison. Once longline gear is set, it remains at the same place in the water column, drifting with the current but stationary relative to the surrounding water. Hence the hooks on a 30 mile long longline, no matter how many hooks there are, are "exposed" to target fish in only that immediate area. The eight or ten or twelve hooks in the bait or lures being dragged behind a sportfishing yacht trolling at eight miles an hour, on the other hand, are exposed to as much water and presumably to as many fish, in only half a day of fishing. The anti-longlining argument that 600 hooks on a longline have 50 times the catching capacity of 12 hooks dragged by a sportfishing yacht over the same 30 miles of ocean strains the credulity, if not the rationality, of any objective observer. In spite of the fact that the big game sportfishing fleet collectively fishes what appears to be at least an order of magnitude more water than the longliners, that's their primary argument.

Admittedly, we've taken liberties in estimating the offshore recreational fishing effort. Even if we are overestimating by a factor of two, it still appears pretty difficult to deny that the recreational HMS fleet covers a much larger part of the ocean than the longline fleet does in a year of fishing. But what about the relative catching capacities of the two fisheries?

For an idea of how effective recreational fishing for billfish can be, we found a website (The Billfish Americas Tour, url <http://www.billfishamericas.com/overview.htm>) in which a rotating crew on a 47 foot yacht fishing off Mexico and Central America in 1999 and 2000 caught up to 22 marlin and up to 33 sailfish a day (not the same day), we assume by trolling. Surpassing even that catch level, an article in the September, 2000 issue of Marlin magazine reports a recreational boat fishing in Mexican waters taking 86 sailfish in a single day. We've seen reports of anglers on recreational boats in the winter bluefin tuna fishery off Cape Hatteras catching and releasing upwards of 40 tuna a day, and successful yellowfin tuna charters out of New Jersey ports can easily land two dozen fish in a day.

It seems that when these sportfishing yachts catch 5 or 10 HMS in a day, it doesn't raise very many eyebrows. Going by that, and even assuming the seemingly low 15% HMS catch and release mortality rate reported in the Marlin magazine article cited above (no one knows what it actually is, and it seems like nobody's particularly interested in finding out), the recreational mortality must be staggering.

"Sportfishermen" selling their catch

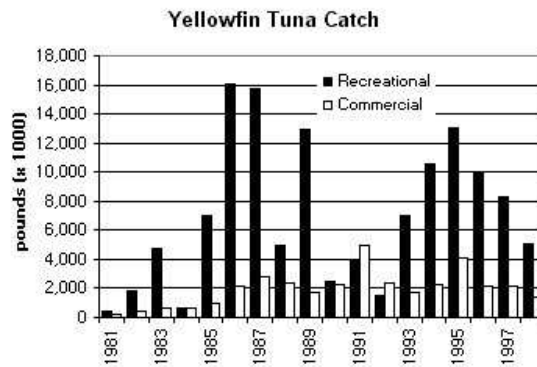
A spin-off of the anti-longlining campaign is an increased scrutiny of the degree to which HMS sportfishermen sell their catch - primarily yellowfin tuna. There are federal regulations prohibiting it. According to NMFS "... sale and purchase of Atlantic tunas is illegal unless the individual is in possession of the proper permits. Atlantic tunas Angling category permit holders are not authorized to sell their landings, and only permitted Atlantic tunas dealers are authorized to purchase tunas from vessels. Illegal sales and purchase of tunas caught by non-commercially permitted vessels may be penalized by substantial fines. In addition, consumption of illegally sold and purchased tuna could present a health threat to your community, as the fish may not be properly processed...." In spite of this, it's being reported that it's a fairly common practice for sportfishermen to sell part or all of their catch of tuna to "help offset the cost of the trip." With the ex-vessel price of yellowfin tuna starting at \$3 a pound, and with recreational trips resulting in 500 pounds of dead tuna not uncommon, this is hardly surprising, and certainly brings into question the actual motives of some of the people who want to close down the longline fishery.

Conversely, the longline fishery is closely monitored. Government observers sail aboard randomly selected longline trips, and all of the fish are reported to NMFS when they are landed. The swordfish fishery is shut down when (if) its annual quota is being approached.

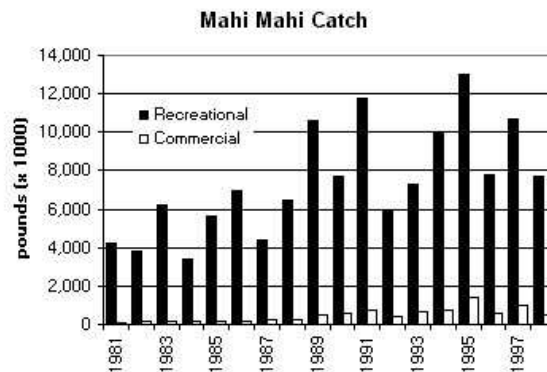
The Catch:

It's difficult to compare actual catch figures, but we thought it would be an interesting exercise to try to ferret out who's really catching all the fish.

Of the HMS species, swordfish have become an almost exclusive commercial quarry and the other billfish are reserved for the recreational fleet so we can't use them. Bluefin tuna are so highly regulated, and fishing for them by all sectors is so restricted, that no valid comparisons can be drawn from that fishery either. Yellowfin tuna, however, can give us a reasonable picture of who's catching what in our offshore waters. As we mentioned above, because of their culinary desirability they are sought after both recreationally and commercially, and the fishery had been unregulated until very recently. As the chart to the right shows, the recreational yellowfin tuna catch has remained at least 5 times the commercial catch for most of the last two decades.



Another species that is found in the same offshore waters as the HMS is the dolphin fish, also known as mahi mahi. Another popular species with both recreational anglers and seafood consumers, it has also been targeted by some of the sportfishermen as a potential "gamefish" (this means commercial harvest and sale would be banned). The gap between the recreational and commercial harvest of mahi mahi is even greater than it is with yellowfin tuna. And the boats that pursue these fish, and the fishing capacity they represent, are the same boats that catch HMS.



The Big Lie:

(or perhaps just a very large misunderstanding?) There are thousands of sportfishing boats out there pursuing marlin and sailfish and tuna. As a fleet they have the ability to cover areas of the ocean and outfish the commercial longliners by a factor of at least ten to one. As demonstrated by the landings of dolphin and yellowfin tuna, when the playing field is level and the hyperbole is filtered out, that's about what they do. It's glaringly obvious where the threat to the HMS in U.S. waters is coming from (and, according to Saltwater Sportsman, that threat is increasing dramatically from year to year). But with millions and millions of dollars at stake - in sportfishing yacht sales, in marlin and tuna tournament prizes, and reportedly in the "black market" sale of tens of thousands of pounds of recreationally caught and illegally sold tuna - it would certainly be in the sportfishing industry's best interests to eliminate the competition for these fish. And, longline fisherman and consumer be damned, it appears as if that's what they are trying to do.

Who puts up the money? Environmental lawsuits backed by BIG bucks

From Commercial Fisheries News, 04/01/01

(This is the first of two guest columns examining the influence of big money donors and the environmental groups they support on US fisheries policy originally printed in Commercial Fisheries News)

A while back a letter on the fishing industry web site Worldcatch.com caught my eye. Written by Jack Sterne, a lawyer representing environmental interests in Alaska, the letter was a response to an article discussing the funding of the Stellar sea lion lawsuit by Greenpeace.

It seemed crafted to leave the impression that going to court was a financial strain on the involved environmental organizations and that the lawyers representing them were doing so at some significant level of personal sacrifice as a public service.

Said Sterne in his letter, *"There is no environmental group that I know of that has 'millions of dollars' either for legal fees or for paying the costs of a lawsuit. Those of us who work for nonprofit environmental law firms typically make much less money than we could in the private sector (usually half as much or more), and we do so because we believe in the causes we represent."*

It kind of brings to mind the image of the down-at-the-heels, struggling yet "committed to the public good no matter what the sacrifice" lawyers that John Grisham has turned into folk heroes, doesn't it?

Having for some time been interested in the role that "charitable" foundations play in national and international fisheries arenas through their support of various non-governmental organizations (NGOs), I found Sterne's letter and the image he was presenting intriguing.

There was something about its tone that didn't quite ring true with my understanding of who was paying for what and how much was being paid, in the rarefied world where many environmental organization folks hang out. Since the larger foundations provide rather detailed information on their grant making activities on their websites, rather than taking Sterne's words at face value, I thought I'd do a little background checking myself.

Sterne works for the law firm Trustees for Alaska. He wrote that Earthjustice Legal Defense and his firm were co-counsels in the Stellar sea lion suit and that both are non-profit public interest firms with the mission of providing legal services to environmental groups. Earthjustice used to be the Sierra Club Legal Defense Fund. On its web site, Earthjustice claims that it is the "non-profit law firm for the environment," which, for more than a quarter century, has represented "hundreds of environmental clients, large and small, without charge." (If Earth Justice seems familiar, that's because its lawyers also were behind suits on summer flounder, scallops and continued "overfishing" under the SFA.)

Multi-million dollar gifts

The database on the Pew Charitable Trusts site revealed that since 1996, Pew has given Earthjustice \$9.797 million. It seems Sterne's understanding that no environmental group has millions of dollars for legal fees or to pay the costs of a lawsuit isn't all that accurate. And what about the "needy" clients? Earthjustice lists a number of organizations as clients that will be familiar to many in the fishing industry for their "contributions" to the management process.

Among them are:

- The Conservation Law Foundation (CLF)
- The Center for Marine Conservation (CMC)
- The World Wildlife Fund (WWF)
- The National Audubon Society
- The Natural Resources Defense Council

Each of the first three has received over a million dollars from Pew since 1996. The Natural Resources Defense Council (NRDC) has received over \$5 million and Audubon, almost \$8 million. While Sterne might be right that these organizations don't have millions of dollars "either for legal fees, or for paying the costs of a lawsuit," it seems as if they do have millions of dollars.

Note that these figures are for grants from the Pew Trusts. Other foundations, such as Packard, Rockefeller, and W. Alton Jones, also support them heavily.

Who is Pew?

As the 800-pound gorilla among sources of dollars for environmental organizations with an oceans orientation, I thought it might be educational if I primarily focused on the Pew Trusts.

On its web site, Pew is described as a group of seven individual charitable trusts established between 1948 and 1979 by two sons and two daughters of Joseph N. Pew and his wife. Joseph N. Pew founded Sunoco Inc. Seven of the eleven directors of the Trusts are Pews. Based in Philadelphia, PA, the trusts have approximately \$4.8 billion in assets and made grants totaling \$235.6 million in 2000. Since 1995, the Pew Trusts have made about \$50 million in fisheries-focused grants.

Pew Oceans Programs

The Pew Fellows Program in Marine Conservation is designed to *"fund innovative work in marine ecosystems, fisheries management, coastal conservation, and marine contamination."*

The Pew Oceans Commission, initially co-chaired by New Jersey Gov. Christine Todd Whitman and ex-Congressman and Clinton aide Leon Panetta, is *"an independent group of distinguished Americans conducting a national dialogue on the policies needed to restore and protect living marine resources."*

This "independent group" includes the chairman of Sunoco Inc., the president of the Center for Marine Conservation, a trustee of the Rockefeller Brothers Fund (which has provided grants to the Conservation Law Foundation, the Natural Resources Defense Council, the Center for Marine Conservation, the American Oceans Campaign, and Audubon), a Trustee of the Packard Foundation (which has provided grants to the Conservation Law Foundation, the Natural Resources Defense Council, the Center for Marine Conservation, the American Oceans Campaign, Audubon, Environmental Defense and SeaWeb), the president of the American Sportfishing Association, the president of the Pew Center on Global Climate Change and a recipient of a Pew fellowship. It also includes two commercial fishermen; one is the president of a trade association which has been funded by Packard and the other is a director of a trade association which has been funded by Pew.

Earthjustice, SeaWeb

While the accompanying table only includes grants focused on fisheries and/or oceans issues, Pew also awarded Earthjustice \$5.5 million last year to establish a center to coordinate public education initiatives to *"enhance wilderness protection efforts by the US conservation community."*

This chart lists the grants that the Pew Charitable Trusts have made in the last several years to these major fisheries/oceans related projects: the Pew Fellows Program, SeaWeb, Earthjustice Legal Defense Fund, and the Pew Oceans Commission.

Grantee	Amount	Duration	Purpose
The Regents of the University of Michigan	\$3,000,000	4 yrs.	For the 1997 and 1998 Pew Fellow classes
New England Aquarium Corporation	\$2,631,000	5 yrs.	For the 1999 and 2000 Pew Fellows classes
New England Aquarium Corporation	\$3,000,000	4 yrs.	For the 1997 and 1998 Pew Fellow classes.
New England Aquarium Corporation	\$1,568,000	3 yrs.	For administrative expenses to operate the Pew Fellows Program for fiscal years 2000 through 2003.
New England Aquarium Corporation	\$1,500,000	3 yrs.	For the 2001 Pew Fellows class.
New England Aquarium Corporation	\$1,000,000	3 yrs.	To cover 1996 fellowships.
New England Aquarium Corporation	\$769,000	2 yrs.	To cover administrative expenses to operate the Pew Fellows Program for the 1999 and 2000 fiscal years.
New England Aquarium Corporation	\$432,000	19 mos.	To cover administrative expenses to operate the Pew Fellows Program for the 1997-98 fiscal year.
Natural Resources Defense Council, Inc.	\$1,453,000	13 mos.	To provide continued support for SeaWeb, a public education initiative on ocean issues.
SeaWeb	\$1,600,000	1 yr.	For a public education initiative on ocean issues.
SeaWeb	\$1,200,000	2 yrs.	For core programs.
Earthjustice Legal Defense Fund	\$1,475,000	2 yrs.	To launch the Ocean Law Project, a coordinated legal effort to restore marine ecosystems and fisheries.
Earthjustice Legal Defense Fund	\$1,233,000	15 mos.	For continued support of the Ocean Law Project, a coordinated effort to restore marine ecosystems and fisheries.
Earthjustice Legal Defense Fund	\$269,000	18 mos.	To implement the Ocean Law Project in the Mid-Atlantic, Gulf of Mexico, Pacific and Western Pacific regions.
Strategies for the Global Environment, Inc.	\$3,500,000	30 mos.	For establishment of a national oceans commission.

SeaWeb is the public outreach arm of Pew's ocean interests. According to XX, "*SeaWeb is a project designed to raise awareness of the world ocean and the life within it. The ocean plays a critical role in our everyday life and in the future of our planet. We believe that as more people understand this and begin to appreciate the earth as a water planet, they will take actions to conserve the ocean and the web of life it supports.*"

SeaWeb has also received approximately \$1.33 million dollars from the Packard Foundation.

In addition to the \$24 million listed in the table, Pew has provided about \$34 million more in fisheries/ocean focused grants, and has donated a total of almost \$90 million to the "conservation" community since 1995.

What's Pew's motivation?

Why has Pew spent so much on fisheries issues? What has Pew -- or the public -- gotten for its money? And, most importantly, what has the impact of these millions of dollars been on the fishing industry, the fisheries it depends on, and the management process that's supposed to keep it all going?

The answers to those questions could be critical to the future of the commercial fishing industry. While I can't provide those answers, I can provide enough background information to help you draw your own conclusions. I'll do that in next month's edition.

The truth is out there (and it's available if you look for it!)

04/11/01

We recently saw a copy of a June press release issued by a New Jersey legislative office in support of a ban on harvesting menhaden - a small, oily fish that is available in greater abundance than any other species off the East and Gulf coasts - for fish meal and oil in state waters out to three miles. In part the release said "*Waterways off the New Jersey coast attract thousands of out-of-state processing boats which continually harvest menhaden and wreak havoc on the local underwater food chains. Menhaden are harvested by factory ships not for human consumption, but rather to be incorporated in fertilizers, cosmetics and cat food.*" Because menhaden are only found in estuaries and close inshore, closing the fishery in state waters would effectively close it completely.

For the record, 1) there are less than two dozen boats, not "thousands," on the East coast (from Maine to Florida) that are capable of participating in the menhaden reduction fishery, 2) There are no "processing" boats in the menhaden fishery at all (the less than two dozen boats in the fleet catch the fish and transport them to shore-based facilities for processing), 3) The menhaden reduction fleet, which has been actively engaged in harvesting on the East coast and in New Jersey waters, with many more boats and a much higher level of landings than in recent years, for well over a century is "wreaking havoc" on neither the "local underwater food chains" nor anything else in our local waters - at least if we can believe all of the recreational angler's claims about "the good old days," 4) menhaden are no more harvested by "factory ships" than by "processing boats," and 4) as well as making their way into some commercial products, menhaden are harvested for use in livestock feed (the resulting livestock destined for human consumption) and, increasingly importantly, the production of omega 3 dietary supplements, which modern medicine has determined are among some of the most valuable additives available to health-conscious consumers.

The glaring inaccuracies in the release could have been revealed with one or two phone calls, half an hour in a well-equipped library or fifteen minutes of research through credible sites on the internet. And yet the legislative staffers and whoever else was involved in preparing, editing and distributing the press release weren't interested enough in its accuracy to put forth even this minimal effort. (A well-referenced article describing the fishery and real management concerns, "Of fish meal, crab bait, a public resource and a disregard for science," is available on the internet at [Link to piece on menhaden management](#))

In a nutshell, this illustrates how severe distortions can and have been used to skew public perceptions in fisheries issues.

We've been pointing out over the past several years that capitalizing on doom-and-gloom pronouncements about the status of our commercial fisheries has greatly outgrown the cottage industry phase (see "Who puts up the money" [Link to piece on menhaden management](#)). As the N.J. legislative release so accurately indicates, so too has the scope of the disinformation being used in support of these pronouncements. With seemingly limitless funding from multi-billion dollar foundations on one hand, and with the full gamut of communications from scores of recreational anglers intent on grabbing all of the fish that they can on the other, environmental and angling organizations have become adept at convincing targeted elected officials and media representatives that commercial fishing is totally out of hand and that commercial fishermen alone are responsible for the degraded condition of our coastal and ocean fisheries. Strategically, this is a wise move on their part. The management system that we have in place is staffed by fisheries professionals who aren't swayed by miss-applied, skewed or totally fabricated "facts," but are committed to decision-making based on the best available science, which the commercial fishing industry is committed to making better. Some of our elected officials, however and unfortunately, have been known to respond to focused political pressure, even if brought by a very small group of constituents and even if based on information that is far from factual.

In the face of all of this anti-fishing* bluster, we thought it would be timely to reacquaint our readers with the benefits derived from a viable domestic commercial fishing industry, with some of the most widespread anti-fishing arguments, and why these arguments are less than convincing.

As far as the pluses of having a healthy commercial fishing industry in the U.S., consider the following:

- As successful “marriages” between working commercial fishing operations and successful tourist attractions in ports like Cape May and Barnegat Light on the East coast and San Francisco and Seattle on the West demonstrate, there’s an ongoing public fascination with working fishermen and how they harvest the sea’s bounty.
- Particularly in the context of our heavily developed coastlines on the Atlantic, it’s difficult to imagine any type of coastal development more environmentally benign than a working fishing port, nor any that would be more effective in demonstrating to the public the importance of healthy coastal and ocean ecosystems.
- Domestic production of fish and shellfish reduces the trade deficit by billions of dollars each year.
- Harvesting by professionals is the only way to make the fish and shellfish that are a public resource belonging to all of us available to people lacking either the time, the money or the inclination to harvest them themselves. While it’s a hard concept for the most zealous anglers to grasp, somewhere around 95% of our citizens would never consider catching their own seafood, yet they all have an equal right to enjoy a fresh fish dinner - and the health benefits that come with it - whenever they wish.
- Locally caught, ocean-fresh fish and shellfish taste better than products that have been frozen or refrigerated and shipped halfway around the world.
- As is becoming increasingly evident, there are a myriad of health benefits associated with a diet rich in fish – particularly saltwater fish.

The most common anti-commercial fishing arguments seem to be variations of:

- Recreationally caught fish are far more valuable to the economy than commercially caught fish because they cost so much more to catch. (In actuality, a recreationally caught fish is the end product of a “fishing experience” while a commercially caught fish is the primary input for a seafood meal which is generally eaten in a restaurant. On a pound-for-pound basis, fish enjoyed by patrons at a mid-level restaurant easily generate as much economic activity as fish caught by anglers on vacation, and well over half of the seafood enjoyed in the U.S. is enjoyed at restaurants.)
- Anglers employing “catch and release techniques” can catch the same fish over and over again, multiplying its “value” far beyond that of the commercially harvested fish that is caught once and eaten. (In actuality, because of catch and release mortality, which is generally agreed averages out at around 20%, anglers catching and releasing as many fish as they can in an outing can – and do – kill more fish than anglers who catch and keep their limit and then stop fishing. See The big lie - <http://www.fishingnj.org/netusa15.htm>.)
- Commercial fishermen are dollar-driven resource exploiters with no regard for conservation who will “cheat” whenever the opportunity arises while recreational anglers are conservation minded to a fault and are incapable of damaging a fishery. (In reality commercial fishermen, with a full spectrum of regulations controlling every facet of how they ply their trade, can and do live within management-imposed restrictions as a matter of course, while – as exemplified by the last several years’ fluke landings in the mid-Atlantic – unlimited numbers of recreational anglers can far exceed management-mandated quotas no matter what other restrictions are in place.)
- Without adequate controls, commercial harvesters are likely to drive overfished stocks into extinction. (We have not been able to find any examples of species that have been “fished” to extinction. As a matter of fact, modern fishing communities are in far more danger of extinction resulting from overzealous legislative mandates than any fish or shellfish species are from overzealous harvesting.)
- Commonly used commercial harvesting gear is unselective and/or destructive to natural ecosystems (With a rational management system in which there was no such thing as a “regulatory discard – an otherwise usable fish landed as bycatch which the fisherman is forced by regulation to discard – and gear with designed-in selectivity, many of the problems with selectivity would disappear. Fishermen agree that some areas should be protected from some types of fishing gear. However, the efficient harvest of many species can only be accomplished with gear that does have some impact on particular types of bottom. Just as we accept modifications to terrestrial ecosystems for enhanced agricultural production, we are going to have to accept corresponding changes in the oceans if we are going to efficiently utilize the fish and shellfish they are capable of producing.

Today virtually every facet of commercial fishing is regulated, at least for U.S. fishermen. There are regulations controlling the size and type of gear they use, the size and horsepower of their boats, the hours they fish, where they fish, the amount and the size of the fish they catch, which fisheries they can participate in, the size of their crews, etc., etc. A cumbersome and complex network of management regimes at the state, regional, national and international levels (sometimes managing the same fisheries through overlapping jurisdictions) each establishes and enforces various restrictions on commercial harvesters. While impossible to quantify, on the average a commercial fisherman today is probably fishing with less than half of the total effectiveness (based on the ability to harvest fish of a particular species) that he was fishing with twenty years ago. And in many of our commercial fisheries there are significantly fewer fishermen and significantly fewer boats. On top of this, many

commercial fishermen are involved in efforts to further reduce bycatch (non-targeted fish that are inadvertently caught along with the quarry), impacts on habitat and interactions with protected and endangered species.

This is in stark contrast to the recreational fishing fleet, which is allowed to increase unhampered by any regulations whatsoever, resulting in a (largely unmeasured and unremarked) steady growth to the point where on-the-water traffic jams are a common occurrence in heavily fished areas.

Yet for the anti-fishing crowd, the management- and self-imposed controls on commercial fishing aren't enough. In instances where a stock of fish is rebuilding from depressed levels, they pressure the system to accelerate the rebuilding process. Despite the fact that it's virtually impossible to reduce bycatch in some fisheries (and despite the fact that in many instances bycatch mortality has at most a negligible impact on the involved species) they insist that every fishery be 100% "clean." While the concept of Marine Protected Areas being effective tools in fisheries management is totally unproven in non-tropical waters, they support their extensive establishment in all of our coastal waters, with the only "protection" afforded being that of protecting the fish from fishermen. Even where it's common knowledge that particular areas have over the years consistently yielded healthy catches of particular species, they argue that commercial fishing gear is "damaging" the bottom, reducing biological diversity and negatively impacting productivity.

Most recently some anti-fishing activists have turned their attention to the "ecosystem impacts" of commercial harvesting. Their arguments revolve around the idea that the effects of fish harvesting aren't limited to the species being harvested but can also trickle either up or down (depending on your philosophical perspective and which group of commercial harvesters you're intent on skewering) the food chain. The recent "Ancient overfishing" article in the journal *Science* is an attempt at "top down" skewering (see *Critique of Science Ancient Overfishing* article). The "close down the menhaden fishery" crowd's fatuous theory that an unfished (except for bait) menhaden population is the only thing saving our estuaries from perishing due to eutrophication** is its "bottom up" corollary.

The reason for the anti-fishing efforts by some of the people and organizations in the recreational angling community is obvious. They want more – or all – of the fish for themselves. In keeping with the "professionalization" of many of our recreational activities, an angler who spends tens of thousands of dollars on his or her hobby every year is unlikely to admit that he or she is inept at fishing. It's much easier - at least on the ego - to blame any lack of performance on the activities of those "netters" off the beach or over the horizon. The reason for the corresponding efforts by the various so-called environmental organizations is equally clear. There are seemingly bottomless (at least to us in the fishing industry) buckets of tax-free dollars available from multi-billion dollar trusts/foundations to pursue their anti-fishing agenda in Congress, in the courts, and in some of our most respected institutions of higher learning. What isn't clear is why these "charitable" trusts and foundations are so seemingly intent on destroying an industry that has existed in harmony with the environment for generations.

We've got a large and growing population. Every day we've got more people to feed – a relative few in the U.S. and other developed countries, a staggering number in much of the rest of the world – and it seems as if we're provided every day with yet another example of the many health benefits of having more seafood in our diets. For the first time since aquaculture's been touted as the solution to looming protein shortages, we're starting to realize that its development at any significant scale comes with significant environmental costs. From a number of perspectives we can't afford to turn our backs on the domestic commercial fishing industry, nor can we afford to manage it with anything less than the application of the best available science, which while sometimes woefully inadequate is always better than "Chicken Little" rhetoric employed by the anti-fishing groups. The real information is available, all that's required is that those who are involved in fisheries issues take the time to ferret it out.

*Many of the involved individuals will argue that they are not anti-fishing, that they are simply against allowing fishermen – in their collective and distinctly skewed opinion - to continue to "plunder" living marine resources and undersea habitat with little or no regard for the effects they are having on the coastal or offshore ecosystem or the future of the fisheries. Considering what we have to lose if we lose our commercial fishing industry, this is a well-considered argument for them to make. However, the vast majority of fishermen and industry reps we deal with on both coasts have no doubts about what they see as an anti-fishing campaign, and neither do we. If the anti-fishing groups were truly interested in conserving fisheries or in maintaining healthy estuarine or oceanic ecosystems, they would certainly be interested in much more than the activities of the commercial fishing industry. They aren't.

** In a letter being sent to New Jersey legislators, the anti-menhaden fishing forces are claiming that menhaden, which filter copious amounts of algae out of the water column, are primarily responsible for maintaining the water quality in our estuaries by removing excess nutrients via their dietary habits. Supposedly the algae metabolize the nutrients, the menhaden eat the algae, the nutrients disappear. While this makes a pleasing story - particularly if your goal is to shut down a fishery that depends on catching menhaden - it might be a little more convincing if we didn't know that the same anti-fishing folks were claiming to the same audience a year or two back that the menhaden fishery was responsible for the starvation of all of the rebounded striped bass stocks. Another pleasing story, except for the fact that after two years of "starvation" the striped bass stocks are in better shape than they've been in for the last 50 years. When you are out to unjustly skewer a fishery or to mislead a legislator or two, it's best to be flexible.

(This is the second of two guest columns examining the influence of big money donors and the environmental groups they support on US fisheries policy originally printed in Commercial Fisheries News)

The Pew Charitable Trusts have spent tens of millions of dollars on fisheries and ocean issues and even more on the news media in recent years. This flood of money has had a significant impact both on fisheries policy and on how our industry is depicted in print and on the air. While a large part of the Pew focus is supposed to be representing and increasing the public's interest in fisheries and ocean issues, is it also shifting that interest?

One of the more active efforts to influence public opinion on fisheries is spearheaded by SeaWeb. On its web site, SeaWeb describes itself as a "project designed to raise awareness of the world ocean and the life within it." Its primary funder is the Pew Charitable Trusts. Early in its existence, SeaWeb commissioned a public opinion survey to determine which ocean issues would best "engage the public interest."

The introduction to the results of the survey, which was conducted for SeaWeb by the Mellman Group, stated "Americans believe the ocean's problems stem from many sources, but oil companies are seen as a prime culprit: In fact, 81% of Americans believe that oil spills are a very serious problem. This is followed by chemical runoff from large corporate farms (75% very serious), improperly treated water from towns near the coast (69%), contaminated seafood (65%), and trash, oil, and chemical runoff from streets (65%)." Overfishing evidently wasn't considered "a very serious problem" and was lumped in with "the loss of critical species" to make the cut as a "meaningful indicator" of trouble.

But in an article on the poll in SeaWeb's November 1996 monthly update, the only specific threat to the oceans mentioned was overfishing. Along with three paragraphs of vague generalities was this statement: "71% (of respondents) agree that overfishing is threatening the health and stability of the marine environment." Nothing about oil spills, runoff, contaminated seafood, or any of the other "problems" identified in the survey, only overfishing. Is this engaging or is it redirecting the public interest?

Funding, MPAs

It seems that an almost universal groundswell of support has developed spontaneously for Marine Protected Areas (MPAs) as the solution to problems besetting our oceans and the creatures living in them. It seems as well that much of the focus of the MPA movement is protection from fishing. A widely circulated "scientific consensus statement" by the National Center for Ecological Analysis and Synthesis (NCEAS) at the University of California at Santa Barbara basically concludes that MPAs and Marine Reserves are one of the greatest developments of civilization since sliced bread. The statement, it explained, was the result of a two-and-a-half year effort by an international team of scientists. That effort included a research review and a joint meeting by the NCEAS scientists and other researchers on marine reserves convened by the Communication Partnership for Science and the Sea (COMPASS) in May of 1998. This sounds like the world of science at work the way it's supposed to work, with objective researchers reaching their own conclusions independently, then coming together behind a consensus position. But is it really?

COMPASS is funded by the Packard Foundation and SeaWeb is a COMPASS "partner." The chair of the COMPASS board of scientific experts received a Pew fellowship in 1992 and is also a member of the NCEAS international team of scientists that drafted the consensus statement. Six of the 15 scientists at the COMPASS meeting were Pew fellows, as were 25 of the 161 scientists who signed the statement. Marine reserves or MPAs were mentioned in the project descriptions, biographies, or bibliographies of 27 of the 58 Pew fellows named since 1996. One might easily conclude that they are strong supporters - if not promoters - of the concept. Few other researchers can maintain either the professional or public profiles that Pew fellows enjoy, thanks to the financial support - some \$150,000 each - and connections the fellowships provide. (In addition to these Pew fellowships, the Pew Trusts and the Packard Foundation have spent more than \$2 million in grants specifically promoting MPAs since 1998.)

But the Pew connections don't end there. In January of this year, the National Oceanic and Atmospheric Administration (NOAA) named the finalists for its MPA Advisory Committee. The 26-member committee includes representatives of a number of organizations funded by Pew and Packard, including:

- Environmental Defense - \$3.4 million from Pew and \$1.2 million from Packard in the last five years;
- Natural Resources Defense Council (NRDC) - \$5.5 million from Pew;
- Center for Marine Conservation - \$1.1 million from Pew, \$1.6 million from Packard; and
- Conservation International - \$400,000 from Packard.

A program officer from the Packard Foundation is also a MPA committee member, along with one commercial and one recreational fishing industry representative.

Groundswell? You bet. Spontaneous? Not hardly. Universal? How much of the universe can you influence with 10 or 20 million dollars, particularly the universe of marine and fisheries researchers, who have been dealing with declining research budgets for decades?

Pew and swordfish

Back in August 1997, Pew Environmental Program Director Joshua Reichert wrote in an op-ed article printed in the Philadelphia Inquirer "The root problem is not only the size of the quota, the length of the season, or the number of vessels involved. It is how the fish are caught. Use of longlines must be barred." In January 1998, SeaWeb announced the "Give Swordfish A Break" campaign, centered on a domestic consumer boycott of swordfish. In a 1998 article in the St. Petersburg Times (FL), titled "En Garde for Swordfish," reporter Bill Duryea detailed the SeaWeb strategy behind the "Give Swordfish A Break" campaign. "The first thing (SeaWeb Executive Director) Vikki Spruill did when she went looking for a fish to save did not have to do with fish at all," Duryea wrote.

Having decided that the most effective way to "engage the public interest" in ocean problems was through the food on their plate, Spruill, Duryea wrote, "needed a certain kind of fish. A poster fish, if you will. Shrimp and salmon rank at the top of the most popular seafoods, but half of the shrimp and salmon sold in the United States are farm-raised, tempering their status as overfished. Besides, shrimp lack a certain weightiness. 'We wanted something majestic,' said Spruill. Number 3 on the popularity list, according to Spruill, was swordfish, whose firm-fleshed steaks had become a mainstay of fashionable restaurants across the country."

Good mariners?

In April 1998, Pew Fellow, SeaWeb "spokesteam" member, and National Audubon Society's Living Oceans Program Director Carl Safina wrote an op-ed column in the New York Times attacking the swordfish industry and swordfish managers. "Royal Caribbean and Celebrity Cruise Lines, being good mariners, have announced that they will deftly steer clear of swordfish; they've canceled 20 tons of orders," Safina said. Interestingly, Safina's Living Oceans Program has been on the receiving end of a multi-million dollar grant program administered by The Ocean Fund, which was established by Royal Caribbean Cruises Ltd. Also worth noting, Royal Caribbean has been fined millions of dollars for various environmental violations. In a 1999 New York Times article, Steven P. Solow, chief of the environmental crimes section of the US Justice Department, was quoted as saying that "the fact that the Nordic Empress (a Royal Caribbean cruise ship) continued dumping after the guilty pleas showed that the company 'had a culture of crime.'"

Good mariners, Dr. Safina?

Objective research?

In June 2000, Pew's Reichert was quoted again on longlining, this time in an article on leatherback turtles in the Philadelphia Inquirer. Reichert stated that longlining "is considered a very dirty method of fishing ... These boats pull up everything. They pull up birds, sharks, all kinds of fish and turtles."

On Aug. 1, 2000, NRDC and SeaWeb issued a press release titled "SeaWeb and NRDC Declare Victory for North Atlantic Swordfish" that "applauded groundbreaking action by the federal government to protect juvenile North Atlantic swordfish, one of the two principal goals of the Give Swordfish a Break Campaign" and announced the cessation of the consumer boycott. Industry spokesmen and managers are pretty unanimous in their belief that the Pew boycott inflicted a significant amount of economic damage on the domestic swordfish industry and the long-liners in it, while doing nothing for swordfish conservation. The bottom line was that a lot of individuals and businesses in the US were severely hurt because they were in a fishery that millions of Pew dollars could turn into a "poster child" for a troubled ocean.

And, in spite of the Pew "victory," the oft-printed beliefs of Joshua Reichert will keep the Pew dollars flowing for a study by a researcher who apparently shares those beliefs and will keep the people and businesses in the fishery suffering. Last November, Duke University issued a press release announcing a Pew grant of \$1.2 million to study longlining. In it, Larry Crowder, research team leader, was quoted as saying "pelagic longlining is one of the most lucrative and perhaps destructive fishing techniques. The recent and rapidly expanding fishery is inherently nonselective. In other words, the gear inadvertently kills both juvenile target species and non-target species, such as sea turtles, seabirds, marine mammals, and other fish." Sound familiar?

Putting it together

So back in 1996, the folks at SeaWeb commissioned a survey to help them get the public involved in the ocean. The introduction to the survey stated, "The poll is critically important to informing the campaign. The research has given us a strong sense of what will work to engage the public in this issue, but the public still requires educating before acknowledging a problem."

The report indicated that Americans would be most effectively engaged by focusing on their perceptions of what was contributing to the problems of the oceans - oil spills, chemical runoff from corporate farms, improperly treated wastewater, contaminated seafood, and non-point source pollution.

But were they given that opportunity? Not quite. Disregarding everything else, the Pew Ocean Update focused on overfishing. So did SeaWeb's programs. On its web site, SeaWeb's priority issues are listed as:

- Declines in swordfish, tuna;
- Trawling and longlines;
- Shrimp and salmon farming;
- Algal blooms;

- Marine sanctuaries and marine zoning;
- Shark finning;
- Florida Bay as the problem in microcosm (with an emphasis on estuaries); and
- Land-based toxic pollutants (as contrasted with oil spills).

Fishing - or overfishing - was accorded little attention in the public opinion survey relative to all the other threats. Yet today, fishing and aquaculture "problems" comprise at least half of SeaWeb's workload. Oil spills, which were identified as the number one problem in the poll and which seem to be going on at the same rate they were pre-Exxon Valdez, get virtually no attention at all.

It's obvious to anyone with any exposure to the print or broadcast media that the public's focus has shifted from "blame it all on the oil industry" to "blame it all on commercial fishing." Every major fishery is under stringent management and every fisherman is working with severe restrictions today, but that isn't enough for the organizations funded by Pew.

Perhaps more people should start asking "why?"

Pew and the media

Since 1995, the Pew Charitable Trusts have awarded some \$80 million in media-focused grants. These grants have been in areas including training, equipment, support of journalism projects, improving news coverage, and production of programming.

Some of the recipients and the total grants awarded to them are:

Columbia University	\$19.2 million
WHYY (Philadelphia Public Radio Station)	\$ 2.9 million
The Tides Center	\$10.2 million
Greater Washington Educational Telecommunications Assoc. (McNeil/Lehrer Productions)	\$ 5.8 million
Radio & Television News Directors Foundation	\$950 thousand
National Public Radio	\$3.3 million
Johns Hopkins University	\$6.8 million

Ancient Overfishing?

08/01/01

The cover story in the July 28 issue of the journal Science is titled "Historical Overfishing and the Recent Collapse of Coastal Ecosystems." Written by a group of 19 researchers from several disciplines, in a heavily referenced 8 pages they attempt to place the blame for most of the major ills currently afflicting coastal waters around the world on examples of what they consider to be overfishing. They have done this, they claim, through an analysis of paleoecological, archaeological, historical and ecological records extending from 125,000 years ago (the rise of modern Homo sapiens) to the present. They then use this analysis to support a "top-down" rather than "bottom-up" approach to marine resource management, focusing on organisms at the top of the food chain rather than those at the bottom.

Much of the article focuses on the authors' attempts to fix the blame for the current deterioration of four salt water ecosystems. They claim they've determined through an examination of nontraditional (to ecologists) records that serious problems confronting coral reef, kelp forest, sea grass and oyster reef areas today can all be traced back to some form of "overfishing" at some point in the past.

Before they even get into the "meat" of their article, the authors set their stage by stating *"There are dozens of places in the Caribbean named after large sea turtles whose adult populations now number in the tens of thousands rather than the tens of millions Place names for oysters, pearls and conches conjure up other ecological ghosts of marine invertebrates that were once so abundant...."* While the nostalgic appeal makes this a compelling introduction to the assault on past and present fishermen that follows, we were a little skeptical about the idea of the existence of solid relationships between place names and the local occurrence of the species that those places were named after. Deciding to do a bit of our own digging, we searched the web for Drives, Lanes, Streets and Roads named for various birds and beasts using Google. We got over 1600 hits for "Osprey" and only 250 for "Buzzard;" over 15,000 for "Fox," less than 400 for "Possum" or "Opossum" and less than 100 for "Skunk;" well over 10,000 for "Lion" (mostly in the US and the UK); over 5,000 for dolphin (this after having the search engine exclude all 48,000 instances of "green dolphin"), under 100 for "Mako" and none for "Sculpin;" slightly over 500 for "Oyster" and only 27 for "Clam." It seems that, at least in the modern, internet accessed world, one can't make anything approaching valid judgments on local populations based on place names. (By the way, Google located over 200 addresses containing "Unicorn.") Were Caribbean islanders in the past that different or, like us, did they name places according to some idealized or imagined rather than actual view of their world? More importantly, did the authors - or the editors at Science - give this question any consideration at all or were they more interested in making their point regardless of the answer?

In an article with as many authors as this one has and tackling a topic as complex and far-ranging as this one does, there are bound to be disagreements with some of its content, and while it's not our intent to do a paragraph by paragraph critique of it here, there are segments which appear to be critical to some of the "bottom-down" conclusions which did raise questions. Among them are:

The reliance in instances on what appear to be scant data - Regarding the demise of kelp forests in the Gulf of Maine, the authors fix the blame on overfishing of codfish stocks, which they claim has reduced the average size of Gulf of Maine cod from a mean body length of 1 meter to 0.3 meters. Their "proof" of this size reduction, or at least that portion of the reduction that occurred in the 5,250 years preceding 1950, is based on the measurement of codfish vertebrae found in the excavation of a single shell midden in Maine. It's certainly interesting to read that a regression analysis of the diameter of vertebra thrown out with the garbage at a single location during four distinct time periods spread out over 5,000 years indicates that the size of the fish they were taken from decreased. Can the decreasing size of those few vertebrae be realistically projected to a corresponding trend in the size of all of the codfish throughout the 28,000 square miles of the Gulf of Maine?

The seeming indifference to other factors which could be as or more important than the authors' bottom-down considerations - In the discussion of impacted seagrass beds, we find "all the factors that have been linked with recent die-off of turtle grass beds in Florida Bay, except for changes in temperature and salinity (emphasis added), can be attributed to the ecological extinction of green turtles." Excepting changes in temperature and salinity might make the downfall of Florida Bay's turtle grass beds via the agency of "overfishing" of green turtles a logical conclusion, but is it logical to accept that changes in temperature and salinity should be excepted? And what of the changes in weather patterns/climate, whose profound influences on the distribution and occurrence of living marine resources we are just starting to understand?

Apparent inconsistencies among the authors' own conclusions - The authors liken the situation with reef fish in Jamaican waters to American lobsters off New England. While subjected to heavy fishing pressure which prevented "local" reef fish from reaching sexual maturity, recruitment from neighboring reefs which weren't so heavily fished had kept the Jamaican fishery alive until recently, when the distant reefs became overfished as well and the Jamaican fishery collapsed. They write "A similar scenario has been proposed for the American lobster with regard to loss of larvae from deep-water offshore stocks." Yet in their previous discussion of the Gulf of Maine kelp forests we read "Formerly dominant predatory fish are now ecologically extinct.... Lobsters, crabs and sea urchins rose in abundance accordingly." It kind of leaves the reader grasping in the dark for the actual condition of the lobster stocks, doesn't it? (Lobster landings in New England have been at record levels for the past several years.)

Apparent inconsistencies with "conventional wisdom" - For at least a generation it's been accepted that the anthropogenic disturbance and/or destruction of submerged aquatic vegetation (by boat and personal watercraft passage, commercial fishing operations or dredging activities) can have detrimental environmental effects. Yet the authors conclude that the deterioration of seagrass beds can be attributed to the uncontrolled growth of the submerged vegetation in the absence of continuous, intensive cropping and "the cessation of systematic plowing of the bay floor" by once abundant but now "overfished" dugongs and sea turtles. What is the difference between the anthropogenic and natural disturbances? (It can't be a matter of scale. They also write that the physical disturbance of seagrass beds by dugongs, which can reportedly remove "up to 96% of the above-ground biomass and 71% of below-ground biomass of seagrasses," is a "major factor" in preventing a "dramatic decline in water quality due to eutrophication and runoff of sediment.")

However, from our perspective these are relatively minor points when compared to the primary thesis of the article, which is nothing but the latest chapter in the "blame it on overfishing" litany.

Our concern, both with the article and with its publication in a journal like Science, is the total reliance of its central premise - that coastal ecosystem degradation today has been caused by "overfishing" in the past - on a definition of "fishing" that is seriously out of step with any usage that we're familiar with. "Fishing" is the taking of fish and shellfish for commercial or recreational purposes. That's the way it's used in conversation, that's what dictionaries say it means, and that's the way it's defined (with the addition of "all other forms of marine animal and plant life other than marine mammals and birds") in the Magnuson Fisheries Conservation and Management Act, legislation that has governed federal fisheries management in the US since 1976.

When it comes to taking mammals, whether on land or in the water, "hunting" is the word of choice. And yet this doesn't quite fill the bill for the authors. They provide their own definition of "fishing," which includes "hunting and gathering all kinds of organisms in the oceans." This is a convenient definition if your goal is to gain a seat near the front on the "blame it all on overfishing" bandwagon by having an important article published in a prestigious journal. Other than that, there seems to be no reason to refer to activities as "fishing" that go far beyond common usage to include what are clearly (and even by the authors own "definition") entirely different activities. According to everyone except these authors and their editors, hunting definitely isn't fishing.

In the 9/10/01 issue of US News, T. Hayden writes "*Now, a survey of fisheries data, archaeological excavations, and historical records, published in the journal Science, reveals a surprising thread uniting virtually every instance of marine ecosystem collapse. The cause, says lead author Jeremy Jackson of in San Diego, is 'fishing, fishing, and fishing.'*" Were Jackson to use a definition of fishing more in-line with the rest of the English speaking world, he'd probably be more prone to blame the collapses on "hunting, hunting, and fishing."

The authors provide a table (Table 1) of deterioration “baselines” for particular parameters of their selected coastal ecosystems (coral reefs, seagrass beds, etc.) that they determined from examining various records. They “inferred” that each of the listed parameters was due to one or more of three causal factors: fishing, mechanical habitat destruction by fishing, or other inputs. Of the total of forty-six “causes” that the authors listed in their table, twenty-six were attributed to either fishing or mechanical habitat destruction by fishing. While twenty-six out of forty-six is hardly an overwhelming majority, it is just barely over half and could just barely justify the claim that “fishing” is the predominant cause for the deterioration of the listed ecosystems. But, rather than the author’s definition, what if we use the one that the rest of the world has settled on? What if we don’t include as “fishing” the hunting of manatees, sea otters, dugongs, seals, etc.? We then have twenty out of forty-six causal factors that are, in the authors’ judgment, fishing-related and twenty-six that are not.* Nothing approaching a majority, in no way justifying titling the article “Historical overfishing...,” but not guaranteed to get the authors front row seats anywhere. From this perspective it seems pretty obvious why the authors felt compelled to provide their own definition of “fishing.” It was either that or come up with another title and miss the ride.

*If we disregard the Magnuson Act definition and the taking of sea turtles is not counted as fishing, then the count becomes sixteen for fishing and thirty not.

But why the bandwagon and why the ride? We’ve written previously about the number of “charitable” foundation dollars that have been and are being spent on vilifying commercial fishermen (see the Previous FishNet at Link to article on Pew funding). From the outside, part of the reason for that seems to be a drive to declare huge areas of the sea floor off-limits to fishing through the formation of what have become known as Marine Protected Areas (MPAs). This drive for MPAs is inextricably tied into the so-called “marine conservation” program of the Pew Trusts, which are becoming notorious for using their Big Oil generated endowment - they were established by descendants of Joseph N. Pew, the founder of the Sun Oil Company - to mold public policy (see “Charity Is New Force in Environmental Fight” by D. Jehl in the NY Times, 06/28/01). And true to the Pew program, the 19 authors - 8 of whom, incidentally, were either “Pew Scholars,” signers of a self-styled “Scientific Consensus Letter” advocating MPAs resulting from an effort heavily subsidized by Pew, or both - end their article with an argument that the only way our coastal ecosystems may be saved from this history of abuse caused by “fishing” is through the adoption of more and bigger MPAs.

The negative fallout that this semantic manipulation has had on the image of today’s fishermen, and today’s fisheries management system, in the broadcast and print media has been significant. The impact it’s going to have in shifting the public focus away from real and ongoing coastal development and water quality problems is going to be equally dramatic. The idea that the impact we have had and are having on our coastal waters due to overdevelopment and pollution is negligible compared to the effects of “overfishing” dating back hundreds or thousands of years seems like an environmentalist’s nightmare - and a polluter’s dream. Yet, as the following quotations from the popular media demonstrate, thanks to this article - and its successful “selling” - that’s where we are.

- “The paper, by 19 of the world’s leading marine biologists, is written in sober academic language but it paints a shocking picture of the destruction wrought by many centuries of global overfishing.” (C. Cookson, Financial Times, 07/28/01)
- “Overfishing that took place hundreds if not thousands of years ago is a key culprit in the collapse of coastal marine ecosystems today, an international group of researchers reports. Up until now, scientists have tied the current collapse of the world’s coastal ecosystems almost entirely to recent human impacts—pollution, increased nutrient runoff, and climate change.” (H. Mayall, National Geographic News, 07/07/01)
- “Fishing, not pollution, has decimated the seas” (E. Check, Newsweek, 08/06/01)
- “The depleted state of many coastal ecosystems has its roots not so much in pollution or other current destructive practices but in over harvesting of marine resources dating back hundreds, and sometimes thousands, of years, a new scientific study has found.” (NY Times, 07/29/01)

Fortunately, at least some of the reporting on the article went beyond the information and the conclusions it contained.

“While the Science piece is a welcome boost for mounting an even larger oyster restoration, (Ed) Houde (a fisheries ecologist with the University of Maryland.) and nine fellow bay scientists caution in a letter sent to the magazine that some of its conclusions are simplistic and overreaching. The Science authors, for example, scarcely acknowledge that polluting nutrients from sewage, air and land have taken a tremendous upswing since the 1950s — long after the oysters, and their filtration capacity, crashed. Unless pollutants are reduced, “restoration of oysters even to pre-Colonial abundances is unlikely to eliminate algal blooms, and [loss of oxygen] and recover sea grasses,” the bay scientists write. In another simplification, the Science authors imply that the overfishing of oysters led to the bay’s current oyster diseases. But MSX, the most virulent disease, has been identified as coming from the unauthorized introduction of Pacific Coast oysters into mid-Atlantic waters in the 1950s.” (T. Horton, Baltimore Sun, 08/10/01)

Of blood and turnips

02/09/02

The New England groundfish fishery, one of the oldest and most important in the country, has seen some bad times in recent years. It was impacted by tremendous pressures from foreign distant water fishing fleets in the 50s and 60s. Then there was a dramatic buildup of the domestic

fleet following the enactment of the Magnuson Act in the late 70s. Finally, in 1984 an almost devastating World Court decision on a fishing area dispute between the United States and Canada established the Hague Line and awarded prime grounds previously fished by U.S. vessels to Canada and restricted them to a small part of the waters they previously had access to. As a cumulative result of all of these factors, there have been too many boats chasing too few fish for a large part of the second half of the twentieth century.

Starting in the late 1980s it became apparent that there were major problems in the fishery. Declining catches, declining sizes and declining biological indices were all signaling that fishing effort had to be decreased, and decreased significantly.

Prodded by this, the New England Fishery Management Council entered into an ambitious, long-term program to bring fishing effort more into line with a level that the fish stocks could support - in today's vernacular, to make the fishery "sustainable." As a part of this program, the Council closed the fishery to new entrants, established a series of time-specific and permanent areas closed to particular types of fishing, put rigorous trip limits in place, limited the number of days boats could fish each year (currently 88), required minimum net mesh sizes and other gear restrictions, and, in federally funded programs, oversaw the investment of millions of dollars to buy groundfish boats and remove them from the fishery.

The costs of these measures were exceedingly high, both to the fishermen and the other involved businesses and to the New England communities that had grown up around them. Fishermen had to find work ashore, fishing related and dependent businesses closed down, and the social fabric that had held New England fishing ports together for generations was stretched to the very limit.

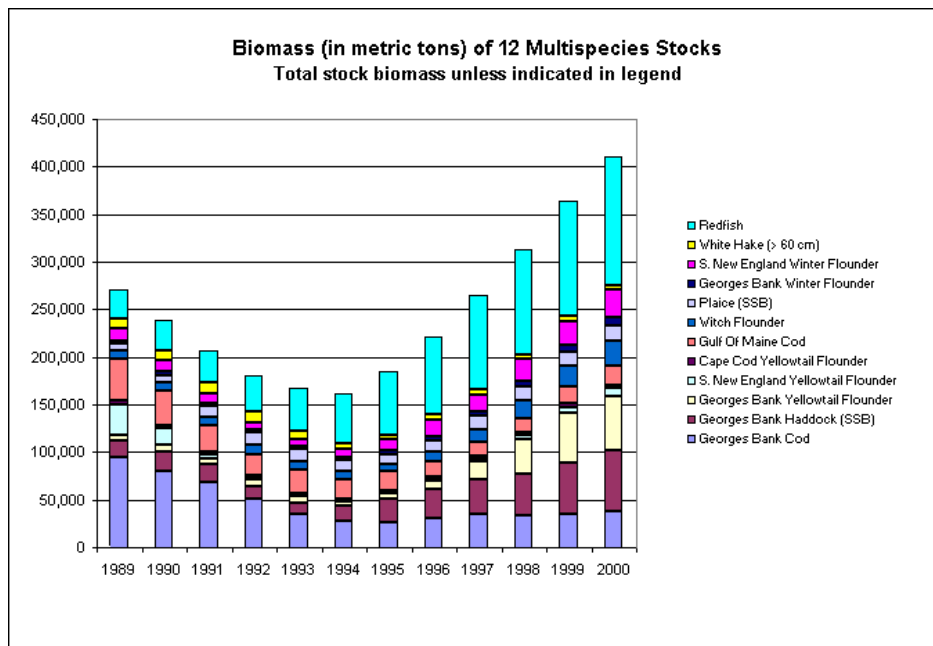
"Overcapitalization" of the domestic fishing fleet - While conventional wisdom has it that the influx of large, state-of-the-art vessels into the domestic fisheries was the result of ill-considered investments by the commercial fishing industry, there was another - and very possibly more significant - cause. As part of President Regan's "economic recovery" package, various tax incentives were put in place that made particular types of capital investments extremely attractive. Among these attractive investments were commercial fishing boats (particularly considering the post-Magnuson focus on developing the domestic fishing industry to take the place of the foreign trawlers that had been forced out of our waters). Many new boats were built with dollars from outside the industry and with little regard for their long term impacts on the fisheries. This fact is conveniently overlooked by members of the anti-fishing clique in their zeal to make commercial fishermen the scapegoats for all of the ocean's ills.

New England groundfish are recovering

But several years back it became apparent that these measures were starting to work. A press release from the New England Fisheries Management Council on June 7 of last year titled New England Fish Stocks Recovering stated "For the first time in a number of years federal fisheries management programs in New England are experiencing measurable and substantial success in building sustainable fisheries. While the New England Fishery Management Council, charged with developing federal regulations, will face many more challenges as stock rebuilding continues, the improvements to date are noteworthy. 'Commercial and recreational fishermen, as well as the public, need to know that collectively the Council is headed in the right direction — that fisheries will continue to improve and consumers, fishermen and their communities will benefit over the long-term from responsible and effective management programs,' said Council Executive Director Paul Howard.

Year 2000 calculations show that estimated biomass levels for 11 important groundfish stocks, collectively, have increased almost 2-1/2 times since 1994.... Reports from several of the major fishing ports in New England mirror the good news about the status of groundfish stocks. As of March 9, cod landings in Gloucester, Boston and New Bedford totaled 1.4 million pounds, 400,000 pounds more than the same time a year ago. Haddock (1.1 million pounds) and yellowtail flounder (1.7 million pounds) landings topped 2000's nine-week total by 100,000 pounds and 200,000 pounds, respectively. The Portland Maine Fish Exchange recorded a 33 percent increase in fish landings last year and is anticipating a banner year in 2001. Further south, Rhode Island ports have seen an approximate 53 percent increase in landings between 1994 and 1999."

The release goes on "This good news is the result of a number of years of very difficult decision-making by the Council, but much credit goes to recreational and commercial fishermen and the public. They have lobbied for better management, more and better scientific information and have participated pro-actively in the management process."



Source: Various assessment documents compiled by NEFMC

The Council has prepared a series of graphs showing the trends in biomass (total weight of fish) of twelve major stocks of New England groundfish. A composite graph showing the increase in biomass of all twelve stocks, which was created from data also provided by the Council, is above.

Amplifying the Council’s message, outdoor writer and recreational fisherman Michael Sosik writes “*today’s rolling closures, moratoriums on bottom dragging, larger net sizes and progressive fishery management plans have fostered more responsible fishing in both the recreational and commercial sectors. Because of these steps and the changing philosophies of commercial and recreational fishermen, Gulf of Maine haddock are once again a catchable fish for anglers venturing out onto Jeffrey’s ledge*” (Gulf of Maine: A prolific haddock fishery, *The Fisherman*, 01/17/02). While his article is specifically about Gulf of Maine haddock, he might just as well be writing about other species/stocks in the New England groundfish complex.

While all of the groundfish stocks are not rebuilt to optimal levels, thanks to the rigorous management measures imposed by the New England Council those few that aren’t today are well on the way. And most importantly, they are being rebuilt at a rate that has allowed a majority of the fishermen to keep on fishing.

But the “conservationists” aren’t satisfied

Unfortunately, this state of affairs, one that should be satisfactory to anyone with a reasonable regard for both the fish and the fishermen, has been anything but that to the “conservationists.” Lobbying mightily in Washington several years back, they were successful in having language included in the Sustainable Fisheries Act that removed much needed flexibility from a fisheries management system that was struggling to maintain the economic viability of the fishing industry at the same time that it was struggling to rebuild and maintain the sustainability of the fish stocks it was managing. Based on the fruits of their successful - and exceedingly well-funded - lobbying efforts, a group of these same not-for-profits (see below) have now brought suit in Federal court to needlessly accelerate the groundfish rebuilding process by forcing unreasonable adherence to these rigid provisions of the Act.

The question that most immediately comes to mind about their interest in the New England groundfish fishery and its management is why are these organizations bringing suit? The fisheries are all recovering - ostensibly the primary interest of these “conservationists” - and the fishermen (or at least most of them) are still working. The length of time it takes for the stocks to “rebuild” makes a great deal of difference - a “keep your boat, keep your job, feed your family” kind of difference - to an awful lot of fishermen. So what possible difference can it make to the “conservationists” if it takes those stocks a few more years to “recover fully?”

A new organization, Oceana, has provided lawyers from its Ocean Law Project for the plaintiffs; the Conservation Law Foundation, the Ocean Conservancy, the Natural Resources Defense Council and National Audobon Society. Among Oceana’s supporters are the Pew Charitable Trusts, the Turner Foundation, the Rockefeller Brothers Fund and the Rockefeller Family Fund. Over \$9 million in Pew funds were used in the last two years to establish Oceana “*in support of efforts to reduce the incidental bycatch of fish and other marine life, curtail particularly destructive fishing practices, and develop a stronger public constituency for ocean conservation.*” In the last five years the plaintiffs together with the Ocean Law Project have received at least \$10 million in funding from Pew. Four “fishing” groups have petitioned to intervene in the suit on

the side of the plaintiffs. Of the four, one - the Cape Cod Hook Fishermen's Association - has received funding from Pew, one - the Northwest Atlantic Marine Alliance - was established by Peter Shelley, a Vice President at the Conservation Law Foundation, as his project as a Pew Fellow, and the other two - Stonington Fisheries Alliance and Saco Bay Alliance - appear to be closely associated with the Northwest Atlantic Marine Alliance.

A faster recovery or a viable fishing industry?

Perhaps we won't have quite as many groundfish available as these several organizations (and the foundations that are bankrolling them) would like for a couple of years, but when this is balanced against the benefits of avoiding any more pain and suffering in the fishing communities, and with maintaining that vital fishing industry infrastructure that is still surviving, that's more than a reasonable tradeoff. The fish aren't going to be worth too much if there's no way to catch them and get them to market, and when we "temporarily" lose fishermen or docks or cutting houses or chandleries, in all likelihood we aren't getting any of them back.

Considering that the very survival of the groundfish industry could be hanging in the balance, do we have to adhere to a rigid rebuilding schedule? Common sense would argue that, as long as the stocks are increasing, we certainly do not. Unfortunately, these few organizations purporting to represent the public, backed by legislation that they pushed through Congress and bankrolled with many millions of dollars from the Pew Trusts, have been and are continuing to be actively involved in wringing the remaining flexibility out of the system, regardless of the resultant impacts on the fishermen, their families and their communities.

Another question, but perhaps one not of as immediate import, is who these "conservationists" are really representing in their lawsuits and lobbying efforts? The common assumption, and the one that they seem intent on projecting, is that they're representing the "public," which is evidently some indistinguishable, amorphous, helpless mass of humanity that needs looking after by these various organizations which have supposedly been designated to act in its interests.

And then there's Pew

But a little background digging shows that the organizations behind these suits are hugely funded by what are generally considered to be "charitable" trusts and foundations - multi-billion dollar empires established by some of America's wealthiest families. The Pew Charitable Trusts, established by the founder of Sunoco and now controlled (seven of the twelve Directors are Pews, another is the retired Chairman/CEO of Sunoco) by his family, has played the most prominent role in funding various organizations and initiatives that are inimical to the commercial fishing industry.

While these organizations/initiatives appear to be undertaken with the support, at the behest and in the interests of "the public," is that necessarily so? According to the N.Y. Times' Douglas Jehl (Charity Is New Force in Environmental Fight, 06/28/01), "From a suite of offices in a high-rise here, a \$4.8 billion foundation called the Pew Charitable Trusts has quietly become not only the largest grant maker to environmental causes, but also one that controls much more than the purse strings. Unlike many philanthropies that give to conservationist groups, Pew has been anything but hands-off, serving as the behind-the-scenes architect of highly visible recent campaigns to preserve national forests and combat global warming." Mr. Jehl didn't get as far as fisheries programs, but the tens of millions of Pew dollars poured into "Marine conservation" certainly qualifies them for membership on this list as well.

In this most recent New England groundfish suit, the so-called conservationists objected when fishermen's groups petitioned to intervene, wishing to keep members of user's groups away from the settlement negotiations. Fortunately they lost. Yet in the most recent of what seems to be another interminable series of court actions on shark management, according to Environmental News Service the same "conservationists," Ocean Conservancy and National Audubon Society (represented by Earthjustice, another recipient of millions of Pew oil dollars) "*claim that NMFS has short circuited public participation in fisheries management by eliminating opportunity for comment and allowing key management decisions to be made through secret negotiations and by outside parties.*" On one hand they go to court to prevent participation by the most knowledgeable and the most affected members of the public - New England commercial fishermen - in negotiations that are surely going to lead to changes in the management of their fisheries, and on the other - and in the same week - they go to court because the government did not allow public participation in the fisheries management process.

We've written previously on the extent to which Pew (with some help from the David and Lucille Packard Foundation) has been responsible for the meteoric rise in popularity of Marine Protected Areas (MPAs), which, while still remaining an untried and definitely unproven concept in most of the ecosystems in the world's oceans, are treated as a *fait accompli* in the environmentalist world. Looking back over the history of the MPA movement, it's not too difficult to see the policy-forming role that Pew has played (Link to another FishNet on Pew Trusts interest in fisheries). And the Pew Oceans Commission, an entity built, operated and paid for by Pew, is set on nothing less than overhauling national ocean policy - with its own carefully orchestrated "public" input, of course.

So on one hand we have what is, from both the cultural and the economic perspectives, one of the most important fisheries in the United States which, having survived some exceedingly hard times in a mostly intact condition, is well into a biological and economic recovery that is - at least the economic component of the recovery - dependent to a large extent on the continued, measured control of fishing effort. On the other hand we have several environmental NGOs (non-governmental organizations) which, having spent many millions of dollars to ensure that fishing effort controls, regardless of their impacts on fishing communities, are employed precipitously rather than in a measured fashion, are spend-

ing even more millions of dollars in court to hasten the biological recovery of that fishery in spite - or perhaps in recognition - of the fact that their success will all but guarantee that the economic recovery will come to an abrupt halt. And funding the efforts of the NGOs is a multi-billion dollar foundation controlled by the family of the founder of Sun Oil (now Sunoco) with a track record of molding public policy.

In the light of all of this, we can only ask...
WHAT'S GOING ON?

Enviros' "survey" promotes locking up large areas of ocean based on questionable science

03/14/02

The idea of establishing large areas of ocean, inaccurately and misleadingly referred to as marine protected areas, in which extractive activities like fishing are totally banned has gained a significant amount of acceptance in anti-fishing circles over the past five or so years. The sentiment, as expressed stridently by select members of the marine research and conservationist communities, is that if these areas, which are in actuality no-take rather than protected, are established on a large scale, they will be able to save the world's oceans from the ruin that is otherwise imminent. In an ongoing assault through a series of articles and interviews, we've been inflicted with a parade of apparently independent scientists and conservationists in one breath bemoaning the fate of our oceans and in the next extolling the virtues of extensive areas being turned into no-take zones.

What is a Marine Protected Area (MPA)?

Executive Order 13158 (05/26/00) defines marine protected areas (MPAs) as "any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." Plainly, MPAs have been and continue to be in widespread use in U.S. and international waters by fisheries managers for decades (see the box at the top of pg. 3). Our "conservationist" colleagues, however, seem to be confusing MPAs with no-take zones, areas from which all resource extraction - particularly fishing - is banned.

However, the available pool of support for no-take zones apparently wasn't considered adequate to advance the agenda of a group of environmentalist organizations which have been acting as the cheerleading squad for the no-take zone campaign. A coalition of these groups, including the Conservation Law Foundation, the Ocean Conservancy, Environmental Defense and World Wildlife Fund Canada, therefore hired Edge Research, a Washington, DC firm that "provides marketing, planning, and strategic communication efforts" to "corporations, non-profit organizations and governmental clients" to give their cause even more of a boost.

Edge Research accordingly conducted a survey of 750 residents of the New England states and the provinces of New Brunswick and Nova Scotia, supposedly to gauge the level of acceptance of the idea that the public should be willing to accept sacrifices – those associated with an extensive series of no-take zones – in order to "save the oceans."

"Reporting on a survey by a special-interest group is tricky. For example, an environmental group trumpets a poll saying the American people support strong measures to protect the environment. That may be true, but the poll was conducted for a group with definite views. That may have swayed the question wording, the timing of the poll, the group interviewed and the order of the questions. You should examine the poll to be certain that it accurately reflects public opinion and does not simply push a single viewpoint." (from National Council on Public Polls - <http://www.ncpp.org/qajsa.htm#13> - 20 Questions A Journalist Should Ask About Poll Results. S.R. Gawiser and G.E. Witt)

Needless to say, the results of this survey were enthusiastically reported to any receptive media outlets by the various organizations that have hitched their wagons to unfounded gloom and doom predictions of the future of the world's oceans due to seafood harvesting. Those results were that the public would enthusiastically and overwhelmingly support locking fishermen out of large areas of ocean and would be willing to accept the attendant sacrifices. From a press release by the Conservation Law Foundation on February 16 "A poll shows the public strongly favors more fully protected marine areas in New England and Atlantic Canada...."

Also needless to say – at least for us if not for the reporters who looked no farther than the environmentalist's press announcements – such a survey, with its far-reaching public policy implications, deserves a serious level of scrutiny, which we afforded it.

The "pollsters"

Before looking at the survey itself, we visited the Edge Research website (<http://www.edgeresearch.com/>). While the apparent intent of the environmentalist organizations that hired Edge Research was to present their work product, the poll and its interpretation, as an objective "scientific" effort, in their own words the people at Edge were hired for anything but their objectivity. In their words "Strategic market research allows you to know your audience – what they want to see and hear, as well as how, when and where they want to see and hear it.... We work with our clients to ensure they are performing the right research to achieve their objectives." (We also noted with interest that Lisa Dropkin, one of Edge Research's four listed "principals," was previously the Director of Research at Pew's SeaWeb.)

While the idea of performing research to allow clients to achieve their objectives is certainly understandable from a marketing perspective, it sure isn't science and it's a couple of orders of magnitude removed from objectivity.

The poll

Then, getting to the poll, as far as this or any other is concerned, we've found four questions helpful in considering its validity. Why was it designed/commissioned? Are the questions and the support material in it "value neutral?" Is the material in it factual? Are its results interpreted accurately?

Why the poll?

The fact that a self-described "strategic market research" firm designed and conducted this survey and interpreted the results speaks eloquently to the first question. Edge Research isn't in business to tell its clients - in this case the Conservation Law Foundation and several other organizations with an extensive track record of actions that have cost the commercial fishing industry millions of dollars - what the target audience - the citizens of New England and Atlantic Canada - wants. It's to tell the clients how they can "sell" their product - in this case banning fishing from large areas of ocean. The Conservation Law Foundation isn't interested in finding out how the public feels about excluding fishermen from areas they have worked in for generations, apparently, but in actually doing whatever is necessary to exclude them - and Edge Research was hired to provide them with a tool to do it.

"Can wording of questions bias poll results?"

How questions in a poll are worded is as important as sampling procedure in obtaining valid results. Questions are checked for balance, that is, are they worded in a neutral fashion without taking sides on an issue? Does the question represent both sides of an issue fairly?" (from National Council on Public Polls FAQ <http://www.ncpp.org/faq.htm#7>)

Are the questions in it value-neutral?

In their question examining which factors should take precedence when considering "restricting economic activities in the ocean," respondents could choose between "short term costs in lost jobs, higher prices for goods and services and impacts on families whose livelihood depends on ocean resources" or "long term benefits of healthier and more plentiful resources or fishing and increased tourism to restored ocean places that will improve life for coastal communities and future generations for years to come." Some choice!

All things being equal, it's hard to imagine how anyone would choose costs rather than benefits, particularly if the costs were represented as being paid by a specific group (almost undoubtedly a group not represented in the small sample) for a short time, and if the benefits were represented as being accrued by the entire community for both "future generations" and "for years to come." While this seems a great way to get the kind of answer you're looking for (77% of the Canadians and 76% of the New Englanders favored the benefits over the costs), it's hard to imagine that the same ratio of responses wouldn't apply just as well to a wide range of similarly biased "costs and benefits" questions restricting economic - or most other kinds of - activities anywhere.

Partial listing of New England/Mid-Atlantic Areas with commercial fishing restrictions/prohibitions:

Northeast Multispecies Regulated Mesh Area - Minimum mesh size to protect groundfish under the Multi-species FMP (100% of EEZ is affected) - <http://www.nero.nmfs.gov/ro/doc/info1.pdf>

Northeast Multispecies Closed Areas - Seasonal and permanent closures for vessels using particular types of gear (ca 50% of EEZ) - <http://www.nero.nmfs.gov/ro/doc/info4.pdf>

Marine Mammal Closed Areas - All persons owning or operating gillnet vessels must remove all gillnet gear capable of catching multispecies from the following areas (up to 8 month "seasonal" closures - various gear restrictions/prohibitions for ca. 75% of the EEZ) waters - <http://www.nero.nmfs.gov/ro/doc/info5.pdf>

Gear Restricted Areas - Various seasonal restrictions on gear used as required by the Scup FMP and gear conflict controls - (ca 10% of EEZ) <http://www.nero.nmfs.gov/ro/doc/info7.pdf>

Is the material in it factual?

In the survey the pollsters wrote "Currently, we protect less than 1% of our ocean waters, To preserve this beautiful resource, we need to protect more." The idea that such a miniscule amount of ocean is "protected" would be sure to guarantee that a large proportion of the people polled provided the desired response; that more of the ocean needed to be protected (and so responded 62% of the Canadians and 53% of the New Englanders).

But, as anyone who has even a rudimentary knowledge of fisheries management off New England and Atlantic Canada knows, far more than 1% of these waters are already protected. Tens of thousands of square miles are closed to all or to particular types of fishing either permanently or seasonally. These closures, which are in place to protect particular fish stocks, marine mammals, spawning aggregations, migration pathways, sensitive habitat, research areas, etc., etc. affect scallopers, groundfish fishermen, longliners, gillnetters, recreational anglers and pot/trap

fishermen. But it's a fairly safe bet that it's easier to sell the idea of protecting more of the ocean from fishing once you've made the case that virtually none of the ocean is presently protected, isn't it? So, regardless of the actual facts, that's the case that was made.

Are the results interpreted accurately?

The respondents were asked to rate the overall health of the ocean and the commercial fishing industry locally (New England or Atlantic Canada). The possible choices were Excellent, Good, Fair and Poor (or Don't Know). On these questions the pollsters wrote "*Regionally, residents are divided in their assessment of the overall health of the ocean: 46% rate it positively (5% excellent, 41% good) and 43% rate it negatively (36% only fair, 7% poor).*" Then, regarding the commercial fishing industry, "*59% say the health of the fishery is in only 'fair-to-poor' shape compared to 28% who think it is in good shape.*"

Rate "Overall health of the ocean"		
<i>Excellent</i>	3%	5%
<i>Good</i>	34%	42%
<i>Fair</i>	43%	34%
<i>Poor</i>	11%	7%
<i>Don't know</i>	9%	13%
Rate "Health of the commercial fishing industry"		
<i>Excellent</i>	4%	4%
<i>Good</i>	21%	25%
<i>Fair</i>	33%	34%
<i>Poor</i>	32%	24%
<i>Don't know</i>	11%	13%

The pollsters at Edge Research – or, as is becoming increasingly evident, “marketers” is a much more appropriate description – have arbitrarily (and kind of amazingly) decided that the “fair” responses belonged in the negative category. This goes against any use of the word “fair” that we’re familiar with, but, to be on the safe side, we checked our understanding of the meaning of the word with the definitions offered in several dictionaries. In its context in the survey, “fair” is defined as “adequate” or “average” or, and this might be stretching a bit, “sufficient but not ample.” In no way do any of the definitions we came across indicate anything remotely approaching negative or substandard. And it’s impossible to imagine that the respondent’s understanding of the English language didn’t reflect that. Yet, by arbitrarily using the terms “only fair” and “fair-to-poor” the “pollsters” conveniently interpreted all of the “fair” responses as negative.

How about if, instead, the Edge Research team had interpreted “fair” as all of the rest of the English speaking world understands the word? Then they would have written something on the order of “*80% of the Atlantic Canadians and 81% of the New Englanders sampled felt that the health of the ocean was average or better and 58% and 63% felt that the health of the fishing industry ranged from excellent to adequate.*”

This would hardly appear to be the message that the Conservation Law Foundation and Edge Research’s other clients were looking for, nor would it be a message that supported either their contention that massive areas of the ocean needed to be blocked off from traditional users or that we were on or beyond the verge of an ocean “crisis.” So what did the Edge Research “pollsters” do? Apparently, they redefined the word “fair.” It seems like at this level of polling the old adage “you get what you pay for” is really taken seriously.

Summing it up, it appears that we have what is being represented by the staff of The Conservation Law Foundation and their cronies as an objective poll that shows that “the public” fully and enthusiastically supports their contention that the oceans and the fishing industry are in dire straits and will only be saved by the institution of no-take areas and other equally stringent measures, and that same “public” approves of the attendant “short term costs” that such measures will entail. But that “objective” poll is based on value-laden phraseology, on misstated facts and on distorted and tortured interpretations of elementary English.

The first question that comes to mind is “why do the Conservation Law Foundation, Environmental Defense, the Natural Resources Defense Council and Edge Research’s other clients feel this is necessary?” Anyone who has spent any time enmeshed in the fisheries management process, either at first hand or through following the literature, is aware that representatives of these organizations go to great pains to let it be known that they are there representing the public’s interests. If they are there “for the public,” one might hope that they have at least an inkling of why “the public” wants them there. Yet here we have them invested in a project - supposedly a “public opinion” survey - ostensibly to find out what the public thinks, but with all the appearances of being designed and interpreted to do something else entirely.

If you want to find out what the public thinks, you do it with a carefully designed and administered survey. You do it by asking questions with no built-in biases. You do it by providing the respondents with accurate information. And you do it by objectively interpreting the responses you receive.

If, on the other hand, you want to sell a product or a position, you toss all of the objectivity and all of the rigorous analysis out the window. In the words of Edge Research, their job is to ensure that their clients are “*performing the right research to achieve their objectives.*” And that’s OK if your organization is selling widgets or doodads to the wary consumer. We’re all aware of the liberties that advertisers take when extolling the virtues of their products over those of their competitors, *caveat emptor* keeps us on our toes and consumer protection regulations keep us out of trouble. But when your organization is selling “public” policies to a trusting public, shouldn’t you be looking to a higher standard?

That sky keeps on falling

09/28/02

“... *Environmental groups such as Oceana, the Conservation Law Foundation and the American Oceans Campaign are using unreliable data to initiate lawsuits, making fisheries’ managers submit to their agenda. In other words, these environment groups are using the fishing industry as a marketing tool to promote their own existence. They should be held accountable for their actions as well.*” (from a September 28, 2002 editorial in the New Bedford Standard Times entitled “**For too long, fishermen’s expertise discarded by feds.**”) For background on the situation that inspired the Standard Times, go to the “Fisheries Research” pages at <http://www.fishingnj.org/> and the “Trawlgate” pages at <http://www.bdssr.com/latest/trawl/trawlgate.htm>.)

On it’s website, Oceana (the environmental organization which received \$10 million in start-up funds from the Pew Charitable Trusts and is carrying on as if its primary mission is to make life miserable and earning a living impossible for U.S. commercial fishermen) claims that “*each year, commercial fishing strips bare an area twice the size of the contiguous United States beneath the sea.*” We found it difficult to imagine what “stripping bare” an area of ocean actually means (though it sure sounds bad, particularly when applied to such a big patch of ocean). So, in an attempt to put Oceana’s apparently dire and alarming pronouncement into a more understandable context, we did a little research of our own.

The easy part was finding out the area of the contiguous United States. It’s roughly 3.3 million square miles. Almost as easy was doubling that area. That’s 6.6 million square miles. Calculating how much of that area commercial fishing actually “stripped bare,” however, is a bit beyond our meager (remember that we haven’t yet been provided with \$10 million of start-up money by the Pew Charitable Trusts) capacity. So we had to consider the issue from another perspective.

Approximately 140 million square miles of the earth’s surface is covered with water, almost all salt water and almost all in the oceans. Eleven point nine percent of these ocean waters are less than 1000 meters deep. Little commercial fishing with trawls or dredges takes place in waters deeper than that, so there are approximately 16 million square miles of ocean bottom that are reachable by commercial fishermen and, in Oceana’s words, candidates for “stripping.”

Thus, according to Oceana, every square mile of ocean within reach is “stripped bare” every three years or less by commercial fishing trawls and dredges. We can only assume this means that everything that was there, living or not, is removed. And this has been going on for decades.

Yet, in spite of this alleged stripping, these same ocean waters continue to produce fish, fish that are being continuously harvested by commercial fishermen at undiminished levels (according to the FAO, fish production from the world’s oceans in the years 1994 to 1999 were 84.7, 84.3, 86.0, 86.1, 78.3 and 84.1 million tons - with the lower 1998 production attributable to El Nino affects).

So, are we blessed with communities of organisms on the ocean bottom that, despite the claims of the anti-fishing groups to the contrary, are capable of healing themselves from the scars of commercial fishing, from being “stripped bare,” in a year or two? Or is Oceana totally out to sea when it comes to estimating the extent of bottom damage caused by commercial fishing? Borrowing a title from Aretha Franklin....

Who’s Zoomin’ Who?

We’ve written before about the propensity of anti-fishing groups to rely on hyperbole when trying to sell their doom-and-gloom messages (see “A good image is hard to find” at <http://www.fishingnj.org/njnet14.htm> or “Anatomy of an anti-fishing campaign” at <http://www.fishingnj.org/netusa6.htm>). We’ve been exposed to this over-the-top Chicken Little rhetoric for the better part of a decade, a decade when our fisheries clearly haven’t self-destructed and in many instances are rebuilding, yet the shrill hysteria continues. Recent examples:

- “*The House Resources Committee adopted a bill last night that rolls back ocean protections and puts fish populations at risk of collapse. The measure attacks fundamental provisions of current law including bycatch, overfishing, and habitat protections in ways that diminish safeguards essential to the survival of many fish species.*” (Audubon)

- *“Because of wasteful fishing practices, oversized fleets, habitat destruction and inadequate fisheries management, an estimated 70% of the world’s commercially fished species have been fished to or beyond the brink at which their populations can easily sustain themselves.”* (Environmental Defense)
- *“Our oceans are rapidly being depleted of fish”* (website of the TV series “Empty Oceans, Empty Nets”)
- *“Presently, many of the nation’s major fisheries rely predominantly on destructive fishing practices, including bottom trawling and scallop dredging, where fishermen not only catch fish, but also devastate the fish’s habitat,”* (Conservation Law Foundation)
- *“The incidental catch and mortality of marine mammals, seabirds, sea turtles and unwanted fish species or age-groups by various fishery-types, and the destruction of habitat and benthic communities by bottom-dragging fishing gear, are altering food chains and sea-life communities.”* (SeaWeb)

These pronouncements certainly raise questions. Have the world’s fisheries been overharvested? Does commercial fishing gear have an impact on habitat? Do commercial fishing techniques sometimes catch unwanted organisms?

Overharvesting

Of course some commercial fisheries have been overharvested, but not all nor even most. The anti-fishing groups invariably ignore the fact that every year more fisheries are removed from the “overfished” list and that many, at least in the U.S. where the massive anti-fishing campaigns are focused, are now in a rebuilding phase. They also, because it gives them much scarier numbers to bounce around, habitually lump overfished and fully exploited fisheries together. But with the growth in the world’s population there’s no reasonable - at least if you have any humanitarian instincts at all - arguments against having fisheries that are fully exploited.

Habitat Impacts

Sure, commercial fishing gear can have an impact on habitat, but which human activities don’t? We’re harvesting almost 100 million tons of seafood from the world’s oceans each year. That’s a lot of fish and crabs and clams. To put this level of harvest in perspective, the world’s annual production of beef, pork and poultry is 50 million, 80 million and 60 million tons respectively.

We all know how much “habitat” is disturbed by cattle, hog and chicken farming. That’s the price we pay for affordable animal protein, and we’re willing to add to that price the downstream effects as well. To suggest that we could harvest equivalent amounts of seafood without some level of disturbance to the ocean habitat, or to suggest that this disturbance might not be a price we’re willing to pay, is at best impossibly Pollyannish and at worst a prescription for even more human misery via protein deficiency in the future.

Bycatch

Without argument, commercial fishermen catch untargeted fish and other organisms, but what – if any - impact does this have on the ecosystem? Commercial fishermen are continuously working to reduce bycatch; not just because it’s such an obvious waste, but also because catching it, handling it and getting rid of it involves more wear and tear on the gear and more work on deck.

Interestingly, because of the sheer magnitude of the numbers involved, the importance of bycatch can be – and always is – overblown by the anti-fishing claque. A cover story in Time magazine a few years back claimed (possibly accurately) that “In 1993...shrimp trawlers in the Gulf of Mexico caught and threw away an estimated 34 million red snappers, including many juveniles.” Such a statement on its own seems pretty horrendous. But put into the proper context, perhaps it isn’t.

“The environmental movement has become riddled with extremism, misinformation, misguided priorities and downright deception. It is wonderful that this dogmatic conceit is now being effectively challenged. Let’s put some wind in Lomborg’s sails!” (P.Moore on his website at <http://www.greenspirit.com/lomborg/>. Dr. Moore was a founding member of Greenpeace, President of Greenpeace Canada, and a Director of Greenpeace International.)

If the author is referring to U.S. waters in the Gulf out to 20 miles, a reasonable estimation of where the U.S. shrimp fleet fishes, then he was writing about somewhere around 18 or 20 million acres of water. Less than two red snapper killed by shrimp trawls per acre of water – and remember that this was back in the days before the use of Bycatch Reduction Devices was mandatory – seems not so horrendous at all. In fact, biologically it could be argued that it reduces the red snapper bycatch issue to a “so what.”

All of these anti-fishing arguments are selling points for a particular agenda, and their success depends on a glossing over or distortion of the admittedly complex science that underlies many fisheries issues.

Is this propensity by the environmental organizations to blow issues way out of proportion limited to those few that have hitched their wagons to the anti-fishing star? Definitely not.

Quote of the month

The Conservation Law Foundation has been in the vanguard of so-called “conservationist” organizations suing the federal government over what they consider as too lax fisheries regulations. Of the recent furor over faulty survey gear used to sample fish stocks (<http://www.fishingnj.org>), Foundation scientist Anthony Chatwin is quoted *“CLF continues to have great confidence in New England’s federal fishery scientists.”* (Fishermen demand voice, D. Fraser, Cape Cod Times, 09/13/02)

Chicken Little in the non-fishing world

“**The Skeptical Environmentalist: Measuring the Real State of the World,**” a book by Danish professor of statistics and ex-Greenpeace activist Bjorn Lomborg, convincingly debunks the “science” that underlies many of the “end of the world” pronouncements that the current crop of eco-alarmists are using to swell their coffers (see Tom DeWeese’s “**Massive Wealth Drives Green Agenda**” at <http://www.sharetrails.org/mag/07/index00/story2.htm>) and skew public policy. Not too surprisingly, Dr. Lomborg has come under attack by just about every “environmental” organization out there. Very surprisingly, he has also been targeted by the scientific establishment, even having Scientific American devoting 11 pages to debunking his debunking. In an article discussing the various assaults launched against Dr. Lomborg (personally) and his book, (**The Mau-Mauing of Bjorn Lomborg**, Commentary; 09/02) David Schoenbrod writes:

- *The release of Lomborg’s book last fall was attended (as I have already noted) by a great deal of publicity all over the world, and the book itself immediately garnered respectful notices in places like the Washington Post and the Economist. This positive reception challenged the power of the environmental movement at a pivotal point: its claim to represent scientific truth. Lomborg may not have been the first to threaten this power, but he was far and away the most dangerous.*
- *A recent article by Roger Pielke, Jr. ([Policy, politics and perspective]in, to its credit, Nature [March, 02]) helps explain why. Writing about the making of environmental policy, Pielke identifies what he calls an “‘iron triangle’ of mutually reinforcing interests:” politicians, scientists, and environmental activists. According to Pielke, politicians are loathe to make controversial decisions on environmental issues and so pass the buck to “science.” The scientists are happy to be given the power, not to mention the research grants that come along with it. The environmentalists lean on the scientists for justification of their policy agenda. Each leg of the triad depends on the others for support.*
- *I would add to Pielke’s triad a fourth element: the staffs of federal agencies, like the National Oceanographic and Atmospheric Administration, that fund research. These agencies can grow their budgets by presenting issues within their jurisdiction not as problems but as looming catastrophes (to revert to our earlier distinction). This creates an incentive to steer grants to researchers whose work supposedly points to such grave threats, and that in turn creates an incentive for researchers to exaggerate the threat contained in their findings.*

We would add to this, at least in the fisheries world, yet another element; large grant-making foundations such as the Pew Charitable Trusts. These foundations, with seemingly unlimited - at least in a fisheries research context - abilities to fund research and with strong commitments to particular agendas, in many cases have much more influence than the involved federal agencies (see A consumer campaign that missed by a mile at <http://www.fishingnj.org/njnet15.htm>).

While **The Skeptical Environmentalist** doesn’t address fisheries issues and fisheries alarmism, Dr. Lomborg might just as well have. The actors, the motivations and the overblown “end of the world” rhetoric are all there. The only thing that’s missing is any connection to reality.

What’s this mean for the fishing industry?

The so-called “conservationist” groups can very effectively sell their skewed view of conditions in our fisheries to elected officials, to the media, and to the public. Taking advantage of the complexity of fisheries and ocean issues and the difficulty of ferreting out reliable information, they are finding a receptive audience. In spite of increasingly stringent management plans for virtually every fishery being managed, in spite of many “recovering” fisheries, and in spite of statistics that show that fisheries production - and fisheries income - is not plummeting as their prognostications would lead us to expect, conditions are not yet bad enough for the commercial fishermen. So, bankrolled with tens of millions of foundation dollars, they continue to lobby, to litigate and to propagandize in a seemingly coordinated campaign that the fishing industry can’t afford to counter. Fishermen are the immediate victims, but the U.S. consumer is ultimately going to suffer.

“Until we learn the intricacies of media culture and the processes by which news is made, we are vulnerable to a daily dose of misunderstanding contained in each morning’s headlines. Indeed, we are at risk of perpetually misdiagnosing our modern world and the role we play in it.” (Introduction to **It Ain’t Necessarily So: How Media Make and Unmake the Scientific Picture of Reality**, D. Murray, J. Schwartz and S.R. Lichter).

The Pew Commission – a basis for national ocean policy?

02/08/03

The Pew Oceans Commission (POC) was established with grants from the Pew Trusts (established and controlled by descendants of the founder of the Sun Oil Company and with billions of dollars in assets) of \$5.5 million. In its words, the POC is “conducting a national dialogue on the policies needed to restore and protect living marine resources in U.S. waters. After reviewing the best scientific information available and speaking with people from around the country, the Commission will make its formal recommendations in a report to Congress and the nation in Fall 2002 (footnote 1).”

Again in its own words (these from a press release on its report “Ecological Effects of Fishing” - footnote 2) the POC, chaired by Clinton Administration official Leon Panetta, “is conducting the first review of policies and laws needed to sustain and restore living marine resources in over 30 years. The Commission includes leaders from the worlds of science, fishing, conservation, business, and politics.”

The POC includes the president of the Natural Resources Defense Council; the president of the Center for Marine Conservation (now the Ocean Conservancy); a trustee of the Rockefeller Brothers Fund (which has provided grants to the Conservation Law Foundation, the Natural Resources Defense Council, the Center for Marine Conservation, the American Oceans Campaign, and Audubon – each of which has contributed significantly to making life miserable and earning a living increasingly difficult and often impossible for large numbers of working fishermen); a trustee of the Packard Foundation (which has provided grants to the Conservation Law Foundation, the Natural Resources Defense Council, the Center for Marine Conservation, the American Oceans Campaign, Audubon, Environmental Defense - ditto - and SeaWeb – ditto again); the past president of the American Sportfishing Association (which is a member, along with most of the NGOs listed above, of the Pew-funded Fish Conservation Network); the president of the Pew Center on Global Climate Change; a Pew Fellow; and two commercial fishermen, one of whom is the president of a trade association that has been funded by Packard and the other was a trustee of a trade association whose formation was supported by and with other ties to Pew.

With all of that money and all of those professed good intentions, with someone of Leon Panetta’s stature at the reins, with its own declaration that it will review “the best scientific information available,” and particularly in light of its stated intention of making “formal recommendations in a report to Congress and the nation,” one should expect that the POC folks would carry out an extensive, thorough and unbiased examination of the science pertaining to the current state of the oceans as well as a broad-based evaluation of existing and future threats. And as we consider, for example, the above-mentioned report (footnote 3), it appears that’s what was done. In a POC press release we read “in a new report, *Ecological Effects of Fishing in Marine Ecosystems of the United States, prepared for the independent Pew Oceans Commission — the latest in a series of science reports on the threats facing the nation’s oceans — scientists find that many current fishing activities are harming the very ecosystems on which future fishing depends, and that this phenomena is worsening. Leon Panetta, chair of the Pew Oceans Commission, released the report today.... ‘This report is one of many that has been presented to the Commission for our consideration as we arrive at our final recommendations.’”*

The “independent Pew Oceans Commission” (and incidentally, the U.S. public) has been provided with a “science report” on what “scientists” have found regarding the effects of fishing on the marine environment. The report has been presented to the POC not as a fait accompli but rather for “consideration” by Commission members; self-described “leaders from the worlds of science, fishing, conservation, business, and politics.” Sure seems an objective and convincing way of doing it, doesn’t it?

And one would expect that the report’s primary conclusion, which was stated in its introduction, that “using the crudest preindustrial fishing technologies, the human population has derived food from ocean waters, damaged marine habitats, and overfished marine organisms for millennia (Jackson et al., 2001). In the last hundred years, the percentage of marine waters fished, the sheer volume of marine biomass removed from the sea, and the pervasiveness of habitat-altering fishing techniques has cumulatively eroded marine ecosystems’ capacity to withstand either human- induced or natural disturbances,” was arrived at objectively as well.

But then we take a closer look at the report. It’s made up of thirty or so pages of text – all focused, of course, on how bad (almost exclusively commercial) fishing is for just about every aspect of the world’s oceans – followed by seven full pages, in smaller type and single spaced, of the 179 references consulted by the authors in preparing their report.

An objective scientific review?

Particularly considering the extensive list of references cited, it seems as if the report’s three authors have done a more than thorough job of reviewing the scientific literature and of synopsisizing the state of the science as it exists relative to the ecological effects of fishing.

But, being of a somewhat skeptical bent, we took a few more steps in considering the report than a casual – or perhaps an even more intent than casual – reader would. Heeding “Deep Throat’s” Watergate era advice to Bob Woodward and Carl Bernstein to follow the money, we identified some of the most obvious funding affiliations of the authors of the report and of the various authors of the references cited in the report.

....or an attempt to push a narrowly focused agenda?

And what we found was kind of surprising. Right off the bat, two of the three authors who contracted with the POC to prepare the report were also recipients of Pew Fellowships. And of the 179 references cited, well over a third had one or more authors who could be directly connected to Pew Trust funding (we emphasize here that we only sought “first generation” funding connections; we didn’t attempt to ferret out all of the authors who were working for organizations, institutions or individuals receiving Pew funds). And when we looked only at those references cited that were authored since 1995 (about the time that the folks at Pew apparently decided that millions of their dollars should be spent to save the world’s oceans from commercial seafood harvesting), almost half were connected to Pew by funding. (A table listing all of the references cited in the report that have authors with obvious Pew connections, what those connections are, and links to web pages showing those connections is available at <http://www.fishingnj.org/impactsreferencetable.htm>)

"From a suite of offices in a high-rise here, a \$4.8 billion foundation called the Pew Charitable Trusts has quietly become not only the largest grant maker to environmental causes, but also one that controls much more than the purse strings.... with its deep pockets and focus on aggressive political advocacy, Pew is not only the most important new player but also the most controversial, among fellow environmentalists.... Until a decade ago, the Pew Trusts...made more conventional environmental grants, financing things like research and land acquisition.... But under (director of environmental programs) Mr. Reichert... the organization has shifted its attention to trying to advance a particular policy...." From **Charity Is New Force in Environmental Fight**, D. Jehl, NY Times, 06/28/01)

To those readers who aren't all that familiar with the world of fisheries/ocean research, perhaps a little background is in order at this point. At the end of 2002 the American Fisheries Society (AFS), a professional association to which most of the fisheries scientists in the U.S. (and many from outside the U.S.) belong, had between 8,000 and 9,000 members. There are an awful lot of fisheries scientists, and as even a casual web search will show, many of them are deeply committed to cranking out as many publications as possible (an estimate of an average of one a year a piece probably wouldn't raise too many eyebrows). Then, along with fisheries scientists, the POC report relied on information supplied by members of a number of other scientific disciplines, including "conservation biologists," ornithologists, ecologists and social scientists.

Thus the number of articles dealing with fisheries and related subjects in technical journals and reports authored by AFS members and other scientists over the last seven years – representing the full spectrum of disciplines reflected by the references cited in the POC report - could easily number in the tens of thousands. Out of these it's inconceivable that the report's three authors – two of who, as noted above, are recipients of Pew fellowships (footnote 4) – didn't have a pool of thousands of relevant articles and reports to draw upon.

Yet 59 of 128 references from 1995 onward that were cited in the report had at least one author who was part of a small group of about 120 recipients of Pew fellowships (\$150,000 over three years) or an even smaller group of recipients of other Pew fisheries-focused grants.

This might be understandable, considering the rigorous screening process Pew uses to ensure its grantees share the proper "scientific advocacy" philosophy (footnote 5) as well as the subsequent annual investment Pew makes to keep its Fellows in touch. (footnote 6) And it would seem to fit in with the system of issue advocacy and strategic communications sold by Fenton Communications, a public relations firm that lists the Pew Trusts, SeaWeb, the Pew Fellows program and a bunch of NGOs that have been recipients of Pew's largesse as clients (footnote 7).

But is it, as Mr. Panetta and the Pew Commission so strenuously attempt to persuade us, science of a level that should be guiding - or even influencing - national policy? Can a report that puts so much weight on the writings of a handful of marine scientists who can all be tied to a single funding source with a carefully crafted agenda - and very possibly with the tutelage of a public relations firm with a history of maximally exploiting environmental issues - be objective? Can a commission on which 8 of the 18 members can be linked into a web of organizations and funding sources that so many working fishermen consider inimical to their own interests be considered either objective or independent?

Mr. Panetta wrote in **Our Moment In Time** (footnote 8), a commentary column for the Santa Barbara News Press on October 27 last year, "early next year we will present our recommendations to Congress and the nation for a new national ocean policy." Let us hope that both Congress and the nation consider the Pew Oceans Commission's recommendations for this new ocean policy in the proper context; as being closely intertwined with a heavily funded, agenda driven campaign by a multi-billion dollar foundation which is directed by the family of the founder of Sun oil (footnote 9). Additionally, let's hope that all of the accolades by the "conservation" organizations that are so dependent on millions of dollars of Pew funding for their marine programs are considered in their proper context as well. And let's also hope that some consideration will be given to the question of why the Pew Commission, while so capable of focusing on the supposed effects of fishing, is seemingly unwilling to consider the impacts of other ocean activities.

With such a pedigree, how can the poc have such a blind spot?

In 1989 the tanker Exxon Valdez ran into a rock and spilled 11 million gallons of oil into Alaska's Prince William Sound. While estimates vary widely, it appears as if the total damages caused by the spill amounted to perhaps five billion dollars (footnote 10).

Last November the tanker Prestige, carrying twice as much oil as the Exxon Valdez, broke apart and sank off the coast of Spain. Like the Exxon Valdez, the Prestige was a single-hulled tanker. The sinking of the Prestige, being described as Europe's worst environmental disaster, could cause long-term damage approaching 10 billion Euros (footnote 11).

In an interview on the Pew Oceans Commission aired by National Public Radio's Morning Edition on Christmas day (when the Atlantic coasts of Spain, France and Portugal either were or were on the verge of being inundated by oil leaking from the hulk of the Prestige), in response to host Bob Edwards' timely comment "you're also dealing with oil spills, with global warming," Commission Chairman Panetta responded "we've touched on the issue of climate change and how that's affecting our oceans. We are also looking at the aquaculture industry, which is a whole growing new industry that has developed, in large measure, because of the loss of fishing stocks that we have in our oceans. The wild fish is diminishing, so what's happening is there's a huge increasing aqua culture industry. What is the affect of that in terms of our oceans? We're looking at pollution that comes from cruise liners. We're looking at what's called invasive species. These are species that are suddenly introduced to an area, because they are carried in the ballast of a lot of ships that go in and out of harbors. San Francisco, for example, has close to 300 invasive species that are now pretty much taking over San Francisco Harbor and destroying a lot of the natural habitat and wildlife that is there." He got in diminished fish stocks and climate change (another major Pew issue), which he was asked about. He got in aqua-

culture (ditto), cruise line pollution, and invasive species (also ditto), which he wasn't. But the Chairman of the Pew Oceans Commission somehow missed oil spills, which neither he nor the Commission seems to be dealing with, in spite of Mr. Edward's obvious interest.

Mr. Edwards, who was somewhat less than bull-doggedly tenacious in the interview (NPR and its affiliates have received millions of dollars of Pew funding), didn't follow up on the POC and oil spills. It's unfortunate that he didn't ask Mr. Panetta how many single-hulled tankers sail in and out of our harbors and how the threat they pose compares to the threat of invasive species. In all likelihood there are more than a handful of people whose lives revolved around Prince William Sound or the Galician coast who would be more than willing to trade a few lampreys, mitten crabs and zebra mussels for millions of gallons of spilled oil. According to the Associated Press (footnote 12), "despite the phasing out of single-hulled tankers, of the 64 tankers plying the East Coast and Gulf of Mexico only 22 are double-hulled, according to the American Shipping Association. And of the 22 carrying crude oil from Alaska to the lower 48 states, six are double-hulled." (A transcript of Mr. Panetta's interview can be purchased through the Morning Edition website - footnote 13)

Another Pew Oceans Commission report, this one supposedly dealing with marine pollution, covers the entire topic of ocean-based oil pollution with the two statements "oil pollution from ships, accidental spills, and production activities has decreased" and "pollutant levels have also been reduced in discharges from industries, including oil and gas production;" along with a cavalier dismissal of other operational oil discharges from ships. The 10,000 or so Spanish fishermen that the Prestige disaster has put out of work probably won't find much comfort in this. Nor will the Alaskan fishermen still seeking billions of dollars in damages from the oil industry following the Exxon Valdez spill. Perhaps the Pew Commission should have held one of its field hearings in Spain or Alaska. That might have given Mr. Panetta a more realistic picture of what's really capable of "destroying a lot of the natural habitat and wildlife" on the Galician coast, in San Francisco Bay and just about anywhere else single hulled tankers are in operation.

An objective report by an independent commission.....

representing the actual state of fisheries and ocean science and culminating in recommendations serving the best interests of all of our citizens, or something else entirely? When Members of Congress (and the American people) consider the POC's interim and final reports and the attendant praise from researchers and NGOs that are on the Pew "payroll," that question should be the first and last they ask.

Pew and ocean issues

One of Pew's initial efforts to influence public opinion on ocean issues was spearheaded by the Pew funded SeaWeb. On its web site, SeaWeb describes itself as a "project designed to raise awareness of the world ocean and the life within it." Early in its existence, SeaWeb commissioned a public opinion survey to determine which ocean issues would best "engage the public interest." The introduction to the results of the survey, which was conducted for SeaWeb by the Mellman Group, stated "Americans believe the ocean's problems stem from many sources, but oil companies are seen as a prime culprit: In fact, 81% of Americans believe that oil spills are a very serious problem. This is followed by chemical runoff from large corporate farms (75% very serious), improperly treated water from towns near the coast (69%), contaminated seafood (65%), and trash, oil, and chemical runoff from streets (65%)." Overfishing evidently wasn't considered "a very serious problem" and had to be lumped in with "the loss of critical species" to make the cut as a "meaningful indicator" of trouble. But in an article on the poll in SeaWeb's November 1996 monthly update, the only specific threat to the oceans mentioned was overfishing. Along with three paragraphs of vague generalities was this statement: "71% (of respondents) agree that overfishing is threatening the health and stability of the marine environment" (footnote 14). Nothing about oil spills, runoff, contaminated seafood, or any of the other real problems identified by respondents in the survey, only overfishing. (this information was originally printed in a column by N. Stolpe in Commercial Fisheries News available at <http://www.fishingnj.org/netusa17.htm>) Evidently the Pew myopia concerning what's really going on in the oceans isn't a recent development.

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3 Available at http://www.pewoceans.org/oceanfacts/2002/10/25/fact_29889.asp

4 For particulars see <http://pewmarine.org/FellowshipGuidelines/administration.html>

5 <http://pewmarine.org/FellowshipGuidelines/categories.html>

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7 See the Fenton Communications website at <http://www.fenton.com/clients/default.asp>, for how Fenton works, see http://www.usatoday.com/money/autos/2003-01-23-suvattacks_x.htm, for a more "aggressive" perspective on Fenton Communications go to the Activist Cash website (<http://www.activistcash.com/>) and look up "David Fenton."

8 http://pewoceans.org/articles/2002/10/25/pr_29891.asp

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10 Exxon Valdez fact sheet, People for Puget Sound, http://www.pugetsound.org/evx/fact_sheet.html

11 Spanish oil spill clean up to cost 1 billion (Euros), Deutsche Presse-Agentur, 1/12/03

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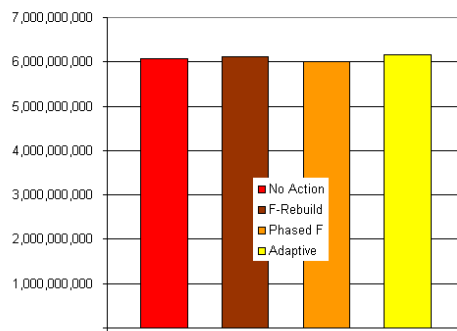
Is it really about saving the fish?

09/19/03

At this point, thanks to a successful PR campaign by anti-fishing interests, anyone with a superficial knowledge of the New England groundfish fishery who lacks either the resources or the curiosity to find out what's really going on has been convinced that stringent cutbacks inflicted on commercial and recreational fishermen today will lead to an overabundance of fish tomorrow.

New England fishermen and fisheries managers rightly see the survival of the many New England fishing businesses as being as important as the survival of the fish. The standard litany of the groups and individuals – the so-called “conservationists” - aligned against them is that cut-backs in fishing effort today will yield tremendous returns to those same businesses, communities, fishermen and their families tomorrow. In the often repeated words of Pew Charitable Trusts funded Oceana’s lawyer Eric Bilsky, “The short-term squeeze is worth getting three times more catch in the long term,” (Every day you’re open and there’s no fish, you’re hemorrhaging cash, Portsmouth Herald, 05/07/02). Of course, Mr. Bilsky’s and the rest of the anti-fishing clique’s position ignores the impact that the irrevocable damage to hundreds of New England businesses, dozens of New England communities, thousands of New Englanders, and a centuries-old way of life will have on the possible rebuilding of the New England fishing industry, but will it eventually return two or three times more fish to the fishermen that remain?

Amendment 13 cumulative landings 2004-2026



A graph of cumulative groundfish landings (in pounds) from 2003 to 2026 for the “No Action” and other management alternatives

Their brand of fisheries management (or more accurately, of media manipulation) might sell in the Mary Poppins inspired world of foundation—funded NGOs where tens of millions of oil-generated dollars may be had, it appears, simply for the asking.² In the real world that the rest of us inhabit, confronted by realities like rampant coastal development, the onslaught of imported seafood products and the necessity of actually having to work productively for a paycheck, Mr. Bilsky’s “spoonful of sugar” is more likely to choke the patient than to help him swallow the medicine. As can be made crystal clear by a quick examination of readily available government data, that “medicine” is more akin to a placebo than to anything that will improve the fisheries more significantly than less stringent measures. And, if adopted, those less stringent measures would allow much of the fabric of New England’s fishing communities to remain intact.

Thanks to a series of amendments to the fishery management plan that controls recreational and commercial fishing of New England’s groundfish (actually the Northeast Multispecies [Groundfish] Fishery Management Plan) most of those stocks are and have been on their way to recovery for several years.¹ Unfortunately, this recovery wasn’t rapid enough nor apparently the damage to New England’s fishing communities severe enough for the “conservation” community. So some of its members filed suit in federal court to help things along. Oceana, a new group self-described as “a nonprofit international advocacy organization dedicated to protecting and restoring the world’s oceans” and established with at least \$13 million from the “charitable” trusts established by the family of the founder of Sun Oil,³ joined in.

Annual groundfish landings (in pounds) for “No Action” and other Amendment 13 Alternatives

Year	No Action	F-Rebuild	Phased F	Adaptive
2003	127,804,289	136,122,934	136,016,419	136,107,358
2004	171,357,040	120,783,934	143,581,433	139,108,546
2005	194,340,342	133,286,969	149,266,262	156,083,764
2006	212,107,481	147,960,545	157,666,202	175,898,965
2007	225,025,685	162,081,824	167,207,764	193,457,853
2008	237,947,702	175,725,247	175,911,042	209,612,463
2009	242,300,813	188,742,778	194,337,866	205,554,960
2010	249,212,086	264,344,897	259,349,802	219,187,800
2011	247,846,760	261,562,918	260,401,626	231,487,370
2012	258,184,021	269,992,449	262,465,170	243,009,582
2013	262,057,974	273,992,704	267,879,269	253,552,639
2014	265,465,591	279,174,949	275,964,679	263,118,177

2015	268,850,613	294,926,671	286,244,837	301,954,127
2016	272,056,805	297,310,203	288,700,132	302,574,913
2017	274,974,226	300,109,840	288,368,560	303,878,564
2018	277,409,640	302,725,153	291,908,857	305,696,991
2019	280,043,836	305,663,323	295,498,105	307,932,161
2020	281,677,263	308,349,134	294,143,640	310,146,927
2021	283,731,290	310,989,626	293,186,731	312,482,020
2022	285,073,016	313,182,799	297,000,077	314,647,981
2023	286,248,624	315,356,458	300,552,886	316,739,394
2024	287,450,500	319,393,177	306,227,377	318,575,116
2025	288,361,400	320,743,054	308,998,417	320,237,697
2026	289,315,950	321,848,493	311,309,289	321,652,892
Total	6,068,842,947	6,124,370,079	6,012,186,442	6,162,698,260
Difference		+ 55,527,132	-56,656,505	+93,855,314

Note that in the 3 alternative measures being projected total landings will not exceed those of the “no action” alternative until 2010 at the earliest. Also note that there is at best less than a 2% difference in the cumulative landings between the “no action” alternative and the others.

In April of 2002 U.S. District Judge Gladys Kessler held that an amendment to the Northeast Multispecies Fishery Management Plan had to be promulgated by August 22, 2003 that “complies with the overfishing, rebuilding and bycatch provisions of the SFA (Sustainable Fishing Act).” The various alternative amendments to the FMP now under consideration are a result of Judge Kessler’s decision.

In the materials prepared by the staff of the New England Fishery Management Council in support of Amendment 13 we find:

The difference in present value between the No Action Alternative and rebuilding (any strategy) is less than \$300 million over 23 years. Mean total landings for the regulated groundfish species, projected to be about 127 million lbs in 2003, were projected to be 289 million lb. in 2026 (when all stocks are rebuilt) for the “No Action” alternative as compared to 327 and 310 million lb. for the constant mortality and phased reduction rebuilding strategies, respectively. Nominal revenues under no action are expect to increase to \$344 million in 2026, but will increase to \$355 million under the phased reduction strategy and \$375 million under the constant mortality or adaptive strategies. Net benefits would increase to \$280 million under no action, but would increase to between \$310 and \$327 million under any rebuilding strategy 3. (Note that the “No Action Alternative” is actually the continuation of the stringent management measures that have been in place and working in the groundfish fishery for several years.)

Each of the alternative groundfish management regimes will result in a “return” of less than \$300 million over 23 years above and beyond what would be realized by just maintaining the management program that is now in place. That’s an average benefit of only \$13 million a year for each of the next 23 years.

Projected percentage change in groundfish landings relative to the “No Action” alternative

In the three alternatives the cutbacks in the first 6 to 11 years will force landings lower than they would be with the “no action” alternative. By year 2026 one alternative would yield a decrease of 1% in cumulative landings, the others increases of 1 or 2 percent.

Year	F-Rebuild	Phased F	Adaptive
2004	-30%	-16%	-19%
2005	-31%	-23%	-20%
2006	-30%	-26%	-17%
2007	-28%	-26%	-14%
2008	-26%	-26%	-12%
2009	-22%	-20%	-15%
2010	6%	4%	-12%
2011	6%	5%	-11%
2012	5%	2%	-6%
2013	5%	2%	-3%
2014	5%	4%	-1%
2015	10%	6%	12%
2016	9%	6%	11%
2017	9%	5%	11%
2018	9%	5%	10%
2019	9%	6%	10%
2020	9%	4%	10%
2021	10%	3%	10%
2022	10%	4%	10%
2023	10%	5%	11%

2024	11%	7%	11%
2025	11%	7%	11%
2026	11%	8%	11%

Of the three alternative strategies, two are expected to “yield positive economic benefits” by 2018 and one by 2021.

Total groundfish landings by 2026 will be a maximum of 13% - certainly not the 300% projected by Mr. Bilsky - greater with the most stringent management measures being forced by Judge Kessler’s decision than they would be with the continuation of the existing management program (the alternative somewhat misleadingly labeled “No Action” in the proposed amendment and supporting materials). The rigorous requirements of the management program that is now in place have already demonstrated they will rebuild the groundfish stocks while allowing New England’s fishing communities to remain at least somewhat intact and fishing and support businesses - at least some of them - to remain economically viable. They just won’t rebuild them as rapidly as Mr. Bilsky et al have decided they should be rebuilt.

And what do the New England economy, New England’s fishing businesses and New England’s fishing communities pay for this accelerated increase? The various alternative regimes would cost fishing and related/dependent businesses in the New England states from \$94 million to \$217 million in lost sales, \$38 million to \$88 million in lost personal income and from 1300 to 3000 lost jobs.⁵

Obviously, the cutbacks proposed in any of the alternatives would force additional numbers of waterfront businesses into bankruptcy. These businesses, including those providing vessel and crew support and fish processing, handling and marketing services, are all necessary to viable commercial fishing communities. The idea that those businesses will reappear after eight or ten or more years, when stocks have “rebuilt” to adequate levels, represents wishful thinking (or purposeful misdirection) of the most egregious sort. Considering waterfront development pressures in virtually every coastal community from New Jersey to Maine, what was a packing house or a chandlery today will be another tee shirt shop or condominium development next week. And that’s a development trend that’s only going in one direction.

(It’s important to note here what appears to be a significant fault in the economic analyses of the proposed alternatives. In each the assumption is made that the “complexion” of the groundfish industry will remain the same; that is, a fleet of vessels of various sizes will continue to supply primarily fresh products to a large number of New England ports and commanding a fairly high price per pound. When, however, the cutbacks force many vessels out of business, there is going to be a significant level of consolidation, both in catching and in on-shore activities. This could lead to a fleet composed of a much smaller number of larger vessels, some or all of which would be doing on-board processing and freezing. Were that the case, the overall revenues generated per pound of fish landed could be reduced significantly below that for equivalent production levels supplying the fresh market. It doesn’t appear as if this scenario was considered in the economic impact analyses.)

And all this for some predicted economic benefits that won’t begin to accrue until 2018 or 2021 and will have a probably negligible -and statistically insignificant - impact on annual and cumulative landings once the “break even” point is reached.

Given a careful examination of the statistics underlying the alternative management measures offered in Amendment 13, it’s impossible to see how such minor potential benefits so far in the future can offset what everyone agrees will be immediate and significant pain spread throughout New England’s coastal communities and beyond. Yet the anti-fishing groups, still standing behind claims of immense future benefits, continue, and continue to expand, their well-financed campaign to punish the commercial fishing industry. The data provided in support of Amendment 13 shows that they’re not going to be helping the fish and they’re definitely not going to be helping the fishermen. That being the case, the questions need to be asked: who are they doing it for and why are they doing it?

Equity in Fisheries Management

12/29/04

Virtually all of our important fisheries, both commercial and recreational, are managed by Fishery Management Plans (FMPs). These plans, which are generally created by the appropriate regional fishery management council(s), are approved by the Secretary of Commerce before being implemented. The management measures that they institute can include limits on the number of participants in particular fisheries, on who those participants can be, on how many fish of a particular species they can catch, of how, when and where they can catch them, and on how large (or how small) they must be. Additionally, an increasing number of fisheries are being managed for the bycatch of other species.

Ultimately, in those few instances where these other controls don’t work and a commercial fishery exceeds its allowable harvest in a given year, “paybacks” are instituted. In these, commercial overages are deducted from the subsequent year’s allowable harvest. It’s important to note that such measures are seldom required because of the effectiveness of the management measures in place in controlling commercial fishing mortality.

Every FMP must be in compliance with ten National Standards, as enumerated in the Magnuson Stevens Fishery Conservation and Management Act (available at <http://www.nmfs.noaa.gov/sfa/magact/index.html>). According to the Act, “any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this title shall be consistent with the following national standards for fishery conservation and management.”

Among the ten National Standards (emphasis added) are:

#1 - Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

#2 - Conservation and management measures shall be based upon the best scientific information available.

#4 - Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

(It's important to note that neither these nor the other seven National Standards differentiate between commercial and recreational fishing nor commercial and recreational fishermen.)

Primarily due to regulations imposed in FMPs to conform to these National Standards, it's fair to say that commercial fishing is among the most heavily regulated modern industries. There is no facet of a commercial fisherman's workday that isn't strictly controlled by government regulation, and penalties for not abiding by those regulations are among the most onerous of any that the Federal government can impose, ranging from fines that can reach into hundreds of thousands of dollars to lifetime expulsion from the commercial fishing industry.

And then, of course, there's recreational fishing.

While nowhere in the Magnuson Act is it stated or even implied that recreational fishermen should be excluded from the National Standards or from any of the requirements of the Act, in practice commercial fisheries are the only fisheries that it is effectively managing.

This isn't to say that recreational anglers aren't being managed. As a matter of fact, at times it might even seem that the management measures they are forced to contend with are verging on excessive. However, the sum total of all of these measures, in recreational fishery after fishery, still fail to add up to effective management.

Why is this so? The overriding reason is that there is no control of recreational fishing mortality. There are no controls on the number of people who can recreationally fish and there are no controls on what they can catch or when they can catch it. Some coastal states require recreational fishing licenses, but no states limit the number of recreational licenses issued. Some recreational fisheries have closed seasons, but the closures apply only to keeping fish of particular species, not to catching them. Some recreational fisheries have minimum or maximum (or both) size limits, but those size limits apply only to fish that are kept, not to those that are caught. An unlimited number of recreational anglers can fish in any area with any gear at any time, and can catch and release any number of any sized fish of any species, with no constraints imposed on them whatsoever other than those on what they can keep.

But if recreational anglers are out there catching fish, as an overwhelming amount of research in recent years has shown, then they are out there killing fish, no matter how careful they are with their catch and release techniques.

And there are never any “paybacks” for recreational overfishing.

The inability of the managers - adhering to the current philosophy of recreational fishing management - to manage recreational fisheries effectively is seen plainly in popular recreational fisheries like those for summer flounder and striped bass. In the Mid-Atlantic summer flounder fishery, every year for year after year the recreational target quota is exceeded in spite of increasingly stringent bag and season and size limits, and the excess catch is in large part due to the mortality of released fish. And in the striped bass fishery on the East coast the recreational discard mortality in recent years has exceeded the commercial harvest.

But it's most obvious - and most serious - in the offshore fishery for highly migratory species, the so-called “big game” fisheries for tuna and billfish in which the participants venture far offshore in boats valued upwards into the millions of dollars.

The white marlin, a much sought quarry of the “big game” angler, is caught by the same techniques in the same offshore waters in the same seasons as several species of tuna and several other species of Atlantic billfish. While white marlin stocks off the East coast are severely reduced and considered “overfished,” there is absolutely no control by the National Marine Fisheries Service on recreational fishing effort. Any recreational angler who wants to (and can afford to) can go out on the ocean and catch as many white marlin as he or she wishes. In fact, every year there are NMFS sanctioned fishing tournaments up and down the coast in which white marlin are the quarry; tournaments in which hun-

dreds of boats participate, hundreds of white marlin are caught, and the largest white marlin killed and landed can win hundreds of thousands of dollars for the angler who caught it.

The federal government's attitude concerning protecting white marlin from the assault of those anglers fortunate enough to be able to pursue them is best expressed in a brochure titled "Atlantic Billfish – What are the regulations?" In this brochure, prepared and distributed by NMFS, we read that that agency has "established a recreational catch-and-release fishery management program for Atlantic billfish in recognition of the unique characteristics of the billfish fishery, including the conservation ethic of recreational billfish anglers which provides multiple recreational opportunities without adversely impacting the stock. Therefore, all Atlantic billfish released alive by anglers are not considered as by-catch" (see http://www.nmfs.noaa.gov/sfa/hms/REC_BROCHURE.pdf.)

We presume that "the unique characteristics of the billfish fishery" include the one about the participants being very rich guys with very expensive boats who know how to push the right buttons in Washington and that their "conservation ethic" includes the completely false assumption that every released fish will in fact survive. However, the idea of providing multiple recreational opportunities without adversely impacting the stocks – apparently a thick tongued way of restating the catch and release mantra of "live to fight another day" – is as off-target with Atlantic billfish as it is with striped bass and summer flounder.

In a recent review of the literature (currently in press), fisheries scientist Jean Cramer reports post release mortality of recreationally caught white marlin determined by Virginia Institute of Marine Science researchers John Graves and Andrij Horodysky of up to 35% (with a 95% confidence interval of 15% to 59%), which, NMFS's and those guys' with the real expensive boats pronouncements to the contrary, one would be hard pressed to consider as "not impacting the stock." In fact, Dr. Cramer's analysis reveals that "if post release mortality... is 35% or more then the removals of white marlin by the U.S. recreational fishery are, on the average, greater than the total catch of white marlin by the U.S. longline fishery." The U.S. longline fishery, we must mention here, has long been considered – at least by the self-styled recreational fishing "conservationists" and their allies in Congress – the biggest threat to white marlin stocks. In fact there are currently proposals to amend the Magnuson Act to close longliners out of even larger areas of the Atlantic.

Of course, there are no complimentary plans to restrict recreational fishing for white marlin in these areas or anywhere else, "catch and release" and the anglers' built-in conservation ethic supposedly being all that is required. So we have the longline fleet, composed of less than a hundred boats, which has already accepted significant restrictions for conservation including large closed areas, still being blamed for the plight of the white marlin fishery while the unlimited number of recreational anglers, who have done just about nothing to conserve these fish up until now - beyond proclaiming themselves conservationists and shifting the blame to the longliners - are expected to continue doing nothing. And this in spite of National Standards stating that "conservation and management measures shall prevent overfishing, shall be based upon the best scientific information available, and shall be fair and equitable to all fishermen."

Unfortunately, there has yet to be any commitment from NMFS to impose the National Standards on the recreational fisheries, in spite of inarguable evidence that those fisheries, with their completely uncontrolled mortality, can and do have greater negative impacts on fish populations than commercial harvesting. Isn't it time that the federal fisheries management establishment recognize and control all forms of fishing mortality, whether recreational or commercial?

What do they really want?

09/24/04

"The root problem is not only the size of the quota, the length of the season, or the number of vessels in-volved. It is how the fish are caught. Use of longlines must be barred" (Josh Reichert, Director of the Pew Trust's Environment Program)

If you've been paying any attention at all to marine fisheries issues, you'll know that a handful of so-called environmental organizations have been making life miserable for just about every commercial fisherman (except, of course, for those few in organizations that have been won over to the side of these "conservationists" by lucrative foundation grants and the chance to use their connections to get a competitive edge on fishermen in competing fisheries) for most of the past decade. Primarily funded by the Pew Charitable Trusts, they have now turned their attention towards recreational fishing as well, making much of recent research identifying recreational fishing as a significant cause of fisheries declines (for an earlier exploration of this subject, see <http://www.fishingnj.org/netusa15.htm>) and pointing to discarded recreational fishing line as being a significant factor in the destruction of coral reefs.²

They have attacked virtually every domestic commercial fishery. They have done this through the management system, through Congress, through the courts and through the media. They have attacked particular fisheries because they supposedly catch too many fish, because they supposedly catch too many non-targeted species, because they supposedly disturb "habitat," because the fish they produce are supposedly contaminated, or because the fishermen are supposedly receiving too many government subsidies. Their attacks haven't been limited to commercial and recreational fishing. Fish and shellfish farming have been included as well. And, as the above quote by the head of Pew's Environmental Program shows, they have singled out some fisheries for particularly harsh treatment. (Please note that in spite of Mr. Reichert's pontificating, the North Atlantic swordfish stocks, which are still fished almost exclusively with longlines, were declared recovered several years ago.)

Do these organizations, that it would be most comforting to assume were simply being run by out of touch zealots, have anything other than their particular up front fisheries-related goals in mind?

They spend what must be millions and millions of dollars (of course, these aren't dollars that they actually had to go out and earn, nor even dollars that they had to beg from individual members³) on influencing Congress, on selling their version of reality to the media, and on going to court when the people who catch fish for a living can't comply with the unrealistically stringent fishing regulations that they have used their massive influence to impose.

But do they spend any of their millions on actual conservation actions that will keep the fishermen fishing and keep the fish coming to market?

Armed with an initial \$10 million from Pew, Pew/Oceana has filed suits aimed at either crippling or completely shutting down the same few fisheries time after time. While it's almost impossible to come up with a real-world equivalent, it might be close to consider a vindictive homeowner with really deep pockets filing suit after unsuccessful suit against a neighbor he was feuding with. If he had a big enough bucket of bucks and a willingness to throw large handfuls of them to his stable of in-house lawyers, the neighbor would have no choice other than to eventually pack up and leave. The Pew bucket, filled with billions of oil bucks, is certainly big enough to file a lot of suits.

Sea Turtles as an example

Ocean Trust, an environmental organization with major ties to the commercial fishing industry, has been involved in operating a successful sea turtle hatchery for the last ten years (<http://www.oceantrust.org/>). Since 1995, Ocean Trust has been one of the primary participants, along with the Mexican government and the shrimp industry, in a program in Mexico which has helped to restore sea turtle stocks by hatching, raising and releasing thousands of juveniles. Ocean Trust, not in spite of but because of its ties to commercial fishing, has been in the forefront of real sea turtle conservation and restoration efforts. Has Pew, either through Pew/Oceana, Pew/Seaweb or any of the other anti-fishing organizations that have received tens of millions of Pew dollars over the past decade, been a part of this effort? Not hardly.

Then we have the domestic pelagic longline fleet. As the introductory quote that we started off with shows so well, the longline fleet has been on Pew's "most wanted" list for a decade. This fleet consists of somewhere around a hundred boats. The longline fishermen, with boats that average well under eighty feet in length and are purposely mischaracterized by the anti-fishing groups like Pew/Oceana as "industrial," in the last several years have been working intensively with the National Marine Fisheries Service (NMFS) to develop gear and methods to reduce their interactions with sea turtles.

Their efforts, accomplished at a significant cost, have been so successful that they showed reductions in sea turtle interactions of up to 90%. Accordingly, members of the fishery lobbied the government to make the gear and techniques they developed mandatory for all participants in the U.S. fishery. Their efforts have also provided the foundation for an outreach program by NMFS aimed at the international pelagic longline fleet.⁴ Though they make up a small fishery with severely limited resources, the longliners have achieved a level of success in turtle conservation beyond anyone's wildest speculations. What role did the anti-fishing, supposedly pro-turtle activists at Pew/Oceana play in developing these mechanisms and techniques to allow the longliners to continue to fish while at the same time protecting the vulnerable sea turtle populations? Absolutely none at all.

In addition, in about 2001, scallopers began for the first time to experience interactions with expanding sea turtle populations in a portion of their Mid-Atlantic fishing areas (Needless to say, this is another fishery that the various Pew organizations love to hate). Realizing that this could mean an increase in turtle interactions, they immediately began to consider avoidance measures. Working with government and academic researchers, they designed and tested "turtle chains" which were proven effective in reducing interactions with the burgeoning population of sea turtles in the southern range of the scallop fishery. They subsequently petitioned the National Marine Fisheries Service to make these turtle chains mandatory where and when turtles and scallopers are in the same areas. What role did the anti-fishing, supposedly pro-turtle activists at Pew/Oceana play in developing these mechanisms to allow the scallopers to continue to fish while at the same time protecting the vulnerable sea turtle populations? Absolutely none at all.

But not by a long shot have Pew/Oceana and other like minded groups stayed out of turtle issues. Unfortunately, and in spite of seemingly having more riches than Croesus to contribute to for-real turtle conservation and restoration programs, their actions to date have involved expensive law suits in federal courts aimed at shutting down the very commercial fisheries that have led the way in sea turtle conservation. In the latest chapter in their quest to destroy the domestic pelagic longline and sea scallop fisheries, they have brought high profile suits to impose potentially bankrupting sanctions on the longliners and to close half of the traditional fishing grounds to the scallop fleet. Evidently just saving turtles isn't enough for Pew/Oceana; it seems as if the two fishing fleets that have led the way in turtle conservation must be destroyed as well.

Is Pew's way the only way?

In an article in the Boston Globe on a program to reduce the entanglement of whales in lobster gear (09/21/04, **Gearing up to save whales, livelihood**) Beth Daley wrote "*the International Fund for Animal Welfare has raised about \$150,000 in private donations and is raising another \$150,000 to \$200,000 for the rest of the program.*" With another \$660,000 from the federal government and \$300,000 to \$450,000 from

Bay State lobstermen, both whales and the lobster fishery will be saved. Hats off to the International Fund for Animal Welfare for involvement that prioritizes saving fishermen as well as protected species. It's obvious that fishermen weren't their actual target; preventing fishermen's interactions with threatened species was.

Pew/Oceana hasn't come close to demonstrating that level of concern, for either turtles or fishermen. In light of this, it's hard for us to see what their motivation really is.

1 Philadelphia Inquirer op-ed article on August 13, 1997 titled "Swordfish technique depletes the sword-fish population."

2 From Yoshikawa, T., and K. Azoe. 2004. Entanglement of monofilament fishing lines and coral death. *Biological Conservation* 117: 557-560 as reported in SeaWeb's Ocean Update.

3 In an "action alert" Pew Oceana was seeking \$10,000 in donations to "*help us reach our goal and show the scallopers that there are people out there who will stand up for sea turtles. Your contribution can make the difference!*" In the first place, scallopers don't need to be shown any such thing. Scallopers were the first people to identify the potential problem and were the first to do anything about it. But, and both more importantly and more perplexingly, Pew/Oceana was started with ten million or so Pew dollars. And we've seen the papers they've filed and their team of litigators in court. It's our impression that the \$10,000 they are asking for isn't any more than a very small drop in their bucket, so why the impassioned plea? It might be an attempt to show "grass roots" support for their court machinations (their request for a preliminary injunction to stop fishing immediately was immediately denied), which would make their actions appear much more altruistic than if they were bought and paid for solely by a multi-billion dollar series of trusts established with big oil revenues, but it sure seems that that level of support isn't anything more than a token.

4 In an "ocean update" from a Pew/Oceana staffer (**To Save the Sea Turtles: A Spanish Fishing Adventure**, Charlotte Hudson, 2004-09-16, **Section: Europe, Topic: Dirty Fishing**), after she condescendingly writes "*think fishing, no showers, foam rubber pads that everyone shares and blankets on the deck of the boat sitting in fish guts - and then imagine that they haven't been washed in months.... I won't even begin to explain the no toilet and limited freshwater problem,*" (just so, of course, no reader would mistakenly confuse working Spanish fishermen with "people") writes about using the gear and techniques developed by the U.S. pelagic longline fishery on a Spanish swordfish longliner. But of course she gives no credit to the U.S. fishermen or to the National Marine Fisheries Service for developing the gear/techniques, glossing over who actually did by clumsily writing "*these hooks are a new idea by the U.S. and research shows that they reduce the number of turtles being caught by the gear - and since most of these turtles are on the Endangered Species List, this is a good thing. So, I brought some of these new hooks with me from the U.S.*" It probably wouldn't do to have a Pew staffer mentioning in a positive light that a fishery her bosses were out to destroy or a governmental agency they were out to eviscerate were responsible for developing the highly effective technology that she was so eagerly promoting .

Circle hooks - A great idea whose time has come

01/20/05

As we had discussed several weeks back, mortality from recreational fishing is an increasing and largely uncontrolled factor with a direct bearing on the health of many fish stocks. While this fact has been obvious to anyone who has observed the fishing scene – though, of course, the entire recreational fishing industry is deep in denial – it is now coming to the attention of the general public. As a matter of fact, a recent Pew-funded study by researchers Felicia Coleman (Florida State University), Will Figueira and Larry Crowder (Duke University) reported that "*recreational catches account for nearly a quarter of the total take of over-fished populations in U.S. waters, including many of the most economically valuable species.*" (**Pew SeaWeb Ocean Update**, October 2004). And, according to Crowder, the authors of the study "*likely underestimate the true impact of recreational fishing because we did not include fish that are discarded at sea or die from the effects of catch-and-release fishing.*" The study receiving the benefit of a full-blown Pew media blitz didn't detract at all from its significance; intended and unintended recreational fishing mortality, at the uncontrolled level that characterizes recreational fishing in the U.S., can and does damage fish stocks severely.

But, unbeknownst to most people who aren't that familiar with fishing equipment and techniques, there's a "quick and easy" fix for a large part of the recreational fishing mortality resulting from both releasing fish caught unintentionally (fish that are either illegal or undesirable to keep) or purposefully via "catch and release." This is a fix that has already been adopted by the commercial fishing fleet in the U.S., and though it wouldn't reduce the recreational release mortality to zero, it would make a significant difference, just as it has in the commercial longline fishery.

Circle hooks – longliners in the U.S. got the ball rolling

While to the average person a fish hook is just a fish hook, the knowledgeable fisherman – either professional or amateur – recognizes that there are a myriad of sizes and styles of hooks, each designed to do a different job, each designed to catch particular sizes/species of fish when coupled with different gear and used under varying conditions.

But in recent years a growing body of research has proven that a particular style of hook has pronounced conservation benefits far beyond those of the type of hooks that are traditionally employed in hook and line fishing. These hooks, generically referred to as “circle” hooks, have been shown to be far superior to the traditional “J” hooks in reducing injuries to (and hence survival of) fish and other animals caught and released in the course of fishing.*

The reason they are proving superior is a simple matter of hook physics. When swallowed deeply, a “J” hook can penetrate a fish’s internal organs, causing severe injuries and heavy bleeding. However, due to its shape and the location of the point of the hook, a “circle” hook will ultimately lodge in the jaw or the corner of the mouth of the fish and generally inflict only minor injury.

This has significant implications for commercial hook and line fisheries. One of the primary goals of fishermen has been and continues to be the minimization of damage to non-intended catch, and “circle” hooks have been proven to reduce injuries to bycatch species. But above and beyond that, “circle” hooks result in target species coming aboard in much better condition, which gives them a higher fresh market price.

The rapidity with which circle hooks are being adopted in commercial hook and line fisheries is edifying. Based on several years of research performed cooperatively with the National Marine Fisheries Service (see <http://www.magazine.noaa.gov/stories/mag144.htm>). The U.S. long-line fishery for swordfish, tuna and shark has switched completely to circle hooks, and in concert with NMFS and several conservation groups, has embarked on a campaign to make the use of circle-style hooks mandatory in all similar fisheries worldwide.** This was initiated by the domestic pelagic longline fishery, whose members – through Blue Water Fishermen’s Association – are encouraging and supporting the program through outreach efforts to other longline fishermen worldwide.

But what about recreational angling?

According to NMFS, the “average” annual catch of saltwater anglers in the U.S. has been increasing in recent years, with the increase attributed to more “catch and release” fishing (a form of angling in which the fish, after being “battled” to exhaustion and brought to shore side or boat side, is released to either swim off, survive and be caught again on another day or to swim off, die and be recycled in the ecosystem). Accordingly, the use of “circle” hooks should be even more widespread in recreational angling. Unfortunately, this hasn’t been the case.

Here is a simple gear modification that would reduce the release mortality of recreationally caught fish significantly (as we reported in our last article, in the case of the severely depleted stocks of white marlin, post-release mortality would drop from approximately thirty five percent to approaching zero). It is readily adaptable in virtually every style of recreational angling, and it is becoming increasingly relevant as “catch and release” fishing continues to gain in popularity. And circle hooks, once they were in wide use, would cost no more than the standard “J” hooks.

So what is the “official” reaction?

Imagine that an easily adopted gear modification was available that would drastically reduce the release mortality in a commercial fishery. You would be right in thinking that the National Marine Fisheries Service would move rapidly to mandate that modification in fisheries that could benefit. And that’s the positive conservation action that NMFS took in the case of the commercial pelagic longline fishery. Circle hooks are now mandatory.

But what has been done in the recreational fisheries? While it’s hard to believe, not very much at all. A couple of years back Crystal Straughn, in Public Affairs at the National Oceanographic and Atmospheric Administration (NMFS’s parent agency) wrote in **An Easy Way to Conserve Big Game Fish** “realizing that conservation is a team effort, NOAA Fisheries is working with the recreational fishing industry to encourage the use of circle hooks when targeting big gamefish.” She continued that NMFS was providing monetary support to “conduct bait rigging seminars to aid participants (in a large fishing tournament) in the proper use of circle hooks” and that “this bold step will have every chance of success within this tournament and to promote the expansion of circle hook use in other tournaments on the Atlantic and Gulf coasts.” Some bold step! While the scientific evidence that circle hooks significantly reduce post-release mortality of billfish (including the white marlin, a species that the government had to go to court to prevent being placed on the endangered species list), all the government is doing is “encouraging” their use.

And the reaction of the recreational angling industry?

While recreational angling advocacy groups continue to campaign against “industrial fishing fleets, walls of death gill nets, bulldozing otter trawls” and other mythological constructs designed to frighten membership dues out of the uninformed angler, about all they are doing regarding circle hooks is, like NOAA/NMFS, gently encouraging their use, while trumpeting the “conservation ethic” that they pre-tend is built into any type of recreational angling regardless of how many fish it kills. In fisheries like the East coast striped bass, where recreational catch and release mortality attributable to the use of “J” hooks exceeds the commercial quota, they are pushing for legislation to close down the commercial fishery rather than making the use of circle hooks mandatory in their own fishery. Some conservation burden-sharing!

If you are in the habit of frequenting tackle shops – or even if you’re not – the next time you visit one, compare the number of circle hooks that are displayed compared to the number of “J” hooks (and notice that virtually none of the artificial lures are equipped with circle hooks). Notice that recreational anglers and their advocates spend all of their time ranting against commercial fishermen and commercial fishing and none demanding that “J” hooks be phased out in favor of circle hooks in their own fisheries.

This is a hook technology that is proven to be a real conservation measure. It’s time that our managers, our legislators, the recreational angling community and the so-called conservation community recognized that and started to get actively and effectively engaged in reducing recreational fishing mortality instead of just pretending.

* We won’t get into an involved discussion of what constitutes a circle hook here, but will say that it’s a hook generally circular in outline and with the point perpendicular to the shaft. A “J” hook, on the other hand, has the point parallel to the shaft. The Atlantic States Marine Fisheries Commission has “defined” circle hooks in greater detail at <http://www.asmfmc.org/publications/specialReports/sr77CircleHookDefinition.pdf>.

** This is in spite of the fact that the use of circle hooks can in instances mean a slightly reduced catch of some important market species.

Selected references on circle hooks

An Easy Way to Conserve Big Game Fish, C. Straughn, NOAA

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Northeast Distant Fishery Sea Turtle Bycatch Reduction Project, NMFS

(<http://www.nmfs.noaa.gov/mediacenter/turtles/>)

Striped Bass Catch And Release Results, R. Lukacovic, Maryland Department of Natural Resources, 1999

(<http://www.dnr.state.md.us/fisheries/recreational/articles/crsb.html>)

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COOKE and C.D. SUSKI, Aquatic Conserv: Mar. Freshw. Ecosyst. 14: 000–000, 2004

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Can the sky fall any farther?

04/04/05

Fish Wars?

In the latest hysterical assault on commercial fishing, Robert Ovetz, the turtle campaign’s Über-alarmist, lowers the anti-fishing rhetoric to new – though still unfathomable – depths.

Ovetz writes in War escalating on high seas over vanishing resource: fish with characteristic over-the-top exaggeration that “the fish wars are flaring out of control across our planet.” Seeking to invoke the predictable knee-jerk small is good, big (particularly big government and big business and big boats) is bad reaction, he suggests that this is due to “small-scale subsistence fishermen battling governments and industrial fishing companies to whom their traditional fishing’ rights have been given away.”

He then cites several instances of what he would like us to believe are part of this David and Goliath struggle, but includes as examples lawsuits against the U. S. Secretary of Commerce brought by multi-national environmental organizations funded by multi-million dollar grants from multi-billion dollar corporate foundations (Goliath versus Goliath?) and the U. S. protecting its small scale shrimpers from cheap imports (David versus David?).

In fact, the conflicts he cites are indicative of nothing more than business as usual on the world’s oceans and in international trade. The idea of one country trying to protect an important segment of its economy from assaults from imports has been with us for centuries, and isn’t indicative of anything above and beyond governments doing what they are supposed to.

Regarding fishing wars, they are hardly new and, despite Ovetz’ attempt to convince us otherwise, are hardly a reflection of anything other than one nation’s determination to protect its fish and its fishing industry. Going back three decades, we read of the third Cod War “between November 1975, and June 1976, the cod, a common species of fish, brought two NATO allies to the brink of war. Great Britain and Iceland confronted each other over Iceland proclaiming its authority over the ocean, up to 200 miles from its coastline. The issue was the amount of cod caught by the two countries’ fishermen. During this conflict, British trawlers had their nets cut by Icelandic Coast Guard vessels and there were

numerous ramblings between Icelandic ships and British trawlers and frigates. The conflict caused Iceland to threaten to close the NATO base at Keflavik, which would have imperilled the NATO ability to defend the Atlantic from Soviet incursions.” (From the Riots, Rebellions, Gunboats and Peacekeepers website at <http://www.britains-smallwars.com/RRGP/CodWar.htm>)

It would seem that Ovetz doesn't have much of a grasp of what “flaring out of control” really means when it comes to fish wars.

Moving on, he then repeats what has become part of the standard litany of the anti-fishing activists; “about 70 percent of our global fisheries are now being fished close to, already at or beyond their capacity.”

Needless to say, we are supposed to regard this (like the big business/big government/big boats examples up above) as a bad thing. But in a world where malnutrition is far from rare, what's bad about fishing close to or at the capacity of a large proportion of our fisheries? Should we be catching less fish and starving more people? Apparently, according to Ovetz and his ilk.

This is all part and parcel of Ovetz' anti-fishing modus operandi. In *Fish Wars: How Cheap Oil Drives Industrial Longline Fishing* he waxes eloquently and at length on how energy intensive longline fishing specifically and “industrial fishing” in general is. He writes “amongst fisheries targeting high value species, it is now common for direct fossil fuel energy inputs alone to exceed nutritional energy embodied in the catch by at least an order of magnitude.” We can only counter with a somewhat less eloquent “so what?” High value species aren't targeted to feed the masses, they are targeted to earn a profit for the fishermen. The amount of energy going into the fishery compared to the amount of energy coming out is irrelevant – at least to anyone who accepts the concept of free markets and expects a diet a bit more satisfying than bread and water.

He then writes of fuel use by the commercial fishing industry “the fisheries... consumed a staggering 1 billion liters (about 6 million barrels) of diesel fuel.” We assume that he was giving us the per year estimate (including information like that is a nicety that's probably not that important to you when you are intent on bandying about the biggest, most impressive numbers you can find, and Ovetz is certainly accomplished in bandying about big numbers), but no matter what the time frame, compared to over 19 million barrels of oil consumed by the United States every day it's a mere drop in the bucket.

As a matter of fact, it has been estimated that the world's fishing fleets account for only about 1.4% of total global oil consumption. To anyone outside the “Chicken-Little” anti-fishing clique we can't see how this can be seen as anything other than an energy bargain, considering that, according to the United Nations FAO, in 2002 the world production of fish and seafood (101 million tons) was greater than of beef (60 million tons), of pork (95 million tons) or of poultry (73 million tons).

Dr. Ovetz has tried to make fish wars a unique recent phenomena, has tried to force what are nothing more than ongoing resource allocation conflicts that have been with us for centuries into a “David vs Goliath” mold, has tried to take advantage of everyone's concern about energy, and has tried to call into question the fact that we are exploiting many of our fisheries at or approaching the maximum level. What's his point?

Using what appear to be a series of unconnected (unconnected to longlining, unconnected to each other and unconnected to the real world) anti-fishing arguments, he then slides into his standard “stop the longliners to save the oceans” spiel.

Discounting what have been tremendous strides in bycatch reduction by the domestic longline fleet and the U. S. government's unprecedented efforts to share this technology with the rest of the world, he continues to beat that same old drum - a drum, we might add, that gets emptier and noisier from year to year. And he does this instead of trying to work with the commercial fishermen and the National Marine Fisheries Service to further minimize bycatch and to export the existing – and proven – bycatch reduction technology.

As commercial fishermen are proving in fishery after fishery, they can and they will modify their gear and their techniques when it becomes apparent that they are having more of an impact on the ocean environment than is desirable. The real environmentalists are those who are willing to help them to do this.

A media mugging of commercial fishing, Florida style

05/22/05

Last month Jordan Kahn, the Outdoors Editor for the Daytona Beach News-Journal, attacked the commercial fishing industry in general and the domestic pelagic longline fishery in particular in an article replete with over-the-top bombast and using and misusing carefully filtered information to wrongfully skewer commercial fishing and commercial fishermen.

Among the most egregious of his assaults was the charge that the Fisheries Research Institute, a not-for-profit corporation established by the longline industry, was “essentially a longliner lobbying group.” Of course Mr. Kahn was using the unpopularity of lobbyists (at this point probably the most unpopular professionals in the United States except for journalists) to bolster his anti-commercial fishing, anti-longlining arguments. However, Mr. Kahn – who claims to have been trained as a “scientist” – failed to turn up in what to him must pass for research (keep

reading), or perhaps failed to report, the fact that the Fisheries Research Institute is prohibited by law from lobbying. This was pointed out to him..

He used other, and equally misleading, “facts” and figures to further what is difficult to see as anything more than a personal vendetta against anyone efficiently catching and selling (or affordably buying and eating) fish from what he seems to consider his private playground – the world’s oceans. These were pointed out to him as well.

Thus, when he had a follow-up piece in the May 13 News-Journal, we thought that we were about to see Mr. Kahn setting the record straight. Not quite! What we read was more of the same old same old, packaged slightly differently but with the same nebulous connections to objectivity.

Because such strident exercises are occurring more frequently in the advocacy “journalism” practiced by recreational fishing writers, and because Mr. Kahn is so emphatically and demonstrably wrong on so many counts, we thought that a point-by-point refutation of his latest column might aid our readers in evaluating his and similar scribblings.

- He started out with a labored exercise designed to show that the pelagic longline fishery was so small as to be inconsequential when considered in relation to the total production of seafood by the domestic commercial fishing fleet. He wrote, more or less correctly, that longlining accounted for just 0.3% of that total. (Actually, from the context it appeared as if he was only writing about edible seafood but was using a total production figure for edible and industrial seafood combined. Considering only edible seafood, the longline proportion would be almost 0.4%, but what’s precision when you are on a mission?)

This is an interesting argument. So interesting, in fact, that we decided to adopt it and extend it to the newspaper business.

According to the Newspaper Association of America, in 2003 the total daily circulation of U.S. newspapers was 55,185,351. Going to The Readership Institute at Northwestern University’s Media Management Center, we found that the Daytona Beach News-Journal has a daily circulation of 100,582. It appears as if Mr. Kahn’s newspaper accounts for only 0.18% of the total daily circulation of newspapers in the U.S. – or that Mr. Kahn’s newspaper is significantly more negligible in the domestic newspaper industry than pelagic longlining is in the domestic fishing industry. Based on Mr. Kahn’s “reasoning,” shouldn’t we be questioning the News-Journal’s right to continue publishing?

- He then writes, after throwing around some really, really big and impressive numbers, that in the U.S. “more than 10 times the amount of food than the entire 2003 U.S. commercial fishing catch was just thrown away.” While this might be an interesting fact to some folks, what does it have to do with anything that Mr. Kahn is addressing? This is followed by “Maybe American consumers don’t depend on longlined seafood after all.” Of course they don’t. Nor do they “depend” on steak or fast food or white truffles or corn flakes. If the fact that we aren’t dependent on a particular kind of food can be used as an argument to deny us that food, then we’re all going to be left with very meager diets.
- He lists the longliners’ chief catch as “*sharks, swordfish, other billfish like marlin, and real giant blue fin (sic) tuna, not canned tunafish or skipjack steaks.*” Au contraire, he was right on the swordfish and skipjack steaks but dead wrong on everything else. Domestic longliners target swordfish, yellowfin tuna, albacore tuna and bigeye tuna, and their catch at the end of a trip reflects this. With the proper permit and until a miniscule quota is reached, longliners can possess and sell a maximum of three bluefin tuna per (two to three week or longer) trip. Longliners can’t possess or sell any billfish other than swordfish and no Atlantic billfish other than swordfish can be sold in the U.S.
- And he asks how many people have ever eaten these longline caught fish, arguing that he’s “*never even seen these fish in the grocery store, and as it turns out, most of these types of fish go to the highest bidder....*” We can’t account for what Mr. Kahn does or doesn’t see in the grocery store (considering the blinders he’s so obviously wearing when he writes, if they are still on when he goes shopping we wouldn’t be surprised by anything that he doesn’t see), but having fish, or any other product, going to the highest bidder has a nice capitalist ring to it that most people – at least those benefiting from a capitalist economy – would find more comforting than threatening. To get back to the News-Journal, how much of the advertising in their 100,000 daily papers do you suppose wouldn’t be sold to the highest bidder?
- “*...these types of fish go to the highest bidder, which would be Japan.*” Mr. Kahn obviously doesn’t like exports. With a trade deficit of monster proportions we find his anti-export bias somewhat puzzling, but here again Mr. Kahn is woefully off the mark. Most of the longline-caught tuna and virtually all of the longline caught swordfish stay in the U.S. and are sold to U.S. consumers. Anyone who shops outside of Mr. Kahn’s neighborhood, or anyone who shops in his neighborhood but is better at identifying the fish in the seafood section than he is, will know that in the U.S. we have been blessed in recent years with an influx of fresh sushi-grade tuna, for example. Most of this fresh tuna is caught by longliners, and our palates and our cardio-vascular systems are better for it. (On this point we’re purposely giving him the benefit of the doubt, but it’s hard to imagine that there isn’t a bit of Japan bashing going on here as well.)
- Apparently scorning all of the “eat fish high in omega 3 fatty acid” advice we’ve been getting from the medical establishment for most of the last decade, he then informs us that the inclusion of longline caught tuna and swordfish – both of which are way above average in omega 3s – or any other fish in the average American’s diet is even less important because “on average, Americans ate a total of 200 pounds of meat per person in 2002.” So keep chowing down on those Big Macs, folks. Jordan Kahn evidently thinks it’s the right thing to do.

- Then, in what must be his gratuitous nod to the bizarre, he relates that “*a few pounds of fish seems like even less when you consider that 130 pounds of food per person ended up in landfills.*” It would be really interesting to find out what intellectual contortions Mr. Kahn went through when determining that there was a relationship between discarding moldy bologna, spoiled milk and stale bread and enjoying twelve dollar a pound fresh swordfish steaks, wouldn’t it?
- Moving right along, he then segues into an interpretation of the world of fisheries management as seen through his demonstrably effective blinders, starting with “*the fact is, the U.S. commercial fishing industry as a whole isn’t even close to being eagerly compliant with regulations.*” Now, Mr. Kahn and/or his employers at the newspaper might be “*eagerly compliant with regulations,*” but we somehow doubt that. In fact, we doubt that there are any individuals or businesses or institutions that are eagerly compliant with regulations. The significant point would be whether they complied or not. On the whole, most fishermen – both recreational and commercial – comply with regulations, and just like in the rest of the world, a few don’t. (Here we are compelled to mention that managing commercial fisheries today often requires “regulatory discards.” These are fish that are inadvertently caught that must be returned to the ocean, even if it is obvious that they won’t survive once they are released. We hope that even Mr. Kahn wouldn’t be eager to comply with a regulation that mandated such gratuitous waste.)
- He then bemoans the fact that there are only “about 150 agents” charged with policing fisheries in federal waters. Though he doesn’t make it clear, we guess he does this to demonstrate an incentive for commercial fishermen to not be eagerly compliant with regulations. But somehow he fails to mention that these federal agents work hand-in-hand with the Coast Guard and with state fisheries enforcement people, resulting in a reasonably effective – and much larger - enforcement presence than he would have his readers believe actually exists. At the same time, he totally ignores the fact that recreational anglers – who it seems, in his eyes though not in most others’, neither can nor will do any wrong – are subject to the same enforcement as commercial fishermen, as adequate or inadequate as it might be.

He also fails to mention that the 16,568 federal cases he cites that were filed in the last five years include recreational fishing as well as commercial fishing violations. Likewise he somehow misses the fact that, because at-sea enforcement is so expensive and potentially dangerous, the trend has been and still is to do it at dockside. It’s relatively easy to police a few thousand commercial fishing boats landing fish at a few hundred commercial fishing docks, particularly when the boats and docks must document the catch and the docks must document their sales, but try keeping track of who’s catching what when your target group consists of tens of millions of recreational anglers fishing from millions of boats or thousands of miles of shoreline. Yet in Mr. Kahn’s opinion the level of fisheries enforcement encourages rampant cheating by commercial fishermen.

- Predictably he trots out all of the old, hackneyed bycatch tales. We won’t argue with the United Nations’ estimate of total bycatch worldwide, but we will argue that commercial fishermen in the United States are among the world’s leaders in developing bycatch reduction gear and techniques, and that the domestic pelagic longliners and folks in a few other commercial fisheries have been leading the pack.

For one example of what the U.S. longliners are doing to reduce bycatch, see <http://www.nmfs.noaa.gov/mediacenter/turtles/>, and don’t forget that the proposed, temporary reopening of the closed - to longlining, not to angling – areas that got Mr. Kahn started initially was to allow an experimental fishery aimed at further bycatch reduction. (For the record, bycatch is by definition stuff that a commercial fishermen can’t keep or sell. Catching it causes unnecessary wear and tear on the gear, disentangling or unhooking it and returning it to the water takes time and effort. Bycatch reduction is something that every rational fisherman is constantly focused on, not just because it’s so wasteful, but because it’s expensive to deal with as well.)

- Then he takes on the notion that commercial fishermen in general and longliners in particular are capable of making any commitment to conservation. To support his idea that commercial fishermen are the scourge of the oceans, he writes that “time and again, the closure of hundreds of thousands of miles of waters off the coasts of the United States was the result of lawsuits brought against the National Marine Fisheries Service for failing to protect natural resources and for violating the Sustainable Fisheries Act of 1996.” In actuality, the closure of these waters has generally been the result of the fisheries management process, implemented by fisheries management plans created either by the regional fisheries management councils or the Department of Commerce, and approved by the Secretary of Commerce. Commercial fishermen, recreational fishermen and conservationists all participate in this process. They might argue over the details and they might bring suit (against the Secretary of Commerce, not the National Marine Fisheries Service) to effect changes, but closed areas are a result of fisheries management decisions, not judicial intervention.
- And he finally closes with “As for those international regulations that longliners would take credit for, since the International Conference for the Conservation of Atlantic Tunas was established in 1966 -- this is the chief regulator of international commercial fishing in the Atlantic rim -- fisheries scientists estimate that the population of Atlantic tuna has declined by 90 percent.” First off, it’s the International Convention for the Conservation of Atlantic Tunas (ICCAT), and with a charge restricted to the management of tunas, mackerels and billfish in the Atlantic, it is far from the “chief regulator of international commercial fishing” there. We don’t have the foggiest idea what the “Atlantic Rim” means, but ICCAT has 40 member nations (more properly known as contracting parties) from around the world that are involved in the Atlantic fisheries for “tuna-like” species. We doubt that there is anyone with even a superficial acquaintance with ICCAT’s operations over the last decade that wouldn’t acknowledge the U.S. delegation’s leadership in terms of conservation, or of the role played by the U.S. longliners in that delegation. If the vessels of every other contracting party were fishing to the standards of the U.S. longline fleet we wouldn’t have anything approaching the problems in the ICCAT fisheries that Mr.

Kahn gloats about. The fishermen of the U.S. longline fleet were instrumental in creating those standards and they having been pressing politically to have the U.S. exercise what powers it has to force international compliance with ICCAT conservation measures in effect here. (see <http://www.publicaffairs.noaa.gov/releases2002/oct02/noaa02131.html>).

Why all of this attention focused on one “journalist” writing in a paper that is, by his own reasoning, a negligible part of the domestic newspaper industry – particularly when he usually covers Ripley-esque subjects including a fish falling on a school bus in Montana, a basketball-swallowing catfish, and an unfortunate in the U.K. who has kept on fishing with toes surgically replacing his amputated fingers? Because so many of his cronies, while generally a bit more clever in their assaults, spend an awful lot of time attacking commercial fishermen and seafood consumers in their columns with the same kinds of specious arguments. While done by Mr. Kahn a little more clumsily than by most of the others, they all have a penchant for wrongly applying what’s going on in the world’s commercial fisheries to what’s going on in our own.

Perhaps because he’s never been able to stumble over it in his local Publix or Winn-Dixie, Mr. Kahn doesn’t want to enjoy fresh swordfish or tuna – or, we’d be willing to bet, any other fish removed from “his” ocean for reasons as crass as making a living. So he uses this as justification to shut down the fisheries that provide them so none of us can enjoy them. The readers of the Daytona Beach News-Journal, no matter how inconsequential their number in Mr. Kahn’s estimation, deserve better.

Note: In the Southern Volusia County section of this past Sunday’s News-Journal, Linda Walton has a long article documenting the decline of a once vibrant commercial fishing industry in Daytona Beach and the surrounding communities. While she mentions several of the reasons for this, she left out the impact on this decline of an ongoing media campaign demonizing the commercial fishing industry and commercial fishermen.

Recreational fishing – beyond the hype

06/20/05

In their never-ending quest for more and more fish for their constituents, recreational angling advocates have relied on claims that their sport is continuously growing, that it is the “foundation” of coastal communities, that every fish allocated to the consumer (and therefore denied to the recreational angler) represents a loss of tens or hundreds of dollars to the economy, and on and on and on. Anyone who is reading this is probably more than familiar with the litany.

But how true are these claims? What is the “state of the state” of recreational angling in the United States? Is participation in recreational angling on an upswing that is threatening the future popularity of NASCAR and pro football and the seafood lover’s access to ocean-fresh fish from our rich coastal waters?

We decided to find out.

Wallop-Breaux funding

First off, a particular federal funding mechanism must be understood to truly appreciate the governmental attitude concerning how many people in the U.S. fish for recreation – or for “subsistence” in the recreational fishing advocates’ latest attempt to show that sports fishing hasn’t become the province only of the well to do - in salt water.

The Fish and Wildlife Service of the U.S. Department of the Interior spells this out in a page on their website titled Federal Aid in Sport Fish Restoration (the Dingell-Johnson Act and the Wallop-Breaux Amendment – see <http://federalaid.fws.gov/sfr/fasfr.html>)

From the FWS page:

“The Sport Fish Restoration program is funded by revenues collected from the manufacturers of fishing rods, reels, creels, lures, flies and artificial baits, who pay an excise tax on these items to the U.S. Treasury. An amendment in 1984 (Wallop-Breaux Amendment) added new provisions to the Act by extending the excise tax to previously untaxed items of sport fishing equipment. Appropriate State agencies are the only entities eligible to receive grant funds. Each State’s share is based 60 percent on its licensed anglers (fishermen) and 40 percent on its land and water area.

The major element of the W-B Amendment established a new Trust Fund, named the Aquatic Resources Trust Fund. Funds are also received from import duties on sport fishing equipment, pleasure boats and yachts. Another source of revenue is a tax from motorboat fuel sales. These motorboat fuel taxes are collected by the U.S. Treasury and then transferred to the Fish and Wildlife Service for distribution among the States and territories.

The passage of TEA-21 authorized a National Outreach and Communications Program to increase participation in angling and boating while reminding boaters and anglers about the importance of clean aquatic habitats. It also increased the minimum level of spending for boating access to 15% and raised the maximum allowable expenditure of Sport Fish Restoration apportionments for aquatic education and outreach to 15%. TEA-21 created a Boating Infrastructure Program for the construction, maintenance, or renovation of facilities for non-trailerable recreational boats (boats greater than 26 feet in length.) TEA-21 raises the amount of Federal gas tax credited to the Aquatic Resources Trust Fund and establishes a “permanent” appropriation for the Boating Safety Account.”

... and the government spin it generates

Needless to say, assuming that the fisheries management establishment comports itself as every other bureaucracy does when dealing with budgetary questions, we tend to look at recreational angling participation figures derived or paid for by governmental fisheries agencies with a slight bit of skepticism. The NOAA/NMFS Recreational Fisheries Strategic Plan (available at http://www.nmfs.noaa.gov/recfish/Fisheries_Strategic_Plan.pdf) is a good case in point. From the plan

“Every year, 13 million Americans enjoy recreational fishing in our oceans and along our coasts...Saltwater recreational fishing is more popular than ever. Over the past decade, the number of angler trips rose nearly 10 percent, to 82 million trips in 2003. Not surprisingly, the number of fish caught by anglers since 1993 has increased proportionately. Although saltwater anglers have caught more fish in recent years, they also have released their catch more often.”

Note that while the plan acknowledges that saltwater angling is “*more popular than ever,*” and addresses the number of trips, the number of fish caught and the number of fish released, it doesn’t discuss the number of people who actually participated in saltwater angling.

Then, in a NOAA/NMFS press release dated October 21, 2004 (http://www.nmfs.noaa.gov/docs/04-104_recfish_release.pdf), we read:

“While participation in marine recreational fishing fell eight percent (in 2003) from the previous year, the 10-year trend is still positive with the number of anglers up seven percent and the number of trips up nine percent.”

Reading all of this, one can’t help but feel that all’s right in the world of recreational fishing in the United States and that soon the television viewing public will be as familiar with the winner of the Ocean City White Marlin Open as it is today with Lance Armstrong of Tour de France fame.

But what happens when we look beyond the spin?

However, and fortunately for those of us who are capable of recognizing a potential bureaucratic conflict when it smacks us across the face, we found an alternative source of information on recreational angling participation and, by inference, popularity.

The Sporting Goods Manufacturers Association (SGMA), founded in 1906, has made available a study, the **Sports Participation Topline Report** (available for downloading at <http://www.sgma.com/reports/2005/report1113421275-27433.html>) that highlights participation trends in over a hundred indoor and outdoor sports – running the gamut from rock climbing to darts – in the U.S. since 1987. The chart below was from that report.

Participation in recreational fishing

Type of Fishing	1987	1990	1993	1998	2000	2002	2003	2004	Change last year	Change last 6 years	Change last 17 years
Fly	11,359	8,039	6,598	7,269	6,581	6,034	6,033	4,623	-23.40%	-36.40%	-59.30%
Freshwater-Other	50,500	53,207	50,198	45,807	44,050	42,605	43,819	39,433	-10.00%	-13.90%	-21.90%
Saltwater	19,646	19,087	18,490	15,671	14,710	14,874	15,221	13,453	-11.60%	-14.20%	-31.50%

The decline in saltwater recreational angling of over 31% that the Sporting Goods Manufacturers Association measured in the last seventeen years is pretty dramatic. (And note that, counter to the NMFS press release cited above, the SGMA data show a decline in participation of 17% from 1993 to 2003.)

When this decline is considered relative to the total U.S. population it becomes even more so. In 1987 approximately one in twelve, or 8.1%, of us fished in salt water. In 2004 that participation had fallen to less than one in twenty, or 4.7% (based on a population of 242 million in 1987 and 285 million in 2004). This is a decline in the popularity of saltwater angling, as measured by the percentage of the total population that participates, of almost 60%

And this isn’t a phenomena that is restricted to the United States. Recreational fishing in Queensland, Australia declined from 24.6% to 20.6% from 2001 to 2004. According to Queensland’s Commissioner of Primary Industries and Fisheries, Henry Palaszczuk, “*the decrease in fishing participation in Queensland reflects trends in other countries that show fewer people are fishing recreationally*” (Survey shows fewer fishers but smarter fishing, http://www.mysunshinecoast.com.au/local_community_news_display.php?id=1370).

Saltwater or fresh, here or abroad, it’s apparent that the people aren’t rushing to the coastlines in ever-increasing droves to catch their weekly dose of omega 3s. According to SGMA, the percentage of people in the U.S. who fish for recreation in saltwater has fallen by almost half in the last seventeen years. If that’s the case, how can a federal agency state in *A Vision for Marine Recreational Fisheries - NOAA Recreational Fisheries Strategic Plan, FY 2005 to 2010*, a widely distributed planning document, that “*saltwater recreational fishing is more popular than ever?*”

More popular with who? Saltwater recreational fishing is certainly more popular with government fisheries workers, because there are more and more of them every year, and their budgets, thanks to Wallop-Breaux, are increasingly dependent on recreational fishing expenditures. Again, from the NOAA/NMFS Strategic plan:

“Marine recreational anglers represent one of NOAA’s largest organized constituencies. With their demonstrated conservation ethic, America’s 13 million anglers will be among NOAA’s most important allies.

And it’s definitely more popular with an aging group of participants with an increasing amount of spare time to devote to fishing and an increasing amount of disposable income to spend on recreational fishing gear. As a matter of fact, the author(s) of the planning report cited above, while attempting some of what it’s difficult to imagine as anything but totally inappropriate political finessing, wrote in a justification for their conclusion that saltwater recreational fishing is more popular than ever, “*in the past decade, the number of angler trips rose nearly 10 percent, to 82 million trips in 2003.*” Are we off base in thinking that if fewer and fewer people participate in a given activity each year, that regardless of how often each of those people participates, that activity is becoming less rather than more popular?

With fewer recreational anglers ever year, why does the recreational fishing mortality continue to climb?

Not surprisingly, we had some difficulty equating this greatly reduced, though well camouflaged, participation in saltwater angling with the increases in recreational landings and recreational mortalities in so many fisheries (see http://www.fishingnj.org/recstuff/NetUSA02_05.html). Searching for an explanation, we did a query (using the NMFS online recreational fishing database at <http://www.st.nmfs.gov/st1/recreational/queries/index.html>) on the total number of angler trips per year for those years reported on by the SGMA. Using these two data sets, we found that in the time period in question, the average number of saltwater fishing trips taken by recreational anglers each year had more than doubled.

Average saltwater angling trips per year

Year	1987	1990	1993	1998	2000	2002	2003	2004
Average trips/year	2.7	2.4	3.4	3.9	5.4	4.9	4.8	5.5

Only two thirds as many anglers are fishing today as fished seventeen years ago, but on the average, each of them is fishing twice as much. And they are using more advanced tackle, faster and larger boats, marine electronics several orders of magnitude more effective and far more affordable than in 1987, and communications technology – cell phones and internet chat rooms – that transmit knowledge of the latest “hot spot” instantaneously.

Who’s zooming who? (with thanks to Aretha Franklin.)

Could it be that an ever-decreasing number of increasingly organized recreational fishing hobbyists and their activist leaders, with the perhaps unwitting complicity of a fisheries management establishment that is dependent on their expenditures for its budgetary well-being as well as its future existence, are involved in a major effort to hoodwink our policy makers? Looking at the data, it seems inescapable that more and more fish from our coastal and offshore waters are going to fewer and fewer people. These are fish that belong to all of us, and 95% of us either can’t afford to or couldn’t care less about catching them ourselves, depending instead on commercial harvesters to get the fish out of the water and onto our plates..

Let’s take a look at the fisheries management establishment. Some of its members must surely be privy to the same information that was available to the authors of the SGMA report, and in fact the SGMA’s 13 million participant estimate for 2004 is echoed by the NMFS/NOAA planning document, which states “every year, 13 million Americans enjoy recreational fishing in our oceans and along our coasts.” They don’t write that 13 million last year is likely to be 10 or 11 million in only a few years. In spite of the fact that, if the present trend continues, there will be virtually no recreational fishing in another thirty to forty years, nowhere in their report do they even hint at the fact that recreational fishing is actually in the midst of a long and dramatic decline in popularity.

This decline, and the corresponding impact it can have on the collective budget of the fisheries management establishment, must be the major impetus behind a federally funded effort to increase the level of recreational fishing (see the Fish and Wildlife Service funded Recreational Boating & Fishing Foundation website at <http://www.rbff.org/> and the website of its spin-off “Take me fishing” campaign at <http://www.takemefishing.org/>). The fact that tens of millions of dollars are being spent by the federal government to promote recreational fishing is hard to consider as anything but self-serving.

But this promotion comes at the expense of the consumer who enjoys ocean fresh, locally caught seafood, and the commercial harvesters who provide it. For any reader who wants to seriously consider the bizarre world of fisheries management, explore these two websites with their joint emphasis on increasing recreational fishing participation and recreational fishing access, and contrast that with federal efforts aimed at reducing commercial fishing harvest

At the same time, both the per capita consumption of fish and seafood in the U.S. and the U.S. population – both at record high levels – continue to increase. So we have a growing population that at the same time that it is consuming more and more fish per capita is increasingly declining to go out and catch its own. According to the SGMA, and to wide ranging anecdotal observations, the *vox populi* has spoken resoundingly: the U.S. consumer is less and less interested in catching his or her own fish – either to eat or for enjoyment.

Determining a rational government policy addressing this fact would seem to be fairly obvious. Fisheries allocation decisions should be favoring the non-fishing seafood consumers, who outnumber recreational anglers by more than twenty to one. But is this the case?

Not hardly!

Points to ponder:

- If participation in recreational angling is declining, why are federal and state agencies so engrossed in countering this trend, improving angling access and the “quality” of the angling experience?
- If participation in recreational angling is declining, why is so much effort of the National Marine Fisheries Service aimed at decreasing the commercial harvest and the availability of local seafood to an ever-increasing population that is demanding more high quality seafood every year*?
- If participation in recreational angling is declining, why are commercial fishing representatives increasingly being replaced by recreational angling representatives on our regional fisheries management councils?
- If participation in recreational angling is declining, why does the membership of the Atlantic States Marine Fisheries Commission continue to be so recreationally oriented?
- If participation in recreational angling is declining, why are recreational fishing advocates unceasingly demanding a larger part of every fishery they or their constituents have an interest in?
- If participation in recreational angling is declining, why are our elected officials sponsoring legislation to turn entire species of fish or huge areas of ocean over to recreational anglers, forever excluding commercial harvesters and non-fishing consumers?

Isn’t it time that we took a serious look at the designed-in funding conflicts and political leverage that have so severely distorted our fisheries management priorities for the last two decades, a period during which fewer and fewer anglers have been demanding – and often been getting – more and more fish? Isn’t it time that we recognized this “public be damned” attitude, and begin to seriously address it? The real public, the 95% who don’t fish for fun, deserve a lot more and are getting a lot less.

* Further complicating this question is the potential conflict raised by the federal Saltonstall-Kennedy program. Designed to support fisheries research and development, the S-K program is described in a 2004 report to Congress:

“The S-K fund is capitalized through annual transfers by the Secretary of Agriculture to the Secretary of Commerce of amounts equal to 30 percent of the gross receipts collected under the customs laws on imports of fish and fish products.”

(The Saltonstall-Kennedy Grant Program: Fisheries Research and Development at http://www.nmfs.noaa.gov/mb/sk/2004_report/2004_sk_report_to_congress.pdf)

However, as the chart below (taken from Table 1. S-K funding for FY 2004 in the above report) shows, only 22% of the available S-K funding was used to support the fisheries R&D that was the original legislative intent. The rest was absorbed by the NOAA budget to offset agency operating costs (the other \$185 million stayed with the Department of Agriculture).

Table 1. S-K Funding for FY 2004

Funding Item	Amount (\$ in millions)
Total Duties Collected on Fishery Products	\$265.75
S-K Transfer to NOAA (30% of above)	79.72
NOAA's costs related to operations, research, and facilities	62.00
S-K Allocation	17.72

The budget for the National Marine Fisheries Service is on the order of \$500 million per year. It's parent agency (the National Oceanic and Atmospheric Administration or NOAA) receives about 12% of that amount from a tax on imported fish and fish products. If fish imports increase, S-K receipts increase. If the domestic harvest of fish and fish products declines, fish imports increase at a more rapid rate than they would otherwise. *Res ipsi loquitor?*

Connections
(from National Fisherman)
08/10/2005

Going by what's being presented by the popular media, no one could be faulted for assuming that our fisheries and the system that manages them are going to hell in a handbasket. In recent years the doom and gloom observations and predictions have become much more common, and much more pessimistic than is warranted by the actual conditions of our fisheries or of our fisheries management system. Looking at two recent examples:

Some fairly intense coverage a month back concerned a survey of scientists presently or previously employed by the National Marine Fisheries Service that revealed that, on orders from "higher up," the science underlying fisheries management decisions was being subverted. The source was a press release by Public Employees for Environmental Responsibility announcing the results of a survey by that group and the Union of Concerned Scientists. The survey went to 460 NMFS "scientists," both current and ex-employees. The dramatic results were reported from "a strong majority (58%), more than half of all respondents (53%), more than one third of respondents working on such issues (37%)" and "nearly one in four (24%) of those conducting such work." From the release, and from the media coverage it spawned, it appeared as if most of the science, and accordingly, most of the management measures coming from NMFS had been corrupted by politics.

So, as seemingly attested to by most of its in-house scientists, is the federal agency (that we've all had problems with from time to time) so mired in politic as to be ineffectual in managing fisheries? Going beyond the press release, I took a closer look at the study. The 460 "scientists" who were surveyed weren't anywhere near all of the scientists working for NMFS. In fact, according to the Agency leadership, there are about 2,000 scientists currently working there, most at the regional science centers and the Office of Science and Technology in DC. Neither the scientists at the Science and Technology Office nor the regional centers received the surveys. So who was actually surveyed is apparently an open question.

But let's assume that all 2,000 NMFS scientists had been surveyed and that there is a pool of another 1000 who worked there but left. Perhaps a sixth of the available scientists received the questionnaire. This wasn't revealed in the press release. What was revealed was that 27% of the recipients returned it. So a maximum of 124 scientists out of a possible 3000, or 4%, responded. "More than half of all respondents" is a maximum of 2%. "Nearly one in four" is 1%. And "a strong majority" is 3%. Some smoking gun, particularly when you consider how many of the respondents might have simply been disgruntled employees lashing out at "the boss."

Then this past week we read (once again), that fishing pressure was endangering the "big fish" in the world's oceans. Based on an article published in Science (Global Patterns of Predator Diversity in the Open Oceans), the Associated Press reported "scientists say the variety of tuna, marlin, swordfish and other big ocean predators has declined up to 50 percent over the past half-century due to overfishing." There was a spate of print and broadcast coverage of the Science report, all that we saw accepting the information in the press release and written in the same vein.

Now you don't have to be a fisheries scientist, or a biology student or anyone who has spent any time at all around a fishing dock to know that the variety of tuna, marlin and swordfish hasn't declined at all. As a matter of fact, we have the same variety today that we had fifty or a hundred or five hundred years ago. In spite of the quote above, we haven't ever lost a species of fish to overfishing. But the AP reporter would seem to want his readers to believe otherwise, wouldn't he?

So, you might ask, what's the connection between these two studies? The two lead authors of the "big fish" study, Boris Worm and Ransom Myers, are both recipients of research funds from the Pew Charitable Trusts, and the Union of Concerned Scientists has gotten at least \$2 million from Pew. And it's awfully hard to see this research, or much of the rest of it that has led to similar alarmist headlines in the last decade, as anything but part of a larger agenda.

The Pew Charitable Trusts set up a national commission that was supposed to recommend how we could "fix" our oceans, and one of the major recommendations was to junk the way we are currently managing our fisheries. And then we read – in the headlines, of course – that NMFS has become politicized and the scientists are no longer in charge. Fortuitous reinforcement of the Pew Commission recommendation, isn't it? And ever since the Pew Trusts bankrolled the "Give swordfish a break" campaign, it's been obvious that their crosshairs have been on the pelagic longline fleet (in spite of the amazing strides in real conservation that the domestic longline fleet has made). As a matter of fact, in "Swordfish technique depletes the swordfish population" in the Philadelphia Inquirer in 1997, Josh Reichert, Director of the Pew Trust's Environment Program, wrote "The root problem is not only the size of the quota, the length of the season, or the number of vessels involved. It is how the fish are caught. Use of longlines must be barred." So, it appears, Drs. Worm and Myers are marching to the same old beat.

So I'm going to make a suggestion. Whenever you see a doom and gloom headline about fishing, don't just assume that it's another bit of research carried out by an independent researcher. Do some rudimentary research (for an easy how-to, Google "Myers Worm Pew" or "Union of Concerned Scientists Pew") and see what connections you come up with. We're living in a world of advocacy science, and in such a world knowing who's signing the checks is critical.

Connecting the dots

(in National Fisherman)

09/06/2005

PBS recently aired "Gutted," documenting the agony of a Scottish fishing family being forced to deliver their boat to a scrap yard in Denmark.

It started out as an unvarnished look at a tragic upheaval in the life of the West family. But, unfortunately, PBS trivialized this tragedy with their own editorial comments and an "afterword" by **Pew Oceans Commission** chairman Leon Panetta that turned it into just another anti-fishing rant.

By his words, Mr. Panetta seemed anything but an expert on commercial fishing. This is hard to fathom, considering the time he's invested in chairing the \$5.5 million dollar commission, but he displayed a seeming lack of knowledge of or familiarity with fishing – either elsewhere or in his California backyard. Among his more noteworthy blunders:

Addressing advances in fishing, Mr. Panetta stated "*they have these huge nets that can basically go down and scrape the bottom of the ocean.*" Then, on the nets' size, he said "*oh, they're huge.... they can go as far as eight miles in some instances.*" Can anyone with any real knowledge of net fisheries - whether trawls, gillnets or purse seines – explain what kind of gear he was referring to?

Getting it partially right in Alaska with "*fishermen and the scientists and the community and the state have said, 'This is a vital economic resource for our state. We depend on it,'*" he got it seriously wrong with the subsequent "*as a result, they're taking steps to try to restore their key fisheries.*" Since passage of the Magnuson Act, none of Alaska's important finfish fisheries have been overfished. All of Alaska's groundfish species, 40% of our domestic landings, are fished at sustainable levels, as are salmon. No one is "trying" anything and these fisheries aren't in need of any restoration.

Reminiscing about his grandfather's employment in the Monterey sardine industry, and referencing John **Steinbeck's Cannery Row**, he said "*and suddenly, in the late '40s, the sardines were fished out, they were gone.*" While they were gone in the late '40s, they went because of natural conditions that have caused their populations to fluctuate widely and regularly for millennia. Fishing pressure hastened the fishery's demise, but certainly didn't cause it.

"*There's a problem with regards to what are called the snappers and groundfish, particularly off of the Florida coastline, the Carolinas.*" Snappers and groundfish, snappers and groupers, Southeast or New England, what's the difference? To a layman, particularly to one who is uninvolved or uninterested in domestic fisheries, probably none.

"*The shrimp fisherman in the gulf themselves are concerned about whether or not they're going to be able to maintain their livelihood.*" They're not concerned about catching enough shrimp. They're concerned about declining prices, skyrocketing expenses, government mandated inefficiencies and, right now, recovering from Katrina.

And of course, he squeezed in “*ninety percent of the large fish in the oceans -- by the large fish I mean tuna, marlin, swordfish, sharks -- are gone,*” treating it as a foregone conclusion, not as a controversial theory based on severely limited research and nowhere near acceptance by the scientific community.

Mr. Panetta isn't just another “talking head.” As the chairman of a commission that seems to have been designed and (privately) funded to overturn how our oceans and fisheries are managed, his role in determining our industry's future could be huge.

But that doesn't automatically make him an expert in fisheries.

So why was he allowed to turn a documentary personifying the real-life tragedy of an entire community into yet another verse of the Pew “Chicken Little” refrain? Why didn't PBS find someone to speak authoritatively about “huge nets,” who knows the difference between grouper and cod, who could differentiate between a collapse caused by fishing and one that was inevitable because of natural processes?

Pew's given somewhere around \$10 million to public broadcasting. That's a big hunk of change, particularly for a network that is incessantly cajoling \$50 and \$100 pledges from listeners and/or viewers. Could that kind of money invested in that kind of atmosphere buy that level of exposure – and the credibility that goes with it – on PBS?

I'm afraid the actions, and the facts behind them, speak louder than any words. Rather than a balanced presentation, the viewers got yet another version of Pew's doom and gloom message. And we all got to subsidize it.

p.s. –PBS will soon air **Last Journey for the Leatherback?** with an introduction by Sylvia Earle, another member of the Pew anti-fishing clique. The press release is rife with absurdly overblown “statistics” about longlining and high seas gill netting, but when you're out to destroy an industry, who needs accuracy?

Keeping the con in conservation

09/27/2005

Who needs better science?

Earlier this year, recreational fishing organizations launched an extensive lobbying effort aimed at preventing an experimental longline fishery for swordfish from being carried out in areas that have been closed to longlining, though still open to recreational fishing, for several years. The experimental fishery, which would have been accomplished under stringently controlled conditions by commercial fishing boats, was designed to improve bycatch reduction gear and bycatch reduction techniques in the pelagic longline fishery. The closed areas were selected because there was already a great deal of scientific information pertaining to them from earlier studies. Availability of this large amount of preexisting data would have reduced the size and complexity of the experimental fishery tremendously. About half of the fishing effort was to have been in the closed areas and half in areas still open to longlining.

Needless to say, the opposition by the recreational fishing groups was ostensibly based on conservation. Article after article, web page after web page, rant after rant claimed that allowing the longliners into these areas would result in horrendous bycatch levels – primarily of other highly migratory species (tunas, sailfish, marlin, sharks and swordfish) and sea turtles.

In actuality, estimates were that on the order of 75 white marlin, 50 blue marlin and under 20 sea turtles would have been caught inadvertently in the experimental fishery, divided equally between open and closed areas. Using the latest bycatch reduction gear and techniques, which are mandatory in the pelagic longline fishery, the mortality of the turtles would have been negligible, and most of the marlin would have survived capture.

So the recreational fishing groups that were so concerned about the impacts on marlin and sea turtle conservation in these closed areas went to a tremendous effort to save perhaps a couple of marlin and no sea turtles whatsoever.

They were successful. The experimental fishery in the closed areas wasn't allowed.

The “Big Game” fishing tournament scene

A few months later approximately 450 recreational fishing boats participated in this year's White Marlin Open, a recreational fishing tournament held annually in Ocean City, Maryland. Most of them fished for 3 days. The primary quarry was white marlin, but there were also prize categories for other "big game" species.

The prize awarded for the largest white marlin killed was \$1,650,000. The fish weighed seventy-eight and a half pounds. (For what is perhaps more than you ever wanted to know about big time tournament sports angling, you can visit the tournament website at <http://www.whitemarlinopen.com/>.)

During the tournament, 486 white marlin were caught and released and 13 were killed outright ("boated" in the politically aware vernacular of fishing tournaments). For blue marlin, 79 were released and 3 were killed.

But when it comes to catching white marlin, the anglers in the Ocean City tournament evidently aren't all that good (although the money certainly is). On the first day of the Pirate's Cove (North Carolina) Billfish Tournament a week or so later, the 115 boats that fished caught 129 white marlin (<http://www.pcbgt.com/day4standings05.pdf>). During the entire tournament the 123 boats that were entered caught 488 white marlin and 35 blue marlin. All of the white marlin caught were released, and all but 2 of the blue marlin were released.

And bringing up the rear for this two week period of tournament activity was the Mid-Atlantic \$500,000 fished out of Cape May, NJ and Ocean City, MD. One hundred and sixty-nine boats caught 220 white marlin and 27 blue marlin, with 11 white marlin and 4 blue marlin "boated." (<http://www.tournamentlive.com/index.php>)

In total, during these three tournaments 1,194 white marlin and 135 blue marlin were caught and released while 24 white marlin and 9 blue marlin were killed and brought to the dock.

Live to fight another day?

While no one can accurately predict how many of the marlin that were released subsequently succumbed to the trauma of being caught, estimates of white marlin "catch and release" mortality range up to 59%, depending upon the gear that is used and the techniques that are employed to do the catching (see Application of pop-up satellite archival tag technology to estimate postrelease survival of white marlin [*Tetrapturus albidus*] caught on circle and straight-shank ["J"] hooks in the western North Atlantic recreational fishery by A. Horodysky and J. Graves and available at <http://fishbull.noaa.gov/1031/horo.pdf>.) This means that during these three tournaments, in addition to the 24 white marlin that were definitely killed (or "boated," if you would rather employ the tournament organizers' feel-good euphemism), another 700 could have been killed, along with an additional 70 or so blue marlin, through injuries sustained while they were being "fought" to boatside. (See also <http://www.fishingnj.org/pdfs/LifeAfterCandR.pdf> .)

To save readers from doing the math, that works out to one marlin killed for every three to four days that each boat fished (the Asbury Park Press reported a catch rate of one marlin per boat per day in the 1999 Cape May tournament).

This was just for three tournaments. In both 2003 and 2004 there were over 200 fishing tournaments for highly migratory species held in the United States' EEZ. In every one of these tournaments, points or prizes were offered for both blue and white marlin, so we can safely infer that these species were targeted in all of them.

But not all of the boats that fish for marlin do so in tournaments. There are thousands that don't. And the boats that compete in the tournaments certainly fish for marlin outside the tournaments as well.

So how many recreational fishing boats are there that are actually targeting marlin? No one seems to be counting. How many days a year do they fish for marlin? No one seems to be keeping track. How many marlin are they catching? How many marlin are they killing? When it comes to recreational "big game" fishing, the questions seem to go on and on and on. The answers definitely don't.

It's generally accepted that the use of circle hooks greatly reduces the catch and release marlin mortality. Consider that if circle hooks were used in the three tournaments discussed above, the marlin mortality – exclusive of those fish purposely killed – would be far, far less than 700 fish. As Horodysky and Graves determined, catch and release marlin mortality using traditional "J" hooks can be over 50%. So, it would seem that mandating the use of circle hooks, something that the commercial longline fleet enthusiastically accepted last year, would be a no-brainer for the supposedly conservation minded recreational anglers. (In case you aren't aware of how "conservation-minded" these big game anglers are, Jeff Merrill wrote in an Asbury Park Press article **Big fish, big bucks**, that Cape May tournament organizer Dick Weber "*has always been a strong believer in fisheries conservation in general and billfish conservation in particular, and this tournament has donated well over \$1 million to fisheries' conservation organizations since its inception.*" We'd bet dollars to donuts that a big chunk of that money went to the Recreational Fishing Alliance, a "conservation" organization headed by Viking Yachts – see below - chairman Bob Healey, that claimed credit for stopping the experimental longline fishery described above from taking place.

So what's being done to guarantee the conservation of these marlin, other than the questionable move of shutting down an experimental fishery designed to reduce longline bycatch even farther than it has been already through the mandatory use of state-of-the-art gear and techniques?

According to Dick Weber in the same Asbury Park Press article, "We are actively considering the mandatory use of circle hooks with natural baits and may implement it for the tournament in the future even before NMFS requires us to do so."

Dare we point out that "active consideration" of a conservation technique, no matter how active, has not yet been shown to save any fish.

The National Marine Fisheries Service is currently proposing that the use of circle hooks be mandatory in the recreational white marlin fishery when bait is being used and the Recreational Fishing Alliance is, according to John Geiser writing in the Asbury Park Press on September 25, opposed. Mr. Geiser quotes Jim Donofrio, Alliance Executive Director, "while the RFA supports the continued conservation ethic that has resulted in 99 percent catch-and-release rates for billfish, we are opposed to making the use of circle hooks mandatory," Though the RFA did support the mandatory use of circle hooks in a small recreational fishery targeting spawning striped bass in the Delaware River, they are unaccountably unwilling to extend the same conservation benefits, benefits that the commercial longliners have fully embraced and have been trying to improve upon over the opposition of the RFA, to the marlin that are the quarry of the big game fishing crowd.

And that good old conservation ethic resulting in "99 percent catch- and-release rates" isn't all that effective either, particularly when over half of the fish that are released can end up dead.

The RFA is also opposing the NMFS proposal to cap annual recreational marlin landings at 250 fish, claiming that recreational fishing isn't the problem, commercial fishing is.

But what's a dead marlin or two, or two or three hundred, when recreational anglers are the folks who are doing the killing? After all, they're doing it through "catch and release," and it seems that we're all supposed to think that doesn't result in dead fish.

And while we're on the subject of "Big Game" fishing tournaments and conservation

In the above referenced Asbury Park Press article about the Mid-Atlantic \$500,000 tournament, Dick Weber, the tournament organizer, was quoted "there's so many things that depend on government policy in terms of protecting the fish, maintaining an adequate fuel supply, and keeping a regulatory posture that allows the sport of offshore fishing to continue to be what it is." We've always been mildly interested in the fuel consumption of the boats that tournament anglers use in pursuit of their quarry (and their hundreds of thousands of dollars in prizes), but Mr. Weber's concern over "an adequate fuel supply," coupled with the recent fuel "crisis" brought about by hurricanes Katrina and Rita really brought the issue to the fore. While digging up information for this FishNet, we came across a website that has "road" tests of various yachts (go to <http://powerandmotoryacht.com/boattests> and select the appropriate vessel, then go to the "specs" page). Each of the evaluations includes a table detailing the particular boat's fuel consumption at varying speeds.

Using sport fishing boats of varying sizes (according to Dick Weber in the Asbury Park Press article, in the Cape May tournament "most of the participant's boats are 45 feet and larger"), we found that with their motors running at 2000 rpm, a reasonable cruising speed, the fuel consumption of these typical vessels was as follows:

Boat model/length	Fuel consumption @ 2000 rpm
Grady White Express 35	27 gallons/hour*
Egg Harbor 42	58 gallons/hour
Bertram 51	76 gallons/hour
Rybovich 60	118 gallons/hour
Viking Convertible 74	136 gallons/hour
*The Grady White 35 Express was powered with outboard motors, so we used the fuel consumption at what was reported as the most "economical" speed.	

The reported mileage varied from 1.37 miles per gallon for the Grady White moving at 8 miles per hour to 0.22 miles per gallon for the Viking 74 manufactured by RFA Chairman Bob Healy at 44 miles per hour. It's kind of hard to imagine a boat burning well over 75 times as much fuel to move a single mile than a Chevy Suburban or Ford Expedition SUV so four or five anglers and a crew of two can fish, but apparently that's what offshore "big game" fishing is all about.

We can now relate much more realistically to Mr. Weber's concerns about having adequate fuel supply.

And then, if you still don't like the data that the managers are collecting

On the commercial side, we easily – and effectively – handled the dilemmas that we regularly faced when it became obvious that the data that was being used in formulating fisheries management plans wasn't good enough. We made a commitment to work with the managers and scientists to provide better science. In fishery after fishery we have done this and will continue to do this, to the extent that "cooperative research" is becoming an integral part of fisheries science.

Seems kind of simple and straightforward, doesn't it?

Our recreational fishing colleagues have evidently come to similar conclusions regarding the quality of the data underlying recreational fisheries management, and we would have expected – particularly after they had observed the progress the commercial fishermen had made in working with the managers to acquire better data – them to pursue a similar strategy.

Well, not quite.

According to Tom Rock's column in the August 28 edition of *Newsday*, "*a coalition of sportfishing groups might soon be challenging the way fish are counted by stumping it at the beginning and organizing a boycott against the voluntary collection of all information to recreational fishing collection programs. The idea of a boycott, spearheaded by the United Boatmen of New York and New Jersey and the New York Fishing Tackle Trade Association, would target the Marine Recreational Fishery Statistics Survey (MRFSS) program used by the National Marine Fisheries Service to establish its limits and quotas.*"

On the same day, John Geiser wrote in the *Asbury Park Press* "*activists in the recreational fishing community are so disgusted with the fisheries management process they are considering leading an organized boycott of cooperation with the system. This Mid-Atlantic Tea Party would be the first formal attempt to shake the hitherto impenetrable management system with its haughtily undemocratic attitudes. The effort is being considered by the United Boatmen of New Jersey and New York and the New York Fishing Tackle Trade Association. Repeatedly frustrated and infuriated by a system that fiddles while the recreational fishing industry burns, the coalition announced Friday it is exploring a host of targets it can attack. Foremost is the Marine Recreational Fishery Statistics Survey, that pseudo-census of anglers and their catches, that has served for years as the basis for management decisions.*"

We can sympathize with our recreationally oriented colleagues when it comes to feeling set upon by the fisheries management establishment. However, we can't help feeling that the solution to a problem that has its roots in the unavailability of accurate data doesn't have much to do with organizing a boycott to stop the existing flow of data. That brings to mind expressions involving noses and faces and cutting implements, doesn't it?

C'mon guys, wake up and join (at least) the twentieth century. Science is here to stay, and so is fisheries management based on science. Unless you have anything to hide, you aren't going to suffer if the managers have more accurate data concerning your fisheries, are you? The only way they are going to get that is with your help and your cooperation.

And last but certainly not least

In an act of not uncharacteristic hubris, the Ocean Conservancy has been peddling what it terms its "Overfishing Scorecard," in which it purportedly rates the various regional fisheries management councils, summarizing "the known data from each of the eight regional fish councils and reports on their progress toward ending overfishing and rebuilding overfished stocks."

Needless to say, the report focuses solely on the fish, paying no attention at all to the fishermen or the fishing communities that are dependent on those fish for their well-being.

Fortunately, the regional fisheries management councils that are being rated aren't constrained by such a myopic view of the fisheries in our Exclusive Economic Zone or of our government's role in managing them. As a matter of fact, the Magnuson Fisheries Conservation and Management Act, the federal legislation that controls the regional councils, rightfully recognizes the importance of the human dimension of our various fisheries. There are ten "National Standards" that any fishery management plan prepared, and any regulation promulgated to implement any such plan through the Act, must be consistent with. Six of these ten standards (numbers 1,4,5,7,8 and 10) deal directly with the human dimensions of the fisheries.

In these days of rampant coastal overdevelopment, at a point when any waterfront property in most regions of the country has doubled, trebled, quadrupled or more in value in the last few years, our fisheries managers are becoming increasingly aware of the necessity of preserving on-shore infrastructure. And to their credit, they are starting to realize that there is a threshold level of fishing activity, both recreational and commercial, necessary to maintain this infrastructure. Anyone with an actual interest in the future of fishing in the U.S. knows this, and knows that it's far more involved than the moronically simple-minded idea that healthy fish stocks will equate to healthy fisheries. Oceans full of fish aren't going to do any of us any practical good without the wherewithal to catch them – for sport, for profit or for sustenance.

Were the Ocean Conservancy to grade the various councils not just on their ability to "save" the fish stocks, but also on their ability to save the many businesses that depend on them, the scorecard would probably look quite different. For example, along with increasing fish stocks we still have a commercial fishing industry and a recreational fishing industry in New England. What's threatening the future of those industries today isn't going to be the future health of the stocks, it's going to be whether harvest levels continue to be such that the businesses that depend on them can survive. If not, they'll be replaced in fairly short order by tee shirt shops, restaurants and condominiums, and that's something that's irreversible.

The Ocean Conservancy's and other so-called "conservationist" organizations' continuing slavish devotion to the health of the fish stocks regardless of the health of the businesses and the entire communities that depend on the harvest of those stocks puts the lie to their claims that what they are doing is for the good of recreational and commercial fishermen.

Who, us? An examination of who's catching what in the world of fishing

09/27/2005

Ever since several Pew-funded researchers had the temerity to suggest that recreational angling could actually be detrimental to the health of fish stocks (**The Impact of U. S. Recreational Fisheries on Marine Fish Populations**, F. Coleman, W. Figueira, J. Ueland and L. Crowder, *Science*, August 24, 2004), recreational fishing advocates have been in a tizzy, vociferously proclaiming to anyone who will listen that "it isn't us killing all the fish, it's those nasty netters."

According to Karl Wickstrom, editor of Florida Sportsman magazine, "*this study is designed to obfuscate the fact that industrial level overfishing is the cause of the global fishing crisis we have. There is a mountain of information saying commercial fishing is the cause of fish depletion*" (U. S. anglers big impact on fish stocks, CNN.com, August 27, 2004).

Then in a recent column the Recreational Fishing Alliance's Gary Caputi wrote "*it is the extensive expansion of commercial landings that has caused overfishing.*" He then elaborated "*in the past 22 years the commercial harvest has expanded by 57.8 percent, while the recreational catch has declined by 23 percent. Landings data for species such as blackfish, sharks, porgies, tuna and summer flounder, clearly show that in the past 20 years, the total catch of recreational fishermen has declined and has been replaced by an expanded commercial catch.*"

Needless to say, Mr. Caputi's words piqued our interest – particularly since he neither specified what "commercial harvest" he was writing about nor disclosed the source of his information. We hadn't addressed who is catching what in our waters since 1997, when we did take a fairly close look at the mid-Atlantic situation. Needless to say, at the time we weren't surprised to see that in fisheries that were shared between recreational and commercial fishermen, our for-fun colleagues were more than capable of killing more than their share of fish (see *Commercial harvesting and sportsfishing - who's catching what?* at <http://www.fishingnj.org/njnet5.htm>). But, based on what he had written, and on his colleagues' chronic claims that they "weren't killing hardly anything at all," we decided to do an update.

Availing ourselves of the extremely user friendly (at least if you are actually interested in finding out who's killing what when it comes to fishing) commercial and recreational fishing databases that the folks at National Marine Fisheries Service have made available on their website, we decided to first verify that commercial fishing had really grown at the expense of recreational fishing over the last two decades.

Looking at the aggregate commercial landings from all states, we did indeed see that they had increased significantly since the early 1980s (see Chart I at <http://www.fishingnj.org/recstuff/MinusAlaska.htm>). Deciding to look a little more closely at the data, however, we found that Alaska's commercial landings had grown at such a rate during this period as to mask a decline in total landings from the rest of the country (see Charts II and III). And virtually all of the growth in Alaskan landings were in two fisheries. Pacific cod landings increased from 60 million pounds in 1984 to almost 2/3 of a billion pounds in 2003, the most recent year for which data is currently available, and Alaskan pollock landings increased from under 10 million pounds in 1984 to 3 and 1/3 billion pounds in 2003. In 2003 the total commercial landings in Alaska were 5.3 billion pounds. The two fisheries almost entirely responsible for the tremendous growth in Alaskan landings (in 1984 total Alaskan landings were just under a billion pounds) couldn't in any realistic way be considered to be in competition with recreational fisheries.

Regarding the "declining" recreational landings, we totaled them for all species for each year and, in accordance with Mr. Caputi's pronouncement, there really was a decline over the latest twenty years for which data is available. However, on examining that data we noticed that bluefish play a similar role in recreational landings as do Alaskan Pollock and Pacific cod in commercial landings. Recreational bluefish landings in 1986 were 93 million pounds – slightly over one quarter of the total recreational landings for the U. S. As we did with Alaskan pollock/Pacific cod, we looked at the data for those years minus bluefish landings and saw that recreational landings had actually increased (<http://www.fishingnj.org/recstuff/TotalRec.htm>).

Taking this a step further, we took the recreational landings of marine fish from Alaska from 1994 to 2004 (in number of fish from <http://www.sf.adfg.state.ak.us/Statewide/ParticipationAndHarvest/index.cfm>) and compared them to the landings of Alaskan Pollock and cod from those same years. Assuming that Mr. Caputi and Mr. Wickstrom were right about increasing commercial effort driving down recreational landings, we would have expected to see a decline in "adjacent" recreational fisheries when these two commercial fisheries expanded so rapidly. That wasn't the case. The recreational landings grew at about the same rate as the commercial landings of cod and pollock (<http://www.fishingnj.org/recstuff/AlaskaStatus.htm>).

So we have Mr. Caputi, Mr. Fosgren and other recreational fishing advocates blaming declines in their recreational fisheries that never really happened on an increase in commercial landings that never really happened either, or at least never happened in commercial fisheries that

would impact any recreational fisheries. The increase in commercial landings was due to an increase in the landings of two species and the decrease in recreational landings was due to the decline of a single species.

Our skepticism having been piqued by this seeming distortion, we decided to dig into the data a little farther, next looking at recreational and commercial fishing mortality in the major East and Gulf coast fisheries that have significant landings by both user groups.

Those who are familiar with the NMFS recreational and commercial databases will know that they differ in the species they cover. Accordingly, we initially used data on those species that were treated similarly in both, choosing twenty-five to compare. We retrieved commercial and recreational landings in pounds from 1993 to 2003. We subsequently included six species that are commercially significant but support no recreational fisheries.

For recreational landings we used the NMFS category Type A + B1 (fish that are brought back to the dock in a form that can be identified by trained interviewers or fish that are used for bait, released dead, or filleted). We ignored fish “caught and released,” in spite of the fact that catch and release mortality in some recreational fisheries (striped bass and bluefish, for example) can be quite significant. We plotted yearly recreational and commercial landings (in pounds) for each species and linear trend (regression) lines for each species.* The charts are all available at <http://www.fishingnj.org/recstuff/RecCatch.htm>

We also determined the proportion of recreational to total landings for each species for each year and plotted them on separate graphs.** Thus, we’ve made available in an easily digestible series of charts a picture of what proportion of twenty-five selected species recreational and commercial fishermen are catching, whether the amount of each species they are catching is increasing or decreasing, and whether the recreational “share” of each species is increasing or decreasing (needless to say, when the proportion of the total catch taken by recreational anglers increases, the proportion taken by commercial fishermen decreases).

And with the six fisheries that we consider to be solely commercial because they have no significant recreational component, we plotted the percentage of each year’s catch as a portion of the total catch of that species over the time period (see <http://www.fishingnj.org/recstuff/Comtrends.htm>). This allowed us to demonstrate on a single chart whether the landings for each species were increasing or decreasing. In five of these fisheries the landings have been trending downward since 1993 and in one, ocean herring, they have been trending upward. (We included the swordfish fishery in this chart because no recreational landings are recorded in the NMFS recreational fishing database. However, in recent years an important recreational swordfish fishery has developed and landings appear to be increasing dramatically from year to year. Verification of this increase is readily available through visiting “Swordfishing Central” at <http://www.swordfishingcentral.com>, a website that focuses entirely on the recreational swordfish fishery).

Were we to accept Mr. Caputi’s and his recreational fishing colleagues’ assurances, we would expect to see commercial landings in the fisheries increasing, recreational landings decreasing, and the recreational “share” decreasing as well; if not in all of the species we examined, then at least in the overwhelming majority of them.

This wasn’t what we found. As a matter of fact, this wasn’t anywhere near what we found. Instead, we found that landings were increasing in eight commercial fisheries out of thirty one and in fourteen recreational fisheries out of twenty-five (and remaining level in two commercial and two recreational fisheries). We also found that in the time period covered more fish were harvested by recreational anglers than by commercial fishermen in twelve of these fisheries, and in 2003 that number had increased to thirteen.

Then when we looked at the recreational “share” of the particular fisheries (by dividing the total landings for each year into the recreational landings for that year, we got a relative proportion of recreational landings per year). We saw that it had increased in sixteen of the twenty-five shared fisheries. Of course, it had increased at the expense of the commercial harvest, so the commercial share had decreased in those same sixteen fisheries.

We finally addressed Mr. Caputi’s statement that “*landings data for species such as blackfish (tautog), sharks, porgies (scup), tuna and summer flounder, clearly show that in the past 20 years, the total catch of recreational fishermen has declined and has been replaced by an expanded commercial catch.*” Without a lot of trouble we discovered that recreational anglers have been increasing their proportion of at least three of the five fisheries he focused on; tautog, scup and summer flounder. We don’t know how the landings compare in the shark and tuna fisheries because the recreational and commercial databases don’t address these groups of fisheries in the same manner, but in the yellowfin tuna fishery - the most important tuna fishery of the Atlantic and Gulf – the recreational share and the recreational landings have both been increasing as well (for a comparison of the recreational and commercial shares of these fisheries over the last two decades, see <http://www.fishingnj.org/recstuff/20yearcomp.htm>).

So what are we to make of all of this? It’s hard to credit Mr. Caputi’s claim that “it’s the extensive expansion of commercial landings that has caused overfishing,” and while Mr. Wickstrom might have been accurate when he wrote “there is a mountain of information saying commercial fishing is the cause of fish depletion,” all of that “mountain” of information is apparently of the same caliber as Mr. Caputi’s, at least concerning our domestic fisheries.

A couple of days immersed in the NMFS data and some fairly simple spreadsheet manipulations have shown us that:

- In spite of the claims of recreational fishing activists, there is no evidence that increases in commercial landings have driven down recreational landings. Nor, according to NMFS data, are their claims that commercial landings have increased over the last two decades (except in Alaska) valid.
- In Atlantic/Gulf coast fisheries that are shared between recreational and commercial harvesters the recreational share (even discounting catch and release mortality) has increased in two-thirds of the fisheries we examined.
- In over half of those shared fisheries the recreational harvest exceeded the commercial harvest.
- Landings were increasing in almost half (twelve out of twenty five) of the recreational fisheries and less than a third of the commercial fisheries (ten out of thirty one) that we examined.

We can certainly understand the recreational fishing activists' attempts to convince their constituents, the general public and federal and state policymakers that their inability to catch whatever they want whenever they want to catch it is the fault of commercial harvesters. In fact, it sometimes appears as if that's all they have to base their campaigns for increased quotas upon.

We can't, however, fathom the seemingly total concentration of fisheries managers on their two preoccupations – conscientiously reducing commercial fishing effort and studiously ignoring the obvious impacts of the increasing recreational fishing-induced mortality (exacerbated by “catch and release” angling) on the sustainability of our fisheries. In fact, the just-released NOAA Recreational Fisheries Strategic Plan for FY 2005 to FY 2010 proudly proclaims:

“Saltwater recreational fishing is more popular than ever. Over the past decade, the number of angler trips rose nearly 10 percent, to 82 million trips in 2003. Not surprisingly, the number of fish caught by anglers since 1993 has increased proportionately. Although saltwater anglers have caught more fish in recent years, they also have released their catch more often” (available at http://www.nmfs.noaa.gov/recfish/Fisheries_Strategic_Plan.pdf)

Notice that whoever was responsible for penning these words, in spite of recognizing the reality of who's catching how much of what, attempts to leave the reader with the impression that, because of the growth in “catch and release” fishing, recreational fishing mortality isn't increasing in spite of increased recreational fishing pressure. Nice try, but as we've just shown in fishery after fishery, NMFS' own data proves the contrary.

Commercial fishermen have paid and continue to pay for real conservation. Their reward: continuing efforts by the management establishment to further reduce commercial fishing effort. Recreational fishermen continue to pay for bigger and better boats, for longer and more expensive fishing trips, and for the ability to catch – and to kill – a higher proportion of fish every year.*** Their reward: carefully crafted statements disguising what's really going on from the agency that's supposed to be managing fisheries for everyone.

And because commercial landings can't keep pace with consumer demand, we import more seafood every year. Is it any wonder?

* The NMFS recreational fishing database does not include Texas, which with its large recreational fisheries in red drum, black drum, red snapper and spotted sea trout would have increased the recreational landings of these species significantly.

** The time interval selected can be critical. As we demonstrate with striped bass, while the trend line shows a decline of about 2% in the recreational proportion of the total striped bass catch from 1993 to 2003, when the time period is extended to twenty years we see a 20% increase in the recreational proportion.

*** For an explanation of the role that recreational fishing expenditures play in fisheries management, see <http://www.fishingnj.org/netusa4.htm>.

Towards a rational oceans policy

(in National Fisherman)

10/03/2005

The United Nations' Food and Agriculture Organization (FAO) reported that in 2002 the world production of pork was 95 million tons, poultry was 72 million tons, beef was 60 million tons and goat was 11 million tons.

You don't have to be an agricultural expert to know that neither a corn field nor a heavily grazed pasture bears much resemblance to virgin grassland or forest. If you've driven across North America, you know that you can go for miles without seeing much more than wheat, corn or soybean fields. And if you've flown cross country and spent any time looking out the window, for much of the flight the most noticeable feature had to be a seemingly endless progression of cultivated fields.

Of course, this agricultural development isn't limited to North America. According to the FAO, about a fourth of the world's land area is devoted to either growing livestock feed or for grazing. Humankind's insatiable appetite for calories has drastically altered the terrestrial ecosystems of all but one of our continents.

No one is insisting that we should be producing all of this livestock, using all of this land, without any impact on the environment.

The production of fish and seafood surpasses that of any other animal protein. In 2002 it was just over 100 million metric tons (a level that it's hovered around for years).

Yet, while accepting a world that has been radically altered by agriculture, some so-called environmentalists insist that in the act of producing a greater tonnage of protein than cattle ranchers or poultry farmers do, commercial fishermen should be prevented from having any effect on the ocean environment. They actually preach that, for whatever reasons happen to be in vogue at the moment, the oceans should remain pristine and free from fishing's impacts.

According to them, fishing gear and techniques that have any impact on the ocean ecosystem are unacceptable. Going back almost a decade, they were bolstering their arguments by comparing the size of nets to Boeing 747 airliners. Then they segued into gear "bulldozing" or "clear cutting" areas of ocean bottom the size of continental land masses. Most recently, it has been the destruction of "luxurious forests" of deep water corals, supposed critical areas that few if any in the environmental community had paid any attention to up until the time when fishing gear was implicated in their supposed destruction.

It's perfectly obvious that we aren't going to have any agricultural production without impacting the terrestrial environment; in fact, it's memorialized in America the Beautiful, with fruited plains and amber waves. No agricultural impacts equal no agriculture.

So, should we be expected to fish – at least at any meaningful level of production – while having no impacts on the ocean environment? Any rational analysis would suggest we shouldn't, but since when have the anti-fishing forces been interested in rationality?

The very act of harvesting fish causes change. While a stock can be fished sustainably with 20% or 30% or more of the biomass being removed every year, that removal will have an impact.

Then there are the impacts of fishing gear. Dragging a net or a dredge across it is definitely going to alter the bottom, and anything that alters the bottom is anathema to these "environmentalists." Or is it? When creating artificial reefs, natural bottom is covered with thousands of tons of surplus weaponry, decommissioned ships, construction rubble and obsolete subway cars. When was the last time one of the conspicuously anti-commercial fishing organizations demanded that the natural bottom be protected from burial by megatons of societal refuse? (I have to acknowledge here Clean Ocean Action's valiant attempts to keep the waters in the New York Bight from being used as a convenient junk yard.) It seems like some alterations are ok.

It should go without saying, but the bottom impacts fishing gear as much as the gear impacts the bottom. More "wear and tear" on the bottom means more wear and tear on the gear, and that means higher operating costs. Gear researchers and fishermen have been working on nets and dredges that fish "lighter" for years, but today's \$3 a gallon fuel makes improvements in this area imperative.

Unless fishing effort shifts back to primitive and inefficient technologies, harvesting the fish and shellfish that are found on or near the bottom is going to have an impact on that bottom. We can, and we are, working constantly to reduce that impact, but we're not going to get away from it without regressing to hand harvesting methods in use centuries ago. With the world's population at seven billion and rising, this isn't going to happen. Isn't it time we started working towards a public policy that accepts this while still protecting the areas that need to be protected?

The case for Bureaucratic Monitoring Systems (BMSs)

(in National Fisherman)

11/02/05

A good friend of mine is a New Jersey gillnetter. An acknowledged highliner, he's served and continues to serve on several state and regional advisory committees, has always participated in the management process, and has never received a NOVA or been convicted of violating any

federal or state fisheries regulations. He's the kind of fisherman the managers should try to accommodate in every way possible, because he and fishermen like him are the future of the commercial fisheries and the bureaucracy that has grown up around them.

Like every prudent fisherman, he tries to maintain every permit he can. One requires that he have a Vessel Monitoring System (VMS) operating 24 hours a day, 7 days a week, 52 weeks a year. This is so that the enforcement people will know he isn't fishing in an area seven states away where the use of gillnets or longline gear is seasonally prohibited. The assumption is, as with all commercial fishermen, that he is *de facto* likely to violate the closed area/season regulations; and the burden is on him to prove he isn't.

It's impossible to know his VMS unit is operating correctly without an on-board computer. He doesn't have one and his unit evidently stopped transmitting. How did he find this out? Not by a phone call from NMFS, or a casual note or email asking that he get the unit checked and repaired (remember that the closed season/area that his boat's being monitored for is several months and hundreds of miles away). Rather, he received a registered letter that in part read "**please be aware the vessel should not return to sea with gillnet, or pelagic/bottom longline gear on board the vessel without first correcting the unit's reporting problem.**" Complying would have cost him perhaps a week's worth of fishing, but it's apparent that the feeling in NMFS is that's a negligible price to pay to be able to prove to The Man that you aren't breaking any laws or ignoring any regulations.

The justification for this "guilty until proven innocent" philosophy is that harvesting public resources is a privilege, not a right, and that you should be willing to accede to any conditions that "the system" deems appropriate, no matter how onerous they are, for this privilege.

This got me thinking, and one of the things it got me thinking about was all of those bureaucrats paid from the U.S. Treasury. The Treasury would seem to meet the criteria of a "public resource," wouldn't it? And, accepting that people are only people, we can assume that bureaucrats are likely to lie, cheat and steal at about the same rate as fishermen.

Hence, wouldn't it be reasonable, in order to protect us taxpayers who try to keep the Treasury filled, to make it the responsibility of bureaucrats to prove that they are performing their bureaucratic functions where, when and how they are supposed to? While I never kept any kind of tally, it sure seems that more bureaucrats every year are caught with their hands in various illicit cookie jars that are fishermen caught fishing outside the regs. And the potential cost to the public of bureaucratic shenanigans is certainly greater than the cost of any imaginable illegal fishing.

So why isn't the wearing, or perhaps implantation if that is a practical alternative, of Bureaucrat Monitoring Systems (BMSs), required as a condition of public employment? Perhaps as ankle bracelets *a la* Martha Stewart, and to be worn 24/7, 364 days a year. Every government job has requirements: hours worked, number and duration of coffee and lunch breaks, number of sick and personal days, etc. With required BMSs, we would know whether a bureaucrat on "sick time" was at home, at the doctors, in a hospital or on the golf course. We would know when a bureaucrat had exceeded the permissible time in the employee lounge or out of the building for lunch. With vital signs monitoring, we would know whether a stationary bureaucrat was at the desk working, nodding off or taking a nap. A bureaucrat would be hard pressed to pass off three days spent on a beach in Bermuda as a family emergency. Were a bureaucrat anywhere but home at 3:00 am on a weeknight, there's a good chance he or she was engaged in some illegal or immoral activity, with all but guaranteed negative effects on job performance.

And, of course, if a bureaucrat's BMS was on the fritz, he or she would be required to remain in the office or at the work station until it was operational again. If not, how would we taxpayers know that we were getting our money's worth?

Now all we need is a federal bureaucracy in which to implement an experimental BMS. Any suggestions?

It's called "fisheries management"

(in National Fisherman)

12/01/2005

But of all those things – anthropogenic and natural – that influence our fisheries, how many are we actually managing?

Think of a fishery, then think of everything that impacts it. If you can't come up with a half a dozen factors, you aren't really trying. Obviously, fishing is going to be on your list. And maybe water temperature and "traditional" industrial pollutants will be there to. If you've really given it some thought, perhaps you've also included food availability and predation. But what about spawning success, larval survival, inter-species

competition, “upstream” habitat loss or degradation, catch and release mortality, seismic profiling, decadal - or longer - natural cycles, or residues of pharmaceuticals and personal care products (household pollution) in the water?

Any one of these might play an important role in the health of particular fish and shellfish stocks. But how many can we, and more importantly, how many do we control?

Since the Magnuson Act became law, and in some instances since well before then, we’ve gotten pretty effective at controlling commercial fishing. Commercial fishermen are told when they can fish, where they can fish, what gear they can use, how big their vessels can be, who they can fish with and how many of what size of fish they can catch. But, in spite of this gruelingly stringent level of control, some fisheries refuse to respond the way they are supposed to.

What’s the problem? Depending on whether you’re an anti-commercial fishing recreational fisherman or an anti-commercial fishing environmentalist, it’s either that commercial fishermen are cheating or that the management system has been co-opted and conflicted by commercial fishing interests – or some combination of the two. Hence we have demands for even more drastic restrictions on fishing, for around-the-clock, around-the-calendar surveillance of fishermen, for removal of commercial fishermen from the decision making process, for large areas of the ocean to be declared off limits to commercial fishing, and for the human aspects of the commercial fisheries to be given even less consideration in the management process.

But these all assume that commercial fishing is the root cause of our non-responsive fisheries.

For at least a decade we’ve been living with the fall-out of a large segment of the environmentalist community’s fixation on fishing as the source of most of our fisheries- and ocean-related problems. Millions of foundation dollars are spent each year on research “proving” that it’s all about fishing, and on subsequently peddling that research to a largely uninformed public (ten years ago could anyone have imagined that “leading scientists” would be holding press conferences to announce publication of the latest “fishing is evil” article?). Aside from the obvious and painful impacts on commercial fishermen, dependent businesses and coastal communities, this myopia is effectively drawing attention away from other, and equally or more significant, human activities.

Speculating on why multi-billion dollar foundations are so heavily invested in this misdirection is a great way to while away a winter’s afternoon, but what accounts for the managers’ fixation on fishing as the factor that drives the whole system? In a nutshell, it’s got to be bureaucratic necessity.

Fisheries management today is a multi-million dollar endeavor, burning up a lot of tax dollars, employing a lot of people and exercising a lot of power. But that power is restricted to controlling fishing activities, and considering that the management establishment has proven largely ineffectual in dealing with recreational fishing, that leaves commercial fishing as the thing that it can most effectively control. So, suppose that commercial fishing might be having no – or relatively little – impact on a fish stock. Suppose that a fishery’s condition is totally or mostly dependent on non-fishing factors. Is the fisheries management bureaucracy likely to consider the impacts of a human activity or a natural phenomenon that it has no influence over?

Ideally, yes. In actuality, bureaucracies don’t work like that (and let me emphasize here that bureaucracies can and do take on a life of their own, moving in directions that have little to do with the individual actions of the bureaucrats that make them up). A “successful” bureaucracy might not be willing to recognize it is incapable of doing what it is charged with doing or that something it can control isn’t worth controlling. So fishing gets most of the attention while other factors are ignored, and fishing is being managed while not much else is.

The downside of this is obvious. So is a reasonable, and easily implemented, solution. Mandate the inclusion in every management plan of an estimate of the relative importance of all those factors having a significant impact on that particular fishery. This would allow our fisheries management resources to be applied where they would be most effective, conserved where they would otherwise be squandered, and would serve as an all too necessary reminder that it’s not just fishing that’s affecting the fish.

An homage to Michael Crichton

(in National Fisherman)

01/06/2006

According to one of the main characters in his latest bestseller, *State of Fear*, “*Modern people live in abject fear. They are afraid of strangers, of disease, of crime, of the environment. They are afraid of the homes they live in, the food they eat, the technology that surrounds them....they are convinced that the environment of the entire planet is being destroyed around them. Remarkable! Like the belief in witchcraft, it's an extraordinary delusion—a global fantasy worthy of the Middle Ages. Everything is going to hell, and we must all live in fear.*” Unfortunately, while the words, the character and the book are pure fiction, the sentiments are real.

Crichton makes it abundantly clear, both in *State of Fear* and in his afterword, that agenda-driven science, particularly when it's confused with or substituted for real (meaning objective) science, is a threat to all of us. This won't come as a revelation to anyone associated with commercial fishing; professional fear merchants have been making doom and gloom predictions about the future of our fisheries for years. We've been suffering the consequences

What's agenda-driven science? Yet again, in dealing with fisheries the folks at the Pew Charitable Trusts have provided several excellent examples.

The recommendations of the Pew Oceans Commission, and their subsequent high profile selling, have had a significant impact on public perceptions of our industry. The foundation that the Pew Commission built on was a series of reports addressing the “state of the science” in various subject areas. Because of the growing emphasis on ecosystem management, I looked at one, *Ecological Effects of Fishing in Marine Ecosystems of the United States*, in fair detail a while back (the resultant article is available at <http://www.fishingnj.org/netusa23.htm>). Among other things, I found that two of the three authors who contracted with the Pew Oceans Commission to prepare the report were recipients of Pew Fellowships, that of the 179 references cited in the report, well over a third had one or more authors directly connected to “first generation” Pew funding, and that of those references that were written since 1995, almost half were connected to Pew by funding.

In the past several decades how many thousands of marine and related researchers have published how many tens of thousands of papers on subject matter dealing with or relevant to the ecological effects of fishing? How many of them were beneficiaries of Pew funding? How well represented in the report was the work of those who weren't? If we reasonably assume that Pew-sponsored research has a bias, is there any way we can suppose that this report was an objective representation of the state of the science dealing with fishing impacts?

All the folks in Washington who will be deciding how to amend the Magnuson Act will have been exposed to the conclusions of a “Blue Ribbon” commission chaired by former Congressman Leon Panetta. Those conclusions were largely justified by research funded by the same Pew Charitable Trusts that paid \$5.5 million to establish and operate the Commission. What are the odds that Congress has been left with the impression that the underlying research was representative and objective.

Pew SeaWeb has a website. On it is an “Ocean Citations” section containing “Selected Science Publications on Ocean Issues” (note the emphasis on science). It contains 483 citations for publications dealing with fishing impacts, 96 with coastal development and 43 with oil pollution. I'd venture that having ten times as many articles listed dealing with fishing impacts than for oil pollution and five times as many as those dealing with coastal development is going to have an effect on anyone who looks at those pages. What message is he or she going to draw from that regarding what's “endangering” the oceans?

I did a Google search on some of SeaWeb's categories of ocean issues. Of the three attributable to commercial fishing, “overfishing” yielded 1,900,000 hits, “trawling impacts” yielded 357,000 hits and “bycatch” yielded 523,000 hits. That's less than 3 million in total. “Coastal development” yielded 34,600,000 hits, and “oil pollution” yielded 22,900,000 hits, each an order of magnitude greater than the total for fishing impacts. If we assume that the internet has become a reasonably accurate measure of interest in and writings on various subjects, and that a Google search is a somewhat accurate sampling of all of the web content available, then the ocean citations listed on the SeaWeb website seem to be pretty far from an objective cross section of relevant literature. But is anyone who visits the website going to figure that out?

It might be a bit difficult to define agenda-driven science, but it's sure easy to recognize it when it smacks you in the face, isn't it.

Blame it all on what we're catching!

04/01/06

The entire focus of what is considered fisheries management today is on first blaming (generally commercial) fishing for any situation involving the perception that there are not enough fish, and then controlling (generally commercial) fishing to return a population of fish to what is

presumed to be some optimum level. And most recently this has even been extended to restoring once healthy habitat that has been supposedly compromised by (generally commercial) fishing.

Why this focus on fishing? The logical answer would seem to involve an old adage dealing with smoke and fire. Is that necessarily so, or are there other factors at work instead?

A very brief history of wildlife management in general

Even before we in the colonies were attempting to hunt bison and passenger pigeons and anything else that was fit to eat or wear or shoot into extinction, the folks in Europe were realizing that such a strategy didn't bode well for the future of small furry and finny creatures. Accordingly, the creatures were all claimed by members of the aristocracy, who proceeded to manage them (or more correctly, to have them managed) on their estates and on public lands. Needless to say, this was a fairly simple undertaking, aimed at controlling fairly simple and fairly artificial systems to "sustainably" produce a handful of desirable critters for the lords and ladies of the manor and their guests to eat or catch or shoot. Apply a few simple rules – don't shoot too much, don't catch too much and keep the peasants out – and you'd be in business for decades. This was because there were few factors affecting the highly controlled forests or lakes or rivers other than harvesting.

Moving forward – or perhaps not, at least as far as effectively managing fisheries was concerned - a few hundred years, in a lecture given at the Fisheries Centennial Celebration in 1985 (**The Historical Development of Fisheries Science and Management**, http://www.nefsc.noaa.gov/history/stories/fsh_sci_history1.html), William F. Royce quoted Milton C. James, who wrote in 1951 *"The fishery administrator starts his functioning with a background of a vast, unorganized ignorance, illuminated by occasional flashes of traditional legend, hearsay, inference, assumption, guesswork, and praise be, an increasing backlog of scientific theory and fact coupled with the experience gained from trial and error. The administrator, having no firmly fixed starting point of fact, must then chart some sort of course in the hope of arriving at the only definite landmark in his harassed existence -- that represented by a stable, sound, productive fishery. This part of the job, nevertheless, might be considered relatively simple, calling for nothing more than a system of Spartan, conservative restraints and restrictions upon the taking of fish. By always leaning over backward in regulating, giving the resource the benefit of the doubt, he might come up with reasonable assurance of protecting the resource, except that the economic survival of thousands of individuals, hundreds of communities, and dozens of counties, may be affected by the administrative action taken."*

Royce followed this with *"the dry wit of Milton C. James, who for many years was the Assistant Director for Fisheries of the U.S. Fish and Wildlife Service, is as pertinent today as it was in 1950 when he made that statement at the Gulf and Caribbean Fisheries Conference."* We agree with Royce completely here, but probably not for the same reasoning. What James wrote wasn't pertinent in 1951, it wasn't pertinent in 1985 and it isn't pertinent today. At least back in 1951 we didn't know any better, but by 1985 it should have been obvious that there were many other factors, both man-caused and natural, that affected our fish stocks.

Have we grown out of it?

A rational and well-informed person, one who was familiar with the advances that have been made in the last half a century in understanding ecosystems, how they function and what our effects on them are, would assume that fisheries management had gotten beyond the simplistic view that (mostly commercial) fishing was invariably the major determinant of the health of fish stocks. With increasing knowledge of the downstream impacts of what goes on upstream, with the detection of various chemical pollutants in marine organisms far removed from any identifiable source, with the identification of weather/climate cycles and the attendant regime shifts that they bring about, and with a realistic grasp of the importance of wetlands and estuaries to inshore and near shore fisheries, it's hard to imagine that we haven't moved beyond the "blame it all on fishing" paradigm.

Unfortunately, the belief that if you can limit fishing you'll be able to protect the fish is still at play in marine fisheries management today. In spite of the fact that estuaries and oceans are tremendously complex systems affected by myriad natural and anthropogenic activities, our fisheries management system is still based on controlling the fishery by controlling the harvest.

This is most convincingly demonstrated by the fact that in fisheries management only two sources of mortality are recognized. One of these is – you guessed it! – fishing mortality. The other is termed natural mortality, though it is defined as *"that component of total mortality not caused by fishing, but by natural causes such as predation, diseases, senility, pollution, etc."*¹

"Refining" this definition of natural mortality, we have from NMFS *"that part of total mortality applying to a fish population that is caused by factors other than fishing. It is common practice to consider all sources together since they usually account for much less than fishing mortality."*² While it's kind of hard to imagine that fishing is "usually" the major cause of mortality in a fish population (of all of the hundreds or thousands or millions of eggs that a fish produces each year, a very, very small proportion survive to be caught by fishermen), and while it's guaranteed to skew every discussion of mortality in fisheries against fishing, that's the official government position.

Note that pollution is considered a part of natural mortality, as are any other anthropogenic effects other than fishing. We'll get back to that later, but for now, consider the ramifications of recognizing only two sources of mortality, one "natural" and the other caused by fishing, when dealing with a fish population.

It's been ingrained in modern society that anything that is "natural" is considered to be good and desirable, and woe to anyone who would dare to trifle with the natural order of things. Who could forget the "it's not good to fool Mother Nature" margarine commercials of a few years back? Of course, the average person doesn't have any idea that when it comes to fisheries management, mortality brought about by pollution, in fact mortality brought about by anything other than fishing, is considered "natural," and is automatically considered "good," leaving fishing as the only "unnatural" factor affecting fish stocks.

Is this the wrong way to manage?

If commercial fishing were the only, or even the predominant, source of mortality impacting a fish stock, then no one could argue that focusing on managing commercial fishing wouldn't be the most effective way of managing it. On the other hand, it seems equally inarguable that if commercial fishing weren't the only or the predominant source of mortality, then to focus solely on commercial fishing wouldn't be effective. Rather, such a focus would be a virtual guarantee that commercial fishing on that stock would be "managed" into oblivion.

As evidenced by commercial fishery after commercial fishery enduring ever-increasing restrictions for year after year with no relief in sight, managing fish stocks by relentlessly cutting back on commercial fishing effort isn't working the way it's supposed to be. The anti-fishing activists blame this on a fishery management system that is compromised by conflicts of interest and is therefore unwilling or unable to impose the strong medicine that, in their estimation, curing our fisheries requires. Accordingly, they are in the midst of a campaign to amend the Magnuson Fisheries Conservation and Management Act to remove the slight bit of flexibility from the management process that at this point is the only thing allowing a number of commercial fisheries to survive.

But what if there are factors at work on particular fish stocks, factors that would be considered "natural" by the fisheries managers and thus unworthy of their attention, that are significantly influencing the health of those stocks?

A major "natural" source of mortality

We'll start with the easiest and most understandable factor with the potential to significantly affect our fisheries; human population growth on the coasts, or more precisely, the impact of that growth on the productivity of inshore and near shore waters. If you've bought into the fisheries managers' vocabulary, this is a "natural" source of fish mortality that is insignificant when compared to fishing mortality. But is it?

In the U.S. the population on the coasts has been and continues to increase at a greater rate than the general population. This is a worldwide trend. Every year there are more people, and every year more of them are living on the coasts.

Crossett, Culliton, Wiley and Goodspeed (2004, **Population Trends Along the Coastal United States: 1980-2008**, US Dept. Of Commerce/National Ocean Service) document the dramatic increase in population in coastal counties in the U.S. from 1980 to 2000. The only state that didn't experience a significant increase in its coastal population density during this period was Alaska. Regionally, the coastal population density increased 18% in the Northeast, 58% in the Southeast, 45% along the Gulf coast and 45% for the Pacific states (including Alaska and Hawaii).

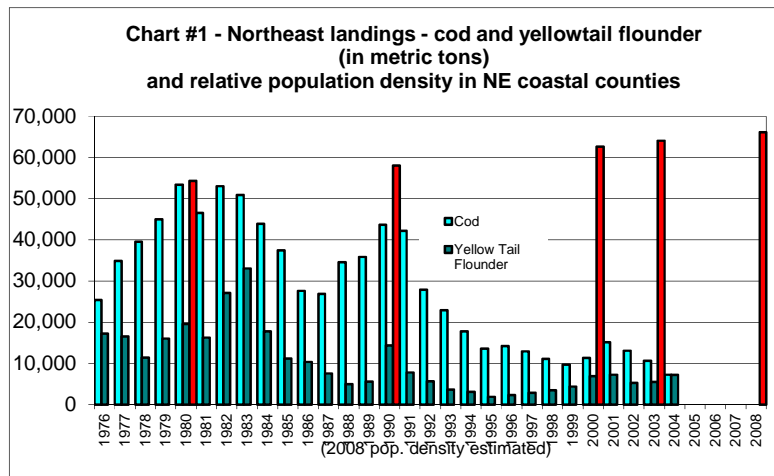
Coastal Density (Persons per square mile)													
State	1980	1990	2000	2003	2008	Change	State	1980	1990	2000	2003	2008	Change
Maine	50	55	59	60	62	24%	Florida (Gulf)	119	158	194	206	223	87%
New Hampsh	171	212	239	250	265	55%	Georgia	52	53	59	60	62	19%
Massachuset	837	877	927	939	963	15%	Alabama	70	73	82	83	88	26%
Rhode Island	906	960	1,003	1,030	1,037	14%	Mississippi	71	75	87	88	94	32%
Connecticut	641	678	703	719	727	13%	Louisiana	126	128	136	138	143	13%
New York	1,578	1,625	1,751	1,777	1,824	16%	Texas	119	139	170	181	192	61%
New Jersey	1,031	1,082	1,177	1,208	1,247	21%	Total GOM	113	132	156	164	175	55%
Pennsylvania	767	794	835	846	863	13%	California	270	338	381	398	419	55%
Delaware	304	341	401	418	439	44%	Oregon	72	75	86	89	94	31%
Maryland	512	582	642	667	700	37%	Washington	126	153	186	193	209	66%
Virginia	244	299	345	361	385	58%	Alaska	1	1	1	1	2	100%
Total NE	543	580	626	641	661	22%	Hawaii	150	173	189	196	200	33%
North Carolina	82	90	101	103	109	33%	Total Pacific	53	65	74	77	81	53%
South Carolin	85	96	109	112	120	41%	Data from Population Trends Along the Coastal United States 1980-2008 (2004) (
Georgia	51	58	68	70	74	45%							
Florida (Atlan	330	439	546	582	630	91%							
Total SE	142	176	213	224	241	70%							

This coastal population explosion is unquestionably accompanied by increases in non-point source pollution, in recreational boating, in harmful algal blooms and so-called dead zones³, in the loss of productive wetlands, in the amount of household chemicals and pharmaceutical “residues” making their ways into coastal waters, in the amount of impervious ground cover and the corresponding increase in water borne sediments, with a host of side effects with the demonstrated potential to directly or indirectly impact the health of fish stocks.

In the U.S. “five of the 10 most populated watersheds are located from southern Virginia to New England. The Hudson River/Raritan Bay and Chesapeake Bay watersheds were the most populated overall, with over 13 million and 10 million people, respectively.” (from Crossett, Culliton, Wiley and Goodspeed). We’re not making much of a leap when we assume that this coastal population increase has had negative impacts on inshore and near shore water, nor that there would be an accompanying effect on the resident and migratory fish stocks.

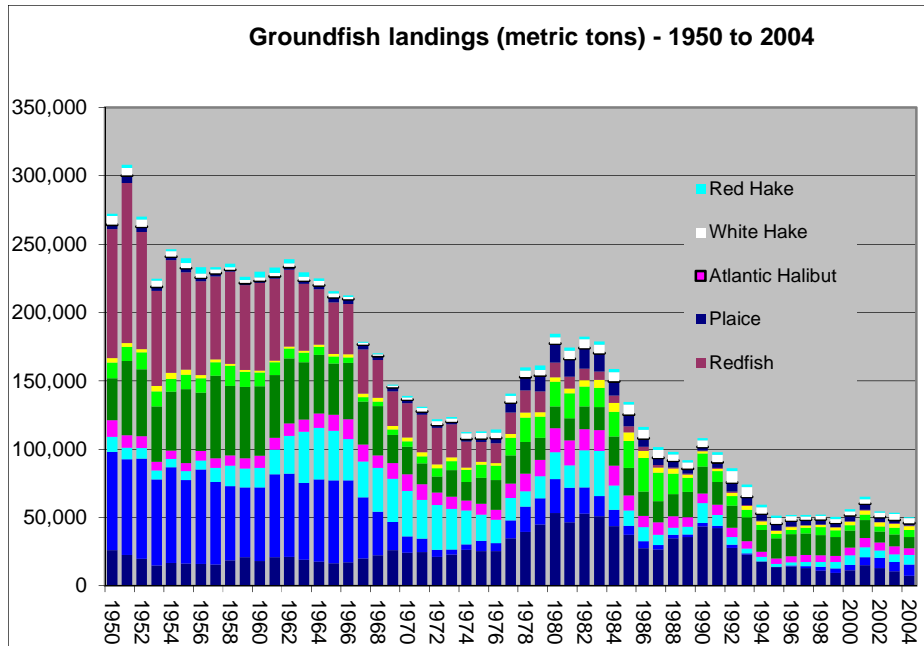
How does this apply to New England Groundfish?

With cut after cut being inflicted on the groundfish fleet, there still aren’t enough fish – at this point cod and yellowtail flounder in particular – to meet the rigid “rebuilding schedules” imposed after the passage of the Sustainable Fisheries Act. Under the latest management proposal, boats are to be allowed on the order of twenty days a year to fish for groundfish. The fleet average in the ‘70s and early ‘80s was perhaps 200 to 250 days. The proposed cuts represent a reduction of perhaps 90% in fishing time per vessel over several decades (without even taking into consideration what have been significant reductions in the fleet size). As Chart #1 indicates, since the passage of the Magnuson Act in 1976, the landings of these two species have declined dramatically in spite of the drastic and ongoing reductions in fishing effort.



This isn't just characteristic of the cod and yellowtail flounder fisheries. In Chart #2, landings of the various species that make up the groundfish complex are depicted. In all of them fishing effort has been ratcheted downwards continuously (the increase starting in the late 1970s was an artifact of the passage of the Magnuson Act in 1976). Looking at this chart, it's awfully difficult to believe that, along with fishing, there aren't other factors influencing the stocks. If not, with such drastic reductions in fishing effort as the landings data indicate, why haven't a greater proportion of the stocks recovered? At the same time, the coastal population in the Northeast continues to increase – as does the loss of wetlands, the amount of non-point source pollution, the recreational use of our waterways, etc. The attendant and undoubtedly increasing impacts on the fisheries, because they are considered to be part of the “natural” mortality and because the focus of fisheries management has always been on fishing, escape the managers' scrutiny and the public's attention while the groundfish industry faces cutback after cutback with no sign that relief is on the way. (For another example of this total focus on fishing, see “**Brief history of the groundfishing industry of New England**” on the Northeastern Fisheries Science Center website at <http://www.nefsc.noaa.gov/history/stories/groundfish/grndfsh2.html>).

If we assume that there are other factors that are negatively impacting the groundfish stocks, and if the fisheries managers continue to reduce fishing effort in a futile attempt to counteract them, what lies ahead for the New England groundfish industry?



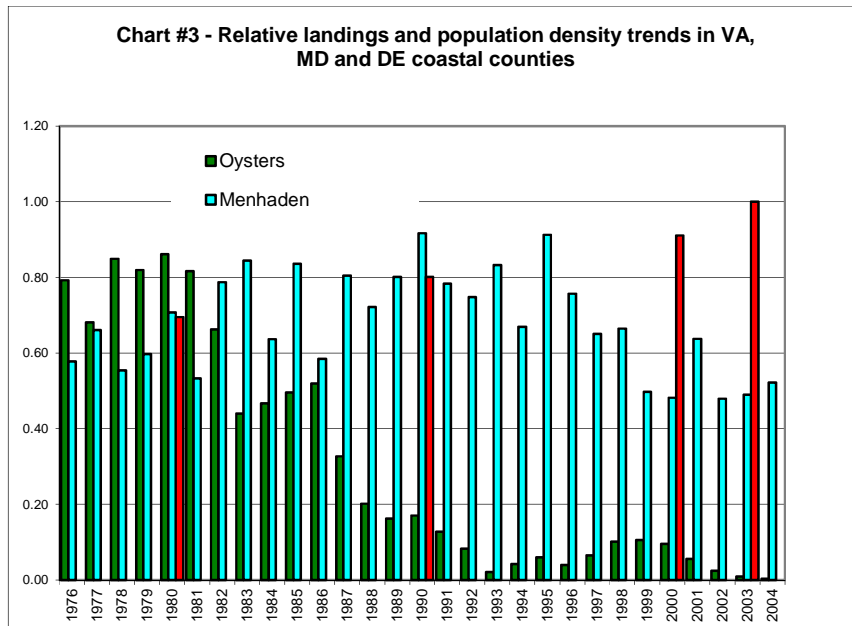
The Chesapeake Bay

“The Chesapeake Bay Watershed population grows by 100,000 people annually, with more than 16 million people who are now Chesapeake citizens. Vehicle miles traveled has increased at three times the population growth rate during the last decade. Meanwhile, the amount of impervious surfaces -- surfaces through which water cannot flow -- increased at five-times the rate of population growth in the 1990s. The watershed loses 100 acres of forest daily...”⁴

The fallout from all of that growth has dramatically affected and continues to affect the productivity of the Chesapeake. It's generally agreed that the Bay is in trouble and has been for years, and that drastic measures aimed at controlling the impacts of development are long overdue.

In spite of this, there has been a recent movement to blame the ills of the Chesapeake on the overharvest of two filter-feeding commercial species, oysters and menhaden. Landings in both of these fisheries have declined significantly in the Chesapeake in recent decades. As shown in Chart #3 below, menhaden landings have been declining for well over a decade and oyster landings since the 1950s. The menhaden fishery is not being overfished, though there are recognized problems with recruitment (the addition of young fish to the stock). The view being pushed by anti-fishing groups is that decline in the productivity of the Chesapeake isn't responsible for the decline in these fisheries but vice versa. Understandably, some of the most vehement critics of the Virginia and Maryland commercial fisheries are among those 16 million people who live around, play on and flush into the Bay. Their endeavors on behalf of the Chesapeake would be far more effective if each of them, in company with a dozen or so neighbors, packed up and moved to North Dakota.

The one fisheries “success story” in the Chesapeake – the resurgence of the striped bass population – has been tarnished by recent reports that a large part of the population has been afflicted with *mycobacteriosis* a lethal bacterial disease that has been increasing in the Bay's striped bass for at least a decade.⁵ **Mycobacteriosis** is linked to degraded water quality.



And Then There's Alaska

The situation regarding coastal development in Alaska is unique. With such a sparsely populated coastline, it's hard to imagine that there are any impacts from coastal development, and though the coastal population density has increased slightly, according to the U.S.D.O.C. it won't reach two people per square mile until 2008 (the following chart lists the state-by-state coastal population density). This is in strong contrast to the other coastal states, with coastal population densities ranging from 60 people per square mile (Maine and Georgia) to 1,777 (New York). While Alaska's fisheries are considered to be among the world's most well managed, as they rightfully should be, isn't there another message in there as well? Why is managing fishing mortality effective in managing Alaska's fisheries while it's for the most part inadequate in other fisheries? New England and the Chesapeake Bay estuary are in no way unique. In fishery after fishery and for year after year, commercial fishing effort is reduced because fisheries management is all about reducing fishing mortality and not about much else. And while fishing effort is continuously reduced, the coastal population continues to climb and the attendant "natural" mortality continues to increase.

And Natural cycles in fish populations

Some fish stocks vary cyclically. Among the most well-known examples of this are the extremes exhibited by west coast sardine/anchovy stocks. Sardines off California go through a "boom or bust" cycle, to be replaced by anchovies as their populations plummet. This cycle, which was responsible for the collapse of the sardine fishery that had supported Cannery Row in Monterey, is driven by changes in oceanographic conditions brought about by a short-term "climatic" cycle of a 50 to 60 year duration and has been tracked back several thousand years.⁶

Related to the El Niño cycle and other factors, regime shifts in the Pacific drive periodic fluctuations in fish stocks. While research is not as well advanced, regime shifts are at work on fisheries in the Atlantic as well.^{7,8}

One might argue that, in the face of declining fish stocks, rational fisheries management would demand a reduction in fishing effort, and in some instances that's surely the case. But one could just as well, and more convincingly argue, that in rational fisheries management all sources of mortality should be identified and quantified and, to the extent possible, controlled. That should be one of the primary underpinnings of ecosystem management, but it isn't happening. According to the management establishment, it's only about fishing. Our fishermen and our fish are paying the price.

- 1 <http://www.fishbase.org/Glossary/Glossary.cfm?TermEnglish=natural%20mortality>
- 2 <http://www.nefsc.noaa.gov/sos/intro/>
- 3 <http://www.whoi.edu/oceanus/viewArticle.do?id=2487>
- 4 http://erf.org/user-cgi/conference05_abstract.pl?conference=erf2005&id=146
- 5 <http://www.dnr.state.md.us/fisheries/oxford/stripedbass/>
- 6 http://news.nationalgeographic.com/news/2003/01/0109_030109_fisheries.html
- 7 <http://www.ices.dk/iceswork/asc/2004/abstracts/abstracts/M.pdf>
- 8 <http://tinyurl.com/n7e8x>

Flexibility in fisheries management

(in National Fisherman)

04/06/2006

Those organizations that are devoted to convincing anyone who will listen that all of our oceans' ills should be blamed on commercial fishing are hard at work in Washington, trying to remove the last vestiges of flexibility from our fisheries management system. With war chests bulging with foundation dollars, as I write this they are hard at work on Capitol Hill. They're there selling the idea that what little latitude still remaining in the fisheries management process should be removed, that those people who have an actual, on-the-water grasp of what fishing is all about be barred from the decision making process, and that fisheries management should be done by filling-in-the-blanks and driven by statistics and rigid time frames.

To anyone not well acquainted with the vagaries of nature, oceanography, sun spots and the host of other variables that can affect fish stocks, this probably seems like a reasonable idea. If we know how many fish should be in the ocean and how many aren't there because fishermen are killing them, then all we have to do is adjust the latter to control the former. And we can set a realistic time frame in which to build the stocks back to where they should be. All we need to do this is a few scientists, a few statisticians, a few bureaucrats, a bunch of observers to ensure that the fishermen aren't cheating, and a bunch of foundation money to spend on PR and lobbying and litigation. There's no need for fishermen in the system because inherent conflicts of interest dictate that they are incapable of making reasoned decisions.

Sounds nice, doesn't it? And if we knew how many fish of each species there were in the ocean, if we knew and could control (or if not control, then at least predict the effects of) all of the factors significantly impacting on those fish, and if we could understand all of the interactions in our ocean ecosystems, it might even work.

Unfortunately, about the only thing we know is what the commercial harvest is, and that's about all that we can easily control. We don't have a clue about what the recreational anglers are catching, we don't know how many of them there are and we sure can't regulate what they catch. We inflict the residues of our modern existence on our inshore and near shore waters in increasing amounts every year as we continue to trade productive wetlands for commercial and residential development. As far as knowing how many fish there are out there, did you ever wonder why the fisheries folks are the only scientists who hardly ever accompany their published "numbers" with an indication of how precise they actually are? And it's only been in the last few years that we've even begun to recognize the importance of natural "cycles" on fish stocks.

What would the logical outcome of this almost overwhelming lack of knowledge be if, as desired by the ENGOs (that's Environmental Non-Governmental Organizations for those of you not in the know), it were the sole basis of fisheries management decisions? If we removed any subjective judgment from the process? Let's consider a hypothetical fish species: an estuarine spawner just starting on the downward leg of a 50-year population cycle. For the past 10 years it's been at high levels of abundance (though not as high as it should be because we've done such a good job of building around, playing on and flushing into those estuaries). But, as its population cycles downwards, that would automatically trigger regulations reducing fishing effort. How about if the reduction in fishing effort doesn't compensate for the natural population decline and falling recruitment due to habitat degradation? It gets reduced again next year, and the following year, and the year after that.... And with a mandatory 10 year rebuilding period, with no flexibility in the system, and with no one in the system who can see through the statistics, what's going to be left of the fishery?

If the displaced fishermen are lucky, they and their boats can move into another fishery. If not, hey – anything that reduces capacity is a good thing, isn't it? And there's always a ready market for the property commercial docks sit on. So what if it's more condos and tee shirt shops? So what if, once gone, waterfront fishing infrastructure is never coming back.

And if anyone in the management establishment, realizing that it isn't fishing that's driving the fishery, tries to interfere, there are those buckets of foundation dollars waiting to pay for the ENGO lawyers to go to court again to "save the commercial fishers." Someone's gotta be able to afford to live in those new condos.

Predation – It's not just what's for dinner

(in National Fisherman)

04/14/2006

I just dug into the spiny dogfish situation in the Northeast (see The Dogfish Follies at <http://www.fishnet-usa.com/dogfishfollies.html>), and was intrigued by the fact that it apparently took 2.4 million metric tons of prey - including hake, cod, pollock, ling, haddock, porgies, croakers and flatfish - to support last year's standing crop of 400,000 tons of horn dogs. This got me interested in the impacts of predation by other protected species.

Finding population estimates of these species is fairly easy (the various Stock Assessment Reports are available via the Protected Resources section of the NMFS website), but determining how much of what they eat isn't. Fortunately, I stumbled across an article, **Food Webs in the Ocean: Who Eats Whom and How Much?** (by Andrew Trites of the Marine Mammal Research Unit at the Fisheries Centre of the University of British Columbia) that shed quite a bit of light on the subject. Dr. Trites wrote "*consumption of marine organisms, expressed as a percentage of an individual's body weight per day, ranges from about 4–15% for zooplankton, to 1–4% for cephalopods, 1–2% for fish, 3–5% for marine mammals and 15–20% for sea birds.*"

So I took a look at the possible impacts of some other protected species on our East coast fisheries. Starting out with Flipper and his friends, I found that in our neck of the western North Atlantic there were 30,000 bottlenose dolphin, 31,000 common dolphin, 61,000 striped dolphin, 36,000 spotted dolphin and perhaps 30,000 white sided dolphin, (these are all 1998 figures, the most recent available, though "anecdotal" observations indicate that they have been increasing since then). So in 1998, we can conservatively estimate at least 180,000 of these efficient predators were eating fish off our shores, that many of them were species that fishermen – both recreational and commercial – are seeking, and that many others were species that economically important species eat. If we assume an average weight of 150 pounds per porpoise or dolphin (your guess might be better than mine), they are collectively consuming a million pounds of fish a day, or 180 thousand metric tons a year. The 14,000 pilot whales, if we assume an average weight of 3,000 pounds each, are eating another 300 thousand tons a year.

What about seals? The 100,000 harbor seals in Maine's water, with an average weight of 200 pounds, would consume 130,000 metric tons of fish and invertebrates a year.

So we have a handful of "protected" species, all presumably increasing in numbers each year, that are conceivably consuming some 3 million metric tons of commercially and recreationally important species, or the species that those species eat, off our East coast. In 2004 the commercial landings of all species of finfish and shellfish from the Atlantic coastal states were 750 thousand metric tons.

The situation can't be much different on the West coast or in Alaska's waters.

But according to our current management philosophy, this doesn't make much of a difference. Just take a look at the current situation in the New England groundfish fishery. After what seems like eons of cutbacks, the fleet is facing the latest; a proposed reduction to 22 days at sea (55% below last year's allocated days). The first allocated groundfish DAS - that's "Days At Sea" for those fortunate enough to be unaware of this acronym – were on the order of 200 per year ten or so years ago. They've been ratcheted steadily downwards ever since. Not too surprisingly, landings have followed suit. In 2004, the total landings of the major groundfish species - cod, haddock and yellowtail flounder - were under 25,000 metric tons. Post-Magnuson highs were 50,000 metric tons for cod, 25,000 for haddock and 33,000 for yellowtail flounder. After two decades of increasingly restrictive management and corresponding declining harvests, the stocks still aren't where "they should be." Accordingly, the managers insist that more, and more debilitating, cutbacks in fishing are deemed to be necessary. But in those same two decades all of these protected species have been increasing with no limits.

If less than 1% of the prey consumed by these protected species is cod, haddock and yellowtail flounder, then they are eating more than we are catching. Their populations continue to increase and, in spite of all the "fisheries management" inflicted on fishermen, some fisheries continue to decline. Can we "manage" our commercial and recreational fishermen right off the water and have no impact on declining stocks?

Rationalizing the irrational

(in National Fisherman)

04/30/2006

Ever hear of "fleet rationalization?" It's what managers use to justify getting rid of fishing capacity. If you've bought the argument that we don't have enough fish because of too much fishing, it makes sense. And it makes sense as well that government folks do the rationalization, 'cause they're objective, they're for the fish. Oh, and I probably don't need to add that it's only the commercial and for-hire fishing sectors that are getting rationalized.

At the same time this “rationalization” is going on, we’re being besieged via the airwaves and the internet with ads promoting even more recreational fishing and boating. Fair enough, you say. These are paid for by the recreational fishing and boating industries to sell more of their products. Like auto manufacturers still pushing horsepower, that’s what they’re supposed to do, with little or no regard for the resources that they depend upon. That same kind of economic self-interest is what’s being used to justify attempts to force commercial fishermen out of the management process, isn’t it? Whether it’s petroleum or fish, profit comes in and conservation goes out the window.

Would you believe that the government is supporting such public relations efforts as the Take Me Fishing program? Bureaucrats who, in the name of conservation, are working assiduously to destroy large parts of our commercial fishing industry, our fishing communities and consumers’ rights to fresh, locally produced seafood couldn’t be working to increase the number of folks who fish and boat for recreation, could they? That would be like a government-sponsored ad campaign promoting driving farther and faster in bigger cars.

Well, if you do a little bureaucratic veil piercing, you find that the Take Me Fishing program was created by the Recreational Boating and Fishing Foundation, which is funded by the Sport Fish Restoration and Boating Trust Fund with Wallop-Breaux (W-B) bucks. The Wallop-Breaux Act imposes a tax on the sale of recreational fishing and boating gear and fuel (see <http://training.fws.gov/library/Pubs9/sportsfish.pdf>). The fund, administered by the U.S. Fish & Wildlife Service, is also used to build launching ramps and pump-out stations, improve angling access, buy research, etc. Most of the money is passed down to state fisheries agencies, making up a sizeable part of each state’s fisheries budget.

So on one hand we have managers (federal and state bureaucrats) diligently at work destroying... oops, sorry, rationalizing the commercial fishing industry, and on the other we have the same managers (federal and state bureaucrats) enticing more and more people to boat and fish, catch and release, enrich our estuaries with hydrocarbons, tear up the eel grass beds, run over the manatees and engage in other recreational activities. “Conservation” is being forced on the commercial fishing industry by the heavy hand of government, while the other hand is pushing for more outboard motor sales, more recreational fishing trips, more rods, reels, lines and lures, more and more of everything connected to angling and yachting.

A bit irrational? Not really. The more people zipping around on jetskis, dragging expensive lures through the water and fighting “gamefish” to exhaustion, the more they spend and the bigger the Wallop-Breaux cash cow becomes. That means bigger budgets for federal and state agencies that depend on W-B funding. Bigger budgets mean the guys and gals in charge have more employees and more turf and pull down bigger bucks. It’s only irrational if you’re really interested in saving the fish, and what’s that have to do with successful empire building?

So, as we’re looking forward to a summer of gas prices way above three bucks a gallon, our bureaucrats have to do something to keep those boats in use, ‘cause they’re getting thirteen and a half cents for every gallon of gas they burn (or exhaust into your favorite estuary). What better way to invest their Wallop-Breaux bucks than in a public relations campaign to keep those props a’ spinning?

And just to show you that this isn’t a two-way street, there’s also the Saltonstall-Kennedy program, which imposes a duty on fish products imported into the U.S. Originally the program was intended to fund projects to aid the commercial fishing industry. Not any more. Those dollars not kept by the USDA, which collects the revenues, go to NMFS and are used to balance that agency’s budget. If we assume an inverse relationship between how much fish we produce and how much we import, what are the chances of NMFS or NOAA being institutionally objective?

So if management or allocation decisions seem irrational at first glance, put yourself in the shoes of the bureaucrats that are making them. From where they’re coming from, they might be right on target.

Who needs science?

(In National Fisherman)

05/10/2006

There’s a new movement in the anti-fishing world. Most simply, it’s “to hell with the science; we know what we know.” This was articulated in a press release from the Natural Sciences and Engineering Research Council about Daniel Pauly, part of the Pew Trust’s “blame it all on overfishing” clique of well-funded researchers.

Pumping up Pew’s doom-and-gloom perspective, Pauly said in the release, “the world has passed ‘peak fish’ and fishermen’s nets will be hauling in ever-diminishing loads unless there’s political action to stem the global tide of overfishing... The crisis in the world’s fisheries is less

about scientific proof than about attitude and political will. And the world's fish need a dynamic, high-profile political champion like a Bono or Mandela to give finned creatures the public profile of cute and furry ones.”

I guess neither Ted Danson nor Leon Panetta could fill those shoes.

It's kind of intriguing when an internationally recognized scientist suggests we don't need scientific proof about the fishing-induced ruination of the world's oceans; what we really need is a media superstar, isn't it?

We're seeing the same thing, on a less grandiose scale, in the Chesapeake Bay in the most recent wave of assaults on the menhaden reduction fishery. This assault has focused on the “localized depletion” of this important little fish.

If you're unaware of menhaden matters, the reduction fishery is one that various recreational fishing groups and “environmentalists” have been targeting for generations. This stems, in large part, from the fact that big boats and big nets are employed, and they're employed in waters that the sports and the enviros like to consider their own. In the March/April issue of *Mother Jones*, Rutgers professor (of English and American studies) H. Bruce Franklin devoted the first two paragraphs of an article about the supposed plight of the pogy to comparing Omega Protein's Malcolm Glazer to “evil tycoon C. Montgomery Burns” of “Simpsons” cartoon fame. And, of course, he lets us know that Mr. Glazer is a “billionaire tycoon.”

I guess if you can't find a superstar, creating an arch villain is a reasonable alternative. (I've always known fish killed by recreational fishermen weren't as dead as fish killed by commercial fishermen. To that knowledge, I can now add — thanks to Franklin — that fish killed by a billionaire tycoon are even dead.)

Getting back to the alleged localized depletion and its alleged role in devastating Chesapeake Bay, where's the science supporting it? According to the Atlantic States Marine Fisheries Commission, it's not there yet, and I'll give you odds that it never will be.

But consider that the Chesapeake watershed has been the victim of tremendous development over the last 50 years. All those people, all those cars, all those malls, all that impervious cover, all those pharmaceuticals (once all those people are done with them), lawns, farms, outboard motors. All of those necessary appurtenances to life in the late 20th/early 21st century have been steadily increasing for decades, as has their cumulative impact on the Chesapeake.

Who gets blamed? Blamed, I might add, by the folks driving those cars, fertilizing those lawns, owning those outboards and popping those pills? A billionaire tycoon, of course, and a fleet of boats run by commercial fishermen with the temerity to want to fish the bay they've fished for decades and that more and more people are living next to, flushing into and driving around.

Virginia menhaden landings for the last 20 years have been trending steeply downward. They're declining similarly to landings in most other commercial fisheries. And what other anthropogenic factors that negatively impact fisheries — in the Chesapeake watershed or virtually anywhere else — have declined correspondingly? Industrial wastes coming out of pipes, and sewage that's received primary treatment are about it. With everything else, it's onward and upward, but that's OK, 'cause if we've got tycoons and working fishermen to blame, we don't have to blame ourselves.

Menhaden are the only domestic source of omega 3 fish oil, a dietary supplement that has been proven to fix much of what ails most of us (though in my book, getting omega 3 from consuming fish, not a supplement, is the best way to do it). But why should that stand in the way of restrictive actions supported by a compelling lack of knowledge and a bit of Pauly's attitude? He's got it right. Who needs science? Bring on the superstars, keep on flushing and save the bay.

(I have to acknowledge the inspiration that the folks on Fishfolk provided for this column.)

Then and now
06/06/06

Summary: Abetted by members of the broadcast and print media who are unfamiliar with either fisheries or ocean issues at anything beyond the “advanced layman” level, a group of foundation funded Environmental Non-Governmental Organizations (ENGOS) have devoted tens of millions of dollars to convincing the public that the coastal waters of the United States are facing an imminent crisis brought about by a rapacious fishing industry running roughshod over a conflict-crippled federal fisheries management system. Availing ourselves of data going back to 1950, we have found that neither the amount nor the makeup of the domestic commercial fisheries landings have changed notably in over half a century. In 1950 the total landings of the domestic commercial fishing fleet in the continental U.S. were 1.218 million tons. In 2004 they were 1.186 million tons. That's a decrease of 3%, a decrease that can be in large part accounted for by Pacific sardines being at the peak of their population cycle in 1950.

Of the 25 largest fisheries in the U.S. in 1950, thirteen are still there in 2004. Of the remaining twelve, two declined because their processing operations relocated abroad, two aren't being fully utilized, four were/are casualties of environmental degradation in at least parts of their range, two are in the process of recovering from previous overfishing, and one has fallen victim to the Florida net ban. Only two of the twenty-five largest fisheries in the U.S. in 1950 are still being overfished.

Some readers will remember Clara Peller asking "where's the beef?" Looking at these figures, we have to modify her question - but not her incredulity - by asking "where's the crisis?"

The sky is falling (Part 1)

"Scientists also tell us that the most immediate threat to ocean health is posed by the short-sighted practices of industrial scale commercial fishing.... Oceana should also seek changes in the way this agency manages our oceans. If this agency has a consistently bad track record, then we need to reform the agency itself." **Andy Sharpless (Chief Executive Officer of Pew recipient Oceana)**

Reading – and believing - what Mr. Sharpless from Pew/Oceana wrote above, one would have to assume that the health of our oceans has been on an extended downward slide and that industrial scale commercial fishing abetted by a compromised federal management regime is to blame.

Of course, to be believable all of that doom and gloom should be accompanied by some tangible indicator of how bad things have become, something easily understandable that would convince us that corporate fishing boats and ineffectual managers were responsible for ocean productivity being precariously perched on the edge of a precipice. If things are that bad, it must surely be reflected in what is being caught by those rapacious fishermen, mustn't it? And if things are that bad today, they would surely have had to have been better in the past. We couldn't have been teetering on the edge of that precipice for over half a century, could we?

Fishing a half a century ago

So what about the good old days? Consider commercial fishing 50 or so years ago, decades before the Magnuson Act became law. Back then, the regulations were fairly easy to understand because there were so few of them.

If you had a boat and you wanted to fish for something, you bought the right gear – or something approaching the right gear, or something that you thought might catch whatever it was you wanted to catch – and you had at it.

If you decided you wanted to fish and sell your catch and didn't have a boat, you bought one. If you didn't have the right boat, you modified yours or you bought another one. You left port when you wanted to, you returned to port when you wanted to, you caught what you wanted to however you wanted to catch it, you fished with as many crewmen as you thought you needed, you kept the fish you wanted to keep, you handled them on board the way you wanted to handle them, and you sold them to whoever you wanted to sell them to. Reporting requirements, if they existed at all, were rudimentary. The idea of being forced to take a government observer on a trip or to install some kind of tracking system so that "big brother" knew what you were catching, where/when you were fishing, or whether you were at the dock or not would have been considered somewhere between excessively ludicrous and extremely un-American.

The argument seems to be that regulations weren't necessary to control commercial fishing back then. That because of the lack of modern technological innovations, fishing was mostly an artisanal undertaking that has, alas, been supplanted with the high tech "industrial scale" fishing. (At this point we won't go into the cynical use by the anti-fishing groups of the deep and growing antipathy of the average person to "corporate" America, but that's on the FishNet agenda for the near future.)

Small numbers of fishermen in small boats using ineffectual gear in near-shore waters supposedly had negligible impacts on the fish stocks, on the ocean habitat or on much of anything else. Our ocean waters, we are to believe, resembled a Rousseauian paradise back then.

The sky is falling (Part 2)

While improvements have been made in some fisheries, more changes will be needed to decrease the waste of valuable resources and damage to vulnerable species. **(Pew recipient Ransom) Myers Lab website.**

Then technology, with the enthusiastic encouragement of corporate greed, allegedly took over. We're supposed to think – with the help of emotionally loaded rhetoric as exemplified by the various "sky is falling" quotes that we've included in this issue – that the quaint local fishermen in their colorful native attire, with their inefficient, low impact fishing methods (think a cross between Spencer Tracy in *Captains Courageous* and the locals crafting handicrafts for and serving buffets to ecotourists in Costa Rica) had no impact on the fish stocks. They were replaced by the big boats and the big nets and the big investments, all requiring unfettered harvesting with no thought to tomorrow, and it's been downhill ever since. Hence the alleged crisis.

Fishing regulations today – cheaper by the dozen?

Today in fishery after fishery there aren't any significant variables - or insignificant ones, it seems - that aren't regulated by government edict. While the listing isn't all-inclusive, consider the following commercial fishing restrictions imposed under federal and/or state and/or regional management in U.S. and international waters (these aren't requirements of every Fishery Management Plan, but they are all – always in combination – in place in one or more):

Who is allowed to fish:

- Limited entry is in place in every important commercial fishery.
- New entrants must acquire an existing permit to participate in that fishery
- In some commercial fisheries you can only inherit a permit from a relative.
- There are restrictions on who can own a permit.
- Some permits can only be purchased in company with other permits.
- Some permits can't be transferred or sold.

The vessels allowed in particular fisheries:

- There are maximum size limits on vessels allowed.
- There are maximum horsepower limits on vessels allowed.
- There are limits on the size and horsepower of vessels replacing existing vessels.
- There are limits on the degree of modification allowed for existing vessels.

The gear (nets, hooks, etc.) used in particular fisheries:

- There are requirements for the specific type of gear allowed.
- There are limits on the amount of gear (size of nets, number of hooks, number of dredges/vessel, etc.) allowed.
- There are limits on the size of gear (mesh of nets, size of hooks, width of dredges, etc.) allowed.
- There are design/construction requirements for the gear used.
- There are requirements to have specified non-fishing gear on board.

The crew allowed in particular fisheries:

- There are limits on the size of crews.
- There are residency requirements for crewmembers.
- There are requirements that crewmembers be certified in particular conservation techniques.

Where/when fishing is allowed:

- Some areas are permanently closed to commercial harvesting.
- Some areas are seasonally closed to commercial harvesting.
- Some areas are temporarily, and on short notice, closed to commercial harvesting.
- Some areas are closed to commercial harvesting using a particular kind of gear.
- Some areas are closed to passage of commercial vessels with certain gear on board in a "ready to fish" condition.
- Particular gear can't be set within various distances from shore or from certain structures in particular fisheries.

Which fish are harvested:

- There are size limits.
- There are total catch limits.
- There are bycatch limits of particular species.
- The possession of some species is prohibited.
- The catch may only be sold to permitted dealers.
- There are requirements to release all females of particular species caught.
- There are requirements to mark then release egg bearing females of particular species caught.
- There are requirements to release marked females of particular species caught.
- There are requirements preventing the transfer of fish from vessel to vessel.

How the fish are harvested:

- There are requirements on how gear may be fished (duration of sets, length of tows, etc.)
- Gear must be attended at all times when being used.

How the fish are handled on board:

- Fish may not be cut or processed on board.
- Fish must be stowed on board in a prescribed manner.
- Fish must be stowed in standardized containers while on board.
- "Tags" must be affixed to the catch when it is brought aboard.

How government intrudes into a fisherman's workday:

- Fishermen must file regular reports on areas fished, level of catch and level of bycatch.
- Vessels are required to carry government observers.
- Vessels are required to carry satellite tracking devices.
- Electronic reporting by the harvester and by the buyer is required.
- A captain must provide notification before leaving the dock.
- A captain must provide notification before returning to the dock.
- Fish may only be sold to "licensed" buyers.

This undoubtedly incomplete listing is only of the fisheries management requirements. There are also safety, navigational and national security requirements imposed by the U.S. Coastguard, product sanitation requirements imposed by state and federal health agencies, and crew documentation requirements imposed by the federal Department of Immigration and Naturalization.

Quite a change, isn't it? Imagine Spencer Tracy, Freddy Bartholemew and Micky Rooney sitting down after an exhausting day of fishing to watch Lionel Barrymore fill out page after page of government reports. Or the *We're Here* being boarded by the Coast Guard and turned inside out in a search for illegal lobsters, cod that are too small or hooks that are shaped wrong. Unless you're a particular type of career bureaucrat, the idea should be completely unsettling, but the recent years' barrage of "ocean crisis" rhetoric has made it acceptable.

For the purposes of this discussion, we assumed that all of these restrictions, though ineffectual, are necessitated by the short-sighted rapaciousness of today's fishermen (who are nothing like those played by Spencer, Freddy, Micky and Lionel back in 1937). This being the case, we also assumed that there were blatant indications of the many supposed failings of today's fishermen and fisheries managers.

The sky is falling (Part 3)

"Having exhausted catches of larger, longer-lived species (e.g., tuna, cod, snapper), fishing fleets are increasingly concentrating on catching smaller, shorter-lived, plankton-eating species (e.g., squid, mackerel and sardines, and invertebrates such as oysters, mussels, and shrimp), which are nearer the bottom of the food chain." Pew Seaweb website

The most obvious place to look for evidence that the oceans are being emptied or ruined or whatever the currently fashionable anti-fishing concerns are would be commercial landings. Accordingly, we went to the Commercial Fishing database on the NMFS website (http://www.st.nmfs.gov/st1/commercial/landings/annual_landings.html) and looked at the total commercial landings from the Atlantic, Gulf and Pacific coasts from 1950 to 2004, the first and last years for which landings data are available (We used commercial landings data because it's generally agreed that they are among the most accurate sources of information dealing with fisheries. While they don't provide an actual estimate of the fish in the water, over time they provide an accurate picture of resource trends as long as other relevant factors are allowed for.) In these fifty-five years we went from virtually unfettered fishing pre-Magnuson to over three decades of what the foundation-funded activists consider "conflict compromised," and what everyone else considers increasingly restrictive, federal management.* (For reasons detailed below, we left out Alaskan landings and those of Pacific Sardines and Atlantic/Gulf Menhaden.)

Considering all of the *strum und drang* that has been the bread and butter of the anti-fishing forces for the last decade, we expected to see dramatic differences in what was caught over the last three generations. With the cumulative impacts of new technology, new boats, the supposed development of the "rape and pillage" mentality, rampant cheating, overfishing and bycatch that we've heard about incessantly, we expected that somewhere, somehow, landings would have shown definite trends indicative of the supposed fisheries/oceans crisis. We never dreamed that, once we allowed for the advent of several huge new fisheries in Alaska, domestic commercial landings would be just about the same today (or more specifically, in 2004) as they were in 1950. If they were, why would all of that foundation money be pouring into the coffers of those ENGOS that were seemingly created to make life miserable for commercial fishermen while saving them from themselves and their supposed self-destructive obsession with profits. (SEE Chart 1).

Aggregate landings the same then and now

To our considerable surprise, we didn't see anything that would indicate any trends at all. In the years from 1950 to 1975 the average annual landings for the United States were 1.185 million metric tons. In the post-Magnuson years from 1976 onward the average annual landings were 1.236 million metric tons. In the earlier period the annual catch ranged from 1.111 million tons to 1.283 million tons. In the post-Magnuson period the range was from 1.080 million tons to 1.390 million tons. In the Atlantic the landings were a little bit down and in the Gulf and Pacific (discounting the Pacific sardine fishery, which was winding down to virtually zero in 1950-51) they were a little bit up.

In the lower forty-eight states the total commercial landings have been what is difficult to describe as anything but surprisingly stable for the last half a century. They started at 1.218 million pounds and finished at 1.186 million pounds. That's a 3% difference (and a difference in large part accounted for by the fact that in the early 1950s NMFS credited significant Atlantic herring landings to the Pacific).

No "fishing down the food chain"

But how much variation is there within the total landings? The doom and gloom ENGOS would have us believe that we've "fished down" the ocean ecosystem, in recent years replacing high value species that inhabit the upper reaches of the food chain with those less valuable species that are lower down. From what we can understand of this supposed universal trend in the world's fisheries, an example would be on the order of catching menhaden rather than tuna. To see how valid this assertion was, we looked at the landings of the top 25 species (in metric tons landed) in 1950, 1975 and 2004. We included all species of fish and shellfish, leaving out only the "SEAWEED, KELP" and the "FINFISHES, UNC BAIT AND ANIMAL FOOD" categories (see **Table 1**).

Thirteen fisheries that were in the top 25 in 1950 remained there in 2004. Of the remaining twelve, the two tuna fisheries declined because the tuna processing operations relocated abroad; the alewife, Eastern oyster, coho salmon and chinook salmon fisheries were/are all casualties of environmental degradation in at least parts of their range; silver hake, and haddock are recovering from previous overfishing (the fisheries are still classified as overfished but overfishing is no longer occurring); jack mackerel are considered underutilized and redfish (ocean perch) are not overfished and are for the most part uncatchable with the gear restrictions now required by the multispecies FMP; and the mullet fishery was almost eliminated by the Florida net ban. Only two of the twenty-five largest U.S. fisheries in 1950, Atlantic cod and scup, are no longer in the top twenty-five because they were and still are being overfished.

Of those that made it to the top twenty-five since 1950, the squid fisheries are a reflection of increased export opportunities and the increased landings in the American lobster and sea scallop fisheries are a function of high levels of natural production. The fishermen in them are and have been taking advantage of this increased production and/or increased market opportunities. The Alaskan cod, Pollock and whiting fisheries were only being developed in the late 1980s. No one has been forced to fish for sea scallops, lobster, squid or the three Alaskan species because there's nothing else to catch, they're in those fisheries because they can make money in them.

"Fishing down the food chain" can't be demonstrated - or even implied - by these landings data. In 1950 and 1975 there were five fisheries in which the target species were at the bottom, in 2004 there were four. The three largest fisheries in 1950 were for species at the bottom of the food chain. In 2004 only the second largest fishery was.

Of course, as the data demonstrate, there are fisheries with higher prior landings, and their declines in some cases are due, at least in part, to too much fishing pressure. But there are only two of them out of a total of twenty-five.

The sky is falling (Part 4)

"In recent years, fish populations around the world, including popular restaurant species, have declined dramatically. One reason is overfishing — fishing faster than a population can replenish itself." (Pew recipient) NRDC Website

We then looked in greater detail at annual commercial landings for five other species from both coasts (**SEE Chart 2**). Our chief selection criterion was the avoidance of the handful of species that the anti-fishing ENGOS have adopted in their campaign to "reform fisheries." While none that we selected are among the most valuable or the largest in any region, they all represent significant fisheries. While it would be difficult to define what an "average" commercial fishery might be, any of these could fill the bill. They've all been in existence for over half a century and each depends on well-developed markets.

We found that the landings in each of them, which have been trending slightly upward for all but albacore tuna for the last 54 years, varied from under half to about double the average in that period. The landings for all of them bounce around quite a bit, but going by the data, these fisheries obviously aren't being threatened by corporate greed or government mismanagement or anything else, and neither is the habitat they depend upon. And, while the folks who have built their careers and their budgets around the "fisheries in crisis" myth would be loath to admit it, there are many more like them.

Populations go up and populations go down

We then compared landings in 1950 and in 2004 of the above 5 species plus 15 more. As shown in **Table 2**, some increased or decreased dramatically, some increased or decreased slightly, and one remained essentially the same. Haddock landings in 2004 were 11% of what they were in 1950, surf clam landings were 807% greater, yellowrail flounder decreased by 34% and coho salmon increased by 15%.

But as the total landings for the period show, everything balanced out nationally and everything balanced out regionally. We're catching a lot more of some species than we were, a lot less of others, some new fisheries have developed, some old ones have disappeared, and some yielded about the same harvest in 2004 that they did in 1950.

How do you create a crisis?

Consider the landings of Atlantic croaker from 1953 to 1962 or from 1977 to 1984 or of Pacific halibut for the two decades after 1962 (see **Chart 3**). Or any of the other protracted declines exhibited in most fisheries. Had there been foundation dollars around to pay for it back then,

and had there then been a reason to demonize commercial fishermen, it would have been easy to make the arguments while they were trending downwards that the species had been irrevocably overfished, that the ocean habitat that it depended upon had been destroyed, or that the management system had failed.

Subsequent increased landings prove that wasn't the case (see **Chart 4**). The ups and downs are nothing more than expected though unpredictable variations that the system (natural and bureaucratic and economic) has demonstrably been able to accommodate.

The sky is falling (Part 5)

“The National Marine Fisheries Service (NMFS) continues to tout a downward trend in the number of stocks that are overfished or experiencing overfishing, these improvements have primarily been due to NMFS finessing the data presented in its annual report to Congress on the status of fish stocks.” (Pew recipient) Marine Fish Conservation Network press

A stable commercial fishery

We had a stable commercial fishery with landings of about one and a quarter million metric tons a year before fish finders, GPS, synthetic twine, powerful engines, “corporate” fleets, supposed habitat destruction and an annual half a billion dollar fisheries management budget. And we have a stable commercial fishery at about one and a quarter million metric tons today as well. Landings of particular species go up and down, but that's to be expected. Fluctuations in landings were, are and will continue to be a part of commercial fishing, being influenced by natural populations, by market changes and in recent years by imprecision in management.

So where's the crisis in our fisheries that multi-billion dollar “charitable” foundations, the ENGOs they support and the academics on their dole have been promoting for the last decade? Where are the catastrophic results of the out-of-control management system compromised by fishing industry conflicts of interest? How about the food chain getting fished down or around or whatever? Or the inarguable proof from tens of millions of dollars worth of “Chicken Little” gloom-and-doom research (we use the term with reservation) grants?

The crisis surely isn't apparent in the total commercial landings over the last 50+ years. Nor is it apparent in the recreational fishing landings, which are generally increasing (see *Who, us? An examination of who's catching what in the world of fishing at <http://www.fishingnj.org/netusa26.html>*).

Can we know all there is to know about the status of every separate stock?

The antis enthusiastically point out that NMFS' knowledge of the status of the stocks managed under the Magnuson Act is woefully inadequate because the agency knows so little about so few of them. When we look at NMFS' annual report to Congress (http://www.nmfs.noaa.gov/sfa/domes_fish/StatusofFisheries/2006/FirstQuarter/TableA_B.pdf), however, we see that while the status of all of the stocks that support major fisheries are known, information is still lacking on some of those that don't. This includes 68 salmon stocks, 50 Pacific groundfish stocks and 44 Gulf and Caribbean reef fish stocks. While these stocks - and the fisheries that depend on them - should definitely not be ignored, the various fisheries management agencies together don't possess the resources to analyze and monitor the condition of all of them. Yet when it comes to furthering their anti-fishing agenda, these activists are willing to accord a lack of knowledge of the status of the Gulf of Mexico wenchman, the Lower River Hatchery spring chinook salmon and the Pacific dwarf-red rockfish the same importance as a lack of knowledge of the cod or king crab or surf clam.

With all due respect to the fishermen – recreational or commercial – who catch wenchmen in the Gulf, dwarf-red rockfish off California or Chinook salmon that were spawned in the Lower River hatchery, NMFS does have a handle on the status of our major recreational and commercial species, because those are the important ones. With a limited budget, and with ever-increasing demands from the activists for more enforcement, bureaucracy and surveillance (plus defending against all of those “conservationist” law suits), should the agency be expected to know the status of every one of several hundred separate stocks? Evidently, in the distorted world of these foundation-funded activists, that would be a definite yes. But we've yet to see a Pew grant for better on-the-water science that would fill the data gaps in dealing with these minor stocks.

So where's the crisis?

If, as Dr. Pauly and his benefactors insist, we'll be running out of fish in the near future, if the U.S. is the epicenter of poor management and corporate greed in the fishing world, then where's the evidence as reflected in U.S. landings? How is it that in the last half a century we've gone from an essentially low tech and environmentally benign type of fishing to one that, if you believe all of the anti-fishing hyperbole, was spawned in the third circle of Dante's Inferno, and yet we're still catching about the same tonnage of fish, and about the same species mix as well?

There are fisheries that are in bad shape today, just as there were fisheries that were in bad shape 50 years ago. And, no matter what is done, there will be fisheries that are in bad shape 50 years from now. Just as there were, there are and there will be fisheries in good shape. That's the

nature of fishing, not an indication of greed, ineptitude or immorality or the part of the fishermen or the managers. Natural and anthropogenic factors influence fish populations, and fishing exacerbates the impacts. The commercial fishing industry is working with the managers to minimize these impacts (we're glad to reference here a recent effort by a diverse group of industry representatives to initiate a buy-out program in the New England groundfish fishery), and we've come a long way in the last decade or two.

Can Congress see through the smoke and mirrors?

Congress is in the process of determining what the future of fisheries management, and the recreational and commercial fisheries, will be like as it considers the reauthorization of the Magnuson Fisheries Conservation and Management Act. As they deliberate, we sincerely hope that their deliberations are based on investing the effort into finding out what's actually happening in our part of the world's oceans, not on the false sense of hysteria that's been manufactured for most of the last decade. An examination of the data will show that the sky's been up there for the last fifty years and there's no sign that it's falling any time soon. What's at risk isn't the fish, it's the fishermen, and they aren't at risk because of their actions, they're at risk because of an anti-fishing agenda that has no basis in reality.

*The landings of Atlantic menhaden weren't included in the total catch from the Atlantic and Gulf coasts because they are an "industrial fish" that are caught in huge quantities determined by the market place (and in recent years, by political rather than their actual availability). For example, in the period examined, Atlantic menhaden landings comprised from about 25% to almost 50% of the total Atlantic landings. Their inclusion would have skewed the total landings significantly.

The landings of Pacific sardines weren't included in the total Pacific catch because 1950 was the last year during which they were available in significant numbers. In 1950 they made up almost one-third of the total catch. In 1952, because of a natural population cycle (possibly exacerbated by fishing) their populations had crashed and they made up less than 1% of the total landings. Landings declined to essentially zero in the mid to late seventies and are less than 20% of total landings today.

Alaskan landings weren't included because they have become so great, increasing by a factor of ten from 1950 to present, that if they were they would have concealed trends – or the lack of trends – in the fisheries in the "lower 48."

The Oil Slick

In a press release jointly issued by Conservation International, the Living Oceans Society and the Ecology Action Centre, Pew/Seaweb spokesperson Sylvia Earle is quoted as saying "*my role is to encourage the Canadian government to engage with the scientific community to better understand the dire impact that high seas bottom trawling has on marine biodiversity, and to form their policies based upon that. We don't bulldoze forests to hunt deer, and we shouldn't destroy the seafloor to catch fish.*" In a subsequent interview reported in the Toronto Globe and Mail, Ms. Earle further said "*imagine using a bulldozer to catch songbirds for food — that's what it's like,... Before trawling, you see eyes that look out from all the little crevices, crannies, burrows and little hills, all sorts of stuff that lives there. After a trawler has gone by, it looks like a superhighway, it's just flat. Nobody's home. A few fish may swim in and out but the residents, those that occupy the substrate, they're just smothered, they're crushed. It's like paving them over.*"

While the press release went to great lengths to identify some of Ms. Earle's accomplishments as a pioneering ocean scientist, those that we presume are useful to her in carrying out her above stated role, it neglected to mention the fact that she serves in another role as well. She was recently reappointed to the Board of Kerr-McGee Corp. (http://www.kerr-mcgee.com/media/bios/board/bio_EarleSylvia.htm), which is described on its website as "one of the largest U.S.-based independent oil and natural gas exploration and production companies."

For an idea of what Kerr-McGee is involved in:

"Kerr-McGee owns a 50% working interest in the 133,000-acre block located in approximately 350 feet of water, approximately 125 miles southeast of Rio de Janeiro. Economic evaluations for various development scenarios of the field are under way. 'This is an exciting and meaningful opportunity for Kerr-McGee,' said (Kerr-McGee Chief Operating Officer David A.) Hager. 'The Chinook field has outstanding rock quality, and its potential could expand as we continue our appraisal program to delineate the full extent of the reservoir.'" (January 24, 2006 - Oil, Gas and Energy News, Research and Trends - http://webbolt.ecnext.com/coms2/news_58816_ENN).

"Kerr-McGee Corp. announced a natural gas discovery in the deepwater Gulf of Mexico at the Claymore prospect located in Atwater Valley block 140. The Claymore #1 well was drilled to a total depth of approximately 25,000 feet and encountered more than 150 feet of net pay in multiple zones. "We are encouraged by the Claymore discovery," said David A. Hager, Kerr-McGee chief operating officer. "This is the first well in our 2006 subsalt program in the deepwater Gulf of Mexico, and this discovery provides momentum as we execute our exploration program that includes four to five additional high-impact subsalt targets this year.... Claymore is located in approximately 3,700 feet of water, 150 miles southeast of New Orleans, La. Kerr-McGee operates Claymore with a 33.5% working interest." (May 9, 2006 - Scandinavian Oil Gas Magazine - http://www.scandoil.com/moxie/news/Gas_news/kerrmcgee-announces-deepw.shtml).

The Offshore Technology website (<http://www.offshore-technology.com/projects/janice/>) reports on the Janice oilfield located in the Central North Sea approximately 175 miles east-south-east of Aberdeen "*Kerr-McGee acquired an interest in the licence block in 1995. It earned a*

total interest of 50.9% through drilling two successful appraisal wells during 1995 and 1996. A third successful appraisal well was drilled in late 1996. Kerr-McGee became the operator in May 1996. The producing horizon lies in the Jurassic section. Recoverable reserves are estimated at more than 70 million barrels (of) crude oil, and production was expected to peak by the first half of 1999. Extra processing capacity is available to allow Janice to serve as a hub for future developments. The Janice development plans envisage ten subsea wells, tied back to a floating production unit (FPU) using individual flowlines and risers. Of the ten wells, six are intended to be oil producers, while four have been planned as water injectors. This configuration will maximise the economic reserves and deliver the peak production forecasts of 50,000 gross barrels of oil per day.”

Of course, this brings up a number of interesting questions. Among them are:

- Why did the participating ENGOS fail to report Ms. Earle’s role as a Kerr-McGee Corp. Board member?
- Why didn’t any of the people reporting on this issue either discover or report her Kerr-McGee affiliation?
- Does Ms. Earle see any difference in the supposed devastation inflicted on the ocean bottom by commercial fishing and by gas/oil exploration and development?
- What does the offshore energy industry think about sharing the ocean with commercial fishing vessels?
- In areas where they coexist, has the offshore oil/gas industry or the commercial fishing industry caused more harm to the coastal and offshore ecosystems.

A while ago we wrote on the level of exaggeration used by the anti-fishing clique in their attacks on trawling and dredging (see <http://www.fishingnj.org/netusa6.htm>). We’ve always espoused protecting critical areas of the sea floor from all anthropogenic threats, but only when such protection is appropriate. We would no more support an end to offshore energy development than we would accept an arbitrary closure of entire ocean basins to commercial harvesting, and neither should anyone else. The world’s insatiable hunger for petroleum is more than matched by its hunger for protein, and while Ms. Earle evidently doesn’t see it that way, there’s room and resource enough in our oceans to continue to produce both.

Nelson “Hammer” Beideman

(in National Fisherman)

06/08/06

Nelson Beideman, known to just about everyone as Hammer, died on May 25. He died at home while puttering around the house with his wife Terri. I’m pretty sure that’s the way he would have wanted it, and that makes it a little easier, but not much.

It seems that I knew Hammer for as long as I’ve been involved in fishing. He was getting his feet dry after years on the water, and I was getting my feet wet after years as a researcher and bureaucrat.

This was in the late eighties when some influential people had decided to put the East coast pelagic longline fleet out of business. They weren’t successful, and though they’ve continued in their efforts, domestic longline caught swordfish and tuna are still available.

Hammer and his wife and partner Terri were the primary roadblock to the antis back then, and they continued to be for most of the last two decades. Despite the ill wishes of a lot of powerful people with money and political influence, the longliners are still fishing, the swordfish stocks they target are rebuilt, and the pelagic longline fishery on the East coast has become a model for cooperative fisheries research. This was almost entirely due to the efforts of Blue Water Fishermen’s Association and Hammer, who served since its inception as its brain, its heart, its soul and its conscience.

But this column isn’t going to be a memorial to him. That’s being done elsewhere. It’s going to be a lesson to all of us on getting involved in the fisheries management process, and in doing it right, because that’s what Hammer did, and he did it better than just about anyone else.

The best way I can describe his approach to fisheries management is with a couple of examples. Back in the days before email, whenever I’d see a long “tongue” of paper hanging out of the machine and coiled up in a pile on the floor, I’d know it was from Blue Water. If you were on the list, you could look forward to regularly getting a twenty, thirty or forty page fax on highly migratory species management. These missives were put together by Hammer (and Terri) in exhaustive detail. Whether it was dealing with domestic or international aspects of the fishery, about biology or the politics behind the biology, about catching swordfish and tuna or not catching turtles and marlin, he covered it. And he knew it cold. And he expected everyone in Blue Water to know it as well. He was thorough to a fault.

And then, two years ago I went to New Orleans with him for a series of meetings with Blue Water's Gulf contingent. Everyone knows that New Orleans is home of some of the best restaurants in the world. Everyone also knows that hotel food is usually pretty dismal. It certainly was at the hotel we stayed in, which was where the meetings were held. In those two days, we didn't leave the hotel once. Not for food, not for jazz, not for anything. We were there to brief Blue Water members, to do Blue Water business, and that's what we did. We did it from when we arrived to when we left. I can safely say that most of the rest of us aren't anywhere near that diligent.

He fully appreciated that the Devil was in the details, and I doubt he ever left his members in the lurch because one of those details got past him. If there were a meeting coming up – in the U.S. or abroad – where the HMS fishery was on the agenda, he would be there if he could. If he couldn't, he'd make every effort to have someone there in his place. And he'd make sure his replacement was thoroughly briefed beforehand.

When it came to HMS matters, to say he was persistent would be a vast understatement. He went through proposed regulations until he understood them completely. Then he explained them to Blue Water's board. Then he hammered a consensus out of them, and considering the varying personalities and business interests that he was dealing with, that could seem almost miraculous. But when he took his marching orders, he knew he had a majority of the Board behind him.

He also recognized that, no matter how much he tried, he couldn't do it all. So he brought together an effective team of consultants and lawyers, who did what he wasn't able to. They were, and are, among the best in the business, because he knew that's what it took to get the job done.

And, last but certainly not least, he excelled at building strategic alliances. Whether it was with researchers or environmentalists or recreational fishing representatives, if he saw that cooperation was the way to proceed, that's what he did. Much of his work at ICCAT (the International Commission for the Conservation of Atlantic Tunas – the guys that manage our Atlantic HMS fisheries) is a testament to that, but his leadership in reducing interactions with sea turtles was his crowning achievement, resulting in an international outreach program which is benefiting commercial hook fishermen – and sea turtles – everywhere.

Hammer figured out how to build, operate and fund a truly effective commercial fishing trade organization. We can all learn a lot from how he did it, and I hope you all do. I know I did.

And he was a good friend. I'm going to miss him.

Cumulative Impacts and Community Effects

(in National Fisherman)

07/04/06

Fishing communities are in trouble. While tempting to blame this entirely on ineffectual management, that's only part of the story. In fishery after fishery the screws are constantly being tightened by the managers. Fisheries have been subject to an unrelenting series of cutbacks; cutbacks often instituted for reasons unrelated to the level of commercial harvesting in those fisheries. Of course this is felt by the fishermen, who find it increasingly difficult to cope. It's also felt by docks, processors and other shore-side businesses. They can be reeling from double- or triple- or quadruple "whammies" of multiple cutbacks in multiple fisheries that they depend on.

This is old hat to anyone who regularly reads National Fisherman, and to a large extent the resourcefulness of people in the commercial fishing industry has allowed them to tighten their belts and more or less cope.

Unfortunately, because other factors are now in play, coping's becoming increasingly difficult.

Rising fuel prices, and attendant trickle-down impacts on the costs of other goods and services, are having major bottom line impacts. This can mean fishing closer to port, diminished landings and, in fisheries where it's possible, consolidation. The result is less revenue not only for the boats and docks, but also for businesses that provide vessel support services.

Coastal development pressures are having a significant impact as well. Docks and other fishing-related businesses that require a waterfront location are being priced out of the market. And those that remain can find themselves surrounded by upscale devel-

opment bringing new neighbors unwilling to accept the round-the-clock activities that a fishing operation depends on. Then when a marine railway, for example, closes down, it's a longer trip with perhaps a longer wait to get hauled out.

There are the proliferating numbers of scheduled or unscheduled closures. A direct route to the fishing grounds is not always possible. Hours and miles can be added to every trip, with a corresponding increase in fuel consumption (and perhaps a decrease in the value of the catch.) The pending whale avoidance speed limits will, at least for larger vessels, add to this burden.

Insurance costs, particularly in hurricane-prone areas, are approaching, and in cases have gone beyond, being affordable.

And we can't forget the increasing cost of regulatory compliance. Vessel monitoring systems aren't free, and come with service charges. In *Uncooperative Spirits* in last month's NF, Wesley Loy reported that the proposed regulations for the Alaskan H&G fishery could require an additional capital investment of up to \$300,000 per boat and an additional observer on board, adding \$82,000 in annual operating expenses.

Sounds pretty grim, doesn't it? But, given some slack in the areas where slack is available, it doesn't have to be. Can we look for any relief from high fuel prices or from the effects of those prices on the goods and services we require?

Unfortunately, that's not likely. Can we survive the impacts of rapidly escalating coastal property values? Zoning can help, and in some cases it already has. Insurance? Everyone's in the same boat there.

Where is slack available? How about in fishing regulations? While nobody is opposed to rebuilt stocks, no one that places any value at all on maintaining traditional fishing communities can think that having those stocks rebuilt according to some arbitrary schedule is worth the loss of a fishing port.

In the long term, does the rebuilding time matter? Not a bit, but a shorter rebuilding period might mean the critical level of fishing necessary to prevent the transformation of a fishing port into another condominized tourist magnet can't be maintained. It's impossible to believe that anyone valuing the contributions of fishing to the character of our coastlines and the health of the public would be unwilling to extend rebuilding for a few years to avoid the irreversible loss of a unique and valuable community.

But what of the so-called conservationists, those foundation-funded activists who profess to anyone willing to listen that they are doing what they're doing for the long term good of the fishermen and the public? That any flexibility in the management process will only make things worse? And what of the managers and the politicians who listen to them? Perhaps they really don't realize that a MacMansion on the water is forever, and that the dock it replaced isn't ever coming back. But it's about time that they did.

I've seen too many fishing communities disappear, and I don't know of any fishery that's actually been fished into oblivion.

Coming home to roost

(in *National Fisherman*)

08/07/06

Since 1996, our fisheries have been on a collision course with the Sustainable Fisheries Act (SFA). The impossibility of meeting the ten year "rebuilding" schedule is in the public eye now because of what it's on the verge of doing to the summer flounder (fluke) fishery in the mid-Atlantic and southern New England, but it will be confronting us in fishery after fishery in the next several years.

Why is compliance impossible? Consider all those factors that influence the size of a fish stock. First off, we've got everything that affects recruitment. This includes the number of spawning fish, viability of the spawn, water quality, water temperatures, currents, cannibalism and predation. Then, once "recruited" into the population, the fish are subject to cannibalism, predation, parasites, diseases, water quality, and fishing. And the managers can only control fishing.

So we have an ocean that's home to burgeoning populations of various marine mammals, all very effective at eating species that are important to recreational and commercial fishermen (for an idea of how accomplished they are, take a look at "It's not just fishing" from the April 2006 issue of *National Fisherman*). We've got the impacts of ongoing coastal development on water quality, and on the critters that live in that water. We've got water temperatures that – global warming or not – are pretty far from the normal. We've got –at least in the mid-Atlantic – a bumper crop of spiny dogfish eating anything that they can catch and swallow. And we've got fishing.

The Sustainable Fisheries Act makes no provisions for controlling, or even for allowing for, anything but fishing. Regardless of any other factors, the burden for returning a population of fish to some arbitrary “healthy” level falls on the shoulders of commercial and recreational fishermen.

As the summer flounder situation makes abundantly clear, no matter how much you cut back on fishing, this isn’t necessarily going to happen. That’s because there’s so much going on that can impact on the size of a stock that nobody’s bothering to (or even can) control, and the Act doesn’t permit the managers to allow for any of it.

With summer flounder, management restrictions seem to have hit the point of diminishing returns. Fishing has been continuously cut back and the stock has responded accordingly, doubling in size over the last several years. But it hasn’t responded enough to meet the rebuilding requirements, which are evidently to reach a stock size last seen in the 1930s. Even if fishing were halted completely, it’s questionable if this target could be reached.

Why? Maybe the rebuilding target was too high. Or maybe there’s other stuff going on that is outweighing the impacts of the long series cut-backs on fishing. Whatever the case, according to NMFS personnel the TAC will have to be reduced by almost 80% for the next fishing year. In spite of a stock that has been increasing steadily. Constrained by the SFA, they can’t do anything else (fortunately, the Mid-Atlantic Council could, and did. At their meeting on August 2, Council members voted for a TAC reduction of less than 20%).

We’ve got fishermen who did what they were supposed to; toed the line, participated in the system, fished “sustainably” and followed the rules. And the fish responded accordingly. What’s their reward? Apparently, if NMFS has it’s SFA mandated way, an almost complete shutdown of the fishery and the financial devastation of the people and businesses depending on it. And similar scenarios are surely in the pipeline for other “recovering” fisheries.

How did we get into this mess? Quite simply, by a handful of foundation-funded NGOs – and, I’m afraid, some complicit fishermen – convincing Congress that inflexibility was the Holy Grail of fisheries management because it would remove any trace of judgment from the management process. The fishermen should be, according to these self-proclaimed “protectors of the fish,” locked into rebuilding schedules with no wiggle room, regardless of whether they’re responsible for the condition of the fish or of the effectiveness – or effects – of forcing their compliance.

So where does the continuing increase in marine mammal stocks leave us? How about ongoing wetland loss, climate change, regime shifts, more frequent red tides or offshore energy development? Right behind the eight ball, folks, ‘cause we’re the only ones who have to pay the piper. And we’re going to remain in this untenable position until the managers can start using the judgment that the members of the Mid-Atlantic Council have demonstrated that a majority of them possess.

Facts? We don’t need no stinkin’ facts.

(in National Fisherman)

09/06/06

I am skeptical of efforts by “conservationist” organizations to help the fish or the “fishers.” There are folks who feel this skepticism is misplaced, that those well-meaning “conservationists” are on the side of the angels and their collective utterances should be accepted without question and immediately made the basis of national and international policy.

Occasionally situations arise that clearly justify my skepticism.

In 1998, researcher and Pew Fellow Ransom Myers co-authored a paper in the journal *Science* claiming that, without government protection, the barndoor skate was facing extinction. News of this ecological disaster was trumpeted far and wide, generating a request to list the species as endangered, pouring more fuel on the anti-trawling fire, providing more justification for marine protected areas, and on and on. The pending extinction was featured in “doom and gloom” publications by the Pew Oceans Commission, the Marine Fish Conservation Network, the American Fisheries Society, the Chronicle of Higher Education, the Reference Librarian, and seemingly any other group with space to fill, an ax to grind or a thirst for foundation dollars.

Since then the MPAs haven’t been created, the trawling controls haven’t been put in place and the other measures that would have been mandatory had barndoor skates been declared endangered haven’t been instituted. Have the barndoor skates continued Dr. Myers’ rush to extinction?

Not hardly. In “Super Sized Catches,” NMFS’ Northeast Science Center reported on the most recent Spring Bottom Trawl Survey “*the second leg brought in two record catches. The first, at station 212, had 147 barndoor skates that weighed in at 1,304 pounds.... This is triple the number of the next largest catch of barndoors... It is five and a half times the third largest catch.... (it) had almost three times the total number of individuals caught between 1975 and 1990!*”

Dr. Myers was just a wee bit off in his Chicken Little predictions. What are the odds that he or anyone at Pew, the Marine Fish Conservation Network or the American Fisheries Society has attempted to set things right?

Then there was a Portland Press Herald Maine Voices column, "Congress can still keep fishery alive," by Associated Fisheries of Maine's Maggie Raymond on July 18. Ms. Raymond started out "*as Congress prepares to revise the Magnuson-Stevens Fishery Conservation and Management Act it must strike an important balance between the conservation of fish and the preservation of fishing communities.*" She continued with an argument supporting legislation sponsored by Congressmen Pombo of California and Franks of Massachusetts, then wrote that the groundfish fishery "*stands on the precipice of destruction because so much of our necessary infrastructure is simply unable to keep an economic foothold while being slammed with repeated and overly restrictive regulations.*" She finished "*less than half the total allowable catch for groundfish set by fisheries scientists was actually landed by New England fishermen. Strict regulations prevented a full harvest. The value of what could have been landed but instead was left in the ocean was nearly \$50 million.*"

Of course, the antis were (and are) totally opposed to the Pombo/Frank legislation or anything allowing any flexibility in the management process or any leeway to fishing communities. Accordingly, on July 30 Roger Fleming at the Conservation Law Foundation responded. He didn't specifically rebut anything Ms. Raymond had written. Instead, he wrote that in her column "*Maggie Raymond portrays New England's groundfish populations as thriving.*" He followed with "*Ms. Raymond's failure to disclose her own special interest - one of the fishery's largest trawl vessels - may help explain her mishandling of the facts. It may also explain her advocacy for 'eliminating government red tape' and 'providing flexibility' to regulators.*" He also went through the obligatory groundfish doom-and-gloom litany yet again.

I've read Maggie's column several times. She didn't portray groundfish as "thriving," or anything close. I couldn't find any facts that she had mishandled. The size of the boat she owns is about as relevant to anything she wrote as Mr. Fleming's hat size. And not just big boat guys to want to eliminate red tape or believe that the lack of management flexibility is destroying fishing communities. If the CLF had supportable arguments, why didn't Mr. Fleming state them rather than accusing Maggie of misrepresentation and trying to paint her with a pejorative "big boat" brush? I couldn't think of a more effective strategy to make her seem unreasonable and to turn small boat fishermen against her. Is that what it takes for the CLF to sell it's vision?

Is it time to wave an olive branch?

(in National Fisherman)

10/04/06

This column is called "A Different Perspective" because I consider fisheries issues with a disregard for the conventional wisdom. This month, however, I'm writing from what is a different perspective for me as well.

It's obvious that I haven't been a fan of politically active recreational fishing groups – and my reasons for this are also obvious. However, it's time that all of us who have made fishing, either commercial or recreational, part of our lives realize that what we have in common – our and our children's freedom to fish – is being threatened by a common enemy, and that we're only going to maintain anything approaching that freedom if we come together with a common goal. And that goal is to put fishermen, both recreational and commercial, back into the driver's seat in fisheries management.

Can you imagine anything more ridiculous than having national fisheries policy dictated by mega-foundations working through false-front environmental and conservation organizations established and maintained by multi-million dollar grants and pretending to be "grass roots?" Or than politicians and the media buying into the fallacy that most fishermen have no thought for tomorrow and are only interested in maximizing their catch, whether for income or for enjoyment, today? Or a management agency that is so paralyzed by the fear of foundation-funded litigation that it will allow fishery after fishery to be destroyed in the name of "conservation?" Or can you imagine fishermen – the guys and gals who always fought in and often initiated, battles for clean water and protected habitat – considering "conservationists" the enemy?

Well, that's where we're at, folks. And it isn't going to get better until we make it better.

Fishermen will butt heads with other fishermen over allocation. Always have and always will. Small boat commercial guys won't agree with big boat commercial guys, nor dragners with dredge boats, longliners with seiners, catch and release anglers with those who take 'em home and eat 'em, pin hookers with those who don't sell their catch, and recreational fishermen with commercial fishermen. But we're all fishermen, and we're more than capable of keeping the sustainable management of our fisheries within the family and without the interference of foundation-funded "Astroturf" organizations trying mightily to pass as grass roots.

Which brings up a conveniently coincidental op-ed piece in the October 4th Asbury Park Press. The writer, chairman of the Ocean County (NJ) Sierra Club, obviously realizes the growing breach between his (and Pew's – the Sierra Club has received at least 800,000 Pew dollars) brand of so-called conservation and that practiced by New Jersey's fishermen, who are working together to put some needed flexibility back into Magnuson. This situation was galvanized by the imminent crisis in the summer flounder (fluke) fishery covered here two months ago. He wrote

"I live on an estuary of Barnegat Bay, where I love to fish. But I am proud to be an environmentalist. No doubt flounder is the most popular recreational fish on the Jersey Shore. I know it's mine." We sure do need more "proud environmentalists" living on estuaries, don't we? And though I have no reason to doubt his claim that he's a recreational fisherman, he's probably the only serious salt water angler in New Jersey who doesn't refer to summer flounder as fluke. But we're now supposed to accept him as a fishing environmentalist rather than a representative of a foundation-funded anti-fishing Astro-turf NGO. (He also refers to commercial trawlers and dredgers as "an environmental obscenity." I'd trade a few more responsibly fishing trawlers and dredgers for a few less people – Sierra Club members or not - living on estuaries any day, as would anyone with a rudimentary grasp of estuarine ecology.)

But his words compellingly illustrate how opposed the anti-fishing groups are to having us fishermen working together, because they've gotten control of the management process by playing one group against another for years (though those several hundred million Big-Oil bucks play a roll as well).

Recreational fishermen, commercial fishermen and all of the consumers who enjoy locally produced seafood are the real "grass roots," not front people for agenda-driven multi-billion dollar foundations. We are the ones with the true commitment to sustainable harvesting, because we demand that our children and their children and their children's children have fishing as a part of their life, and that's how we have to sell ourselves.

Working together will take coordination, cooperation and a lot of forbearance by everyone who fishes, but do we have a choice?

More on Magnuson

10/30/06

"Congress intended to give your agency (the National Marine Fisheries Service) flexibility to deal with situations where management decisions would have disproportionate economic impacts or are subject to other unexpected factors.... It is clear that the Secretary of Commerce, acting through NMFS, has the authority and the legal precedent to use flexibility in ensuring that conservation goals are met without causing serious harm to fishing communities." (Letter on summer flounder from Senators Frank Lautenberg and Robert Menendez and Congressman Frank Pallone to Dr. William Hogarth at NMFS dated 10/13/06)

We've written a fair amount in the last several months about the critical need for flexibility in fisheries management. With our scientists' lack of knowledge of what's going on in the oceans, with the lack of precision in fisheries statistics, with the importance of commercial and recreational landings to fishing communities up and down our coasts, and with the real estate development pressures that are threatening those communities, it's sheer folly to insist on "by the numbers" management. This isn't even taking into consideration the fact that the "numbers" are in actuality statistics that are so imprecise that the scientists who employ them are loath to identify them as statistics (while publications in virtually every other branch of science indicate when statistics are being used by following those statistics with some indication of their precision, this is very seldom the case in fisheries). This isn't a problem caused by a lack of knowledge; rather, it's caused by a lack of understanding of how exact – or inexact – that knowledge actually is.

Needless to say, the antis are more than willing to exploit this to the detriment of the fishermen. Hence the so-called "precautionary approach," which, they would have it, requires that whenever uncertainty exists, managers should err in favor of the fish, not the harvesters. This seems to be a reasonable approach when it is couched, as it almost always is, in terms of saving the fish from extinction and saving the fishermen from an ineffectual management system and their own lack of self-control. And, the argument goes, when the fish stocks "come back," the fishermen will once again be able to harvest them, all the while blessing the so-called conservationists and their superior knowledge and insights.

When the stocks "come back," will the fishing communities?

But is this likely to be the case? After several or more years of severely reduced landings or of no landings at all, and were the stocks that the fishing businesses had depended upon to return to some (often imagined and always overly optimistic) former level of abundance, what would the outcome most likely be? Well, if those fishing businesses had been anywhere other than, perhaps, Alaska, they would be long gone – and where they once were, we'd have a new infusion of condominiums and tourist shops. That's the reality in virtually all of our coastal communities, from Portland, Maine to Seattle, Washington. And development pressures are such that it's highly unlikely that a fishing business once gone is ever going to be replaced.

The development boom transforming North Carolina's inland coast is dismantling the state's seafood industry, which already was collapsing under falling prices, rising fuel costs and shrinking catches. More than 34,000 homes and thousands of private boat slips are planned along the sounds, rivers and estuaries in areas once prized more for their bounty of shrimp, crabs, oysters and flounder than their waterfront views.

Run-down fish houses, which buy seafood straight off the boats and sell it to wholesalers all over the country, are making way for condos that sell for a half-million dollars and up. The workman's docks where fishermen tie up are being replaced by private marinas

where pleasure boaters sometimes pay \$100,000 for a permanent slip.(From Development hurts ailing fishing industry, K. Collins and J. Price, The News Observer, 07/16/06 <http://www.newsobserver.com/1233/story/461206.html>)

If it were simply a matter of fishermen in particular fisheries taking several years off and then coming back to work, inflexible, by-the-numbers management might in some instances be acceptable and might actually allow some stocks to build up more rapidly. Realistically speaking, that isn't anything approaching what would happen. In any coastal community we can think of, waterfront property isn't going to be allowed to exist for any extended period of time without producing significant revenues. So when the fishermen finally got back to fishing, the fish might be there in greater numbers, but the docks, the chandleries, the ice plants, the gear/tackle shops, the marine railroads and all of the other infrastructure that it takes to support an active fishery will be gone, their owners having given in to relentless development pressures (as is happening far too often today even without the "help" of the supposedly selfless conservationists.)

At the same time, and in spite of the antis' ongoing campaign to convince the public otherwise, no species of fish or shellfish has ever been driven to extinction by fishing pressure. This includes fisheries that have been pursued in some instances for several centuries with no or minimal regulation. And even when they temporize, changing the imminent threat from "extinction" to "economic extinction," it's awfully difficult to come up with actual examples. As a matter of fact, none of the species making up the New England groundfish fishery, the supposed poster child for mismanaged, overfished and otherwise abused fisheries, are close to approaching that level, all still generating significant landings and significant income.

It's about much more than the fish

It's our most sincere hope that these "selfless conservationists" and their supporters in Congress have been operating at this point without realizing the harsh economic realities that will result from their overblown doom-and-gloom pronouncements, but perhaps they do. Perhaps they confuse real-world people who have productive jobs and real-world businesses not dependant on tax-exempt foundation largesse with their own colleagues and their own organizations. Perhaps they don't realize that not everyone can avail him- or herself of a regular sabbatical – with pay, of course - every few years. Perhaps they don't realize that the paychecks that many of us take home are actually based on producing things, not on stopping things from being produced.

Or perhaps they do have a realistic grasp of what's going on, but they're far more interested in pushing their anti-fishing agenda and see nothing wrong with miles and miles of oceanfront MacMansions and back-bay condominiums.

Our Congress, on the other hand, has recognized the importance of maintaining our fishing communities. The eighth National Standard controlling the content of federal fishery management plans set forth in the Magnuson-Stevens Act states "*conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.*"

It's obvious that the "sustained participation" of fishing communities in particular fisheries is being threatened by slavish, court-mandated adherence to inflexible management programs. The managers are forced to set rigid biological targets and rigid timelines for reaching them, and when the targets can't be reached within the allocated time, regardless of whether this is due to fishing or some other factor out of the control of the fishermen, the fishermen – and the communities that they support – are expected to pay. And if it appears as if they won't, the "conservationists," bankrolled by multi-billion dollar foundations, will go to court to force them to. It's happened in fishery after fishery, and until the Magnuson-Stevens Act is changed, it's going to continue to happen.

Fish stocks can't all be at optimal levels at the same time

This situation points up yet another major problem with how we are supposed to be managing our fisheries. According to the Magnuson-Stevens Act, both as written/amended and as interpreted, when "recovered," all of the stocks under management are supposed to be at a level that will produce the Maximum Sustainable Yield or MSY (defined as the largest long-term average catch or yield that can be taken from a stock or stock complex). This is generally accepted to be at a level of from 30% to 50% of an unfished stock, a seemingly reasonable level and certainly a desirable one. But how reasonable is it – particularly in the context of having every species/stock complex at that level concurrently?

One of the problems with ocean issues in general and fisheries issues in particular is the average person's unfamiliarity with what's going on out in the ocean, which to most of us is an environment as alien as the surface of the moon. To partially obviate that problem, let's consider a more familiar system instead.

A terrestrial example

Imagine you owned a fenced-in pasture that could support a certain biomass of grazing critters. For the sake of the illustration, assume that this would be 500 horses or 300 cattle or 2000 sheep or 100 bison at any particular time. These numbers would each represent the pasture's carrying capacity for one of the four species (the carrying capacity is determined by one or several limiting factors – those critical factors that limit

the size of a population). Could your pasture support 500 horses, 300 cattle, 2000 sheep and 100 bison at the same time? Of course not, nor could it simultaneously support half of those horses, cows, sheep and bison. You'd have too many grazers and not enough grass.

If everything was percolating along exactly the way it should, if there was enough rain and it didn't get too hot or too cool and you kept away the predators, you might be able to maintain a quarter of the sheep, the horses, the cattle and the bison. How about adding another species? Not likely, because the cattle, horses, sheep and bison that were there would already be eating all of the edible plants that could be eaten each year, drinking all the drinkable water, using all of the available space, or exhausting whichever other factor was limiting.

How about if one of the species, because of optimum environmental conditions, has a banner breeding year? Instead of 25 bison being born, you'd have 150. If those bison were better at competing than the horses, sheep and cattle, you'd end up with more of them and fewer horses, cattle and sheep.

How does this apply to fisheries management? If the managers are doing it right, and if the fishermen and Mom Nature and everyone else are complying, you can have enough fish of a particular species to allow you to harvest the MSY for year after year. You could probably have a number of different species from the same area at MSY levels, as long as those species have either no or minimal effect on each other and no environmental varies get too out of kilter.

Unfortunately, with many of the fish species that are sought by commercial and/or recreational fishermen, the species that are the primary focus of management, that isn't the case. They consume the same prey species (which tend to be anything they can catch and fit in their mouths) and will often feed on each other. If we take the inshore/nearshore waters of the Mid-Atlantic as an example, we have a number of species that spend time in the same areas during much of the year and have diets that overlap significantly. According to Bigelow's and Schroeder's Fishes of the Gulf of Maine, summer flounder, weakfish, bluefish, striped bass, dogfish, black sea bass, monkfish and barndoor skates all feed on smaller fish and squid (see table #1 below). They all share the same chunk of ocean at the same time, they all are chasing the same prey species and, given the opportunity, they'll all feed on each other. They are the oceanic equivalent of bison, cattle, sheep and horses.

Table 1

Species	Feeds upon (from Bigelow and Schroeder)
Summer Flounder	"Feeding largely on smaller fish of various sorts, on squids, crabs, shrimps, and other crustaceans...."
Weakfish	"Smaller fish, such as menhaden, butterfish, herring, scup, anchovies, silversides, and mummichogs, of which they destroy vast quantities."
Striped Bass	"Smaller fishes of whatever kind may be available.... alewife, anchovy, croakers, channel bass, eels, flounders, herring, menhaden, mummichogs, mullet, rock eels (Pholis gunnellus), launce, sculpins, shad, silver hake, silversides, smelt, tomcod, weakfish, white perch, lobsters, crabs of various kinds, shrimps, isopods, gammarid crustaceans, various worms, squid, soft clams (Myra) and small mussels."
Sea Bass	"Crabs, lobsters, shrimp, and various mollusks. They also eat small fish (e. g., launce and menhaden), and squid on occasion."
Bluefish	"Mackerel, menhaden, herring, alewives.... scup, squeteague, hake, butterfish, cunners, and small fish of all kinds, besides squid."
Dogfish	"All species of Gulf of Maine fish smaller than themselves, and squid are also a regular article of diet whenever they are found. Dogfish are also known to take worms, shrimps, and crabs."
Monkfish	"The goosefish becomes a fish eater in the main after it takes to the bottom, and the following Gulf of Maine species have been recorded from its stomach: spiny dogfish, skates of various kinds, eels, launce, herring, alewives, menhaden, smelts, mackerel, weakfish, cunners, tautog, sea bass, butterfish, puffers, various sculpins, sea ravens, sea robins, sea snails, silver hake, tomcod, cod,
Barndoor Skate	"It also feeds on worms, various crustaceans, particularly on large rock crabs and lobsters, shrimps, squid, and on fish. Probably it is more destructive to the latter than are any other of our skates thanks to its large size. Woods Hole records list spiny dogfish, alewives, herring, menhaden, butterfish, launce, cunners, tautog, sculpins, silver hake, hake, and flatfish among its foods."

There isn't any way that the waters of the mid-Atlantic are going to simultaneously support adequate levels of each of these competing species to allow them all to be harvested at the MSY level, particularly considering that optimal conditions for each are unlikely to coincide. There won't be enough food, there won't be enough space, and they'll all end up eating each other. But that's what the Magnuson Act unrealistically requires. And the Act – or how it's being interpreted – puts all of the responsibility if the MSY level isn't reached, or if the rebuilding schedule to get there isn't met, on the shoulders of the recreational and commercial harvesters.

And how real are fisheries “targets?”

Then there’s the MSY level itself. With summer flounder it was decided that 204 million pounds was the biomass target level. As far back as the records go, that level has never been reached, and the records go back to the 1970s. Summer flounder spawn in the ocean, but the juveniles migrate into and mature in estuaries. Considering that the population of the coastal states in the mid-Atlantic has increased so dramatically over the last three decades (see http://www.fishnet-usa.com/blame_it_all.pdf - pg2), it’s hard to imagine the biomass of summer flounder of any other estuarine-dependent species not being negatively impacted. Regardless of this, if the biomass target that’s never been seen can’t be reached, it’s assumed that it’s because of too much fishing, and once again the fishermen will be expected to pay.

And this is the case in every region, in fishery after fishery. A rebuilding target has been/will be chosen at (or, as in the case of summer flounder, beyond) the highest level that has ever been observed, and when that level can’t be reached or the arbitrary schedule for meeting it can’t be met because of the loss or degradation of habitat or because of competition with other species, the fishermen are the folks will be held accountable.

What’s to be done?

In essence, it’s pretty simple.

Managers – at least the good ones – realize how inexact the science is, how fragile the fishing infrastructure is, how resilient the fish stocks are, and the shape the habitat is in. They also have an appreciation of the species-to-species interactions. They are fully capable of making informed decisions (to the extent that such decisions will ever be informed) that equitably balance the needs of the fishermen with the needs of the fish. If we return once again to the summer flounder example, we can insist on sticking to an inviolate 10 year “rebuilding” schedule and a “rebuilding” target that we’ve never observed, inflict hundreds of millions of dollars of damage on recreational and commercial fishing businesses, and interfere tremendously – and perhaps irrevocably – with fishing communities from North Carolina to Massachusetts. Or we could allow the managers enough discretion to switch to a less punitive “rebuilding” schedule (while still being held to the requirement that the stock continue to increase), allowing the recreational and commercial fishermen, the businesses they support and the communities they belong to, to cope with and adjust to any necessary cutbacks in harvest. The only difference, as far as the fish are concerned, is that it will take several more years for them to reach – if they ever can – the arbitrary rebuilding target.

It doesn’t sound like much of a choice, yet the anti-fishing activists are still lobbying for a continuation of the Sustainable Fisheries Act inflexibility that won’t significantly help the fish but will inflict tremendous economic injury on coastal communities in seven coastal states. And it’s not limited to summer flounder and its not limited to the Mid-Atlantic.

“Rebuilding” can be enforced, and “rebuilding targets,” if they are reasonable, can be reached, and it’s doubtful that anyone who fishes and who cares about the fisheries, would argue that they shouldn’t. But what they should and will argue for is the flexibility in management plans that will allow it to be done in a way that protects both the fish and the fishermen. That was the intent of Congress in crafting the Magnuson-Stevens Act, and it should be reflected in the implementation of the Act. Congressman Richard Pombo and Congressman Barney Frank and others have been attempting to get much needed flexibility back into Magnuson-Stevens. The future of fishing communities from Maine to Alaska depends on that happening.

*“We are now in year seven of our fishery management plan for summer flounder, and since 2000, its biomass has nearly doubled and its spawning stock biomass has nearly tripled. The stock is not overfished, but overfishing is occurring. Nonetheless, to meet the statutorily mandated 10-year rebuilding target, we must double the current biomass level of about 105 million pounds by roughly 100 million pounds over the next three years. To meet the letter of the law will likely require draconian measures that entirely miss the spirit of the law. For, in addition to stopping overfishing and rebuilding stocks, we also are supposed to minimize adverse economic impacts and allow for recreational opportunities. Given the current circumstance, i.e., the summer flounder stock at the highest level it has been in more than 20 years, and the requirement that we achieve a target level that has never existed, **we are forced to question the application of a law (and science) that would place a burden on the fishing community that is so onerous that its outcome would likely lead to massive civil disobedience.**” (Ron Smith, Chairman of the Mid-Atlantic Fishery Management Council, in a letter to Congressman Richard Pombo, Chairman of the House Resources Committee. Emphasis added.)*

THE OIL SLICK

Have you ever wondered why so many of the country’s most prestigious newspapers and other media outlets devote so much attention to “doom and gloom” fisheries and ocean issues, almost all involving the supposed negative impacts of fishing and for the most part ignoring a host of other anthropogenic factors? Does an editorial board in Manhattan or a reporter in San Francisco suddenly develop a spontaneous interest in what commercial fishermen are doing to the world’s oceans? With everything else that’s going on in the world, in the country, and in most journalists’ own back yards, that’s kind of hard to imagine. We have written a great deal about how the Pew Charitable Trusts supports

and encourages researchers that are willing to perpetuate the “blame it all on fishing” philosophy. However, without the media to spread this message, the Pew campaign would be far less effective because professional fisheries managers are capable of seeing beyond the distorted Pew perspective to what’s really going on in our coastal and offshore waters.

We’ve been somewhat remiss in reporting on Pew’s connections to with the media, which appear to be quite as equally extensive – and expensive – as their efforts in fisheries (they extend beyond fisheries into other areas that Pew has an interest in, like global warming, as well).

Going through their database, we see that the Pew Trusts have made at least \$140 million in media-oriented grants since 1996. Notable recipients and the amounts they have received are:

The Tides Center* - \$40 million
Columbia University - \$25 million
Various Public-Broadcasting recipients - \$15 million
University of Richmond - \$11 million
Johns Hopkins University - \$7 million
New York University - \$3 million

*The Tides Center disburses foundation funds to other recipients. For more information on Tides, visit the Activist Cash website at http://www.activistcash.com/organization_overview.cfm/oid/225.)

This is just over \$100 million, which should be enough to grease a reasonable number of skids. And, though we’re not privy to the numbers, it wouldn’t surprise us to find that a significant proportion of many of the Pew grants dealing with fisheries issues goes to media relations, which seem to be at the foundation of the Pew oceans program.

Taking the Pew Fellows annual meetings as an example, in the 2002 conclave held in Bonaire, one of the workshop sessions was titled “**Communicating For Results.**” The description of the session read “*Learn how to navigate the stormy waters of the media. Packaging your message is a key to success—whether talking to the media, submitting a paper to Science or Nature, writing a grant proposal, or writing an op-ed for your local paper. This interactive workshop will help you hone your ability to get the results you want. A diverse team of trainers will share their insights and experiences and provide individual feedback on how to strengthen your message. Topics covered will include: What do Media Want, Do’s and Don’ts, Managing Your Message, and Putting Your Press Clips into Action.*”

But even better than the content of the session was the fact that Cornelia Dean, at the time the Science Editor of the New York Times, was identified as one of the session “Presenters/Trainers.”

Ms. Dean was present again at the 2004 annual meeting, this one at the Ocean Reef Club in Key Largo, Florida. Here she was listed as one of the participants in a workshop titled “**Bridging the Worlds of Science and Journalism**” as well as being in a panel discussion “**Oceans in the Balance: Is Science or Politics Tipping the Scales?**” (Note that Ms. Dean also teaches courses at Columbia University.)

Those of us who follow such things recognize that Ms. Dean, as well as Andrew Revkin, her colleague at the Times (who is also a faculty member at the Columbia School of Journalism), are far more likely than not to depend on members of Pew’s stable of researchers as sources for their oceans/fisheries coverage. And, of course, their coverage reflects the pessimism of those researchers. When opposing views are presented, they are nowhere nearly as compelling; leaving the reader with the impression that the scientific consensus is that fishing is to blame (for just about anything). This is hardly the case.

This isn’t to suggest that either Ms. Dean’s (or Mr. Revkin’s) journalistic integrity has been in any way compromised, but after spending time at what appear to be luxury resorts in what appear to be tropical paradises with a bunch of scientists who all share a jaundiced and controversial view of fishing’s impacts, is it any wonder that these scientists are her and her papers primary sources?

In an article she wrote for the New York Times after one of these annual meetings (Rousing Science Out of the Lab and Into the Limelight, November 11, 2003), Ms. Dean wrote “*But it is not always easy for us to tell when a science story really has more than one side -- or to know who must be heeded and who can safely be ignored,*” which she immediately qualifies with “*when we cast too wide a net in search of balance, we can end up painting situations as more complicated or confusing than they actually are.*” We would suggest that Ms. Dean and her colleagues at the Times aren’t having problems with the width of the net, but with the direction in which it’s being cast.

Equal justice for all?

(in National Fisherman)

11/08/06

You’ve probably read about the former observer who admitted to falsifying reports for 59 trips he had supposedly made. According to NOAA, following a plea deal he “was sentenced to five years probation and ordered to pay restitution of \$29,541” The restitution was reportedly the

salary he was paid for the trips. He pled guilty to a misdemeanor charge of embezzling / having received public money that he was not authorized to retain as salary, failing “to conduct fishery sampling trips aboard federally permitted fishing vessels while still accepting his salary” in 2001 and 2002.

According to an article in the Atlantic City Press, the ex-observer attempted to make his trip reports look authentic “by marring them with coffee stains and blood.”

So what? You might ask. He got caught with his hand in the cookie jar and got his wrist slapped. It happens all the time, and few of us are surprised to learn that government employees are as capable of breaking the law as anyone else.

Contrast that to the case of the operator of a Woods Hole commercial fishing boat who was issued “an \$82,500 civil penalty and 136-day permit sanction after he allegedly ignored instructions to fish with a NOAA Fisheries Service Observer aboard during an upcoming trip.” He was selected to carry an observer, but was told that his boat did not meet “safety requirements needed to carry an observer, and the vessel was prohibited from fishing until the requirements were met.” He went fishing anyway, and NOAA Special Agents boarded his vessel when it returned to port. The boarding also resulted in a catch seizure with a total value of more than \$2,675.

Both of these cases were reported, with that air of smug self-congratulation, in NOAA Office of Enforcement news releases.

There are few people who are as important to particular fisheries as federal observers. What they report has a direct bearing on the future of the fishery, or its lack of a future. While it won't be news to most of you reading this, if too many “interactions” with the wrong kinds of critters are reported by these observers, the subject fishery can be severely restricted or shut down (and, of course, Oceana's lawyers will be there with an open checkbook to ensure that the maximum amount of fishermen's blood is spilled in the bargain).

By the same token, the fisheries management system mandates that there are few fishermen's responsibilities as important as complying with the requirements of the observer program.

This is where the unsettling part comes in.

The NOAA bureaucrats in all probability justified the harsh treatment accorded the fisherman because he dared to interfere with the observer program. Otherwise, all he did was go fishing (and he evidently had a legal catch, if not he would have been hit with another huge fine). They couldn't let a fisherman flaunt their system, so they socked him with a big fine and permit sanction.

But what about the ex-observer? Wasn't what he did at least as damaging to “the system?” Yet all he had to do, according to NOAA, was pay back the salary that he had received but hadn't earned. How much faith should any of us put in an observer system where the observers aren't 100% reliable. After this episode there are some monkfish gillnetters in the Mid-Atlantic who are severely skeptical of federal observers and all of their observations. Shouldn't they be? Shouldn't we all?

I don't know all the details in either case. They were pursued in different jurisdictions and there might have been extenuating circumstances in either or both. But regardless, think of NOAA's message. Another fisherman gets dragged through the coals because he's guilty of nothing more than threatening the smooth running of the bureaucracy, while a fellow bureaucrat, one who it appears did much more to threaten the actual functioning of the bureaucracy, gets off with what seems to be a slap on the wrist (restitution doesn't really equate to punishment).

This isn't about an ex-observer and a fisherman. It's about the NOAA/NMFS relationship with fishermen. Or about where that relationship is heading. The agency's attitude is becoming increasingly adversarial; that it's there to protect the fish – and the turtles and the dolphin and the manatees and the whales - from the fishermen. Where does that leave us when it comes to having advocates, or even friends, in the administration in Washington, and don't you think you should be doing something about it?

Here we go again
(in National Fisherman)
01/09/07

In a letter to the editor of the New Bedford Standard Times on January 3, Gib Brogan, Campaign Projects Manager for Oceana, wrote that the paper was at fault for identifying “Oceana and other nongovernmental organizations as being the only opposition to weak rebuilding provisions proposed by Rep. Barney Frank as part of the reauthorized Magnuson-Stevens Act.” He continued “a wide range of groups opposed Rep. Frank's proposal to weaken rules intended to rebuild our nation's fisheries.”

But when he expanded on this, his list of groups was awfully short. As a matter of fact, it went no farther than “the Marine Fish Conservation Network, a coalition that includes commercial fishermen and fishing groups in its membership.”

Now the Marine Fish Conservation Network (MFCN) is an organization that I'm somewhat familiar with, having devoted some significant time researching and several hundred words writing about it in a recent FishNet (see http://www.fishnet-usa.com/reauthor_one.html).

From the tone of Mr. Brogan's letter, the uninformed reader would think that the MFCN might be a large and diverse group of "concerned" fishing- and ocean-related organizations, all with a common interest and all disconnected from Oceana. Large? Perhaps. Diverse? Not likely, at least if one is a believer in Deep Throat's "follow the money" philosophy. And disconnected from Oceana? Consider the following and draw your own conclusion.

Last fall the MFCN, along with the National Environmental Trust, ran an ad in the Washington Times stating that Congressman Frank's version of a retooled Magnuson Act "contains loopholes that will increase overfishing." At that point the National Environmental Trust, the MFCN and Oceana had shared over \$60 million doled out by our favorite "charitable" trust (which, to spare the feelings of some of my more sensitive readers, I'll only identify as OFCT.)

And what about those "commercial fisherman and fishing groups" in the MFCN membership? The MFCN website listed perhaps a dozen groups that can be readily identified as commercial fishing-oriented. From the FishNet cited above, "at least half have what appear to be substantial ties with OFCT. Pat White, past Executive Director of the Maine Lobstermen's Association, and Pietro Parravano, President of the Pacific Coast Federation of Fishermen's Associations (PCFFA) were both members of the OFCT Oceans Commission. The Cape Cod Commercial Hook Fishermen's Association has been funded by OFCT. The Institute For Fisheries Research (IFR) is a spin-off of the PCFFA. Salmon For All is a member of both the PCFFA and Save Our Wild Salmon Coalition, which has received upwards of \$5 million from Pew. David Hallowell of the Humboldt Fishermen's Marketing Association is listed as a Board member of the IFR."

Of course, nothing's wrong with any of these folks or organizations getting funding or seeking alliances or working with whatever or whoever they wish, and I'm definitely not implying that there is. But I don't think it's much of a stretch to suspect that there might be some connections there that go a bit farther than an interest in the oceans and the fish in 'em.

Of the remaining 170 or so members of the MFCN, over a dozen have received more than a quarter of a million dollars each from OFCT. Some of them have received much, much more. Over \$20 million for Earth Justice Legal Defense, \$8 million for the Theodore Roosevelt Conservation Partnership, \$4 million for Seaweb, almost \$5 million for Audubon, but you're all familiar with the drill by now.

And, of course, there are a whole bunch of organizations representing competing users of the oceans' resources; primarily recreational fishing and diving groups.

The range of the groups Mr. Brogan writes about seems to be much more narrow than he would apparently have his readers believe. The big guys are all dipping into the same barrel of cash, as are many of the smaller ones. The commercial fishing groups can be tied to the folks that keep that barrel filled, and many of the rest see that the MFCN agenda, which is opposed by most fishermen, might accordingly have some pay-offs down the road for them.

Wide range of groups, Mr. Brogan? You're going to have to try a lot harder than that.

NEWS FLASH - The internet has been peppered with reports concerning the interactions between selenium and mercury in the body. Selenium, found in high levels in fish, apparently negates effects of mercury (see http://newsletter.vitalchoice.com/e_article000709707.cfm?x=b11,0,w). This is "breaking news" at this point, but keep your eyes peeled for more on the subject. It's critical to the future of our industry – and our customers.

Flotsam and Jetsam

02/05/07

Wikipedia defines "flotsam and jetsam" as "*goods of potential value that have been thrown into the ocean. There is a technical difference between the two: jetsam has been voluntarily cast into the sea (jettisoned) by the crew of a ship, usually in order to lighten it in an emergency; while flotsam describes goods that are floating on the water without having been thrown in deliberately, often after a shipwreck*". (<http://en.wikipedia.org/wiki/Flotsam>)

This seems an apt title for periodic FishNets in which we address several issues that should be of value to anyone with an interest in oceans and fisheries in a somewhat abbreviated manner.

Let's hear it for selenium.

If you read FishNet you're undoubtedly familiar with the "don't eat the fish 'cause it's loaded with mercury" hysteria periodically flogged by various envirogrs when they're looking for some media attention. The basis for this hysteria, as is easily determined with a little research, is a few extremely unfortunate instances of severe mercury poisoning (as in Minimata disease) caused by industrial releases, and a study of resi-

dents of the Faroe Islands. (see http://www.papageorgetuna.blogspot.com/2004_02_01_papageorgetuna_archive.html). A conflicting study, this one looking for, and not finding any, negatives effects of mercury, was done in the Seychelles Islands.

It's important to note that the source of mercury in the Faroe Islands was identified as pilot whale, a marine mammal and a mainstay of the Faroese diet, while that in the Seychelles was fish.

Below is the abstract of a paper by University of North Dakota researchers Laura Raymond and Nicholas Ralston (**Mercury: selenium interactions and health implications**, Seychelles Medical and Dental Journal, Special Issue, Vol 7, No 1, November 2004 - <http://www.seychelles.net/smdj/SECIIC.pdf>) which puts the selenium/mercury issue into perspective:

“Measuring the amount of mercury present in the environment or food sources may provide an inadequate reflection of the potential for health risks if the protective effects of selenium are not also considered. Selenium's involvement is apparent throughout the mercury cycle, influencing its transport, biogeochemical exposure, bioavailability, toxicological consequences, and remediation. Likewise, numerous studies indicate that the selenium, present in many foods (including fish), protects against mercury exposure. Studies have also shown mercury exposure reduces the activity of selenium dependent enzymes. While seemingly distinct, these concepts may actually be complementary perspectives of the mercury-selenium binding interaction. Owing to the extremely high affinity between mercury and selenium, selenium sequesters mercury and reduces its biological availability. It is obvious that the converse is also true; as a result of the high affinity complexes formed, mercury sequesters selenium. This is important because selenium is required for normal activity of numerous selenium dependent enzymes. Through diversion of selenium into formation of insoluble mercury-selenides, mercury may inhibit the formation of selenium dependent enzymes while supplemental selenium supports their continued synthesis. Further research into mercury-selenium interactions will help us understand the consequences of mercury exposure and identify populations which may be protected or at greater risk to mercury's toxic effects.”

According to the US Department of Agriculture's Nutritional Database (Release 17) for the selenium content of selected foods, fish and shellfish are among those with the highest selenium content (and most interestingly, among the fish with the highest levels of selenium are swordfish and tuna, two of the very species that the envirocrisis machine would have the public forego because of the supposed “dangerous” levels of mercury (<http://www.nal.usda.gov/fnic/foodcomp/Data/SR17/wtrank/sr17a317.pdf>).

For more information on mercury/selenium interactions, see the conference report “AAAS: Kids Do Okay After Pregnant Moms Eat Mercury-Laden Fish” at Medpage Today (<http://www.medpagetoday.com/OBGYN/Pregnancy/tb/2704>) and “Mercury-Fighting Mineral in Fish Overlooked in Heated Debate” in the December 7 Vital Choices Newsletter (http://newsletter.vitalchoice.com/e_article000709707.cfm?x=b8wQMPW.b67kwpM8.w).

With this in mind, and considering the many proven beneficial effects of fish, particularly those high in omega 3s, in the diet, we have to question the motives of any groups or individuals who use the threat of mercury “poisoning” as a reason for stirring this pot any more than has been done in the past. The anti-fishing groups are continuing, or trying to continue, their campaign because it's a significant part of their overarching political agenda, but the consuming public deserves much better from them, and from the so-called charitable foundations that support them.

Save our dogfish?

“Having a school of dogfish hanging around seems like the marine equivalent of having the Donner Party spending the winter camped in your back yard”.

We've written extensively on the situation concerning the overabundance of spiny dogfish in the waters off the US East coast and the negative impacts of this abnormally high biomass of these voracious predators on other, far more valuable (both in terms of recreational/commercial fishing economics, and the maintenance of a balanced ecosystem) species of fish (see The Dogfish Follies at <http://www.fishnet-usa.com/dogfishfollies.html>). In spite of this, supposedly concerned environmental activists are still using the spiny dogfish as the “poster fish” to continue their ongoing anti-fishing campaigns.

In a recent AP article (**Conservationists Rally to Support Sharks**, January 20, 2007), Tara Godvin closed with “*British fish and chips and German beer garden snacks have used the meat of spiny dog fish, which takes up to two years to develop inside its mother before being born*, (Sonja) Fordham (policy director of the Belgium-based Shark Alliance and director of the shark conservation program of the Washington-based Ocean Conservancy) *said.*”

As has been pointed out many times before, the long gestation period of spiny dogfish allows the fish to be “born” as highly efficient predators, complete with a full complement of teeth and the voracious appetite that allows them to eat just about anything their size or smaller that they come across. While this characteristic of the species is always used as an anti-fishing argument by the save-the-sharks zealots, it's what has allowed dogfish to reach their present dominant position in our coastal waters in recent years, and from an evolutionary perspective is obviously much more a strength than a weakness. We shouldn't be involved in protecting spiny dogfish from fishermen, but in protecting other fish species from spiny dogfish.

Magnuson amendments - what do we really need and when do we need it?

“The nation must continue working to protect and restore fisheries, but not without weighing the human factor and how excessive restrictions can hurt our fishermen.” New Jersey Congressman Jim Saxton in the Asbury Park (New Jersey) Press on December 28, 2006.

During the final hours of the 109th Congress the Magnuson-Stevens Act - which governs fisheries management in federal, international and to a limited but increasing extent, state waters – was reauthorized. Along with the predictable increase in responsibilities and decrease in funding for the National Marine Fisheries Service (or NOAA Fisheries), a number of significant changes were included in the final version of the Bill.

Foremost among these, at least from the mid-Atlantic perspective, was a provision that exempted the summer flounder stocks from the rigid 10 years rebuilding requirement, allowing the stocks in this particular fishery another three years to reach target levels (see http://www.fishnet-usa.com/reauthor_one.html). It's obvious that this was recognition of the importance of this fishery to both recreational and commercial anglers and dependent businesses from South Carolina to Massachusetts and of the job their constituents did in making their representatives in Washington aware of this.

Unfortunately, this “fix” applies only to the summer flounder fishery, and not to the many others that are going to end up in the same place in the next few years. In fishery after fishery, restrictions have been put in place and the stocks have responded positively. This is always accomplished at great expense to the fishermen, and to the businesses that depend on their efforts. Quotas have been reduced, seasons have been shortened, gear modifications have been mandated and areas have been closed to fishing, and the fish have invariably responded. But as has been so compellingly demonstrated in the summer flounder fishery, these measures won't necessarily be adequate to returning particular stocks to their so-called “target” levels; that is, levels based on some previous, and always calculated, levels of abundance.

We can't overemphasize how important this three-year extension of the rebuilding period is going to be to the summer flounder-dependent recreational and commercial fishing industries in the mid-Atlantic. While all of the involved businesses are going to be hurt economically, the extension will allow most of them to remain viable. And what's the cost? Instead of being at a particular level immediately, the summer flounder stocks will be at that level three years later. Is the benefit worth the cost? If you're income is partially or wholly dependent on the fluke fishery it is. If you put any value on maintaining the character of our coastal communities, it is. If you take pleasure in catching one or several meals worth of summer flounder as a recreational angler, it is. If you look forward to an ocean-fresh flounder dinner at any of thousands of shore restaurants, it is. But if you're a foundation-funded “advocate” whose interest apparently begins and ends with the fish (or with bedeviling the fishermen that catch them), it seems that it doesn't.

Congressman Saxton hit the rebuilding nail squarely on the head when he wrote “*with three more years added to the rebuilding time frame, the compromise helps lessen the extreme socioeconomic impacts of steep cuts. They ensure Jersey Shore fishermen will enjoy more summer flounder in the short term, while also working toward an abundance for the long term.*” Not at all surprisingly, however, this wasn't good enough for Michael Hirschfield, chief scientist for Oceana, the so-called “ocean advocacy” group that has achieved unprecedented unpopularity in the fishing industry. Mr. Hirschfield said of the several compromises engineered by Congressman Saxton and a handful of other Representatives and Senators who saw preserving the economic integrity of the many involved fishing businesses as important as meeting any arbitrary rebuilding schedules “*we're disappointed because we really do see this as an opportunity missed*” (J. Eilperin, **House Approves Overhaul of Rules for Fisheries**, Washington Post, December 10, 2006). While we can't be certain exactly what opportunity Mr. Hirschfield was disappointed in missing, it's hard to imagine it being anything other than the opportunity to ruin more fishing businesses and inflict more pain and suffering on fishing communities. And for what? To reach an arbitrarily determined summer flounder population level a few years earlier.

In the past the Magnuson-Stevens Act has undergone major amendments at roughly a ten-year interval. Unless we wish another ten years of seeking special exemptions in fishery after fishery when each comes up against totally unrealistic requirements such as the one that Congressman Saxton and a handful of his colleagues helped us to circumvent in the summer flounder fishery, we can't wait that long. Unless the “public be damned” attitudes of a handful of “ocean advocates” with seemingly unlimited budgets for public outreach are to hold sway, the flexibility that was just allowed in summer flounder management must be extended to all of our fisheries, both recreational and commercial.

When it comes to balancing the viability of fishing businesses with being at a particular point on a population rebuilding curve this year, next year or the year after, the fishing businesses are being accorded nowhere near adequate importance. It's as simple as instituting massive cuts in a fishery immediately, and irrevocably damaging the businesses that depend on it, or phasing them in over several years and saving the businesses. Along with anyone who depends on either commercial or recreational fishing, that would have to be a no-brainer to anyone who has to really work for a living. Obviously, for those people who are dependent on the foundation grant cycle, it's irrelevant.

New York Times – this is reporting?

On January 17 the New York Times ran “**Sea Sends Distress Call in One-Note Chowders**” by food writer Molly O'Neill. In the article, focusing on the preparation of fish chowder by several commercial fishermen in Stonington, Maine, Ms. O'Neill claimed that a truly successful Stonington chowder contained a number of different species of fish and shellfish, writing “*cod, haddock, white hake, halibut, cusk and dozens of other groundfish, fish that live near the ocean bottom, mingled with clams, shrimp, lobster and mussels under the creamy surface of the stew.*” She then continued that this variety is no longer available to the Stonington fishermen, and that the local chowders, and the local chowder aficionados, have suffered in recent years due to the inability of the local fishermen to catch anything but lobster.

And of course this is due to overfishing and habitat degradation, particularly caused by large, corporate-owned vessels.

Ms. O'Neill quoted Ted Hoskins, retired "boat minister" with the Maine Sea Coast Mission, "*many of the older watermen retired and sold their days-at-sea or their quotas to large corporate fishing concerns that operate monster boats that can pull up to a million pounds in a single six-hour tow, denuding a swath of ocean about 600 feet long and up to 10 miles wide. The ocean floor can take 20 years to recover.*"

We wouldn't dream of questioning Ms. O'Neill's contention that, at least in Maine, chowders were traditionally "*as diverse and densely packed as the local waters.*" However, at the very beginning of her article she seems to set her stage with Herman Melville having Ismael and Queequeg in his classic novel **Moby Dick** feasting on "*steaming bowls of the stuff*" that "*changed very little for nearly 200 years.*" In the novel, two chowders were discussed; clam chowder and cod chowder. While bringing the crew of the *Pequod* into it certainly adds a certain flavor to the article, the flavors in the chowders that Ismael and Queequeg enjoyed in Nantucket had nothing to do with Ms. O'Neill's "*dozens of other groundfish*".

But we will definitely question Ms. O'Neill's and Mr. Hoskin's inference that there are corporate-owned "*monster boats*" at work in the New England groundfish fishery capable of catching a million pounds of fish in a single tow... or in any number of tows, for that matter. While it's true that there are boats in the herring/mackerel fishery that might be able to carry a million pounds of fish in their fish holds, they don't participate in the groundfish fishery, it's beyond comprehension that they'd be able to fill up with one six hour tow, and if they did, they'd end up with a million pounds of reduced quality fish rather than the high quality product that today's domestic and export markets demand. And other than a small and stringently monitored amount of bycatch, the herring/mackerel fishery has nothing to do with the groundfish fishery. The former is for relatively low-value fish that must – and can sustainably – be caught in the large amounts necessary to supply mostly export markets for processed/frozen product. It is stringently regulated. The latter is for high-value fish that are landed in much lesser amounts to mostly supply domestic fresh markets. It is stringently regulated as well.

"*Denuding a swath of ocean about 600 feet wide and 10 miles long* (we assume that's what Ms. O'Neill and/or Mr. Hoskins meant)?" In the first place, there isn't a net in use by commercial fishermen anywhere that's going to "denude" a swath of ocean, no matter the size. Contrary to popular opinion – popular opinion misinformed by inaccurate and inflammatory statements like these – nets don't "denude" either the sea floor or the water column. Strictly regulated mesh sizes allow fish below a certain size to pass through, and nets are designed to have minimal interaction with the bottom. While it might be different in Stonington, casual discussions with fishermen with local roots going back several generations will disclose there are many areas that have been trawled intensively and continuously for several generations that are still productive. While trawling can change the character of some types of bottom others are unaffected, and any method of cost effectively harvesting commercial quantities of fish is going to have attendant impacts on the ocean ecosystem. Obviously no-impact fishing is as impossible as no-impact farming (for more on trawling/dredging impacts, see <http://www.fishingnj.org/netusa9.htm> and <http://www.fishingnj.org/netusa1.htm>). Whether from aquaculture, from trawling, from dredging or from hook-and-lining, fish in the diet means impacts on the environment, and our collective job is, and has always been, to minimize them.

It's extremely unfortunate that such misleading information can make its way into print, particularly in what is considered to be one of the very few national newspapers of record like the New York Times. Folks who are unfamiliar with the world of commercial fishing, or the world of chowder creation outside of Stonington, Maine, were undoubtedly left with a number of off-target impressions, and those impressions were in all likelihood reinforced because of their source.

Doom and gloom in fisheries - the media and the (distorted) message

"Two journals with the highest profile, Science and Nature, clearly publish articles on fisheries not for their scientific merit, but for their publicity value. Beginning in at least 1993 with an article I co-authored (Ludwig et al. 1993), Science and Nature have published a long string of papers on the decline and collapse of fisheries that have attracted considerable public attention, and occasionally gaining coverage in the New York Times and the Washington Post. I assert that the peer review process has now totally failed and many of these papers are being published only because the editors and selected reviewers believe in the message, or because of their potential newsworthiness." (R. Hilborn, Fisheries, Vol 31, #11, November, 2006
[http://www.soest.hawaii.edu/PFRP/large_pelagics/Hilborn_2006\(faith\).pdf](http://www.soest.hawaii.edu/PFRP/large_pelagics/Hilborn_2006(faith).pdf))

If there is one thing that distinguishes – or is supposed to distinguish – scientific publications, it's their objectivity, and that objectivity is guaranteed – or is supposed to be guaranteed – by a rigorous system of peer review. Before being published in legitimate scientific journals, articles are reviewed – or are supposed to be reviewed - by a panel of respected scientists from the same or related disciplines to ensure that the conclusions presented were arrived at through a rigorous application of the accepted principals of scientific research.

It won't be any surprise that we at FishNet have long accepted the discouraging fact that many "scientific" publications dealing with fisheries issues, particularly those written from the Chicken Little perspective, don't deserve that distinction. Even more discouraging is the fact that these publications are the ones that, thanks to effective and expensive media handling that most researchers can't avail themselves of, get almost all of the attention from the mainstream media.

In a recent edition of **Fisheries** magazine, a publication of the American Fisheries Society, Ray Hilborn, well-respected* professor of Fisheries Management at the University of Washington, used four examples of what we would only describe as shoddy research to illustrate the fact that what is published as fisheries science today is, instead, advocacy. In the column, titled **Faith Based Fisheries**, he wrote "*a community of belief has arisen whose credo has become 'fisheries management has failed, we need to abandon the old approaches and use marine protected areas and ecosystem-based management.' I fear that this belief has shaded the peer review process so badly that almost any paper showing a signifi-*

cant decline in fish abundance or benefits of marine protected areas has a high probability of getting favorable reviews in some journals regardless of the quality of the analysis. Critical peer review has been replaced by faith-based support for ideas and too many scientists have become advocates.”

As even a casual examination of domestic fish and shellfish landings will illustrate, fisheries management in the US hasn't failed. Some stocks are up and some stocks are down, just as was the case in the past and will be in the future. But overall, domestic seafood production has remained surprisingly stable for as long as records have been kept (see previous FishNet **Full of Sound and Fury** at http://www.fishnet-usa.com/then_now.html).

As we've written repeatedly, fisheries issues are exceedingly complex, proving at best difficult and at worst impossible for even people who are educated and experienced in the field to fully understand. Hence, when the results of supposedly acceptable science are presented with all of the foundation-funded hoopla and fanfare that accompanies the release of the latest "research" demonstrating that fishing is ruining the world's oceans, technically unsophisticated reporters can't be blamed for accepting it at face value. Or can they? It seems it wouldn't take too much extra effort to dig into the issues a little more deeply, but far too little of that is being done at present.

*Dr. Hilborn was one of three recipients in 2006 of the Volvo Environment Prize, "awarded to internationally renowned experts and researchers. The Volvo Environment Prize Foundation was established in 1988 to support and recognize environmental research and development. Since then it has gained the status of being one of the world's most prestigious environment prizes." University of British Columbia researcher Daniel Pauly, one of the most prominent and vocal members of the Pew-funded "doom and gloom in the world's fisheries" clique, was another recipient in 2006.

See also *Re-interpreting the Fisheries Crisis*, a one hour video presentation by Dr. Hilborn with the following introduction: "Popular literature and the pages of Science and Nature have reported on the collapse of the world's fisheries. While there are many problems, most of these fisheries are producing at near maximum potential, and the loss of potential harvest from overfishing is small. In this program, Ray Hilborn discusses changes in objectives of fisheries management, ones with more concern about ecosystems and profitable fishing industries, and how there are many successful sustainable fisheries in the world from which we can learn." It's available in several formats at <http://www.uwtv.org/programs/displayevent.aspx?rID=2515>.

North Carolina to address loss of commercial fishing infrastructure

"There's a rhythm to coastal life, entwined with the weather and the tides. For the fishermen, there's shrimp season, and months when crab and flounder are more likely to be pulled from the sea. That rhythm is being interfered with in many communities by a flood of development along coastal rivers and streams. It is encouraging that the legislature is taking a serious look at the problem. Developers are in a mad dash to buy up North Carolina waterfront property, to build new homes, condos and shopping areas. A News & Observer series last year noted that more than 34,000 new homes were planned in coastal communities. Those new units have a ripple effect, including crowding out fish houses and crab processing businesses." ("Brakes near the breakers," Raleigh News and Observer editorial, January 20, 2007)

The serious look that the News and Observer editorial is referring to is the Waterfront Access Study Committee, which has "21 members, including representatives of the commercial and recreational fishing industries, marine trades, environmentalists, state agencies and local governments." ("**Panel working on waterfront access**," Jay Price, News and Observer, September 27, 2006, and available at <http://www.newsobserver.com/1233/story/491276.html>).

One of the options being considered is a state-mandated waterfront property tax valuation based on current use rather than speculative value. Such schemes have proven effective in preserving small farms and would certainly help North Carolina's commercial fishing industry, because without the necessary onshore infrastructure there can't be a commercial – or recreational – fishery.

But above and beyond that, it's necessary for the Committee to also consider the impact of inflexible fisheries management requirements, particularly at the federal level. It takes fish to run a fish house, and it takes a continuous supply of fish to maintain a fish business. Severely reducing – or eliminating – the availability of one or several particular species, even if the reduction is only temporary, means lost revenues, lost markets and lost infrastructure, and when the losses reach a certain point the business is going to close, regardless of tax incentives or the good will of government.

The Oilslick

*In an article published in the Jan. 5 edition of Science magazine, scientists from the Argentine Fundación Patagonia and the U.S. University of Washington warned that fishing for anchoita (*Engraulis anchoita*) in the South Atlantic threatens endemic species that sustain ecotourism in the region. (M. Valente, Alarm Sounded for Patagonian Seas, Environment-Argentina/Tierramérica network.)*

The scientists are Elizabeth Skewgar and P. Dee Boersma from the University of Washington and Graham Harris and Guillermo Caille from the Fundación Patagonia Natural in Argentina. From Ms. Valente's reporting, it would seem to be yet another instance, "discovered" by independent scientists from two continents, of commercial fish harvesting leading to the ruination of yet another ocean ecosystem. To her credit,

and unlike a spate of environmental journalists who accepted the Science story as gospel, Ms. Valente did a credible job of balancing the “blame it all on fishing” perspective of Claudio Campagna, an Argentine researcher from the National Patagonia Centre, and the “what’s the fuss about” point of view of Ernesto Godelman, president of the non-governmental Centre for the Defence of National Fishing.

As we’ve become accustomed to doing in recent years, we did a little internet researching to determine exactly how “independent” the four listed authors and the quoted experts actually are.

Needless to say, we weren’t awfully surprised to discover that Mr. Campagna, the expert opposed to the new commercial fishery, was a Pew Scholar, nor that his Pew project involved establishing marine protected areas off Argentina’s coast. We also found that he was one of the founders of the Fundación Patagonia Natural, where two of the four authors of the Science report are employed. Author Graham Harris was a co-founder and is now the President of the Fundación (<http://www.pewoceanscience.org/fellows/ccampagna/index.php?pfID=9931>).

Nor were we surprised to learn that author Boersma was also a Pew Fellow, or that her Pew focus was on developing “*marine reserves and zoning arrangements to protect penguins and declining fish stocks*” (<http://161.58.251.199/pewFellowsDirectoryTemplate.php?PEWSerialInt=3664>).

Just as she should have done, Ms. Valente made it obvious that Mr. Godelman was connected with, and an advocate for, commercial fishing.. But once again we are being presented with the Pew Trust’s perspective (assuming, of course, that Pew uses it’s funding to carry out it’s own agenda – see http://www.pewtrusts.com/pdf/environment_forum_josh.pdf), but with no indication that’s what it is. We would strongly suggest that whenever an anti-fishing study comes to light, particularly if it does so with the amount of media attention that almost always accompanies the release of reports of Pew- underwritten projects, Google or a similar search engine be used to show who or what might be in the way of influencing the involved researchers. As we showed in **The Pew Commission – a basis for national ocean policy?** (<http://www.fishingnj.org/netusa23.htm>), the connections are very often there, it just takes a little effort to dig them out.

Safety at sea

02/08/07

Back-to-back sinkings and the tragic loss of six New England fishermen in one week has once again focused the public’s attention on fishing vessel safety and the issue of licensing commercial fishermen as vessel operators.

All of the arguments and counter-arguments are once again being dusted off and trotted out. Management-imposed fishing regulations were responsible. Commercial fishing vessel operations have become too complicated to allow unlicensed people to be in charge. Reduced income has forced owners to scrimp on routine maintenance. In the last week I’ve read exhortations for more training, more education, more inspection, more regulation, more responsibility, more of just about anything dealing with vessel safety. Most of us have heard it all before, but does that mean we should disregard it?

The fact is that commercial fishing always has been and always will be one of the most dangerous occupations. Nobody who has watched *Deadliest Catch*, the highly rated TV series on the Alaskan crab fisheries, is likely to dispute that. But how dangerous is it, and most importantly, has it become more or less safe in recent years?

While it’s going to be difficult to do so in the wake of the of recent tragedies, we’ve got to look at these two questions objectively if we’re contemplating initiating or supporting any changes in how fishing vessels are operated or in how management measures can be modified to enhance safety at sea.

Unfortunately, there are a lot of confounding factors involved. Some of them would intuitively argue for increasingly safe fishing vessels, some for increasingly risky fishing, but major changes in how we operate our vessels or how we manage our fisheries are far too important to rely on intuition.

In many fisheries the average vessel age is increasing from year to year. Is there a significant relationship between vessel age and incidence of accidents? How about the age and/or experience of the captains and crew? Every year there seem to be fewer youngsters coming into the fisheries – at least those fisheries I’m familiar with. Does this impact on vessel safety?

Then there’s operator licensing. Many countries require that their commercial fishermen be licensed. Are vessels with licensed captains safer than similar (in terms of age, size, gear used, waters fished and technology employed) vessels operated by unlicensed captains?

Safety equipment? EPIRBs (Emergency Position Indicating Rescue Beacons) are getting smaller, cheaper, more sophisticated and more useable every year. Ditto for satellite phones. Cell phones are ubiquitous today, and most of our inshore waters are within range of the major cell networks. GPS units are readily available, with basic hand-held models costing under \$100; so providing precise information on a vessel’s loca-

tion is easier and more accurate than ever. Vessel Tracking System transmitters are becoming mandatory in more fisheries every year, and can be fitted with “panic buttons” which instantly alert whoever is monitoring the system in case of an emergency.

What about how the fishery is managed? We believe that derby-style fishing, where the vessels must catch their “share” as quickly as possible, is inherently less safe than when each permitted vessel is guaranteed a certain poundage each year. But back in 1999 three surf clam vessels, all participants in one of the first and oldest ITQ fisheries, sank in a two-week period. Ten fishermen were lost. Has any other fishery, regardless of how it is managed, undergone such a loss in such a short time in a series of unrelated incidents? (This series of sinkings also marked the last time that there was a significant move to require operator licensing.)

Fishing has always entailed a certain amount of risk, risk it’s hard for the land-bound to imagine. While we’re never going to change that, we might be able to reduce it. However, we have to know how we’re doing relative to the past in our domestic fisheries and relative to the present in similar fisheries in other countries. We need to know if licensing makes a difference, if experience is a valid substitute for formal training and licensing, if our fishermen are getting as much as they can get from the safety technology available, if management mandates force fishermen to work under adverse conditions against their better judgment, if the age/experience of the captain and crew matters, and dozens of other things. Let’s look very carefully before we start leaping. We owe it to the memories of the crews of the Lady of Grace, the Lady Luck and every other fisherman who’s been lost at sea to get it right.

Keeping it in the family
(in National Fisherman)
03/07/08

Ever get the idea that the commercial fishing industry isn’t doing as well politically as it could be doing? I sure do. And while it might be a function of my overly pessimistic nature, I doubt it – and I doubt that anyone reading this will see it that way either.

Folks, we’re getting beat. We’re getting beat in Congress and we’re getting beat in the White House. About the only place where we’re not getting beat is in the Courts, but that’s only because the laws haven’t been written or amended to that extent yet.

Why? One of the reasons is that we haven’t learned one of the lessons that are second nature to every effective lobbying group. That is, don’t air your dirty laundry in public.

Auto manufacturers are pretty good at competing with each other. I imagine that the competition to sell cars can get pretty cutthroat at times, but when it comes to national politics, they speak with one coordinated voice. Agricultural commodity groups are often going after the same markets, but when it comes to national policies, they all take the same tack. And it’s a safe bet that the anti-fishing envirogrs that are competing for the same prospective members and large but limited pot of foundation money have ongoing disagreements. But when it comes to attacking the commercial fishing industry, they’re all part of one big, happy family.

What about us? Let’s take two recent examples.

First we have the high profile conflict between the lobster pot fishermen and the draggers in Maine. I’m not taking sides here, but please consider the message that this ongoing issue has left the politicians – and the public – with. I’d bet that regular people don’t differentiate between pot fishermen, gillnet fishermen and otter trawl fishermen. To most folks a fisherman is a fisherman is a fisherman. And their take-home message from all of the media attention has to be “those commercial fishermen don’t even like, and they can’t even get along with, each other.” I’ll bet dollars to donuts that any bad feelings the public was left with will be directed as much at commercial fishermen in general as it will be at one group or another. Let’s also consider the politicians. They’re right in the middle of two strongly disagreeing factions of the same industry. Is that any way to garner political support for commercial fishing?

Then there’s the still simmering mid-water trawling issue. Again, the assumption is that the general public can differentiate between mid-water trawling and any other kind of commercial harvesting, or in fact even cares that any differences exist. You think?

At the end of the day, it’s most likely that people are going to be left with bad tastes in their mouths “because of trawling.” After six months, how many of them are going to differentiate between mid-water and bottom trawling? After another six months, between trawling and tub trawling? Or purse seining? Specifics will be forgotten but the anti-commercial fishing taste is going to stick with them, because so many people are working hard to make sure that it does.

Unfortunately, this issue has another significant downside. Implicit in some of the arguments is the charge that the management and enforcement systems are seriously flawed (actually, the charges have been explicit on occasion). If anyone thinks that this is anything but ammunition for the antis in their drive to make fishermen totally superfluous in the fisheries management system except in an “advisory” capacity, think again.

I'm sure that most of the fishermen immersed in these issues, or in any others that involve gear bashing of some form or other, would assure us that they are solidly behind a unified commercial fishing industry with a coherent and coordinated national strategy, but "this is something that is so obviously wrong that it needs to be fixed any way that we can fix it." Remember singing as a kid "I'm rubber, you're glue, your insults bounce off me and stick to you?" None of us are rubber, none of us are glue, and any insults stick to all of us.

Sit down with the fishermen on the other side and come to an accommodation. Not adequate science? Do what you have to do to make it adequate, but go after it together and abide by the results. For the future of the industry and for your future in it, keep it in the family. We all pay if you don't.

Fringe Science

03/07/07

Swordfish are severely overfished. Ninety percent of the "big" fish in the oceans are gone. We'll run out of fish by the year 2048. Barndoor skates are on the verge of extinction. Marine protected areas are the only way to save the oceans.

We're much too familiar with these kinds of headlines. They're based on information that is, I presume, presented to the press as mainstream, objective science, and are invariably reported as such, usually attributed to "prominent" or "leading" or "respected" scientists.

But are these doom and gloom pronouncements really a reflection of what a preponderance of ocean researchers believe, based on a compelling body of rigorous research?

Not hardly. Rather, they represent a severely jaundiced view of the state of the world's fisheries based on various statistical manipulations of the same inadequate data that the fisheries managers have been hamstrung by since fisheries management became a profession.

When you read headlines claiming that we're running out of fish – big fish or barndoor skates or sharks or all of 'em - because of too much fishing, it's easy to assume that the researchers making these claims are basing them on real world observations. You picture them out there dragging their nets in an increasingly fruitless quest for whatever species or species complexes they are researching. You think that, like the archetypical scientist who depends upon "the scientific method" and is a slave to objectivity, fisheries scientists and their "science" are beyond any external influences. Nothing could be farther from the truth.

Their predictions of imminent doom always seem to be based upon rehashing of statistics generated by others; either landings or survey data, both of which are notoriously imprecise. Thus, when Dalhousie University researchers Ransom Myers and Boris Worm, with a little help from Our Favorite Charitable Trust (hereafter to be known as OFCT), decided to demonstrate that almost all of the marlin and tuna and swordfish had become casualties of rapacious fishermen, they didn't do it by going out and counting marlin and tuna and swordfish, they did it by "analyzing" landings of marlin and tuna and swordfish by commercial longliners.

You don't have to be a rocket scientist – or even a fisheries scientist, for that matter – to know that there isn't necessarily a constant relationship between reported landings and the abundance of the fish being landed. Commercial fishermen aren't in business to provide scientists with data. They're in business to maximize profits, and they're going to fish where and when and how they can do that. That means that any conclusions based on landings are subject to a significant amount of spin.

And when it comes to survey data, I can't help but think of "trawlgate" a few years back, when one of NMFS' oldest and most trusted trawl surveys was shown to be less reliable than we all had assumed.

What this means is that, given enough of the right kind of data, and enough facility in manipulating it, you can "demonstrate" virtually anything. Convenient for the agenda-driven scientists that are grabbing all of today's headlines, isn't it? And on the subject of agenda-driven scientists, a little appreciated fact is that the American Fisheries Society, the organization representing just about all the fisheries scientists in our neck of the woods, not only accepts, but encourages advocacy (which is defined as "arguing for a cause, often on behalf of others" in an AFS Policy Statement) in its membership. So much for scientific objectivity.

Couple that with seemingly unlimited access to the broadcast and print media and with all of the credibility that money can buy, and data interpretation that is way out there on the fringes can be – and has been – made to appear as main-stream science.

Whenever you're confronted with "research" dealing with fisheries, particularly if it's of the Chicken Little variety, ask a few questions. Is it based on counting fish or on spinning someone else's data? Has it included all of the relevant data? Are there logical assumptions behind it? Is it in support of a particular, and perhaps controversial, agenda? Most importantly, who's paying for it?

And finally, there's a question we should all be asking those well-intentioned folks who are so busy saving the world's oceans from fishermen. In view of the glaring gaps in our knowledge of the actual status of our fisheries, why are they spending so much money on reworking the same old and inadequate data and so little on increasing what we actually know?

Is this any way to run a business?

04/26/07

Setting the stage

On April 11, the National Marine Fisheries Service (NMFS) announced in the Federal Register (Volume 72, Number 69, Page 18105-18118) that it was enacting "*regulations to implement the Fish and Seafood Promotion Act (FSPA) of 1986 for the establishment, organization, and operation of Seafood Marketing Councils.*" NMFS will "*promulgate regulations providing the foundation for the establishment, organization, and administrative practices of the Councils.*" As justification, NMFS primarily cites the need for consumer education regarding seafood safety, but the Register notice goes on to say "*while the role of the federal government is not to promote seafood, it does have a responsibility to the consumer to ensure that the information presented to them is accurate and scientifically valid.*"

After an industry-sector referendum demonstrated that forming a Council had industry support, it would be organized by NMFS, which would also appoint its members. Again from the Federal Register, "*NMFS will initially pay all costs related to the conduct of the referendum to establish a Council. Once an application (to form a Council) has been approved, NMFS will estimate the cost of conducting the referendum, notify the applicants, and request that they post a bond or provide other applicable security, such as a cashier's check, to cover costs of the referendum. After the referendum has been conducted, NMFS will inform the applicants of the exact cost. If the referendum is approved and the proposed charter is adopted, the Council will be required to reimburse NMFS for the total actual costs of the referendum within 2 years after establishment of the Council. This amount would be paid for from assessments collected by the Council. If a referendum fails to result in establishment of a Council, NMFS would immediately recover all expenses incurred from the bond or security posted by applicants.*" The Councils would be funded by the industry sectors (fisheries) they represented.

Of course, "*continued operation of a Council is at the discretion of NMFS*" and there are a number of conditions on the order of "*the market plan should be designed to increase profits rather than increase harvest.*"

This notice, as much as anything we've seen, represents the schizophrenic attitude that NMFS takes towards our commercial fisheries. As stated, anything that will increase the harvest in a fishery – with, evidently, no attention paid as to whether that fishery is being harvested at "maximum" levels or not – will not be tolerated. This is and for some time has been the general attitude of NMFS towards commercial fisheries. If it results in catching more fish, according to the agency charged with managing our nation's fisheries, it categorically can't be good and shouldn't be permitted. If, on the other hand, it results in reduced commercial harvest, it's right in line with agency policy.

The Council members will also be NMFS approved, affording the agency the opportunity to inordinately influence their behavior as members, and if NMFS doesn't approve of the Council's actions, it can be dis-banded.

Sounds like quite a bargain, doesn't it? Particularly for NMFS, which has nothing at risk yet gains control of the entire process.

A business is a business is a business...

A commercial fishing boat is a business. A commercial fishing dock is a business. A seafood processing plant is a business. Enterprises that depend on fishing, like welding shops, chandleries, net lofts, marine electronics suppliers, diesel repair shops, marine railways and seafood truckers, are all businesses. They face the same challenges and have the same constraints as any other businesses. They have competition (increasingly from abroad), they have constantly increasing costs and they have difficulties finding – and keeping – skilled and dependable workers. Like other businesses in other industries, those that are solid and operated in a business-like manner have proven themselves able to cope with these challenges.

As has been drummed into the consciousness of anyone with access to the print and/or broadcast media over the past five years, fish is a good thing to eat. In fact, study after study suggests that not just any fish but marine fish in particular are a very good thing to eat, the unique omega 3 fatty acids they contain at high levels providing all sorts of benefits to our circulatory and nervous systems. It's important to remember that the domestic commercial fishing industry is responsible for providing the lion's share of those marine fish to the 230 million or so U.S. consumers who choose not to catch their own. Doing this would seem to be a good thing, something well worthy of governmental support.

As members of one of the oldest U.S. industries, one that can be credited with doing more to perpetuate the traditional values of our coastal communities than any other, and one that demonstrably contributes to the health and well-being of the populace, it's hard to imagine any of these businesses not receiving the full support and encouragement of government at every level.

... and should be treated like one by the government

Unfortunately, that's about as far from the actual case as it could possibly be. In fact, in port after port and in fishery after fishery, government intervention – in the form of increasingly stringent, unrealistic and ineffective regulations – is seen as the biggest threat to the survival of commercial and recreational fishing businesses and those businesses that are dependent on them. In fishery after fishery the feeling isn't that the government has simply abandoned the people who are in it; it's that the government is actively working against them. Today, government interference in the form of what now passes for fisheries management is far more detrimental to the survival of commercial fishing businesses than resource availability has ever been.

Under the guise of “conservation,” the federal government, as most prominently represented by the National Marine Fisheries Service, seems as if it couldn't be less concerned with the impact of its management on the fishing businesses that are completely dependent on the fisheries it controls. And there isn't any other federal agency that seems willing – or able – to extend any effective support to those businesses.

Massachusetts' take on federal fisheries management

The Boston Herald reported on April 10 “*Gov. Deval Patrick sought a different kind of federal disaster declaration Monday, saying it wasn't a hurricane or other natural disaster that damaged the local fishing industry, but Washington's heavy-handed regulation. Patrick asked U.S. Secretary of Commerce Carlos Gutierrez to designate a 'fisheries resource disaster' for Massachusetts, the first step in obtaining financial relief that could help the groundfishing fleet survive until stocks rebound.*” (Patrick: Federal fishing rules create 'economic disaster,' Associated Press.)

The article continues “*Kevin Allexon, a senior policy adviser at the Commerce Department, said it's an 'awkward re-quest' because it asks the government to declare its own rules flawed. He said there's never been a disaster declared as 'the result of government regulation.'*” Please note that Mr. Allexon didn't say that there was never a disaster that was the result of government regulation.

The current “crisis” in the New England groundfish fishery, a crisis that the Associated Press article demonstrates has become about as institutionalized as the federal “attempt of the year” to fix it (if funded, this will be the third multi-million dollar federal bailout of the New England groundfish industry, and there's another one, this by the Governor of Maine, on the way), has gotten to the point where the full Massachusetts Congressional delegation is supporting Governor Patrick's request..

What about the “critical mass?”

It takes a complex of businesses to sustain a viable fishing port. Most obviously, docks capable of supporting the fishing vessels are required. These docks provide fuel and ice to the vessels. They generally sell the catch and provide offloading and packing. Gear shops sell nets, dredges, boots, rain gear, hydraulic hoses and all those other supplies that keep a boat – and a crew – fishing. Diesel mechanics, marine electronics technicians, welders and woodworkers are necessary to keep the vessels running. Marine railways are necessary to haul the boats out of the water for maintenance or repair. Box manufacturers, truckers and refrigeration technicians are needed to pack, store and move the fish. And marine surveyors and insurance brokers are necessary as well.

It takes a minimum amount of activity to keep these businesses in operation. When that level of activity isn't available, the businesses leave. And they aren't going to come back in five or ten years, when the stocks are healthier and the fishermen are once more allowed to fish, because their former premises will have been re-placed with condominiums

Monkfish as an example

At this point there isn't a better example of the federal government's seeming total disregard for the economic realities of the commercial fishing industry than its monkfish management program, which will serve to demonstrate just how far beyond ineffectual a fisheries management program can get.

The domestic monkfish fishery, which extends from the waters off North Carolina to the Gulf of Maine, is one of the most valuable on the east coast. Popularized by pioneering celebrity chef Julia Child on her television series *Julia Child and Company* in 1979 (<http://www.nefsc.noaa.gov/read/popdy/monkfish/>), annual landings of the rather unappetizing appearing yet delectable monkfish have approached \$50 million (to the fishermen). Monkfish were among the so-called underutilized species that NMFS invested a lot of effort into popularizing and more into enticing fishermen to catching back in the 1980s.

The fishery has no recreational component.

Various species of monkfish are found throughout the world's oceans, and they are fished commercially in many other countries. The majority of the U.S. production is either marketed domestically as a fresh product or frozen and exported. In the late autumn and winter, when they are at their highest quality, there is a sizable market in Asia for fresh monkfish livers.

On the East coast there is a large directed monkfish fishery utilizing gillnets and otter trawls. Because of their broad distribution, monkfish are also taken as bycatch in a number of fisheries targeting other bottom-dwelling species. The majority of monkfish landings are seasonal, coinciding with inshore/offshore migrations.

In spite of being one of the most important/valuable edible finfish landed on the east coast, scientific knowledge of monkfish is severely limited. Most limited is knowledge of their abundance.

Monkfish Management

The Monkfish Fishery Management Plan, which is administered jointly by the New England and Mid-Atlantic Fisheries Management Councils, arbitrarily divides the fishery into a Northern and Southern Fishery Management Area. Monkfish abundance and the Total Allowable Catch (TAC) that is derived from it are determined each year from a running average of the monkfish catch of the three previous Autumn Trawl Surveys. The Autumn Trawl Survey and the gear and techniques it employs were designed to sample fish species that, unlike monkfish, spend most of their time up off the bottom.

This management mechanism has been recognized by those involved in the management of the fishery as being inadequate. The Monkfish Defense Fund – an industry group representing monkfish fishermen and processors – submitted comments to NMFS on proposed management measures last year that included:

“The monkfish TAC-setting mechanism is flawed.* The Regional Administrator, the NEFSC, and the NEFMC all recognize a problem exists with the Framework #2 TAC-setting formula. The values produced by the formula are not congruent with the condition of the resource. Dr. John Boreman, Director of the NMFS Northeast Fisheries Science Center, concluded in a February 18, 2005 memorandum to NMFS Regional Administrator Patricia Kurkul that a flaw exists in the adjustment mechanism that should be addressed in the near future. We wholeheartedly agree. In fact, the MDF opposed the implementation of the formula's estimate of the increased trip limits for the May 2005 season – the limits were too high. The NEFMC is planning to redo the TAC-setting process during the summer of 2006 but the results will not be ready in time for the May 2006 season.

(*For an indication of how serious the need is to redesign this process, consider that without any major changes, the 2007/2008 TAC will be up about 100% to 200% from the 2006/2007 TAC, with concomitant increases in DAS and trip limits.)”

The primary problem with using an index derived from the Autumn Trawl Survey to determine the status of the monkfish stocks and to set the TAC is that the vessel/gear/crew used in the survey doesn't catch monkfish or doesn't catch anywhere nearly as many monkfish as commercial vessels/gear/crews catch in the same areas fishing at the same time. This fact has been conclusively demonstrated at least three times: each of the three occasions when a cooperative survey utilizing commercial fishermen fishing on commercial fishing boats with NMFS, state and university scientists on board produced far more monkfish per tow than the NMFS vessel did. The NMFS website detailing these cooperative surveys is at <http://www.nefsc.noaa.gov/nefsc/READ/popdy/monkfish/>.

Another NMFS survey, one that is designed to sample bottom-dwelling fish, has predictably caught significantly more monkfish as well.

In spite of this, the NMFS Autumn Trawl Survey has remained the foundation of the monkfish TAC setting process because it has been in use longer than any other survey. The argument seems to be that, regardless of how good – or bad – the Autumn Trawl Survey is at catching monkfish, it's the one that NMFS is going to use because it's been catching – or not catching – monkfish for longer than any other survey has been, and that year-to-year “consistency” in how the survey is carried out will make up for the survey's lack of efficacy at catching monkfish.

As a measure of how unsuitable the Autumn Trawl Survey is for sampling monkfish, in the seven surveys completed from 2000 to 2006, no monkfish were taken in water less than 14 fathoms (84 feet) deep, and only 20 pounds were taken in water less than 18 fathoms (108 feet) deep. The average depth at which monkfish were first caught in the surveys was 20 fathoms (120 feet). In the autumn, at the time when the Autumn Trawl Survey is done, commercial monkfish fishermen routinely fish in water less than 120 feet deep, and routinely catch monkfish at these depths. With approximately 1/3 of the stations sampled in the Autumn Trawl Survey each year in waters less than 120 feet deep, it's obvious that the survey is missing a large number of fish, yet it is considered to constitute the “best available science.”

Confounding the situation, the survey vessel Albatross, which has been used to conduct the various surveys including the Autumn Trawl Survey, in NMFS' Northeast Region, is being replaced with a new vessel, the Henry B. Bigelow. It will take several years before the new vessels' performance can be calibrated against that of the Albatross.

The federal managers seemed to be listening

Recognizing the limits of the Autumn Trawl Survey, the far different picture painted by the Monkfish Cooperative Survey and others, and the impending hiatus in meaningful survey data while the performance of the Bigelow is being calibrated, the New England and Mid-Atlantic Fishery Management Councils (because the fishery straddles both regions, monkfish is managed jointly by the two Councils), with the apparent support of the NMFS Northeast Regional Office, voted to adopt a conservative constant fishing level over the next three years. Using this approach also addressed the industry's concerns regarding wide annual swings in landings that have been the result of the TAC setting process outlined above. In the Southern Management Area this came out to 24 Days At Sea (DAS) for each vessel.

In all of the discussions and deliberations up to that point, and in all of the data that provided the basis for those discussions and deliberations, there was no indication that the fishery was in any kind of trouble. Nor has there been any suggestion of this by the fishermen engaged in the fishery.

Assuming that this conservative level of fishing was going to be approved and in effect for the next three years, participants in the fishery "geared up" accordingly. The fishermen made or bought new nets, installed new equipment and upgraded or replaced existing vessels. The dealers reduced their frozen inventories and began negotiating with existing or new customers. Everyone made plans, many at significant expense, because no one had any doubt of how the fishery was going to be managed for the foreseeable future.

Surprise!

Then, at the last possible moment, word was passed down from NMFS headquarters that, in spite of both Councils approving the various management measures to be put in place for three years, in spite of the seeming approval of the same measures by the Northeast Regional Office, in spite of all of the commitments made by the people in the industry, and in spite of the fact that there was still no indication of any problems in the fishery, that at best the directed fishery in the Southern Management Areas was going to be hit with a 50% reduction in allowable fishing time, at worst it was going to be shut down completely.

The only explanation offered was that without drastic reductions it was possible that the rebuilding schedule might not be maintained. There doesn't appear to be any administrative justification for this action and I'm not aware of NMFS taking any similar action in any other fishery at such an inexcusably late date and based on such nebulous reasoning.

What international competition means

As a trip to your neighborhood supermarket or seafood store will clearly illustrate, the seafood industry has changed dramatically over the last several decades. Not so long ago the featured fish were primarily local, with overseas production – unless your neighborhood was down South or in the Pacific Northwest - represented by shrimp and salmon and perhaps a few other "exotic" species. This had a significant impact on the relationship between fishermen and the people who bought their fish; the buyers were for the most part limited to what the fishermen had to sell when they had it to sell.

This is no longer the case. Today, with improved fish-handling techniques, easier and more reliable airfreight connections, dramatic increases in aquaculture production and the continuing reduction in trade barriers, the seafood industry is truly global. The availability of species that consumers once thought of as exotic is now taken for granted. Fresh fish can be, and often is, shipped thousands of miles in a day or so, and can arrive looking as "ocean fresh" as fish that was landed by local fishermen.

This means that buyers can and often do demand that fish be delivered to a predetermined schedule. Aquaculturists can meet schedules. Fishermen from countries whose governments understand and support their own fishing fleets can - weather permitting – meet schedules. Fishermen from the U.S., where the government evidently feels that a fishery can be shut down at a moment's notice without a hint of prior warning, surely can't. And it could take years to lure a buyer back, luring him or her back is even possible, because there's a world of fish out there, and much of it is only a day or so away

We're from the government and we're here to....

Imagine, if you can, that at the government's urging you've invested tens of years and tens or hundreds of thousands of dollars in a fishery, and that a significant amount of your and your crew's or your employees' income depended on that fishery. Imagine that, based on all you knew about the management process – and few people in any segment of the commercial fishing industry that is federally managed aren't far too familiar with the process – you made business plans and sizeable commitments based on what you and everyone else who was involved believed was a sure thing. And that no one in NMFS or on the two Regional Councils in charge ever suggested that there might be a "problem" with the regulations that were wending their way through the NMFS headquarters bureaucracy.

Then imagine that, slightly more than a month before the current fishing year was to begin, all of your careful planning, all of your investment of time and money and much of your and your business credibility was shattered because the federal agency that is in charge of your industry decided, at the last possible moment, that the two Regional Councils responsible for managing your fishery were wrong. That the scientists and analysts that worked with them were wrong. And that some faceless bureaucrat(s) in Silver Springs, Maryland (NMFS Headquarters) knew more about the future of your fishery and your business than those who have been directly involved in managing it for years.

But it's not just monkfish

The monkfish situation is far from unique, neither is the plight of the businesses dependent on the monkfish fishery. Summer flounder, another extremely important East coast fishery with a strong recreational component, was in a similar circumstance last year. It took Congressional intervention at the last minute to postpone what was, for all intents and purposes, a closure of the fishery. Ditto the West coast groundfish fishery, the Southern snapper fishery, the list goes on and on.

Once again, what are we managing our fisheries for?

We've been managing our fisheries under the provisions of the Magnuson-Stevens Fisheries Conservation and Management Act for over 30 years. In that time, as attested to by the present condition of many of our fish stocks and in refutation of the doom and gloom pronouncements of the anti-fishing clique, we've gotten pretty good at it. One only has to look at Alaskan groundfish, East coast striped bass, Mid-Atlantic summer flounder or North Atlantic swordfish. We can manage fisheries for sustainable harvests and we can bring depleted stocks back to – or even beyond – former levels of abundance.

But what then? What is fisheries management supposed to be all about? Is the be all and end all of fisheries management an EEZ full of fish with no businesses left to harvest them? Is it the attainment of some arbitrary estimated population size, arrived at through cumbersome, complex, poorly understood and most likely inaccurate statistical manipulations, for each species under management? Considering where federal management has been heading over the last decade, with an end point articulated by NMFS in the quote at the beginning of this FishNet, the answer would seem to be in there somewhere. But should it be?

That, when taken to the bottom line, depends on whether we believe that fish are more valuable in the water or on the plate. Should the goal of fisheries management be the maximization of the number of fish in the ocean or should it be the maximization of the harvest of the fish in the ocean? And while the anti-fishing activists have been hard at work attempting to convince us otherwise, those are two very different goals.

Take the Mid-Atlantic summer flounder fishery, for example (see http://www.fishnet-usa.com/reauthor_one.html). The biomass is as high as it's ever been, at least for as long as we've been measuring such things, and yet the recreational and commercial fisheries are both facing significant reductions over the next several years. What good is it doing anyone to have all of those fish out there if the recreational anglers are denied the opportunity to catch them and the non-fishing consumers are denied the opportunity to purchase them? It's hard to imagine anyone gazing out over the Atlantic and taking pleasure in the fact that there are so many uncaught summer flounder on the bottom and out of sight (unless, of course, that person is a foundation-supported activist intent on furthering an anti-fishing agenda). Yet that's where our summer flounder management program has taken us, and that's where the so-called "conservationists" want us to be with all of our fisheries.

We have to ask "to what end?"

The antis have effectively confused the issue, but "sustainable" fishing doesn't mean "no-impact" fishing. While it seems somewhat ridiculous to have to go over something that should be self-evident, you can't remove a significant number of fish from a stock without having an impact on that stock. In fact, fisheries biologists agree that a fishery being fished at the maximum sustainable level will be at somewhere under half of the biomass of an unfished stock. To those of us that realize that fisheries resources are there to be sustainably harvested, this is acceptable. In fact, considering an ever-growing population with an ever-growing dependence on protein from fish and shellfish, it's more than acceptable; it's desirable. Yet the antis continue in their cynical attempts to alarm the public by lumping those fisheries being fished at the maximum rate with those being fished unsustainably, coming out with pronouncements on the order of "70% of the world's fisheries are being harvested at or beyond sustainable levels." While that's much more alarming than writing "20% of the world's fisheries are being harvested beyond and 50% at sustainable levels," the latter gives a much more accurate picture of the world's fisheries, particularly at a time when we can't really afford to not harvest as much as we can at maximum sustainable levels.

And the anti-fishing activists have, with their foundation-provided buckets of cash, been successful in convincing the folks in Washington that the viability of the businesses that are dependent on recreational and commercial fishing is irrelevant when it comes to forcing fishermen to comply with arbitrary rebuilding schedules.

But if we want diverse fisheries in the future, fisheries that are able to provide fresh, locally caught seafood as well as easily accessible recreation, the viability of the thousands of fishing and fishing-related businesses is anything but irrelevant. We've already lost too many fishing docks to residential development, and those docks are never coming back, regardless of what the fish stocks do.

Considering some peoples' eagerness to label anyone associated with the commercial fishing industry as being anti-conservation, effective conservation – something that every responsible commercial fishing industry member supports – can be accomplished in a manner consistent with viable business operations. All it takes is an awareness that it needs to be done and a willingness to work with the affected businesses to determine how to do it. A few more years to reach some arbitrary rebuilding "target" won't make any difference to the fish, but in too many instances it could be the difference between surviving and failing for the involved businesses. It's time our fisheries managers and the legislators who write the laws that control them realized this.

Speaking of – or writing about – fringe science....

05/01/07

Overfishing sharks has wiped out the bay scallops! That's the conclusion of a recent paper published in Science magazine (Cascading Effects of the Loss of Apex Predatory Sharks from a Coastal Ocean, 03/30/'07) and widely reported by the media. Lead author Ransom Myers and four other researchers wrote that, because large sharks have been "functionally" wiped out by overfishing (which is in keeping with his controversial "all the big fish are gone" thesis from several years back), rays and other species among these sharks' natural fare have proliferated at the expense of the bay scallops that the rays love to munch on. As proof they offer the paucity of sharks, the abundance of rays and their fellow scallop munchers, and a decline in bay scallop landings.

It seems pretty convincing; convincing enough to get past the supposedly rigorous peer review process in place at Science and other prestigious scientific journals.

If everything else affecting bay scallops has remained constant, then the decreased landings might be the result of an ominous sounding "trophic cascade" caused once again by those dastardly commercial fishermen. That's not the case.

But before I get into that, consider the biology of bay scallops. Their range is from Cape Cod south and through the Gulf of Mexico. They're short-lived, spend their entire life cycle in estuaries, spawn in the warm weather months and undergo a two-week planktonic stage before attaching to submerged aquatic vegetation (SAV). Obviously, they're highly dependent on both estuarine water quality and the availability of adequate – in terms of both quality and quantity – SAV.

How to best describe what's been happening with the estuaries these scallops, and the other shellfish the article implies have fallen victim to the demise of the large sharks, are dependent upon? Can you say "development?" A really lot of people have moved to the coasts in the last several decades. Since 1980 the population density has increased by 22%, 70% and 55% respectively in the coastal counties of the Northeast, Southeast and Gulf states. That's a lot of additional flushing, a lot of additional non-point source pollution, a lot of additional silt, a lot less wetlands and a lot less SAV in those estuaries that bay scallops call home.

In addition, since 1980 the number of recreational boats in use in the U.S. has increased from twelve million to eighteen million. That's a big increase, one inflicted proportionally on our estuaries.

Consider the impact of all that propeller-generated turbulence on the fragile scallop larvae bobbing around in the water column (coincidentally, they do all of their bobbing during the summer months when recreational boating is at its peak). Think of millions of huge, powerful horizontal blenders, each injecting noxious fumes into the water. And how about SAV impacts? You've probably seen those denuded tracks caused by boaters blasting across eel or turtle grass flats, and even when they're not digging up the bottom, propellers are really good at increasing turbidity and obliterating SAV.

Predictably, Dr. Myers and crew discounted impacts on bay scallop landings other than shark fishing. And the people responsible for the culture of crisis permeating our print and broadcast media did their customary Chicken Little bit as well.

There's a type of reasoning termed "after the fact." In Latin, it's described by "*post hoc, ergo propter hoc*," translated as "*after this, therefore because of this*." It seems to me that Myers' et al's major conclusion was based almost entirely on the idea that correlation means causation – and the only other support it had was a limited study of bay scallop predation in North Carolina involving six sites observed over three years (and with the confounding factor of a bay scallop fishing season coincident with the observations). Without a lot more supporting data than that presented, it's hard to look at this research as anything more than a conclusion in search of a cause. But the media bought it hook, line and sinker.

Could cow nose ray predation impact bay scallop stocks? Could fewer large sharks mean more cow nose rays? Could more fishing pressure result in fewer large sharks? Maybe. But to assume no other factors at play, or that other factors aren't as or more important to landings than shark fishing, is a far leap. In this instance, much too far.

(Dr. Ransom Myers died on March 27. Though I disagreed with much of his recent research, he was a pioneering fisheries scientist with many valuable contributions to his credit. His passing will affect us all.)

Fisheries Management – It's time for a new paradigm

07/18/07

"For nearly four centuries they have lived in a section the Indians called Accabonac, now known as Springs or Bonac, north of the village (East Hampton, NY) that is the wealthy's playground. They are known as Bonackers, an insular group who fishes and farms and serves the grand homes and summer businesses of the fancy folk they call 'upstreeters....' But fishing, the core of the Bonacker culture, has declined over the years because of government restrictions, imported fish and the continued influx of summer residents. Lavish homes limit their access to many of the estuaries, marshlands and beaches. Mr. Loewen, one of maybe two dozen full-time baymen remaining on Long Island's South Fork, says he heard the death knell in June, when state environmental officials tightened the catch limits on the Bonackers' two main summer species. Throughout June, the daily limits were down to 30 pounds of fluke and 60 pounds of porgies per fisherman, well below previous catch levels, although just last weekend the porgie limit was raised slightly.... 'We are trying to sustain a commercial fishery without depleting the resource,' Mr. Heins (of the New York State Department of Environmental Conservation) said. 'Unrestricted harvesting leads to extinction of species. Do you keep taking everything until it's gone?' The Bonac fishermen, insisting that the state is overreacting and miscalculating the stock, met recently with Bill McGintee, the East Hampton town supervisor. Mr. McGintee said he would consider filing suit against the state and federal governments, accusing them of wrongfully restricting business.' "There is no next generation,' Mr. Loewen said. 'These limits are killing off a way of life that has been in our families for centuries, but now our children can see the government won't let us make a living, so it all ends here.'" (from **Endangered Bonackers Fishing Fades Where All That Glitters Is Sea** - by Corey Kilgannon, The New York Times, 07/07/07, http://www.nytimes.com/2007/07/07/nyregion/07summer.html?_r=1&oref=slogin)

It's a story that could have been written dozens of times in the last two decades, about what used to be vibrant fishing communities that dotted our coastlines from Maine to Florida, along the Gulf coast, and from San Diego to Seattle. In an onslaught that started at about the time of Florida's net ban in the early 1990s, fishing business after fishing business has had its doors shut by ill-conceived, inflexible and unnecessary laws and regulations supposedly put in place in the name of "conservation." The regulations that are forcing the Long Island Bonackers out of a traditional life that has existed since earliest colonial times typify what fisheries management has devolved into in the past three decades. According to the biologists in charge, the ocean waters off the Mid-Atlantic support the highest biomass of fluke (summer flounder) ever measured. Yet in spite of these heretofore unmatched estimates of abundance, according to recent amendments to the Magnuson Fisheries Conservation and Management Act this isn't enough. And the handful of so-called conservationist organizations responsible for those amendments, all heavily funded by Big Oil dollars, have a stable of lawyers ready to go to court at the drop of a hat – or a fishing line – to enforce what has now become their law. As things stand, the Bonackers probably don't have much of a chance.

In 1976, when what is now the Magnuson Act became law, the population of the United States was about 220 million and the population of the world was almost 4.2 billion. Today the U.S. population is just over 300 million and the world population is a bit past 6.6 billion.

Back then no thought was given to "overfishing." In fact, the primary impetus for the legislation was the replacement of the foreign fleet of factory trawlers that were operating only a few miles off our shores with domestic vessels. Provisions in the Act allowed for the gradual replacement of foreign vessels with U.S. vessels and gave the federal government control of the living marine resources in the Exclusive Economic Zone, waters extending 200 miles from our coastline.

Over the next decade or so the federal government and the various states were heavily committed to supporting the development of the domestic commercial fishing industry. Government grants and loans were readily available to just about anyone to build new fishing vessels or to upgrade those that were already in operation. Similar programs were in place for on-shore operations. Academic institutions, other "public" entities and private organizations were showered with R&D and marketing funds to allow U.S. fishermen to catch, process and sell more seafood at higher prices. A large and coordinated publicly funded program was in place to develop a number of what were termed "underutilized" fisheries.

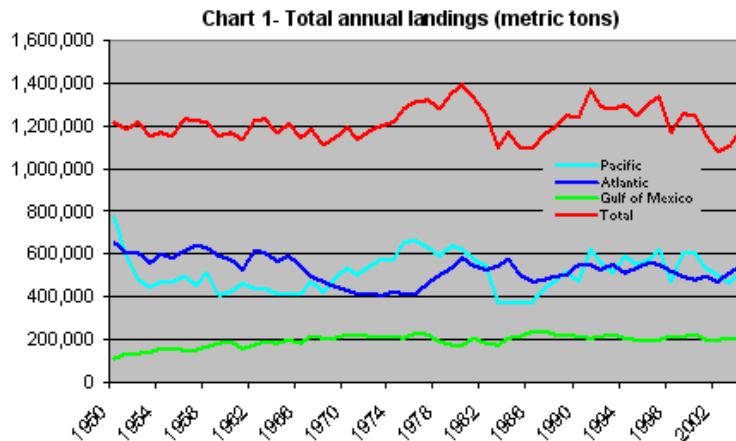
Needless to say, some of these programs were hugely successful. Foreign fishing boats were replaced with U.S. boats. The coastlines were dotted with "seafood industrial parks," some of which made it to the bricks and mortar stage, some of which – fortunately, with hindsight – never got beyond the planning stage. Thanks to a slew of overly generous tax incentives and other programs, hundreds of millions of dollars from outside the existing fishing industry went into buying bigger and better boats and expanding handling and processing operations on-shore.

The Alaskan fisheries, which today are among the largest and the best managed in the world, were a direct result. So were the monkfish and squid fisheries, to such an extent that monkfish and calamari have become menu standards from coast to coast. Others, however, weren't so successful, or became victims of their own success, resulting in too many boats chasing too few fish.

Interestingly, public perceptions have shifted – or been shifted – in the three decades since the passage of Magnuson. When the Act was passed, the belief was that there were an awful lot of fish out there in our waters and it was the government's job to do whatever was necessary to allow our fishermen to efficiently catch them. Now it's much the opposite; shortsighted fishermen aided by too efficient gear have overfished our waters because of ineffectual government management. In the same three decades government, most conveniently represented by the National Marine Fisheries Service, seems to have shifted its policies from promoting commercial fishing to restricting it in every way possible.

How much justification is there for this shift in public perceptions, and for the accompanying shift in the role played by government in commercial fishing? If the numbers are carefully examined, not much.

When total annual commercial landings in the United States are examined, it becomes apparent that in the last 50 or 60 years they have been remarkably stable. As the chart below (taken from NMFS landings data, reported in “Full of sound and fury, signifying nothing,” and available at http://www.fishnet-usa.com/then_now.html) shows, in the 1950s they hovered around 1.2 million metric tons and today they hover around 1.2 million metric tons. And the character of the fisheries, at least when the catch composition is considered, have been stable as well (this is particularly relevant to the spurious “fishing down the food chain” hyperbole that was successfully sold by the “conservationists” to the media several years back). The gradual build-up in the late 70s was an obvious reflection of the “catch ‘em all” attitude prevailing in the immediate post-Magnuson years. The somewhat more precipitous ensuing decline, which appears to be limited to the Pacific coast, can be attributed to a great extent to the periodic disappearance of the Pacific anchovy, part of a natural cycle, and the relocation of the yellowfin tuna fishery abroad, which was driven by economics, not resource availability.



Commercial fishermen have been turned into villains, fishery managers have been turned into everyone’s idea of the quintessential inept bureaucrats and what was revolutionary fisheries management legislation has been amended far beyond its original pro-harvest intent while in aggregate the fish are in about the same shape today as they were 50 years ago, the “good old days,” before modern electronics, synthetic nets, Magnuson management and the corporate mentality supposedly did in any thought of fisheries conservation by the fishing industry.

So now we have an overabundance of foundation-funded “conservationists,” to save the fish and, though they’re supposedly too greedy to realize it, the fishermen.

Save them from what?

The oil-rich multi-billion dollar foundations and the “conservation” organizations and academic programs they support are responsible for what can only be described as a complete distortion of the actual facts about the U.S. fisheries. While we wouldn’t venture a guess as to why they’re doing this, we have no problem understanding the results. Fleets are shrinking, landings in many fisheries are plummeting, shore-based support businesses are disappearing, docks are closing, and it’s increasingly difficult for most fishermen to see any future in fishing.

And, of course, the public attention that had been almost totally and accurately focused on the impacts of Big Oil on the world’s oceans after the Exxon Valdez disaster has been shifted elsewhere; to the supposed depredations of the commercial fishermen.

But there has to be a bright side, doesn’t there? If not for fishermen, then for others. The decline in the fortunes of commercial fishing businesses is contributing significantly to an ongoing coastal building boom.

If trends continue, what will we be left with? More waterfront condominiums and McMansions that only the rich can afford, an end to local, ocean-fresh seafood, and continuing – and continuously empty – promises of a domestic aquaculture industry.

What’s at risk?

“We are trying to sustain a commercial fishery without depleting the resource,” Mr. Heins said. “Unrestricted harvesting leads to extinction of species. Do you keep taking everything until it’s gone?”

In spite of the dour warning that Mr. Hein expressed in the New York Times regarding the Long Island Bonackers, no species has ever been fished into extinction. All things considered, no species ever will be. Discounting anything else, it’s just too difficult to catch fish once their populations have been reduced beyond a certain level. Realizing this, the antis have become adept at using the term “economic extinction.” As far as we’ve been able to determine, this means reducing a population to such an extent that it’s no longer economically feasible to harvest it. While they are adept at glossing over the point, there’s a lot more that influences this supposed “extinction” than the population size. Market

demand and production costs are two of the more obvious factors from the anthropogenic side. If the fishermen are getting half as much per pound this year and are paying 50% more for fuel, they might switch over to another fishery – or tie up their boats. Is this extinction, economic or any other?

On the natural side, we have the population cycles that seem hard-wired into some species. When Pacific anchovies aren't available, they aren't available, no matter how much harvesting preceded their (temporary) disappearance. Fish stocks come and fish stocks go, and in climatologically active periods such as that we appear to be in today, they are likely to come and go a lot more rapidly and with a lot more vigor than they have in the recent past. But those that are down are far from extinct, and they're only "unfishable" because of natural fluctuations (and you can safely bet that other stocks are or will soon be up to compensate).

Another update on the extinction of the Barn Door Skates – In the late 1990's the foundation-funded doomsayers manufactured a media tempest by predicting the imminent extinction of the barndoor skate. A number of these anti-fishing activist groups lobbied to have the species listed as endangered (see <http://www.flmnh.ufl.edu/fish/sharks/innews/Barndoor.htm>), something that would have negatively impacted many of the trawl/dredge fisheries operating in the skate's range. Recognized as one of the most egregious examples of overblown environmental alarmism that had been manufactured to date as an assault on commercial fishing, the fishing industry came together with the managers to prove conclusively that the "plight" of the barndoor skate was non-existent. (Google "barndoor skate extinct" for an idea of how the anti-fishing clique piled on to this non-issue). Far from these long-lived skates being "endangered," the Northeast Fisheries Science Center reported in the 2007 Spring Bottom Trawl Survey "history was made at Oceanographer Canyon, station 204, when over 3200 pounds of barndoor skates and 1500 pounds of winter skates came over the stern and ended up sliding all over the back deck. This is the first time in survey history that so many barndoor skates were landed" (http://www.nefsc.noaa.gov/esb/rsr/sbts/sbts_2007/large_file.pdf). Unfortunately, while these activist groups and foundation-funded researchers are adept at spreading their erroneous information far and wide, they are characteristically inept at getting the right information out when they are shown to be misinformed

And the fisheries managers, no matter how "conflicted" the system they work under is supposed to be, aren't going to let fishing continue unabated when stocks are reduced beyond a certain point. As has been demonstrated in fishery after fishery in the U.S., commercial fishing effort can be effectively controlled.

Barring extinction – either economic or actual – what's left? About all we can come up with is not enough fish within some arbitrary time frame. And that's what all of the antis' concern and campaigning is focused on. In their world, a world where someone else pays the bills and someone else is always responsible for the paychecks, fish populations should be higher than they are as immediately as possible. Their primary argument for this is that it will allow fishermen to harvest the maximum sustainable yield (MSY) sooner than otherwise, and that until a fishery is at the MSY level the fishermen won't be doing as well as they should be doing.

Does it make a difference? To whom?

MSY makes sense philosophically. Who wouldn't want a fishery to be yielding as much as it can yield, year after year? It's certainly the level of fishing that every fisherman, every fisheries manager, every seafood consumer and every antifishing activist should be aiming for. But can we ever get there, and if we can, will it be worth the cost?

The antis have made it plain. In their remote-from-the-water and tunnel-focused view, one in which they think that fishery after fishery can be at MSY levels at the same time, it's worth any sacrifice that they can inflict on other people - the fishermen, their families and the folks in the businesses that depend on their efforts. It's not that plain to many of the rest of us.

Most importantly, the question of whether every stock of fish can be at the MSY level at the same time is still open to serious debate. Managed species are very often in direct competition with other managed species, competing for the same food or the same space or both (in tech-speak, their niches overlap). As has been demonstrated innumerable times, many of these species exhibit wide natural population swings. Hence, when species A is at high levels, species B will be at low levels. And vice versa. In other instances, one managed species preys upon another species. As the biomass of predator species C increases, the biomass of prey species D decreases. It's hard to envision MSY levels of spiny dogfish, summer flounder, bluefish and weakfish all existing simultaneously, because much of what they all eat is the same stuff, and some of them are fairly adept at eating each other.

Yet that's what we're supposed to be managing for.

What's the downside?

We know that we're running out of commercial dock space. It's becoming increasingly difficult to afford to keep a commercial dock in operation, and in many instances landings, and therefore income, are dropping.

At a national workshop on the loss of water access held in Norfolk, VA last month, Maine State Senator Dennis Damon reported that only about 20 miles of Maine's 5,300 miles of coastline remain devoted to commercial fishing. He's quoted "*where did it all go? It went into private homes, hotels, motels, condos and restaurants.*" (L. Becker, **Water access alarm sounds**, Palm Beach Post, May 10,

2007.) For a description of the dock situation in North Carolina see the N.C. Seagrant presentation of a recent study at http://www.ncseagrant.org/files/wasc_inventory_fish_houses.pdf. Writing about the study in National Fisherman, Susan West quotes Jeff Aiken, owner of one of the last two fish houses in Hatteras Village, “when you’re offered several million (dollars) from a developer, you look at all the fishing regulations, you see no recruitment of young fishermen into the industry, and then you make a business decision.” (Report: **N.C. lost a third of its fish houses in six years**, National Fisherman, July 2007).

We know that too many fishermen are deferring maintenance, are scrimping on safety gear and are sailing short-handed. They’re pinched between escalating fuel costs, prohibitive insurance premiums, rock-bottom prices, increasing bureaucratic requirements and declining landings, which in recent years aren’t connected to declining but rather recovering stocks.

We know that too many fishermen have gone permanently ashore, too many fishery-dependent businesses have closed, and too many more are on the verge. And we know that leaving the fisheries is almost always a one-way trip.

We also know that we’re getting better at managing fisheries, or at controlling commercial fishing effort, and its extremely doubtful that any of our commercial fisheries today are getting worse because of commercial fishing.

The antis gleefully take advantage of – and NMFS seems unwilling to do anything about – the fact that so-called “overfished” fisheries don’t have to be at low levels of abundance because of fishing, but can be there because of any natural or anthropogenic factor or combination of factors, including changing water temperatures, habitat loss, pollution, excessive predation (see **The Dogfish Follies** at <http://www.fishnet-usa.com/dogfishfollies.html>), poor reproduction, etc. In fact, there was a strong push in the last Magnuson Act reauthorization to change the Act to reflect this, referring to such fisheries as “depleted” rather than overfished. The antis lobbied successfully against the change, not willing to have federal legislation recognize that their favorite scapegoat, the commercial fishing industry, wasn’t responsible for every instance of not enough fish, regardless of the actual cause. In the days following the Exxon Valdez debacle the affected fish stocks would have been considered to be “overfished,” regardless of the fact that it wasn’t fishing but a massive oil spill that did them in.

It’s abundantly clear that we’re not in danger of losing any fish stocks because of commercial harvesting. It’s equally clear that we’re never going to achieve the Quixotesque fiction of concurrently having every species being managed at the MSY level. What’s not so clear – in fact, what’s totally obfuscated by all of the overblown doom-and-gloom rhetoric – is what we’re managing our fisheries for.

If it’s for the good of our fisheries (the fish as well as the people, businesses and communities that depend on their harvest), as the condition of our fishing industry clearly indicates, we’re surely going about it incorrectly. Probably about as incorrectly as we could possibly be going about it. We have, for example, a record biomass of summer flounder in the mid-Atlantic, yet the harvest of the fishermen – both recreational and commercial – who target summer flounder is still seriously restricted, and the smart money says the restrictions will become increasingly stringent even while the stock continues to strengthen. What’s happening in this fishery isn’t the exception. It’s the rule.

Who’s benefiting from these overly-stringent restrictions? Not the commercial fishermen. Not the recreational Fishermen. Not the restaurants, or the tackle shops or the boat liveries or the truckers or the consumers who depend on a flourishing summer flounder fishery for part or all of their profits and/or enjoyment. And how many of them will still be around when the summer flounder stocks will have “recovered” sufficiently to satisfy the “conservationists” who are responsible for the restrictions - if there’s any such point? Commercial fishermen – and that includes those who work on party/charter boats – will have been forced out of business. Restaurants will have replaced summer flounder with similar products from overseas. More tackle shops will close. More boat livery operators will sell out to developers, and on and on. More condos and more ocean-front mansions and more coastal development.

How about an alternative?

Starting out with the premise that we want both healthy fish stocks and healthy recreational and commercial fishing businesses to allow their utilization, maintaining the economic viability of recreational and commercial fishing businesses must be a priority. Unfortunately, at this point that isn’t the case. The health of the stocks has been given an overriding preference through amendments to the Magnuson Act in 1996 and last year.

That has to change. We have to accept the fact that “overfished” fisheries aren’t necessarily depleted because of too much fishing, and that in many instances, no matter how many restrictions are placed on the fishermen, the stocks aren’t going to be at the “target” level. We have to realize that, from a resource perspective, there is little difference in having a stock at an arbitrary level next year, the year following, or five years from now, but how fast that level is reached can make the difference between survival and failure for the businesses dependent on the fishery. And we have to realize that we aren’t ever going to have truly healthy fisheries until we can control coastal development, pollution, and a host of other anthropogenic factors that are for the most part ignored because of the short-sighted and purposely misdirected fixation on the effects of fishing.

The Oil Slick

The latest assault on the commercial fishing industry is by a recently formed organization called The Herring Alliance. This “alliance” is made up of the Conservation Law Foundation, Earthjustice, Environment Maine, Public Interest Research Group, Greenpeace, National Environmental Trust, Natural Resources Defense Council, National Coalition for Marine Conservation, Oceana and The Pew Charitable Trusts. It is described on its website as “a coalition of environmental and other public interest organizations dedicated to protecting and restoring marine wild-life populations and Northeastern U.S. marine ecosystems by reforming the Atlantic herring fishery.” However, there’s a bit more – or perhaps that should be a lot less – to this coalition than meets the eye.

All but two of the member organizations are funded by the Pew Charitable Trusts. According to the Pew Trusts website, since 1998 The Conservation Law Foundation has received over a 1,000,000 Pew dollars, Earthjustice has received over 20,000,000 million Pew dollars, National Environmental Trust has received over 40,000,000 Pew dollars, Natural Resources Defense Council has received almost 5,000,000 Pew dollars, Public Interest Research Group has received over 18,000,000 Pew dollars, and Oceana has received over 38,000,000 Pew dollars. Environment Maine acknowledges Pew support, but the Pew Trusts website doesn’t detail at what level that support is.

This embarrassment of riches is part and parcel of Pew’s strategy. In an article in the New York Times on June 28, 2001, Douglas Jehl wrote “*unlike many philanthropies that give to conservationist groups, Pew has been anything but hands-off, serving as the behind-the-scenes architect of highly visible recent campaigns to preserve national forests and combat global warming. Though some of its money goes to long-established groups, Pew has also created its own organizations, with names like the National Environmental Trust and the Heritage Forest Campaign.*” (**Charity Is New Force in Environmental Fight**). However, in the case of this “coalition,” the impression is that a group of organizations spontaneously came together because of a concern over the management of herring in New England waters. All those zeros in the preceding paragraph show how spontaneous that concern really was.

(Of the two groups apparently not Pew funded, Greenpeace is notoriously opposed to “big businesses” such as those engaged in the herring fisheries, and the National Coalition for Marine Conservation, in spite of its name, is an organization representing recreational fishing interests; interests who see any real form of commercial fishing as undesirable competition.)

(For another example of how The Pew Trusts “stack the deck” to influence fisheries policy, see **The Pew Commission – a basis for national ocean policy?** at <http://www.fishingnj.org/netusa23.htm>).

New Jersey Congressman Frank Pallone declares war on seafood consumers

Striped bass (also known as rockfish) and tautog (aka blackfish) are inarguably two of the finest tasting fish in the sea. As added bonuses, tautog’s native hardiness makes them an ideal product for the Asian live fish market, providing sophisticated seafood lovers with a new appreciation for the term “ocean fresh,” and striped bass are as common in our coastal waters as they have ever been.

Both species support active recreational and commercial fisheries, and in both the recreational harvest far exceeds the commercial. Current estimates are that recreational anglers harvest 90% of the tautog and 80% of the striped bass. (Note that in recent years “catch and release” recreational anglers have killed more striped bass than have been commercially harvested.)

By the wildest, most “optimistic” estimates, only three or four percent of U.S. citizens can afford to or want to fish in saltwater. According to the National Marine Fisheries Service Recreational Fisheries Strategic Plan (available at http://www.nmfs.noaa.gov/recfish/Fisheries_Strategic_Plan.pdf), that number is 13 million out of a total population of 302 million. And every year the percentage drops (for an in-depth discussion of recreational fishing participation, see <http://www.fishingnj.org/netusa27.html>). At the same time the U.S. population is increasing, as is, because of the well-recognized benefits of a fish-rich diet, the annual per capita seafood consumption.

And, though it isn’t really necessary to add it here, the fish found in the waters off our coasts belong to all of us; the 13 million saltwater recreational fishermen and women and the 279 million of us who don’t want to be forced to “catch our own.”

So what is N.J. Congressman Frank Pallone* (in the case of striped bass, in company with Maine Congressman Tom Allen) trying to do? He has introduced two “gamefish” bills. One would reserve striped bass solely for recreational fishermen and the other would do the same with tautog. That means that if you ever want to enjoy a striped bass or tautog that you cook yourself, you’re going to have to catch it yourself or have a recreational fisherman give it to you. If you ever want to enjoy a striped bass or a tautog in a restaurant, you’ll be out of luck, because the sale of both species will be forbidden.

Why is Congressman Pallone doing this? It sure isn’t to benefit the 279 million U.S. citizens, or the 8 million New Jersey residents or the 625 thousand residents of his district who don’t fish. And it just as surely isn’t to benefit the stocks of striped bass or tautog, because compared to the recreational mortality for both species, the harvest by permitted commercial fishermen is just about negligible, and is successfully controlled by the federal, regional and state regulations that are in place. How about the seafood retailers, the supermarket chains or the restaurants that will be forced to give up what the opportunity to sell two of the most delicious fish to come out of local U.S. waters?

Is it for the fish? The primary problem with the tautog fishery is the uncontrolled and illegal harvest and sale of these fish, particularly to the live fish market, by recreational fishermen.** According to the Atlantic States Marine Fisheries Commission, the multi-state organization charged with managing tautog in state waters, “New Jersey law enforcement officials report that the recreational fishery for tautog has a 40% violation rate, the worst for any NJ fishery,” and that “the success of any effort to curb the illegal tautog fishery will depend on changing the compliance rate of recreational anglers, as well as encouraging law abiding harvesters to report illegal activities.”

John O’Shea, Executive Director of the Atlantic States Marine Fisheries Commission, pointed out in a letter to Congressman Pallone on April 16 of this year the several relatively simple management steps that would be necessary to curtail the illegal harvest of tautog, currently a problem in the fishery.

The only problem with striped bass is that there are so many of them that they might be interfering with other fish stocks.

It’s hard to see that Congressman Pallone – and in the case of striped bass, Congressman Allen as well – are doing anything more than catering to a small handful of well-heeled recreational anglers who are only interested in increasing their share of the fishing pie, regardless of any issues of fairness or conservation or common sense. While we can’t agree with it, we can certainly understand their “Public be damned” attitude. What we can’t understand is how they convinced two Congressmen who were sent to Washington to represent all of the people to support it.

*Congressman Pallone was one of the leaders of a campaign to oppose the imposition of licensing for saltwater recreational fishermen (see http://www.house.gov/list/press/nj06_pallone/pr_may3_license.html). Such a license would be a first, and highly effective, step in controlling rampant cheating by unlicensed recreational fishermen, particularly those selling their catch.

**While it could be argued that those anglers who sell their catch – either legally or illegally – should not be considered recreational fishermen, they possess no permits or licenses that would classify them as commercial fisherman, this is nothing more than a semantic smokescreen. The important point here is that, regardless of what the cheaters are called, they are neither commercial fishermen nor non-fishing consumers. These are the two groups that Congressman Pallone is intent on punishing.

Cooperation among fishermen? Pew seems to not want it

05/07/07

Last fall I wrote in this column “*recreational fishermen, commercial fishermen and all of the consumers who enjoy locally produced seafood are the real ‘grass roots,’ not front people for agenda-driven multi-billion dollar foundations. We are the ones with the true commitment to sustainable harvesting, because we demand that our children and their children and their children’s children have fishing as a part of their life, and that’s how we have to sell ourselves. Working together will take coordination, cooperation and a lot of forbearance by everyone who fishes, but do we have a choice?*” Reflecting this, and to the consternation of the anti-, recreational and commercial fishing groups collaborated on relaxing unnecessarily rigid rebuilding standards during Magnuson reauthorization. We’ve been looking at other areas of cooperation since then.

The column, the collaboration and the promise of further cooperation must have been effective, because it appears as if research by Pew-funded Oceana, one of the premier anti-fishing groups, is to be used to get recreational and commercial fishermen back at each other’s throats.

I was sent (anonymously, which was neat in a cloak and dagger kind of way) materials from what I’d give a 99% certainty to will be the next anti-fishing media spectacular, this one comparing commercial bycatch with recreational catch. If handled as previous hatchet jobs have been, nothing will incite anti-commercial feelings among recreational fishermen more than this trumpeting of skewed data demonstrating that in fishery after fishery we’re throwing away more than the recreational anglers are catching. That should take care of any developing cooperative tendencies, shouldn’t it?

Using worst-case data, the information I received paints yet another dismal picture of commercial fishing, typical of the “science” supported directly or indirectly by Our Favorite Charitable Trust (OFCT). Most of the data is from a study by a private consulting group, the Marine Resources Assessment Group (MRAG), bought and paid for by Oceana. I probably don’t need to add that Oceana got \$9 million from OFCT this year.

Authored by OFCT supported researcher Ransom Myers, ex NMFS official and present MRAG vice president Andrew Rosenberg, and MRAG staffer Julie Harrington, the report focuses largely on bycatch data from the shrimp fisheries before Bycatch Reduction Devices and massive fleet reductions forced by low-cost imports, regulatory discards which are themselves a by-product of the management process, and unnaturally high populations of protected species such as spiny dogfish. It’s pejoratively titled “Wasted Resources,” a dead-on indication of its objectivity.

Recreational information is almost entirely from the discredited Marine Recreational Fisheries Statistical Survey.

The only significant commercial fishing information source other than the Oceana MRAG study was from the National Marine Fisheries Service’s Highly Migratory Species (HMS) Fishery Management Plan. Just about all of the bycatch in the HMS fisheries is due to regulations. The

fishermen are forced to heave dead tuna or sharks or billfish over the side. This obscene waste could be stopped by injecting a little rationality into what's one of our most highly politicized fisheries, allowing the fishermen to donate the bycatch to real charitable groups really interested in doing good. Every time this has been proposed, the so-called "marine conservationists" have objected strenuously and effectively.

If they hadn't, what would Oceana campaign against?

I'll bet dollars to donuts that no thought's been given to including any discussion of the strides that have been made in bycatch reduction, though mentioning it here might serve as a gentle reminder to those well-funded folks on the "charitable" side of the fence. Fishermen don't like bycatch. It doesn't generate income, it puts extra wear and tear on the gear, it takes time and energy to deal with and it kills critters needlessly. From a number of viewpoints, it's anathema to responsible fishermen. But will any of this be in what is eventually splashed all over the NY Times, the Washington Post or any of the other publications willing to print any anti-fishing propaganda that comes their way? As radio's Bob Elliot and Ray Goulding used to say, "don't hang by your thumbs."

Recreational fishermen and their representatives – at least those who work for organizations not compromised by all of those anti-fishing foundation dollars – see the writing on the wall. Our collective future lies in maintaining the viability of both recreational and commercial fishing, something that the foundation-funded "conservationists" have demonstrated zero interest in.

If our rudimentary attempts at cooperation can elicit this kind of response, we're heading in the right direction. Once we involve the real consumers, we're home free.

Where's Hercules when we really need him?

06/08/07

Hercules - or Heracles to you Greek scholars out there – had twelve labors to perform. The sixth was to clean out the stables of King Augeus, and to do it in a single day. The maintenance of those stables, home to a huge herd of cattle, had been sadly neglected by the King for years and, needless to say, they were sorely in need of cleaning. Using a combination of brain and brawn and two conveniently located rivers, Hercules cleaned the stables, won a tenth of the cattle in a side bet with the King, and went on to complete six more labors and live sort of happily ever after.

It's not much of a stretch to compare the challenges faced by Hercules with those that the commercial fishing industry is facing. And like Hercules, one of our most important challenges involves significant amounts of bovine manure, though he had to deal with the actual stuff while ours is of a much more symbolic nature.

Ours, which comes to light in technical journals, in trade publications, on television and in the press, is in the form of overblown, inaccurate, sensationalized and one-sided misrepresentations of what's going on in the oceans, presenting commercial fishermen as uncaring vandals and commercial fishing as the scourge of the seas.

So what do we do about it? We could sit back and take it. That's a strategy we're pretty good at, but up 'til now it hasn't proven too successful. We could take a page from King Augeus' book, and wait for a modern day Hercules to do the job, but we're going to have a long wait, 'cause there aren't a lot of superheroes out there any more.

Or we could do it ourselves.

Heresy, you're probably thinking right now. It's my job to feed the public, not to keep the public thinking straight. Well, wake up and smell those stables.

If you don't do it, it's not going to get done. And if it doesn't, in the not too distant future we're going to have an industry that's not very much like today's.

What can you do? That's easy. Whenever you read or see or hear something that's wrong, something that can, and particularly something that appears as if it's been designed to, damage the commercial fishing industry, get to the people responsible for airing or printing it and let them know.

You don't have to be eloquent, sound scientific or spout a bunch of statistics. All you have to be is convincing, and who can be more convincing about fishing issues than someone who's invested his life in the future of the commercial fishing industry. You're out there on the water, or you're talking with the folks who are, day after day. You communicate with other fishermen or other dealers or other suppliers, and you know what's really going on.

Emphasize that what you know is based on first hand observations informed by years – or generations – of on-the-water experience, not on computer generated models based on third- or fourth- or fifth-hand data and manipulated by “scientists” who will accumulate less boat time in a career than you will in a season.

But don't leave it at that, because that's only half the job. Contact your elected officials or, probably more likely and just as effective, their staffers and set the record straight. Then get to your favorite bureaucrats, relate the specifics (where/when the article was published or the segment was aired) and ask them to “officially” respond to the inaccuracies. Then contact your Sea Grant guy or gal, the professors that you've had dealings with, your buddies, your customers, your suppliers and anyone else you can think of and get them involved as well.

The print and broadcast media today thrives on controversy, but that can work to our advantage. A researcher in Halifax or an activist in Washington is going to get coverage, because the deep pockets that support them are also supporting extensive media outreach programs. If a well-spoken and informed local businesswoman or man, one with roots in the community, can provide that spark of controversy, she or he stands a good chance of being contacted the next time a fishing issue comes up. To a large extent, it's about cultivating relationships with the media. The other side is good at it and has been for years. We haven't even started.

Hercules was adept at handling cattle droppings. Our only choice is to become equally adept.

Oh no, gamefish again!

06/25/07

Do you have a hobby that involves growing or building stuff, or do you know anybody that does? If so, you know that it can get really expensive. Amateur gardeners pay way above market price to grow their own tomatoes and eggplants and squash. Amateur mechanics put hundreds of hours and tens of thousands of dollars into rebuilding a 50 year old car that cost a couple of thousand dollars when new. Amateur cabinet-makers invest thousands and thousands of dollars in workshops to build bookshelves and armoires and dry sinks. And amateur fishermen can spend hundreds of dollars for every pound of fish they catch.

Someone that lives in Princeton whose salary is a quarter of a million dollars a year, with a garden that takes up 5% of a lot worth a million dollars and a John Deere garden tractor that cost \$5,000 could probably make a convincing argument that, counting labor and land and capital, his tomatoes cost \$500 a pound. Anybody who's familiar with classic car auctions knows that a well-restored muscle car from the sixties can easily sell for twenty or thirty or more times what it cost when new. With hardwoods costing ten or twenty dollars a board foot and hobby-sized planers and table saws ranging upwards of a thousand bucks, furniture that you could buy for a couple of hundred dollars would, including your time, cost much more to build.

Could you imagine an elected official, one at any level, therefore arguing that the agriculture industry or the automobile industry or the furniture industry should be shut down? That amateurs spent so much more to produce goods, and that their expenditures per pound or per vehicle or per end table were therefore so much more valuable to the economy, that they should be the sole producers of those goods?

Seems unlikely, doesn't it? Evidently not in our Congress.

For what seems like the dozenth time, New Jersey Congressman Frank Pallone, this year along with Maine's Congressman Tom Allen, has introduced legislation to make striped bass a gamefish coast-wide. Their “justification” for doing this is that their recreational fishing constituents spend much more money to catch striped bass than commercial fishermen get for the same fish at the dock. According to them, it's a waste of the resource to allow the non-fishing members of the public to ever enjoy this delicious fish unless they are given one by the sportsman or woman that they're lucky enough to have as a friend.

What do these legislators, whose non-angling constituents outnumber anglers by perhaps a hundred to one, want them to give up? In 1634, William Wood wrote in New England's Prospects “*The Basse is one of the best fishes in the Countrey, and though men are soone wearied with other fish, yet are they never with Basse. It is a delicate, fine, fat, fast fish...pleasant to the pallat, and wholesome to the stomach*” (from the classic *The Encyclopedia of Fish Cookery* by McClane & deZanger). And nobody with even semi-educated taste buds has disagreed in the intervening 373 years.

The proponents of this legislation try to support it with two bogus arguments. The first is that the recreational striped bass fishery is increasingly “catch and release” and more conservation-oriented. Au contraire, recreational “catch and release” striped bass mortality is now greater than the total commercial harvest. The second is that the consumers will still have access to aquacultured striped bass. Fact is that no one is growing real saltwater striped bass for the market. Instead, they are culturing a striped bass/white perch hybrid in fresh water. It's not the same. McClane and deZanger recognize this, writing “*landlocked populations of striped bass ... (are) inferior to a prime fish taken from saltwater.*”

So, according to Congressmen Pallone and Allen, a handful of fishing hobbyists deserve exclusive access to the entire crop of one of the finest seafood products that's available from our coastal waters, offering 300+ million non-fishing consumers an aquacultured "substitute" that doesn't even come close, because those anglers spend so much more to catch the striped bass they catch. This is while those same anglers, using the latest in "catch and release" methodology, are killing and wasting more striped bass than the non-fishing consumers are allowed to consume.

If these two Congressmen get away with punishing commercial fishermen, and the consumers they work for, for fishing as efficiently and environmentally responsibly as they can, look out Broyhill, Ford and Con-Agra, 'cause you might be next.

Stock assessments – a necessary evil

08/07/07

Last month I attended four days of a stock assessment meeting at the NMFS' Northeast Fisheries Science Center in Woods Hole on Cape Cod. I was doing this for the Monkfish Defense Fund (the MDF), an industry group I've been affiliated with since its beginnings almost a decade ago. Asked about it later, I described the four days I was there as the longest two weeks I'd ever slogged thru. In other words, it wasn't all that enjoyable. But it was informative. In fact, it was tremendously informative (and for those science types reading this, you can stop cringing, because I mean that in a good sense).

I'm not an assessment scientist, not even close. I was never big on statistics, even back in college. Needless to say, much of what went on at Woods Hole was at least a wee bit beyond me. This could be why I found the experience somewhat painful in a long and drawn-out way. Think "four day root canal."

But was it worth being there? You betcha!

First off, the monkfish fishery has been characterized as "data poor," indicating, I guess, that extraordinary mathematical/statistical efforts were needed to upgrade the assessment (for an overview of the fishery and its management from my perspective, see "Is this any way to run a business" at http://www.fishnet-usa.com/run_a_business.html). The assessment panel members, both NMFS and "independent" scientists, were there to consider all of the information available on the fishery, to assess its current condition and to make recommendations relative to its future management. They all appeared to be taking the job very seriously and were intent on doing it as well as possible.

If there was a piece of relevant data available on the monkfish stocks or the monkfish fishery, it was considered. Much of the meeting was devoted to fine tuning a computer model that was developed specifically for the monkfish fishery.

The MDF had a scientist there as well, someone who understands all of the technical mumbo jumbo that is so far beyond me. Both his input and mine were sought and considered by the panel. There are subtle, and not so subtle, nuances involved in utilizing data that might not be evident to scientists, no matter how expert they are, from outside the fishery. Because of this, our participation was critical.

On the downside, the panel throughout the meeting was subject to what seemed to me to be inordinate attempts by several members of the Science Center staff to influence the outcome of the deliberations. It felt like they were attempting to "protect" the existing management program – and NMFS' role in its creation and implementation. Interestingly enough, to support some of their arguments they used information that would have undoubtedly been labeled as "anecdotal" and disregarded had it come from fishermen.

What's the final impact on the monkfish fishery going to be? At this point, we don't know. But we do know that an inadequate method of estimating critical stock parameters was addressed and, we assume, will be improved upon.

What's the take-home message for the industry? When it comes to stock assessments of fisheries you are in, be there. Be there in person, if you're able. Or have someone there for you. But make sure that he or she knows the fishery, and knows how it interacts with other fisheries, because what might appear to be changes related to the health of the stocks could be due to a totally unrelated factor (the decline in monkfish bycatch in the sea scallop fishery was one that came up in Woods Hole).

But if you aren't an assessment scientist, or if you doubt that you will understand everything that will be going on at the assessment, also have someone there who does. To as large an extent as possible, the involved industry reps should be there as a part of the process, but getting to that point won't be easy.

This is going to be expensive, but do you have any choice? Do you want to be saddled with an overly restrictive management regime because a decline in landings that was due to a fall in the strength of the yen was interpreted as a stock decline because no one was there to point out what was really going on? NMFS could help by making a fisherman – or someone else recognized by the industry as being well informed about the particular fishery – an official part of each panel. And pay his or her expenses, as well.

Cooperative research – try it, you’ll like it!

09/06/07

Two of the most unfortunate words associated with fisheries management are “anecdotal” and “best available.” The first is used far too often to discount on-the-water observations by fishermen and the second to justify important fishery management decisions based on sometimes inadequate information.

Together, they have arguably cost fishermen and the businesses that depend on them millions of dollars and countless opportunities for recreation – and the antis, of course, use them to bolster their arguments for precautionary management and the harshly restrictive regulations that demands.

Fortunately, a mechanism is available with the potential to obviate much of this: cooperative research.

While NOAA is now the proud possessor of new, state-of-the-art research vessels, these boats were designed, and will be crewed, to do many scientific jobs, perhaps the fisheries research equivalent of a Swiss Army knife or a Leatherman tool. When it comes to working on specific fisheries, their observations will differ significantly from those generated by a boat, crew and captain with years, decades or sometimes generations of hands-on experience in how, where and when to fish in that fishery. They don’t have a net designed to sample several dozen species, they don’t rig it or fish it to sample them all, and if it’s the right boat and crew, they operate as a fine-tuned machine to catch one or several species. Tools, if you will, designed for a particular job.

While some people will argue that a carefully designed sampling program, sophisticated statistical manipulations and the right computer model are all that are needed, this doesn’t quite ring true, particularly when dealing with fish that are or aren’t available based on a schedule determined by Mother Nature, not by a team of researchers and administrators with limited or no sea time. They researchers are sampling stations. The fishermen are catching fish.

The researchers are hesitant to use the fishermen’s data, and from a rigorous scientific perspective that might be understandable. But, if we can get the researchers out on the real fishing boats, crewed by working fishermen and captained by a high liner, then we have the best of all possible worlds – particularly if the data that’s generated can be combined with that from the survey fleet. Cooperative research lets us do that.

Take the monkfish fishery as an example (only because I’m familiar with the fishery and several cooperative monkfish surveys; other fisheries also have dynamic research programs designed and operated jointly by government and academia and industry). The NMFS Autumn Trawl Survey used to be the “foundation” of the monkfish management program. In 2001 a total of 620 pounds of monkfish were caught on the 339 stations sampled. In the cooperative monkfish survey done the same year, the two commercial boats used caught over 18 tons of monkfish on just over 300 stations. This doesn’t invalidate the results of the “official” survey, but it sure puts things in a different perspective. And that perspective played a part in the newest monkfish assessment, which found that the stocks weren’t overfished and overfishing wasn’t taking place in either of the two management areas.

Will this result in higher landings? Perhaps, but it will definitely result in a fishery that’s managed better. And that’s what we’re aiming for.

Cooperative research is under-funded in the NMFS budget, and the cost of chartering commercial boats and staffing them with researchers and their equipment is high. So I’m urging you to devote some serious effort to lobbying both NMFS and your representatives in Washington to pump up the cooperative research budget.

From the industry side, participating in the organization and administration of these programs chews up a lot of hours, but it’s your fishery and you should be involved. It’s more than worth it, because it makes the “best available” information much better, and it turns “anecdotal observations” into useable data. It’s the best mechanism available to show what’s really going on in the fisheries.

On an unrelated note, I’d like to devote a few words to recognizing one of the best friends we have in the Southeast. L.J. Wallace, also a faithful reader and promoter of National Fisherman, has me on his Charlestown, S.C. talk show, Waters Edge, on Saturday mornings following the publication of this magazine. Devoted to recreational boating, L.J. also uses the show to promote the

commercial fishing industry, and he's great at it. The broadcasts are archived on The Salty Southeast Cruisers' Net website (<http://www.cruisersnet.net>) and click on "Waters Edge Radio" on the left). Give it a listen. You'll be glad you did.

Foundations and ENGOs - millions for lawsuits, nada for research

10/08/07

My last two columns dealt with research for a simple reason; the more we know about fish and fishing, the better we can be at harvesting while maintaining the productivity of our inshore and offshore waters. Simple, isn't it? If we spend more on research we know more, and if we know more we fish better.

Unfortunately funding available for research, at least funding from the government and from the fishing industry, is limited, and getting more limited every year. Government funding keeps dropping because agency budgets aren't growing and mandated programs like those protecting endangered species or threatened habitat are becoming more expensive. And I don't have to tell anyone reading this what's happening with industry revenues.

But, you might think, what of all those organizations with really deep pockets whose leaders are more than willing, at the drop of a hat, to profess how they are on the side of short-sighted fishermen who are going to reap their well-deserved rewards when all of our fisheries become "sustainable?" You know they are spending tens of millions of dollars each year on lawyers, on lobbying and public relations, on "research" to show how bad fishing is for all those ocean critters. How much are they spending to improve the science that will actually support more effective fisheries management or the actual day-to-day (rather than illusory, pie-in-the-sky future) lives of the fishermen they are supposedly there to help?

Your guess is as good as mine, and if you're even semi-informed about such matters I'd suspect it would range from close to zip to right around nada.

Of course, it's impossible to consider ENGO (that's Environmental Non-government Organization) participation in research without considering Our Favorite Charitable Trust (OFCT to the heretofore uninitiated).

OFCT gives tens of millions of dollars a year to organizations to ostensibly make the oceans better for fish to swim in and fishermen to fish in. As an example of this largesse, of the ten organizations listed as members of The Herring Alliance – that's the group that's out to save the Gulf of Maine (or the North Atlantic, the world, or the universe; I sometimes get who's being saved from what by those OFCT dollars confused) from the depredations of the big boat bad guys - on its website, eight are funded by OFCT. Seven of them have received over \$120 million from OFCT and one of them, The Pew Trusts, is, if you were wondering, OFCT. Even counting inflation, that's an awful lot of dollars. How much of that has been spent by the recipient organizations on research to improve assessments or reduce bycatch or increase efficiency, in fact on anything of a positive – for the fishermen or for the fisheries managers – nature? If anybody from any of those ENGOs or OFCT is willing to share that information, I – and a bunch of readers – would love to know. We already have a pretty good idea of how much is spent on demonizing and marginalizing the fishermen because we're struggling to live with the results.

Of course, the more we know about the fish stocks, and about the effects of fishing on them, the less we can be forced to rely on the precautionary principal, and where would all of those "crucify the fishermen" programs be without that? Or how about marine mammal assessments that are less than a decade old? Or any of dozens of other issues where, because of lack of knowledge, fishermen are paying the price? How many jobs, how many programs, how much bad PR and how much deflection of the public's attention (eighteen years later "Exxon Valdez" is still synonymous with catastrophic oil spills, five years later "Prestige" doesn't ring anyone's bells, at least on this side of the Atlantic) is based on "we don't know, so it's better to be safe than sorry?"

This isn't to say that the odd bright spot doesn't exist. World Wildlife Fund's Smart Gear competition is one. From a fishing industry perspective it's the only positive program by an ENGO that I'm aware of, and WWF isn't supporting the gear research, it's only recognizing it. But, looking at the Smart Gear website, it's obvious the competition was designed working with real industry groups, and it could easily serve as a model for other ENGOs with a serious commitment to positively contributing to the fish and the fishermen. Will it fly in Philadelphia? Not likely, 'cause it shows that fishermen are good guys, a concept OFCT seems seriously averse to.

Top down "management"

11/07/07

In the last couple of months we've seen two attempts to force major management actions with absolutely no justification in science onto commercial fishermen, one from the White House and one from Congress. In the first, President Bush made striped bass and channel bass "game-fish" on the East and Gulf coasts. In the second, New Jersey Congressman Saxton and Maryland Congressman Gilchrist are attempting to close the East coast menhaden reduction fishery down.

One would think, given the importance of each of the three gentlemen, that these important fisheries must be facing impending disaster at the hands of commercial fishermen that the existing management system wasn't capable of handling. Otherwise, why would the President and two senior Congressmen expend the energy necessary to research and write the bass proclamation or the menhaden legislation and why would they demonstrate a complete lack of confidence in the established government entities charged with managing these fisheries?

But au contraire, folks, that's not necessarily so. The striped bass biomass is as high as it's ever been, channel bass are recovering from the blackened redfish craze quite nicely, and menhaden as of the last assessment (September, 2006) are neither being overfished nor is overfishing on them occurring. Further, about 90% of channel bass landings are recreational, and recreational C&R mortality of striped bass exceeds commercial landings, so if either of these species actually needed extraordinary protection, they would have to be protected from recreational fishermen, not commercial.

Additionally, the vast majority of landings of all three species are from states' waters. Great as the powers of the President of the United States and the U.S. Congress are, neither is likely to intrude upon the prerogative of coastal states to manage fisheries in their waters.

So why are our elected officials "protecting" three species that they have no jurisdiction over, need no protection anyway, and are at no risk from commercial harvesters? I'd like to think that it's because they're acting on grossly inadequate information, and that they are under the impression that commercial harvesting is posing an immediate threat to the stocks. That being the case, they are each sorely in need of some tuning up at the staff level.

Of course, the harvesting of these three fish has been the subject of public controversy for decades. It seems like there have been movements afoot to make striped bass and channel bass "gamefish" for as long as I've been involved in fisheries, and menhaden harvesting has been an issue as well, primarily because striped bass eat them. So the President's and the Congressmen's actions would, it would seem, gain the favor of the recreational fishermen.

But should they? Looked at realistically, recreational fishing is an activity that's practiced by fewer and fewer people each year. While it's hard to get a handle on the actual statistics, it's safe to say that less than a tenth of the people in the U.S. are serious recreational anglers. Just as recreational fishermen outnumber commercial fishermen, the non-fishing public outnumbers recreational fishermen. Some of those non-fishermen, in fact a fairly large number of them, are seriously interested in animal rights. Anyone who doubts this has to look no further than the changes that the cosmetics and pharmaceutical industries have been forced to make over the last decade.

And they have begun to target sportsmen – hunters and fishermen – in a serious way. As an example, in New Jersey legislation has been introduced that would be the first step in turning New Jersey's appointed Fish and Game Council from a body with the goal of protecting the citizen's abilities to hunt and fish into one with the goal of protecting the critters that they used to hunt and fish. And this isn't a movement limited to New Jersey.

How are they doing this? Political pressure, plain and simple, and they're using arguments that are easy to sell to that non-hunting, non-fishing public. Fortunately, while eschewing hunting and fishing, those people haven't given up eating fish; in fact they're eating more per capita every year. We're ahead of the curve on this one.

So I would think that the astute politician, if intent on protecting the fishing rights of his or her constituents, would do everything possible to "marry" commercial and recreational fishing, and to institutionalize them as sustainable pursuits through strengthening the management system we have. This isn't going to happen by short-circuiting that system and weakening it as President Bush, Congressman Saxton and Congressman Gilchrist have just done. Go figure.

Congress to the rescue (we hope)

12/06/07

One of the most troubling problems with the Magnuson Act as it's been distorted in the last two reauthorizations is the designed-in inflexibility. This inflexibility, which has been forced by the campaigning of foundation-funded activists, is there to prevent the management system from acting, or reacting, too subjectively, relying on "science" rather than on the informed judgment of the managers.

At first glance that seems a reasonable approach. Science is objective, and supposedly isn't influenced by extraneous factors. Do what the science says, and the fish – and the fishermen – are going to come out ahead.

But that's not necessarily so, particularly for fisheries. It certainly is for simple systems, those that the scientists fully understand that are only influenced by identifiable and measurable variables. Scientists can predict, for example, at what temperature distilled water will boil at a particular pressure. It's a simple system with identifiable and measurable variables.

But, alas, a fishery isn't a simple system, and certainly not one in which we can identify and measure all of the variables. In fact, we can't even measure most of those variables we've identified, perhaps not accurately, as major. We can estimate the stock size, the landings, a few of the sources of mortality and the recruitment. We don't have a clue about the intra- or inter-specific interactions, the impacts of other natural or anthropogenic variables, the carrying capacity or much of anything else. As a matter of fact, for many species we don't even have a solid handle on the complete life cycle.

Given all of the unknowns, how can we possibly predict – or, written another way, model – what is going to happen in a fishery with any degree of accuracy? Quite simply, we can't.

Fully realizing this, in their wisdom the Members of Congress back in the '70s allowed for a significant amount of informed judgment to be applied to the management system. They knew that the scientists didn't have all of the answers (and I'd be willing to bet that back then they knew that the scientists wouldn't have them all at any point in the foreseeable future, either). Accordingly, they didn't make fisheries management the exclusive turf of the scientists, but legislated participation by governmental representatives and members of the public as well.

Unfortunately, since then Congress' intentions have been subverted by the antis. According to them, fisheries management shouldn't be accomplished by the judicious application of the "best available" science reinforced with the informed judgment of people with hands-on experience. They want management based on "sophisticated" computer models (the sophistication only necessary because the data that fuels the models is so meager), limited survey results, and the recommendations of generally narrow-focused scientists with on-the-water experience limited, at best, to survey cruises and no real grasp of what the ocean is really like. And, of course, none of them are spending any of their easily earned foundation bucks on generating better data. That would interfere with their campaign to turn fisheries management into the entirely political process that they hypocritically claim they are vehemently against.

(The antis are sure in favor of flexibility when it comes to what they consider political interference. If it's a handful of fishing businesses being kept alive by elected officials, it's bad and it's political. If it's 300,000 "comments" generated by mouse clicks on propaganda laden anti-fishing websites to put them out of business, it isn't.)

But to their credit, Congressmen Walter Jones (NC), Barney Frank (MA) and most recently Timothy Bishop (NY) are sponsoring the Flexibility in Rebuilding American Fisheries Act of 2007 (H.R. 4087). While not addressing all of the ills of fisheries management today, it's a great start. It returns informed judgment to a system that isn't making it on science alone, alleviating what has become counter-productive rigidity. Get your Representatives to sign on. It's critical to your future.

On a sort of related note, Rhode Island fisherman Phil Rühle was one of NOAA's five Environmental Heroes in 2003. Agency head Vice Admiral Conrad Lautenbacher said of the recipients "your dedicated efforts and outstanding accomplishments greatly benefit the environment and make our nation a better place for all Americans." This year Phil was a winner of World Wildlife Fund's International Smart Gear competition. He's as good an argument as we have for cloning particular fishermen. So why, I have to ask, wasn't he reappointed to the New England Council? And why have other, equally qualified fishermen and effective Council members been removed "before their time."

Congress to the rescue (we hope)

12/06/07

One of the most troubling problems with the Magnuson Act as it's been distorted in the last two reauthorizations is the designed-in inflexibility. This inflexibility, which has been forced by the campaigning of foundation-funded activists, is there to prevent the management system from acting, or reacting, too subjectively, relying on "science" rather than on the informed judgment of the managers.

At first glance that seems a reasonable approach. Science is objective, and supposedly isn't influenced by extraneous factors. Do what the science says, and the fish – and the fishermen – are going to come out ahead.

But that's not necessarily so, particularly for fisheries. It certainly is for simple systems, those that the scientists fully understand that are only influenced by identifiable and measurable variables. Scientists can predict, for example, at what temperature distilled water will boil at a particular pressure. It's a simple system with identifiable and measurable variables.

But, alas, a fishery isn't a simple system, and certainly not one in which we can identify and measure all of the variables. In fact, we can't even measure most of those variables we've identified, perhaps not accurately, as major. We can estimate the stock size, the landings, a few of the sources of mortality and the recruitment. We don't have a clue about the intra- or inter-specific interactions, the impacts of other natural or anthropogenic variables, the carrying capacity or much of anything else. As a matter of fact, for many species we don't even have a solid handle on the complete life cycle.

Given all of the unknowns, how can we possibly predict – or, written another way, model – what is going to happen in a fishery with any degree of accuracy? Quite simply, we can't.

Fully realizing this, in their wisdom the Members of Congress back in the '70s allowed for a significant amount of informed judgment to be applied to the management system. They knew that the scientists didn't have all of the answers (and I'd be willing to bet that back then they knew that the scientists wouldn't have them all at any point in the foreseeable future, either). Accordingly, they didn't make fisheries management the exclusive turf of the scientists, but legislated participation by governmental representatives and members of the public as well.

Unfortunately, since then Congress' intentions have been subverted by the antis. According to them, fisheries management shouldn't be accomplished by the judicious application of the "best available" science reinforced with the informed judgment of people with hands-on experience. They want management based on "sophisticated" computer models (the sophistication only necessary because the data that fuels the models is so meager), limited survey results, and the recommendations of generally narrow-focused scientists with on-the-water experience limited, at best, to survey cruises and no real grasp of what the ocean is really like. And, of course, none of them are spending any of their easily earned foundation bucks on generating better data. That would interfere with their campaign to turn fisheries management into the entirely political process that they hypocritically claim they are vehemently against.

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Availability cascades – it isn't just climate

01/04/08

John Tierney's New Year's Day column in the New York Times, In 2008, a 100 Percent Chance of Alarm, dealt with global warming and the impact that the pronouncements of a relative handful on scientists and the highly focused media attention they have generated have had on the public's perceptions of what's going on with the world's climate.

I'm not about to enter into any debate on global warming or climate change or the role that our activities are or aren't having with what is or isn't happening there. I have more than enough to do keeping up with fisheries. However, Mr. Tierney's examination of the roots of the media's global warming "frenzy," an availability (or informational) cascade, should be required background reading for anyone with an interest in fisheries policy formation.

He wrote that "*activists, journalists and scientists*" have initiated and are propagating a global warming "*availability cascade*." In the words of Timur Kuran and Cass R. Sunstein, who first used the term in the 1999 paper Availability Cascades and Risk Regulation in the Stanford Law Review, "*an availability cascade is a self-reinforcing process of collective belief formation by which an expressed perception triggers a chain reaction that gives the perception increasing plausibility through its rising availability in public discourse.*" They continue "*availability entrepreneurs--activists who manipulate the content of public discourse--strive to trigger availability cascades likely to advance their agendas.*"

Ring any bells? In spite of an overwhelming amount of information to the contrary, the public perception is increasingly that our fisheries are collectively on their way to hell in a hand basket, and they're on that journey because of commercial fishing. Stocks are increasing, effort is declining and gear is becoming more selective, yet the anti-fishing efforts of the anti-fishing activists haven't abated a bit.

And why is that? Because the anti-fishing community's very own availability entrepreneurs, are masters at manipulating the content of public discourse. And, of course, because they have really deep pockets as well.

One of the most interesting facets of the concurrent anti-fishing and global warming campaigns is that they both seem to a very large extent to be orchestrated by the same organization, Our Favorite Charitable Trust. The Pew Charitable Trusts, and the Sun Oil heirs and etc. that direct them, have kicked many tens of millions of dollars into global warming and anti-fishing campaigns. And it almost goes without saying that Fenton Communications, the public relations giant that cut it's eye teeth on the Alar apple scare, an availability cascade that's still one of the holy grails of availability entrepreneurs, represents many of the entities that are playing a central role in both (your assignment for this month is to go to the Fenton website and dig into how such campaigns are brought about).

But these cascades aren't limited to national or international "causes" funded by multi-billion dollar foundations. Fish-wise, such affronts to equitable and effective resource management as the Florida net ban, the creation of "gamefish" by legislative fiat, the banning of menhaden harvesting in various states' waters and other similar actions are all the results of successful cascades, with no basis in fact but as responses to "political" pressure.

And the effectiveness of such cascades, and their potential to do harm, is exacerbated by the internet, where any statement, no matter how malignantly wrong, may be taken as fact by the uninformed, as long as it's consistent with their self-serving agendas. This can generate an overwhelming amount of pressure on elected officials who are unaware of the truth, or on those who are aware of it are but so much more interested in the next election than in doing the right thing.

How can availability cascades that are based on wrong information, be countered? As Kurin and Sunstein wrote in 1999, "insofar as people appreciate the mechanisms discussed here, they will know that public opinion can be both misinformed and deceptive. As Alexis de Tocqueville recognized, the notion that the majority is not necessarily right collides with one of the building blocks of modern democracy: the principle of majority rule. To ascribe moral authority to numbers is to instruct individuals that if they are outnumbered they are likely to be wrong and deserving of criticism. It is also to signal to the majority that it has a moral right to intimidate dissenters. As compared with people socialized to believe in the virtues of majority rule, those who understand the mechanics and consequences of availability cascades will be more resistant to their informational and reputational signals.

Sectors are coming to New England

02/11/09

Sectors are coming to New England groundfish management. How do I know? I attended a two-day workshop in Narragansett last month, and according to what I heard there, it's all over but the shouting. At some point in the not-too-distant future, the New England groundfish fishery, or at least major parts of it, are going to be managed via sectors.

First off, if you're expecting to find out if I think sector-based management is either good or bad, you might as well stop reading now, 'cause you're not going to read that here. (Maybe move on to the column by that other guy with the beard. He thinks right tonsorially, so he undoubtedly thinks right on other stuff as well.)

Like ITQs or whatever we're calling them this year, trip limits, days at sea or any of the other management gimcracks and geegaws, sectors are tools. They aren't the be all and end all of fisheries management, nor are they a guaranteed death knell for one or another group of fishermen. They are, or should be, a management option to be adopted after careful consideration by the industry members – on board and on shore – whose businesses will be impacted by them.

But I get the idea that that's not the case with sector based management, at least with New England groundfish. I get the idea that a lot of folks wouldn't be considering this form of management except for the fact they're mostly convinced that it's going to happen regardless of how they, or most industry members, feel about it, and they want to be ready when it does.

I probably don't need to tell you that isn't exactly my kind of management. According to Merriam-Webster, a stampede is "a wild headlong rush or flight of frightened animals." Replace animals with fishermen and you'll maybe appreciate where I'm coming from. A lot of folks in the groundfish fishery are frightened about what the next iteration of Days At Sea management is going to do to them, and – based on what's gone on before – they should be. The next groundfish shoe is going to fall next year, and it's going to fall heavily. But you've heard of frying pans and fires, right?

Getting back to the workshop in Narragansett. There appeared to be more bureaucrats, academics and "conservationists" than actual industry people registered. For us perennial skeptics that wasn't a real auspicious start.

If I were a fisheries manager, particularly one with years of groundfish management under my belt, I'd be at the front of the sector bandwagon. And if I was an academic or some other brand of researcher, the millions of dollars of grant funds that are and will continue to be available to "study" sectors would be a good incentive to jump aboard.

But if I were a groundfish fisherman, I'd think twice (or thrice, or more) about what I was buying into and what it was costing me. It seems like I'd be getting less boats in the fishery and some freedom in how, where and when I fished, at the cost of a lot more shared responsibility and shared liability, and with much of the administrative burden shifted from the government to me. And with no indication that the somewhat less than adequate science and the distorted management philosophy that's afflicting so many of our fisheries are going to change. Same old TACs, just divvied up differently. Is it worth it? If you catch or sell groundfish, you should be able to decide for yourself.

The “environmentalist” contingent in Narragansett was all aflutter over the idea of a conservation sector. Having to bid for sector shares against the odds for multi-billion dollar “charitable” trusts is a truly frightening thought, but considering the political climate in Silver Springs, it just might sell. I doubt there are many of us who would want to co-own a fishery with OFCT.

Not at all surprisingly, an Environmental Defense cheerleader for “catch shares” and Limited Access Privilege Programs gave a presentation at the workshop to boost the Sector campaign, and the ENGOs place in it.

There are some particular situations in particular fisheries where sectors might work, and might work well, and they might be viewed as a magic bullet by a lot of people and organizations that have interests not completely in line with commercial fishermen’s. But a panacea they’re surely not, and I really hope that no one in the industry is looking at them as if they are.

Fisheries Questions: perceptions and misperception

(Prepared for the Seafood Coalition presentation to the American Association for the Advancement of Science, Boston, MA)

02/01/08

1) What percent of the United States’ fisheries are overfished?

36 % (NMFS Fish Stock Sustainability Index1)

2) How much have U.S. commercial landings changed in the last 50 years?

“In the lower forty-eight states the total commercial landings have been what is difficult to describe as anything but surprisingly stable for the last half a century. They started at 1.218 million pounds and finished at 1.186 million pounds. That’s a 3% difference.” (FishNet USA, “Then and Now”2)

3) How has the character of U.S. commercial landings changed in the last 50 years?

“Thirteen fisheries that were in the top 25 in 1950 remained there in 2004. Of the remaining twelve, the two tuna fisheries declined because the tuna processing operations relocated abroad; the alewife, Eastern oyster, coho salmon and chinook salmon fisheries were/are all casualties of environmental degradation in at least parts of their range; silver hake, and haddock are recovering from previous overfishing (the fisheries are still classified as overfished but overfishing is no longer occurring); jack mackerel are considered underutilized and redfish (ocean perch) are not overfished and are for the most part uncatchable with the gear restrictions now required by the multispecies FMP; and the mullet fishery was almost eliminated by the Florida net ban. Only two of the twenty-five largest U.S. fisheries in 1950, Atlantic cod and scup, are no longer in the top twenty-five because they were and still are being overfished.” (Fishnet USA, “Then and Now”2)

4) How recent is the “crisis” in U.S. fisheries?

The New York Times reported in “Small Lobsters and Little Fishes” that tub trawling was “the modern illustration of killing the goose which lays the golden eggs” on January 26, 1874. (FishNet USA, “Over a century of crises”3)

5) How does marine mammal predation compare to commercial seafood harvesting?

Canadian and U.S. commercial fishermen in the Northwest Atlantic land approximately 1.5 million metric tons of fish and shellfish each year. Marine mammals eat an estimated 20 million tons of fish and shellfish annually. (FishNet USA, “Getting real about ecosystem based management” 4)

6) What percentage of commercially important fish species depend on estuaries?

“Approximately 75% of the Nation’s commercial fish and shellfish depend on estuaries at some stage in their life cycle.” (NMFS, “Habitat Connections: Wetlands, Fisheries and Economics” 5)

7) What percentage of wetlands has disappeared due to development on the East Coast?

By the mid-1980’s, Maine has lost 20% of its wetlands, New Hampshire 9%, Massachusetts 28%, Rhode Island 37%, Connecticut 74%, New York 60%, New Jersey 46%, Delaware 54%, Maryland 73%, Virginia 42%, North Carolina 50%, South Carolina 27%, Georgia 23%, and Florida 46%. (NMFS, “Habitat Connections: Wetlands, Fisheries and Economics” 5)

8) Which important East Coast fish and shellfish species are dependant on estuaries during at least part their life cycle?

Eastern oyster (*Crassostrea Virginica*), Hard clam (*Mercenaria mercenaria*), Soft clam (*Mya arenaria*), Summer flounder (*Paralichthys dentatus*), Striped bass (*Morone saxatilis*), Channel bass (*Sciaenops ocellatus*), Blue crab (*Callinectes sapidus*), Weakfish (*Cynoscion regalis*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), American shad (*Alosa sapidissima*), Alewife (*Alosa pseudoharengus*), Menhaden (*Brevoortia tyrannus*), Spotted sea trout (*Cynoscion nebulosus*), Spot (*Leiostomus xanthurus*), Atlantic croaker (*Micropogonias undulatus*)

9) How has the status of the world’s fish stocks changed in the last 15 years?

According to the Food and Agricultural Organization of the United Nations, *“The global state of exploitation of the world marine fishery resources has tended to remain relatively stable over the past 10-15 years, even if changes have been re-reported for some fish stocks and specific areas (Figure 18). the overall examination of the state of stocks and groups of stocks for which information is available confirms that the pro-*

portions of overexploited and depleted stocks have remained unchanged in recent years, after the noticeable increasing trends observed in the 1970s and 1980s. It is estimated that in 2005, as in previous years, around one-quarter of the stock groups monitored by FAO were underexploited or moderately exploited (3 percent and 20 percent, respectively) and could perhaps produce more. About half of the stocks (52 percent) were fully exploited and therefore producing catches that were at or close to their maximum sustainable limits, with no room for further expansion. The other one-quarter were either overexploited, depleted or recovering from depletion (17 percent, 7 percent and 1 percent, respectively) and thus were yielding less than their maximum potential owing to excess fishing pressure exerted in the past, with no possibilities in the short or medium term of further expansion and with an increased risk of further declines and need for rebuilding” (FAO Fisheries Series Technical Paper 457 – Review of the State of the world marine fishery resources6)

- 1 http://www.nmfs.noaa.gov/sfa/domes_fish/StatusoFisheries/2007/FourthQuarter/Q4-2007-FSSIDescription.pdf
- 2 http://www.fishnet-usa.com/then_now.html
- 3 http://www.fishnet-usa.com/over_a_century_of_crises.html
- 4 http://www.fishnet-usa.com/ecosystem_management.htm
- 5 <http://www.nmfs.noaa.gov/habitat/habitatconservation/publications/habitatconnections/num2.htm>
- 6 <ftp://ftp.fao.org/docrep/fao/007/y5852e/y5852e00.pdf>

Getting real about ecosystem based management

02/01/08

“Ecosystem Based Management looks at all the links among living and nonliving resources, rather than considering single issues in isolation . . . Instead of developing a management plan for one issue . . . EBM focuses on the multiple activities occurring within specific areas that are defined by ecosystem, rather than political, boundaries.”

— US Ocean Commission Report, 2004

The operative words here, which are echoed in most other definitions and discussions of Ecosystem Based Management, are “all the links among living and nonliving resources.” Obviously this should be a huge departure from what we’ll call traditional fisheries management, which has always been focused on the impacts of one activity – fishing – on one or a limited complex of several species of fish or shellfish.

It isn’t just fishing

As should be obvious to just about anyone with a rudimentary knowledge of our oceans, there are a host of factors that can, and do, impact on our inshore and offshore ecosystems. From the conceptually simple to the extremely complicated, these factors directly or indirectly affect fish stocks. Conceptually simple, for example, is the Gulf of Mexico “Dead Zone,” caused by the excess nutrients in the agricultural runoff from farms in the Mississippi drainage. Extremely complicated are the myriad effects of climate change, which can impact and have impacted far more than the latitudinal distribution of fish.

However, about the only thing that fisheries managers can control is fishing. Natural factors are for the most part beyond anyone’s control and virtually all anthropogenic factors save fishing have historically been far beyond the administrative grasp of fisheries managers. Hence, the complete focus of fisheries management has been on fishing, in spite of the fact that in fishery after fishery there’s no conclusive proof that fishing is what’s “driving the system.”

A relationship between increased biofuel production and more dead fish in the Gulf of Mexico?

In the past several years the price of corn, which is one of the “most leaky” commercial crops from a nutrient perspective, has doubled, the acres of corn under cultivation has increased proportionally, and the nutrient runoff into the Gulf of Mexico has done likewise. It seems doubtful that the demand for gasohol is taken into consideration during discussions of snapper/grouper management in the Gulf of Mexico, but couldn’t a 7,000 square mile (and growing) annual anoxic zone in what was once a highly productive part of the Gulf be as relevant or even more so to those fisheries as is fishing? Yet year after year, and in spite of the cost in terms of dollars and human suffering, the snapper/grouper fishery is cut back in order to “restore” the stocks, which don’t “recover” as the fishing cutbacks would – in terms of traditional fisheries management – dictate that they should.

http://www.cop.noaa.gov/stressors/extremeevents/hab/features/hypoxiafs_report1206.html

And we can’t leave out climate

As far as climate change is concerned, we don’t have to get anywhere near as complicated as the currently vogueish “global warming crisis” would require. A tremendous amount of research has been devoted to the decadal regime shifts in the Pacific and Atlantic that are associated

with the El Niño/La Niña cycles. These regime shifts have dramatic impacts on the affected ecosystems that have been tracked far back in history.

“The term ecosystem regime shift refers to low frequency, high amplitude variation in marine ecosystems involving changes in community composition, species abundances, and trophic structure. Changes occur in the abundance of both exploited and unexploited populations. Temporally coherent changes often occur in other spatially separated ecosystems. Ecosystem regime shifts are thought to be a response to shifts in the ocean and atmosphere climate and hence are relatively coherent with climate changes.” (J.J. Polovina, **Climate variation, regime shifts, and implications for sustainable fisheries**, Bulletin of Marine Science 76[2]: 233–244, 2005).

There are also climate-induced effects on fisheries that aren't on the grand scale of regime shifts but yet have profound effects on fisheries. As reported in a recent (January 18, 2008) **Science Daily**:

*“In a new article Joan B. Company and colleagues at the Institut de Ciències del Mar (CSIC) in Spain describe a mechanism of interaction across ecosystems showing how a climate-driven phenomenon originated in shelf environments controls the biological processes of a deep-sea living resource. The progressive depletion of world fisheries is one of the key socio-economical issues of the forthcoming century. However, amid this worrying scenario, Company's study demonstrates how a climate-induced phenomenon occurring at a decadal time-scale, such as the formation of dense shelf waters and its subsequent downslope cascading can repeatedly reverse the general trend of overexploitation of a deep-sea living resource. Strong downslope currents associated with intense cascading events displace the population of the shrimp *Aristeus antennatus* from the fishing grounds, producing a temporary fishery collapse. However, nutritive particles brought by cascading waters to deep regions cause an enhancement of its recruitment process and an increase of its total landings during the following years. These new findings resolve the paradox of a long-overexploited fishery that has not collapsed after 70 years of intense deep-sea trawling. The results will have a high socio-economic impact, since this species is the most valuable deep-sea living resource in the Mediterranean Sea. Because the cascading of dense water from continental shelves is a global phenomenon whose effects on biological processes were not considered in the past, it is hypothesized that its influence on deep-sea ecosystems and fisheries worldwide should be more important than previously thought.”*

There are myriad other natural and anthropogenic factors as well, some of which are without question having profound impacts on our fisheries while having little or no impact on how we manage our fish. Consider endocrine disruptors, urban and suburban runoff, accidentally introduced exotic species, wetland loss, intra-specific competition, and entrainment by generating stations and desalination plants, to name a few.

What are “Ecosystem Based Managers” actually managing?

Apparently what is meant by Ecosystem Based Management is even beyond the ken of its major proponents. The most recent edition of **Marine Ecosystems and Management – International news and analysis on marine ecosystem-based management**, states on the first page that such management scales up “*from looking at isolated drivers of change to considering all environmental and human impacts.*” Yet on a later page, in a discussion of Australia's Great Barrier Reef Marine Park, which is described as “*one of the better working examples of E(cosystem) B(ased) M(angement),*” we read that one of the directors of the park says “*while the Marine Park is largely confined to the ‘wee’ bits, the integrated management approach extends well outside those areas to include all the islands, all the tidal lands/tidal waters, and even some activities in the catchments.*” That's quite a plummet: from “*all environmental and human impacts*” to “*even some activities in the catchments*” in the space of three pages. But you can bet they're doing a bang-up job on managing the fishing.

Unfortunately, but purposefully, as is clearly illustrated by the above statement of a director of what is supposedly one of the better applications of ecosystem based management, its supporters are shying far away from these other factors and are carrying on a campaign to continue the myopic focus on fishing effects. They are also broadening the scope of the fishing effects being considered to include the supposed impacts of fishing gear on habitat, the supposed impacts of harvesting prey species on predator species, the supposed impacts of harvesting predator species on ecosystems, in fact the supposed impacts of harvesting anything on everything, with virtually no recognition of any factors other than fishing. Doesn't sound like ecosystem based management, does it? Just more targeted anti-fishing campaigning, impacting the fishermen but not necessarily helping the fish.

Regardless of the anti-fishing clique's well-funded attempts to convince anyone who will listen that it's all about fishing, in the next several issues of FishNet we will be exploring some of these other factors, with the goal of putting the impacts of fishing into a realistic relative context. This isn't to imply that harvesting fish doesn't have any effects on the ecosystem. It would be nonsensical to do so. Anything that kills fish or anything that alters their habitat is going to have some effect. However, in many instances our singular focus on fishing is unquestionably counter-productive, counterproductive to the fishermen, counterproductive to the seafood consumers, and counterproductive to the fish.

Who's eating whom?

One of the most important factors when considering the health on any fish stock is the complex of predator/prey relationships that affect it. Or written in more understandable terms, what the fish being considered eat, and what eats them. While it's not immediately apparent, this can be a tremendously complex issue.

As an illustration, and because the fishery is in the news of late as the subject of yet another lawsuit by an “environmental” organization bank-rolled with tens millions of dollars from the Pew Charitable Trusts, we’ll look at the trophic relationships of the Atlantic herring in the north-west Atlantic in general and the Gulf of Maine/Georges Bank areas in particular. (The information here is from *Consumption impacts by marine mammals, fish, and seabirds on the Gulf of Maine–Georges Bank Atlantic herring [Clupea harengus] complex during the years 1977–2002* by W. J. Overholtz and J. S. Link in the **ICES Journal of Marine Science**, 2006, and **Considering Other Consumers: Fisheries, Predators, and Atlantic Herring in the Gulf of Maine** by Andrew J. Read and Carrie R. Brownstein in *Ecology and Society*, 2003.)

Gulf of Maine/Georges Bank Herring

The Atlantic herring is one of the most important, and numerous, fish in the north Atlantic. Supporting several important commercial fisheries – the herring fisheries provide most of the canned “sardines” and lobster (historically, New England’s most valuable fishery) bait, as well as many other seafood products – and providing forage for many other species of fish, marine mammals and sea birds, the species has been the subject of a large amount of research, much of it focused on the role of herring as a food source. Overholtz and Link write “*Atlantic herring are a keystone prey species found in abundance in the Gulf of Maine–Georges Bank ecosystem, and they are common in the diets of many marine mammals, piscivorous fish, seabirds, and large pelagic fish of the region.*”

In their discussion of what eats herring in the Gulf of Maine/Georges Bank area, they found that “*total consumption by demersal fish (cod, hake, dogfish, etc.) ranged from a few thousand tonnes in the early 1980s, peaked at >200,000 t during the period 1991–1994, then stabilized at an average of 135,000 t from 1998 onwards.*” Additionally, “*herring consumption by all marine mammals increased steadily over the time horizon 1977–2002, peaking in 2002. Fin whales and humpback whales consumed the greatest quantities, and by 2002, these two species were eating 41,000 t and 34,000 t, respectively, of herring. Harbour porpoise, white-sided dolphin, harbour seals, and minke whales consumed large amounts of herring during the same period. Estimates of total consumption of herring by marine mammals increased from 19,000 t in 1977 to 153,000 t in 2002.*” Consumption by large pelagic fish (sharks, tuna, etc.) “*increased during the study period.... Total consumption by this predatory group ranged from 8,000 to 26,000 t during the period 1977–2002, a relatively small value compared with demersal fish and marine mammals.*”

According to Read and Brownstein “*the estimated total annual consumption of Atlantic herring by all eight marine mammal species ranged from 93,802 to 189,898 metric tons (mt), using the low and high estimates of abundance respectively. Using the best estimates of population size, we estimated total annual consumption as 141,341 mt. It is important to note that most estimates of the abundance of marine mammals were generated prior to 1997 and that many of these populations are growing; hence, this estimate of predation is likely to be negatively biased.*”

Since 1995 the Atlantic herring biomass in the Gulf of Maine/Georges Bank complex has ranged from 1.0 to 1.3 million metric tons. The annual catch (Canada and U.S.) has averaged about 10% of that.

Category	1986-95 Average	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
U.S. Recreational	-	-	-	-	-	-	-	-	-	-	-
U.S. Commercial	-	-	-	-	-	-	-	-	-	-	-
Total U.S.	53	109	99	106	106	109	108	93	101	94	92
Canada	30	18	21	20	19	17	24	13	11	21	13
Other	-	-	-	-	-	-	-	-	-	-	-
Total Nominal Catch	83	127	120	126	125	126	132	106	112	115	105

Herring catch from the Gulf of Maine/Georges Bank complex (in thousands of metric tons, from NMFS at <http://www.nefsc.noaa.gov/sos/spsyn/pp/herring/>)

The catch of herring, while it can be made to look ecologically devastating to the uninformed (particularly when it is done by the large, easily demonized, vessels necessitated by the nature of the modern fishery), isn’t all that significant when compared to other sources of herring mortality. In fact, harvest levels of 20% to 40% of the total biomass are considered acceptable in other fisheries worldwide.

Spiny Dogfish predation

We’ve written previously on the impacts of spiny dogfish predation on other, far more valuable fish stocks off the Mid-Atlantic and Southern New England coast (see *The Dogfish Follies* at <http://www.fishnet-usa.com/dogfishfollies.html>). Since the late 1990s this voracious, yet protected, species of small shark has comprised about half of the total weight of fish caught in the various NMFS Northeast Regional Bottom Trawl Surveys. The spiny dogfish biomass has been steadily increasing, the landings of the more valuable species that they either prey upon or compete with have steadily decreased, and yet they are still protected (though a very limited commercial fishery is allowed in some states) and fishing effort on the other species has been and continues to be ratcheted downward.

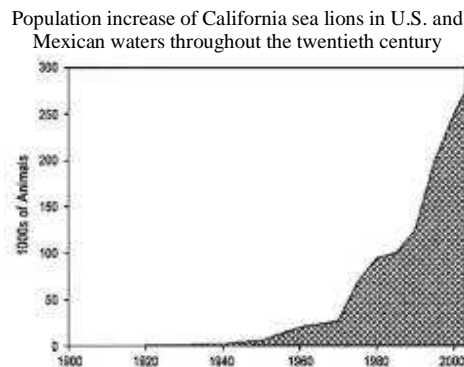
Marine mammals and fish stocks

*“Concerns about the consequences for fisheries of an increasing marine mammal population have already been expressed in southern Africa, for example, where in 1990 South African fur seals (*Arctocephalus pusillus pusillus*) were estimated to consume some two million tons of food a year. Considering that this amount just about equals the annual human catch of fish in the region and that the fur seal population was then expected to increase further, the reason for concern and potential for conflict are obvious.”* (**Marine Mammal Research: Conservation Beyond Crisis**, by John Elliott Reynolds, Timothy J. Ragen, 2005)

If you spend any time fishing, either recreationally or commercially, in our coastal waters, you know that there are more marine mammals in our oceans and estuaries today than there have been in recent memory. If you are a surf fisherman in New England you aren't surprised to hear of anglers loosing hooked fish to seals. If you are a gill netter in the Pacific Northwest, you are used to hauling back and having salmon after salmon in your nets missing various parts of their anatomy because of sea lion bites. We've all seen the pictures of marinas in California that have been “invaded,” and literally taken over by those same sea lions. Florida anglers routinely move away from productive fishing spots after they are discovered by fish-grabbing porpoises. The grey whale, despite strenuous objections from activists, has responded so well to various protective measures that it has been taken off the endangered species list. We wouldn't be too far off if we wrote that many folks are suffering from an overabundance of heretofore-rare marine mammals.

Since the passage of the Marine Mammal Protection Act in 1972, the populations of cetaceans (whales, dolphins, etc.) and pinnipeds (seals, sea lions, etc.) have benefited from a complex of legislative, judicial and administrative actions that have paid off in increases in the populations of most of these charismatic critters. With the exception of a few species, most stocks are increasing, and some are increasing dramatically. For example, in the 2006 assessment for the Gulf of Maine and the Bay of Fundy, the harbor porpoise population increased from 37,500 in 1991 to 89,700 in 1999, an increase of approximately 10% a year (http://www.nmfs.noaa.gov/pr/pdfs/sars/ao2006_poha-gme.pdf). As the following graph shows, California sea lions have increased even more dramatically since the passage of the MMPA.

(We must emphasize here that we aren't advocating any position here vis à vis provisions of the Marine Mammal Protection Act or the Endangered Species Act, but simply pointing out the very significant –perhaps in some instances overwhelming – impact of marine mammal predation on fisheries stocks under management, and of the management system's apparent inability or unwillingness to consider them, rather continuing to focus solely on fishing mortality.)



From: The “Invasion” of Sea Lions in Monterey Bay (Monterey Bay National Marine Sanctuary)
<http://montereybay.noaa.gov/reports/2003/eco/mammals.html>

Much of the diet of these marine mammals is fish and crustaceans. Many of their prey species are the same ones that fishermen target, and others are part of the food base of those targeted species. Focusing on the Northwest Atlantic, the dietary preferences of some of the common marine mammals are detailed below:

- **Humpback Whales** – “Humpback whales are frequently piscivorous when in New England waters, feeding on herring (*Clupea harengus*), sand lance (*Ammodytes* spp.), and other small fishes.” (NMFS 2006), “Humpback whales feed on krill, small shrimp-like crustaceans, and various kinds of small fish. Each whale eats up to 1 and 1/2 tons (1,361 kg) of food a day.” (American Cetacean Society)
- **Fin Whales** – “While much remains unknown, the magnitude of the ecological role of the fin whale is impressive. In this region, fin whales are probably the dominant large cetacean species during all seasons, having the largest standing stock, the largest food requirements, and therefore the largest impact on the ecosystem of any cetacean species.” (Kenney et al. 1997; Hain et al. 1992). (NMFS 2006) “Fin whales feed mainly on small shrimp-like creatures called krill or euphausiids and schooling fish.” (American Cetacean Society)
- **Sperm Whale** – “Its main source of food is medium-sized deep water squid, but it also feeds on species of fish, skate, octopus, and smaller squid. A sperm whale consumes about one ton (907 kg) of food each day.” (American Cetacean Society)

- **Risso's Dolphin** – “Reflecting the offshore distribution of this species, primary prey appears to be squid, although they have also been known to feed on a number of fish species. While the size of their squid prey is unknown, squid beaks from species that grow up to 12 feet in length have been found in the stomachs of stranded Risso's dolphins.” (American Cetacean Society)
- **Pilot Whale** – “The pilot whale feeds primarily on squid, although it's known to eat octopus, cuttlefish, herring and other small fish when squid is unavailable.” (American Cetacean Society)
- **Common Dolphin** – “The common dolphin feeds on squid and small schooling fish.”
- **Harbor porpoise** – “Eats non-spiny fishes such as herring, cod, whiting, squid, pollock, and sardines. It seems to require large amounts of food, consuming approximately 10% of its body weight each day.” (American Cetacean Society)
- **Bottlenose dolphin** – “May consume 15-30 pounds (8-15 kg) of food each day. Bottlenose dolphins eat a wide variety of food, including primarily fishes, and sometimes squid, and crustaceans.” (American Cetacean Society)
- **Cuvier's beaked whale** – “Squid is its primary food, though it sometimes eats fish and, rarely, crustaceans.” (American Cetacean Society)
- **Spotted Dolphin** – “Feed on many varieties of fish and squid found near the surface of the water.” (American Cetacean Society)
- **Minke Whales** – “Feed primarily on krill in the southern hemisphere and on small schooling fish (capelin, cod, herring, pollock) or krill in the northern hemisphere.” (American Cetacean Society)
- **Gray seals** – “Eat a wide variety of fish, squid, octopus, and crustaceans such as shrimp.” (Smithsonian National Zoological Park)
- **Hooded Seals** – “Their diet consists of mussels, starfish, squid, shrimp, herring, and cod.” (Canadian Museum of Nature)
- **Harp Seals** – “Harp seals feed on a wide variety of crustaceans and fishes, with more than 130 species reported in their diet. Capelin, arctic cod, and polar cod are preferred fishes. Atlantic cod, which is a mainstay of North Atlantic fisheries and has been severely reduced in numbers, makes up a small percentage of the diet.” (Ocean Biogeographic Information System - Spatial Ecological Analysis of Megavertebate Populations)

Note: The above information and that in the Table below was taken from The American Cetacean Society's “Fact Packs” (<http://www.acsonline.org/factpack/index.html>), The National Marine Fisheries Service's U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments -- 2006 2nd edition (<http://www.nefsc.noaa.gov/nefsc/publications/tm/tm201/>), The Smithsonian National Zoological Park's Ocean Living Facts (<http://nationalzoo.si.edu/Animals/OceanLiving/Facts/>), and The Canadian Museum of Nature (<http://nature.ca/notebooks/english/harpseal.htm>).

Taking the most recent Northwest Atlantic population estimates for each species from the NMFS 2006 marine mammal assessment, and the individual daily food consumption from various sources, we constructed the following chart:

Species	Population	Daily Food Intake/Individual (KG)	Annual food Intake/Individual (MT)	Total Annual Food Intake(MT)
Humpback whale	902	750.0	273,750	246,923
Fin whale	2,814	1000.0	365,000	1,027,110
Minke whale	2,998	300.0	109,500	328,281
Cuvier's beaked whale	3,513	90.0	32,850	115,402
Pantropical spotted dolphin	4,439	3.6	1,314	5,833
Sperm whale	4,804	500.0	182,500	876,730
Clymene dolphin	6,086	2.4	876	5,331
Risso's dolphin	20,479	7.0	2,555	52,324
Pilot whale	31,139	60.0	21,900	681,944
Atlantic spotted dolphin	50,978	8.4	3,066	156,299
Atlantic white-sided dolphin	51,640	6.6	2,409	124,401
Bottlenose dolphin	54,739	10.0	3,650	199,797
Harbor porpoise	89,700	3.6	1,314	117,866
Striped dolphin	94,462	4.8	1,752	165,497
Harbor seal	99,340	7.0	2,555	253,814
Common dolphin	120,743	4.2	1,533	185,099
Grey Seal	195,000	12.0	4,380	854,100
Hooded Seal	590,000	12.0	4,380	2,584,200
Harp Seal	5,900,000	5.4	1,971	11,628,900
Total MM Food Intake - NW Atlantic				19,609,850

In round numbers, the various marine mammal species in the northwest Atlantic consume 20,000,000 metric tons of food each year. And at an average 3% annual increase, a fairly conservative estimate, each year the amount of food they consume could increase by more than half a million metric tons.

The total commercial landings for all species (finfish and shellfish) from the U.S. East Coast and Atlantic Canada are 680,000 and 870,000 metric tons respectively. (Canadian Division of Fisheries and Oceans - http://www.qc.dfo-mpo.gc.ca/peches/en/statistique/2001_2002/Documents/dfo_adm.pdf) and National Marine Fisheries Service <http://www.st.nmfs.noaa.gov/st1/commercial/index.html>).

In perspective, in the Northwest Atlantic in 2006, marine mammals ate approximately 13 times as much fish and shellfish as commercial fishermen landed, and the annual increase in their total consumption might well have exceeded the U.S. East Coast landings in 2007.

And what are they eating? In large part, it's what the fishermen are catching. If a fisherman wants to catch it, there's an excellent chance that a whale or a dolphin or a seal is going to want to catch it as well. And if a commercial fisherman doesn't want to catch it, then the probability is that something that he or she wants to catch is going to be eating it.

Consider the most numerous species, harp seals. If cod make up only five percent of their diet (it is reported as "a small percentage"), they consume on the order of 500,000 metric tons of this valuable species every year. At the fishery's peak, cod landings for the north coast of Newfoundland, which is in the middle of the harp seals' range, didn't quite reach 800,000 tons. Capelin, one of the harp seals' preferred foods, is also a preferred food of cod. This single species could be eating as much cod as Newfoundland's commercial fishermen were once catching, and are undoubtedly eating far more of the cod's preferred food, the cod have been declining as the harp seal population has been increasing, and yet overfishing is considered to be the reason for the decline.

In view of the massive levels of marine mammal predation, and remembering that much of it is either on the species that fishermen target or the food of those species, from any rational perspective it seems incredible that our fisheries management systems and our fisheries managers are still exclusively focused on fishing. And we haven't yet considered the other factors, human-induced and natural, that will be the subject of subsequent Fishnets. But that's what we've done and that's what we're doing, and because of the slavish devotion to that view, the concept of Ecosystem Based Management has been distorted into just another iteration of the failed "blame it all on fishing" philosophy.

The Oil Slick

All the news that's fit to spin – In reporting on the "merger" of the Pew Charitable Trusts environmental program and the Pew-created and funded National Environmental Trust into the Pew Environment Group, Washington Post staff writer Juliet Eilperin emphasized that William O'Keefe, board member of the George C. Marshall Institute, who she quoted as being skeptical of the benefits of the merger, used to work for the American Petroleum Institute. But when she used the favorable words of the "prominent environmentalist" Kevin Knobloch, president of the Union of Concerned Scientists, she failed to report that the Union of Concerned Scientists has received over \$2 million of Pew's largesse.

Ms. Eilperin has used her position at the Washington Post to act as an unabashed cheerleader for just about every Pew-supported initiative that's come along. According to SeaSpan, the "marine conservation" newsletter from the Pew Institute for Ocean Sciences at the University of Miami, Ms. Eilperin "accompanied Dr. Ellen Pikitch, executive director of the Pew Institute for Ocean Science, on a scuba dive trip to Glover's Reef off the coast of Belize to research an upcoming book about sharks." She has also attended "a one-week intensive scientific and reporting workshop" at the Punta Cana Resort and Club in the Dominican Republic, sponsored by Columbia University's Center for Environmental Research and Conservation and the NY Times. It should come as no surprise that Columbia has received over \$20 million from Pew, with well over half of that going to the School of Journalism, or that the University of Miami, its Institute of Ocean Science and Dr. Pikitch have received over \$12 million from Pew. The Pew folks sure seem to be getting their money's worth from Ms. Eilperin.

And floating natural gas terminals in our future (and in our ocean) – Jad Mouawad reported in the NY Times (**Wary of Protests, Exxon Plans Natural Gas Terminal in the Atlantic**, Dec. 12, 2007) that EXXON Mobil "would like to build a \$1 billion floating terminal for liquefied natural gas about 20 miles off the coast of New Jersey, a move meant to deflect safety and environmental concerns about proximity to populated areas." Later in the article he writes "Exxon's project is the third offshore terminal proposed for the greater New York region in recent years. One proposal, to build a gas terminal in the middle of Long Island Sound, has aroused concern since its announcement in 2004 because of the impact it might have on fishing and boating; it is strongly opposed by shore communities and politicians. That opposition could intensify in coming months as the project, which is known as Broadwater and is a joint venture by Royal Dutch Shell and Trans Canada, is expected to receive notice about federal and state permits. Another company, the Atlantic Sea Island Group, plans to build a terminal for liquefied natural gas on an artificial island about 14 miles south of Long Island, a project called Safe Harbor Energy."

We're not questioning the safety – from either a human or an environmental perspective – of these plants or the necessity to place them as far from "civilization" as possible, yet the positions of one of the most concerned and most impacted user groups, the local fishermen, have been largely marginalized by a successful "demonization" campaign funded almost totally with Big Energy (used to be Big Oil) dollars. It seems hard to imagine that there isn't a connection or two in the mix somewhere.

Regional Council membership "by the numbers"

(in National Fisherman)

05/08/08

We're all familiar with rants about the lack of balance on the Regional Fishery Management Councils, with the negative effects on our fisheries of undue influence and rampant "conflicts of interest," which are always attributed to the commercial fishing industry. Brought forth by disgruntled people or organizations, they are always a prelude to proposals for either restacking the Councils or for reducing their influence in the federal fisheries management process. These proposals invariably increase the reliance on science and scientists, regardless of how questionable the science might be or how compromised the objectivity of the scientists.

I've been digging through the N.M.F.S. annual reports to Congress on Council membership for 1990 to 2007, trying to determine how skewed – or not – it actually is.

Accepting the words of the trustworthy and right-thinking “conservationists” as I always strive to do, I was expecting to see complete and utter domination of every Council by commercial fishermen or their representatives. Going back to 1990, of the 110 to 114 total voting Council members, from 27% ('01) to 33% ('97 and '98) were classified by NMFS as “commercial” and from 18% ('95 and '96) to 25% ('03, '05 to '07) as “recreational.”

Looking at particular Councils, in 1991 the commercial representatives outnumbered the recreational reps on the New England, Gulf of Mexico, Pacific, Caribbean and North Pacific Councils and were outnumbered by the recreational reps on the Mid-Atlantic, South Atlantic and Pacific Councils. In 2007, the latest year for which a report was available, the commercial reps outnumbered the recreational reps on the New England, North Pacific and Caribbean Councils, were outnumbered by the recreational reps on the South Atlantic, Gulf of Mexico and Western Pacific Councils and were tied on the Mid-Atlantic Council.

Government and “other” voting members made up from 44% ('03) to 51% ('95 and '96) of the total. They were at 47% in 2007.

Commercial domination? Not hardly, and the proportion of commercial representation is falling from year to year, from 32% in 1990 to 28% in 2006. Who's really in control? By the numbers, it's the government reps, who made up from 37% ('90 to '97) to 38% ('98 to '07) of the total.

These reports bring up several interesting and, I'd argue, critical points regarding who's managing our fisheries, how balanced and representative the process really is, and where the imbalances actually lie.

First we have the domination of fisheries management by the government people. And, bearing in mind that it takes most Council appointees a term or so – three years out of nine – to become effective, the state and federal members, who are on the Councils just about in perpetuity, have even more relative power. All things being equal, this wouldn't be a problem, but the Wallop-Breaux program injects a level of bias into the process that's really hard to ignore. Stated most simply, the more money that is spent on recreational fishing and boating, the more money goes to the state fisheries agencies. Do you think that recreational fishing expenditures might be related to recreational fishing allocations? That's a real conflict.

Then the largest user group by an overwhelming margin, seafood consumers, is virtually absent from the fisheries management process. We have somewhere approaching 300 million people in the U.S. who enjoy seafood. Who's looking out for them, working to ensure they have access to their share of high-quality, domestically-produced fish and shellfish? Commercial fishing representatives are, but not directly. Certainly not recreational fishing representatives, many of whom think that aquacultured product should be all that the non-fishing public is entitled to, and definitely not the “conservationists” whose actions, if not their words, demonstrate that they don't want anyone catching much of anything at all. What of the food service people, the restaurateurs, the consumer groups?

And finally, where are the people who want to preserve our coastal communities and our maritime heritage. Do you have any idea how many fishing businesses, docks or ports have disappeared over the last two decades because of fisheries management decisions? I doubt that anyone in Silver Springs is counting, but living in Florida, I'm an eye-witness at ground zero. The “conservationists” have compellingly demonstrated that their interests stop at the shoreline and don't extend to working stiffs with real jobs, but there are an awful lot of folks out there who realize the value of an honest-to-goodness working waterfront. Why aren't they in the process?

More balance in the Councils? For sure, but not the way the antis are misrepresenting it.

The cost of diesel fuel – a crisis in the making

(in National Fisherman)

06/07/08

First off, I was made aware that people reading my last column could have been left with the impression that I felt state officials were unduly influenced by Wallop-Breaux considerations in their roles as management council members. Since the late 70s I have known, and respected, many state directors and their designees. They have been conscientious to a fault and I didn't mean to question this. I should have explained that it isn't them I am concerned about, it's the system. As evidenced by the federal/states supported “get out there and fish” programs, Wallop-Breaux funding creates an insidious institutional bias.

Moving on, I had the occasion to sit through part of a regional council meeting a few weeks back and was really pleased to hear a motion made that would allow participants in a fishery to land two trip limits in a single day while, of course, being charged for two days at sea to keep everything “conservation neutral.” This was an effort to make fishing a little – or perhaps a lot – more energy efficient, a reflection of the price of diesel fuel, at the time hovering around \$4 a gallon.

Surprise doesn't quite cover my reaction when I heard the NMFS officials in attendance shoot the idea down. They didn't take a "that's an interesting concept, let's see how we can get it to work" attitude. They dismissed it out of hand, indicating that it was administratively impossible.

Being intrigued with the idea, as well as the official reaction by the federal agency in charge, I decided to find out what the U.S. Department of Agriculture, the other agency in charge of domestic food production, was doing to help its clients cope. After a half an hour of phone frustration I finally got to a very pleasant lady in the Department's Press Office who, after a puzzled silence, told me that the USDA was doing nothing. More surprise!

By this time it was \$4.50 a gallon diesel and the USDA wasn't even considering how to help the farmers deal with it. I wasn't focused on subsidies or anything like that, simply ways to let farmers farm more efficiently, yet there was nothing.

C'mon, folks. We're all in this fuel mess together. Running to and from the fishing grounds represents a major use of diesel fuel. In many fisheries it undoubtedly represents the greatest operating expense. How about bending the regulations to allow fishermen to maximize their landings per gallon of fuel burned?

If a fisherman can catch and land twice as many fish in a trip, and if he can still be held to the same level of annual landings, why shouldn't we let him? It's not going to have any negative impact on the resource, in fact it might well cut down on regulatory discards, and it would help significantly in keeping more boats in business and more fishermen working. Isn't that a very large part of what fisheries management is – or should be – all about?

What about other regulatory adjustments to allow greater fishing efficiency. In commercial fishing, "efficiency" has been transformed into a four-letter word by the antis, but particularly when it comes to maximizing pounds landed per gallon burned, is it really?

If the "conservation neutrality" can be maintained, why shouldn't fishermen be allowed to fish more gear, to land more fish on each trip, to transfer catch at sea or to do anything else to get around the inefficiencies that our managers have been using to control fishing for decades? The regulations could be modified to allow this, and they could be effectively enforced. All it would take would be a decision by the powers-that-be in Silver Springs to do it, and then the necessary administrative follow-up to get it done. If the mechanisms don't exist to streamline what have become extremely onerous administrative requirements during an emergency of this proportion, then let's go to Congress and get them created.

Fishing regulations aren't, or shouldn't be, carved in stone. If, in spite of growing growling to the contrary, NMFS is really interested in helping the fishermen rather than getting rid of as many of them as possible, if the so-called "conservationists" are as committed to a viable, sustainable commercial fishing industry as they claim to be, and if Congress is truly supportive, we can make fishing as fuel efficient as possible at no cost to the resource and at great savings to the fishermen. It's time, or past time, that we do just that.

Fishing-Centric Management

06/16/08

Suppose you were in charge of managing a fishery, and you knew that the bays and estuaries in a well defined area served as the prime nursery for the species you were managing. Additionally, suppose that you knew that the ability of those particular bays and estuaries to serve as nursery areas had been severely compromised.

As a rational manager, how would you proceed? Would you assume that you could, without doing anything to improve those bays and estuaries as nurseries, still return the fishery to early-1900s levels of abundance by controlling other factors? That seems highly unlikely, and yet....

NOAA Fisheries has outlined new measures to prevent overfishing and rebuild the number of sandbar sharks and other species. The number of sandbar sharks are [sic] between 20 and 38 percent of the population in the early 20th century before fishing began on sharks.... The FEIS (Final Environmental Impact Statement) will cut the sandbar shark quota from 1,017 metric tons to 87.9 metric tons, an 85 percent reduction, per year from 2008 to 2012 (NOAA Fisheries Service – FishNews April 28, 2008).

If you consider how we have been managing our fisheries in recent years, this is a seemingly reasonable management program. It's focused completely on restricting harvesting, and it implies that if you do that rigorously enough you'll be able to return the diminished shark population to pre-harvest levels. It's a reflection of the mind-set that has controlled fisheries management, and fishing, for approaching a half a century. For lack of a better term, we'll call it fishing-centric management.

How effective is this form of management? Based on the current condition of intensively managed fishery after fishery, or more accurately on the current condition of fishery after fishery where fishing effort is intensively managed, not very. New England groundfish, Gulf of Mexico

snapper/grouper, Pacific rockfish and a host of other fisheries in which fishing effort has been managed almost into oblivion attest to how “effective” this management philosophy can actually be.

The anti-fishing community would have us believe that this is because the effectiveness of the management system has been destroyed by short-sighted and self-serving fishing interests and the pandering of their elected representatives. Actually, an examination of NMFS records for the years from 1991 to 2006 show that commercial fishing industry members or representatives made up, on the average, only 30% of the total voting membership of all of the regional fisheries management councils. This is hardly a percentage that would allow the fishing industry to distort the entire management process, but as we’ve seen in many other instances, the members of the anti-fishing clique are far less interested in actual facts than they are in creating perceptions that are more supportive of the fictions they’re pushing.

But even assuming that commercial fishing isn’t distorting the management process, then why, in fishery after fishery, isn’t management working the way it is supposed to? Why, in spite of cutback after cutback in fishing effort, aren’t rebuilding targets being met? Why, in spite of increasingly restrictive management measures extending back for years, aren’t we up to our figurative ears in fish?

A closer examination of the announced sandbar sharks management program makes the answer abundantly clear. In fact, fisheries management is to a large extent ineffective because the wrong things are being managed.

Sandbar sharks as an example

The bays and estuaries from Delaware to North Carolina, and particularly the Chesapeake Bay are recognized as the prime nursery areas for the western North Atlantic population of sandbar sharks (Florida Museum of Natural History website at <http://www.flmnh.ufl.edu/fish/gallery/Descript/Sandbarshark/sandbarshark.htm>). This being the case, it would seem imminently logical in any non-fishing context that any serious attempt to manage sandbar sharks would consider the condition of those estuaries, both today and in the baseline years, which, as specified in the FEIS, are “*the early 20th century before fishing began on sharks.*” It is also, we must add, the time before our estuaries started a serious period of decline.

When we do that we find that:

- By the mid-1980s the states of Delaware, Maryland, Virginia and North Carolina, home of the primary sandbar sharks nursery areas, had respectively lost 54%, 73%, 42% and 50% of their original wetlands acreage. It seems safe to assume that most of that loss happened in the years since sandbar shark fishing began.
- The total population of the states in the Delaware Bay and Chesapeake Bay watersheds - Pennsylvania, New Jersey, Delaware, Maryland, Virginia and North Carolina - the watersheds that supply those nursery estuaries, had increased 330% from 1900 to 2006 (from 13.3 to 44.1 million).
- The population in the coastal counties of those states had increased 46% since 1980 (NOAA, Population Trends Along the Coastal United States: 1980-2008)
- The Chesapeake Bay had lost 90% of its submerged aquatic vegetation (SAV) by 1998.

Accompanying the burgeoning of the human population in the watersheds was a burgeoning of the effluents pumped or washed or flushed into the estuaries. Hence the SAV loss, which hasn’t been limited to the Chesapeake and can be extended to the other sandbar shark nursery areas, the plight of the Chesapeake blue crab (see <http://www.forbes.com/feeds/ap/2008/04/14/ap4887527.html>) and oyster fisheries, the mycobacterial infections in striped bass and other fish species in the Chesapeake (Mycobacteria as Environmental Portent in Chesapeake Bay Fish Species at <http://www.cdc.gov/eid/content/13/2/329.htm>), and other signs of a serious decline in the health of the Chesapeake and the other nursery estuaries.

With half of the original wetlands and 90% of the SAV that condition the water and provide much needed habitat in the nursery estuaries gone, with the wastes of 3 times as many people making their way into those estuaries and with each of those people releasing far more noxious wastes than people released at the turn of the last century, they have long since lost the ability to produce anything near the number of sandbar sharks – or any other estuarine dependent species - that they had “in the early 20th century.” In tech-speak, their carrying capacity has been diminished.

Unfortunately, the impact that these declines in the condition of the estuaries have had on the sandbar shark stock is magnified. In a College of William and Mary masters thesis in 2003, J.K. Ellis determined that blue crabs, one of the casualties of that decline, make up the largest part of the diet of smaller sandbar sharks sampled in the Chesapeake (<http://www.vims.edu/library/Theses/Ellis03.pdf>). Not only are the sharks suffering a loss of nursery habitat, they’re also suffering a loss of one of their primary sources of food.

“Shifting baselines” and fisheries management

The sandbar shark FEIS is also a reflection of one of the current infatuations of the so-called marine conservation - more accurately described as the anti-fishing - community: the shifting baseline phenomena. This is when we have lowered expectations for rebuilding a fish stock be-

cause we evaluate the conditions of our fisheries resources only relative to what they were within current memory, not going back to pre-fishing conditions.

These “conservationists” and their subsidized scientists have made much of shifting baselines. They would have us believe that our fisheries management goals should not be based upon well-documented, relatively recent levels of abundance, but rather upon mythical levels of abundance extrapolated by their scientists from historical documents. (Of course, if those documents were of recent vintage, they would be dismissed out of hand by those same scientists as anecdotal and not worthy of serious consideration, but that’s a totally different issue.)

While we give the results of this skewed “research” the scant credit it is due, we heartily endorse the concept of recognizing that particular baselines, baselines that are critical to the productivity of our fisheries and to the future of ocean management, be given more attention. In fact, in our last FishNet, Getting Real About Ecosystem Based Management (http://www.fishnet-usa.com/ecosystem_management.htm), we discussed drastic changes in one of the extremely important baselines that has shifted significantly in the last half a century. Prior to the 1970s, marine mammals weren’t considered an important part of the ecosystem worthy of protection, but were looked at as another ocean crop to be harvested. This kept their populations down far below “natural” levels, as it did their levels of predation on other marine species that were either being harvested or that were food for those harvested species. Since then, most stocks of marine mammals have benefited hugely from being protected, and as we pointed out, this has been at a tremendous cost to their prey species and to the fishermen who target those species.

As we concluded, “*in the Northwest Atlantic in 2006, marine mammals ate approximately 13 times as much fish and shellfish as commercial fishermen landed, and the annual increase in their total consumption might well have exceeded the East Coast landings in 2007.*” This isn’t a condition limited to the Northwest Atlantic.

So, we must ask, which are the appropriate baselines that we should be considering? Should our fisheries rebuilding targets be based on those “good old days” when whales and dolphins and seals were the targets of focused and efficient harvesting and were therefore not competing with the fishermen, or should they be based on the realization that hundreds of millions of tons of fish and shellfish and the prey species that sustain them are no longer available to the fishermen – or as food to the species the fishermen target - because they’ve now become whale and dolphin and sea lion fodder? It’s impossible to rationally argue that it should be the former, yet that’s what the anti-fishing claque has been doing.

Sadly, it’s doubtful that the resurgence of marine mammals is the greatest non-fishing factor that is impacting on our fish stocks or is the only reason that our rebuilding baselines, what they are based on and what they should be, need to be reconsidered.

It’s all about carrying capacity – or it should be

The carrying capacity is the number of individuals or the biomass of a particular species that an ecosystem can support, given a particular set of conditions. Our fisheries management targets are based on some hypothetical carrying capacity – or rather, on the maximum sustainable yield (MSY), which is a calculated percentage of the carrying capacity.

However, when the MSY is calculated, what factors are taken into consideration? With all of the bureaucratic posturing that has accompanied the supposed shifting of emphasis in the National Marine Fisheries Service to that agency’s version of ecosystem based management, you would expect that at least the major factors that impact on fish stocks would all be considered in managing those stocks.

From our examination of marine mammal predation, that is far from the case. In fact, though it can be argued convincingly that marine mammals have much more impact on fish stocks in the Northwest Atlantic than fishing does – because marine mammals eat at least ten times as much as fishermen catch – this is effectively ignored by fisheries managers. As with sandbar shark management, fishing is automatically assumed to be the major source of mortality, and the corresponding assumption is that when fishing is reduced sufficiently, the stock being fished will “recover” sufficiently to allow harvesting at the MSY level. Until that point, of course, harvesting will have to be restricted to allow “rebuilding.” But with marine mammal stocks increasing, with coastal populations growing and coastal development continuing, with the carrying capacity in what appears to be a constant state of downward flux, when is the MSY level ever going to be reached?

It’s not all about fishing – but the managers act as if it is

In written testimony presented to the House Fisheries, Oceans and Wildlife Subcommittee on 12/05/07, NMFS Chief Scientist Steve Murawski wrote:

“Rebuilding targets and productivity levels that will achieve these targets are based on the results of NMFS’ stock assessments. These assessments estimate the history of a stock’s abundance, productivity (growth and recruitment), and fishing mortality as a basis for determining its status relative to overfishing criteria, its sustainable harvest level, and other factors. These assessments generally use a wide suite of fishery and survey data including total catch, catch age composition, survey abundance index, etc. In some cases, the level of abundance that corresponds to the rebuilding target has occurred within the recent history of the stock and is directly represented in the data. In other cases, especially where the time series of high quality data is much shorter than the history of substantial levels of fishing, the level of abundance that corresponds to the rebuilding target occurred prior to the data-rich period. In these cas-

es, good estimates of the rebuilding target can still be made by using the average level of productivity (recruitment) that occurred during the data-rich period and the biomass per recruit that would occur when fishing at target levels and using the stock's biological characteristics and fishery characteristics from the data-rich period."

As Dr. Murawski makes clear in his testimony, in fisheries management the available fisheries data is what in fact actually "drives" the management process. What of other, and possibly equally or more relevant, data pertaining to environmental changes? The focus on "the biomass per recruit that would occur when fishing at target levels and using the stock's biological characteristics and fishery characteristics" doesn't specifically allow for continuing or accelerating environmental degradation, rebounding marine mammal stocks, climate- or weather-induced regime shifts or any other factors extrinsic to the stock being managed. Rather, all of these factors get lumped together into what is called natural mortality, which is a catch-all category including all of those fish that succumb to non-fishing causes such as pollution, being eaten, dying of old age, etc. Natural mortality is estimated and is considered to be constant for each stock being managed.

What are the practical implications of this fishing-centric approach to management? One might argue that how a stock of fish reached a particular point is irrelevant to how fishing on that stock should be managed, but that is far from the case. If a stock is at the point of MSY, it can sustain a particular level of fishing indefinitely (until conditions change). If it is below MSY, according to the mandate of the Sustainable Fisheries Act it must be "rebuilt" to the MSY level. A given biomass could support a higher TAC (Total Allowable Catch) at the MSY level than if it was below MSY and in the forced rebuilding mode.

For the fishermen in a particular fishery, this could be a path to inevitable extinction. In the case of sandbar sharks, for example, nothing is ever going to return the nursery estuaries to the condition in which they can once again support the numbers of juvenile sharks that they did in the early 1900s, at least nothing that's likely to happen in the foreseeable future. Yet this appears to be the level of juvenile sandbar shark production that is necessary to restore the stock to the target MSY level. So every year it is determined that there aren't enough sandbar sharks – that the stock is behind on its "rebuilding" trajectory – fishing will be reduced.

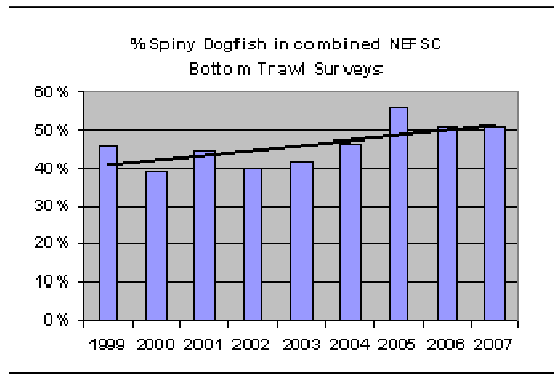
Or take summer flounder, inarguably one of the most valuable fisheries in the mid-Atlantic. The summer flounder population is at the highest level ever measured, but the biomass isn't increasing rapidly enough to meet the rebuilding target. Now, where the summer flounder stock should be on its rebuilding trajectory at any particular point in time is calculated, and the calculations involved are based on the current condition of the summer flounder stock and the assumption that if it doesn't increase at a particular level, the fishing mortality is too high and must be reduced. The desired level of increase is based on retrospective analyses of how the summer flounder stock has performed in the past and the assumption that it will perform that way today and into the future. Obviously this assumption is based on yet another assumption: that all of those conditions that influence the summer flounder stock – other than fishing – remain constant.

Again, these are all seemingly reasonable assumptions, unless you throw a couple of other factors into the mix.

Dogfish again

While NMFS trawl survey data isn't as convincing as the "anecdotal" observations of both recreational and commercial fishermen from the Gulf of Maine to Cape Hatteras, it's hard to ignore the fact that there is a "plague" of spiny dogfish in the waters between Cape Hatteras and the Gulf of Maine (see Dogfish Follies at <http://www.fishnet-usa.com/dogfishfollies.html> and note that the survey trends have continued in the years since this was written). These voracious and low-value fish are interfering with just about every commercial and recreational fishery in areas where they are prevalent; stealing bait, clogging nets, destroying gear and damaging other, more valuable species before they can be brought on board.

Quoting from the Cornell University's Suffolk County (NY) Cooperative Extension Service's summer flounder Species Profile, (<http://counties.cce.cornell.edu/suffolk/Fisheries/species/summer%20flounder.pdf>) "*summer flounder have been found in the stomachs of spiny dogfish, blue shark, little skate, Atlantic cod, silver hake, goosefish, northern sea robin, spot, bluefish, and winter flounder (Bowman and Michaels 1984; Kohler 1988; Rountree 1999; Bowman et al. 2000), of which spiny dogfish are the most significant predator.*" But, in spite of the fact that that the summer flounder fisheries have been, are and always will be far more valuable than the dogfish fishery, the requirements of the Magnuson Stevens Act are such that spiny dogfish harvesting must be restricted, not just until but even after the stock has "recovered."



Here's a species that, considering the negative impacts on other fisheries, it's hard to imagine should be managed with anything other than a bounty or some other harvest incentive. Instead, spiny dogfish are and will continue to be protected. This is bad enough, but it becomes immeasurably worse when one considers that, impossible though the task is, recreational and commercial fishermen are expected to make up for dogfish depredations on other species like summer flounder by reducing their harvest. As the dogfish population increases their predation on summer flounder increases so the recreational and commercial harvest of flounder must be decreased accordingly.

And these are far from unique situations

It's only in the last century that we've really been capable of producing environmental insults with the magnitude to impact not just our estuaries and near-shore waters, but entire oceans, and we've done that with a vengeance. Plastics, personal health care products, household chemicals or their decomposition products have all become ubiquitous in the marine environment, as have their impacts on marine organisms. While our impacts on the terrestrial environment are easily observed – and can be evaluated on the scale of an individual's life, that generally isn't the case with the oceans. Hunks of floating Styrofoam, plastic bags and butane cigarette lighters are easy to see, and the effects of too excessive nutrient run-off – red tides and dead zones – tend to be in areas where they attract much public attention. But the subtle effects of the excess pharmaceuticals and their residuals, of fire retardants, of herbicides and pesticides, of sun tan lotions, detergents and the full spectrum of excess "stuff" that makes it's way from our bodies, our homes, our yards and our workplaces into the estuaries (with their drastically reduced assimilative capacities) then the oceans are all but ignored by society.

No one expects that the terrestrial environment in 2008 is going to bear any resemblance to what it was in 1908. With almost 7 billion people, well over a billion motor vehicles, a quarter of our land area devoted to growing livestock feed or for grazing, and our per capita consumption of just about everything at levels that were unthinkable a hundred years ago, how could they? What we've been doing on the land is at best reflected and at worst concentrated in our inshore and offshore waters.

Yet the "conservationist" agenda and our fisheries management system assume that the carrying capacity of our marine waters hasn't changed in a century, and that when that capacity isn't reached, it's time to cut back on fishing once again. How much of this economically devastating cutting back can the commercial fishing industry endure?

The Oil Slick

It's becoming increasingly popular in the "marine conservation" community to directly engage the seafood consumer in pushing the anti-fishing agenda. The poorly crafted science that their campaigns rely on not being readily accepted by the fisheries managers – or by anyone else with any practical knowledge of fisheries or oceanography and regard for viable commercial fisheries, for that matter – they are now attempting to directly influence consumers, whose lack of knowledge of what's going on in the oceans is exceeded only by their insatiable craving for fish and shellfish.

They rely on some form of "grading" of various seafood products, supposedly based upon the sustainability of the fisheries that produce them. Were that the actual case, most people involved in commercially harvesting seafood would find little to object to. A simple declaration of whether a product was from a fishery that was overfished or not and, if it was, whether it was rebuilding or not, would certainly help the conscientious consumer, and would have little effect on the vast majority of our fisheries, which are well along in management-mandated rebuilding programs.

Unfortunately, that is far from the case. Rather than restricting themselves to such seemingly simple concepts as overfished and overfishing, their ratings systems are also based on other, far more problematic, criteria such as gear type, the degree of illegal, unreported or unregulated fishing (IUUF), and other consumer-confusing esoterica. In many cases their ratings are out-of-date and internally inconsistent as well.

For a few examples:

- The Monterey Bay Aquarium’s Seafood Watch has Mid-Atlantic sea scallops on the “Avoid” list because “the population in the Mid-Atlantic region (North Carolina to New York) is currently being overfished.” Mid-Atlantic sea scallops are not being overfished, nor is overfishing occurring in the fishery. Seafood Watch staff were notified of this - we can’t expect them to keep track of all 75 species they’re watching by themselves, can we? – on April 11. They haven’t corrected their website in the intervening two months. While the fact that scallops are caught with dredges is discussed, this obviously doesn’t rate an “avoid” because several other fisheries that are accomplished with dredges are rated “good alternatives.”
- The same Seafood Watch program has monkfish on the “Avoid” list, stating that “new data suggest that monkfish populations are recovering, however this is yet to be established.” At a stock assessment workshop last summer, monkfish were found to not be overfished, nor was overfishing occurring, and their official status has reflected this change for almost a year. In the world of fishery management it is impossible to establish anything much more than that. Again, the gear used to harvest monkfish (trawls and gillnets) is mentioned, but the products of other fisheries employing trawls and gillnets are given “good alternative” ratings.
- Greenpeace has monkfish on a Red Fish List, stating “*as catches of other groundfish like cod and halibut declined, more and more fishermen began to go after monkfish in the mid-Atlantic and New England waters and now monkfish populations are severely overfished.*” As explained above, they are not, nor have they been (erroneously, it turns out) classified as such for almost a year. (Note that while both Greenpeace and the Monterey Bay Aquarium websites state that monkfish are caught with trawl gear, there has been no directed trawl fishery for monkfish for several years.)
- Greenpeace also includes swordfish on the Red List, but then tempers that (in fine print, of course) with “*due to strict bycatch regulations in the U.S., longline-caught swordfish from these fleets is the only exception in the international fisheries that otherwise have unacceptable levels of bycatch. The fisheries in the waters off California, Oregon and Hawaii are well managed and are a good alternative to most imported sources.*” Bigeye tuna are also on the Greenpeace Red List because they are taken by longline. In this instance, however, there isn’t any corresponding fine print discussion about U.S. longlining, in spite of the fact that they are caught by the same fishermen in the same boats in the same fishery.

So, according to these self-styled arbiters of consumers’ environmental consciences, species “X” is to be avoided because it’s caught with a gillnet but species “Y” is ok even though caught with the same gear? Species “W” is to be avoided because it’s classified as “overfished” though that classification was officially dropped several years ago? That the same fishery that catches species “C” in an acceptable manner is dropping the ball on species “D,” even though they are both caught on the same gear in the same manner on the same trips?

It seems as if the zeal being put into “protecting” the fish by these groups isn’t accompanied by a corresponding zeal to get the grading systems right or to assume any responsibility for the damage done to fishermen, wholesalers, retailers, restaurateurs, consumers or anyone else who is impacted by the inability to keep up with progress in fisheries management.

What is a conscientious consumer supposed to do? Even more importantly, what is a conscientious fisherman supposed to do? He or she plays by the rules, abides by a thousand and one regulations ranging from the picayune through the obvious to the ridiculous and is then financially punished because the people in the agency that promulgates those rules don’t see eye to eye with the foundation-funded antis.

We can only suggest that anyone with an interest in the real-world performance of a fishery avail themselves of the information available on the National Marine Fisheries Service **FishWatch** site (<http://www.nmfs.noaa.gov/fishwatch/>). The information there is that which the Greenpeace people and the Monterey Bay Aquarium people and a bunch of others spin to suit their personal and institutional agendas. It isn’t six months (or six years) out of date, and it’s about the best indication that the fish you are buying have been caught by fishermen legally participating in what have become the most intensely scrutinized and thoroughly managed fisheries in the world.

Real reporting on fisheries issues

(in National Fisherman)

07/09/08

Richard Gaines writes for the Gloucester Daily Times. He covers fishing. Writing for the home town paper of one of the country’s oldest commercial fishing ports, and appearing to be one of the more conscientious journalists around, it’s pretty obvious that he takes his job seriously.

Thus, when he wrote a three part series on the shucking and jiving that’s going on with the administration of the Stellwagen Bank National Marine Sanctuary (starting on June 25 and available on the paper’s website), he did a good job of it. In reporting on the sanctuary’s history, he went back about as far as he could go, writing of its formation “*it was so long ago that commercial fishermen and environmentalists were actual arm-in-arm allies in favor of the creation of the sanctuary.*” Not too many of us remember those days, and I bet that of those that do, most probably wish they didn’t.

He detailed the ins and outs and the convoluted bureaucratic machinations that have much of the New England fishing industry concerned about continued access to Stellwagen’s rich and readily accessible waters, waters that have sustainably supported New England fishing communities for generations.

And, Saints be praised, he also spared a few words for what Our Favorite Charitable Trust (OFCT) has done and is doing in fisheries, detailing the role of two of its “*activist-scientists*” in beating the anti-trawling drums, and then recognizing that “*Pew is associated with public information campaigns against fishing and fish consumption.*” Of course their over-the-top pronouncements on the effects of trawling on bottom habitat will continue to play a conspicuous role in the Stellwagen dialogue.

A week after Mr. Gaines’ series ran, and following an editorial supporting it, one of the “*activist-scientists*” mentioned in the series responded with a letter to the editor. In it, Elliot Norse, President of the Marine Conservation Biology Institute (MCBI), wrote “*if Gloucester’s community newspaper wants your fisheries to end and marine ecosystems to collapse further, then just say what Mr. Gaines’ story did.*” He also questioned whether the paper was condoning “*threatening someone (in this instance, his own self) with murder*” and asked if making such threats is acceptable behavior in Gloucester.

These might be among the more bizarre comments by a self-described honored scientist, but they do a great job of putting Dr. Norse’s trawling/clear cutting comparisons and doom-and-gloom ocean ecosystem pronouncements in their proper context. Fisherman Dave Goethel compellingly responded to them in a letter to the Gloucester Times on July 8. Dave’s wife Ellen, who serves on the federal Marine Protected Areas Advisory Committee with Dr. Norse, was identified by Dr. Norse as relaying the supposed threats on his life that he made such an issue of. She recalled that the reference to murder was made laughingly, that she obviously didn’t convey any actual threat, and that their conversation continued cordially after that.

Dr. Norse’s letter brought up another important issue. After questioning the morality of the people of Gloucester, he claimed that he had not “*received large grant funding from the Pew Institute.*” From a hair-splitting perspective Dr. Norse was right. Mr. Gaines had claimed that “the Pew Institute” was the funding source. The Pew Charitable Trusts website shows that Dr. Norse’s MCBI received two Pew grants; \$110,000 in March of 2000 and \$350,000 in September of 2001. Not the Pew Institute, but it was surely Pew money. His Pew Fellowship, if it was what his fellow Fellows received, was \$150,000. He referred to this as “*modest.*” It must be nice to travel in circles where \$150,000 is considered modest and funding of almost half a million bucks isn’t “*large.*”

In another letter to the Gloucester Times, the other “*activist-scientist,*” Dr. Norse’s colleague and Pew Fellow Les Watling also discounted his \$150,000 Pew Fellowship grant, indicating that the real money supporting him comes from us taxpayers via NOAA (though, to his credit, his letter was minus any alleged murder threats or slaps at Gloucesterites).

Imagine how much money there must be in assaulting commercial fishing, if you can have the attitude that \$150,000 is just barely worth a mention?

Fisheries ending? Murder threats? Modest funding? Ecosystem collapse? Sound science? You be the judge.

Phil Ruhle – another great loss for the industry

(in National Fisherman)

08/05/08

It was just barely two years ago when we lost “Hammer” Beidemann. Some of us in the commercial fishing industry lost a really good friend. All of us in the commercial fishing industry lost one of our most effective advocates.

And on July 23 it happened again. Phil Ruhle, ex-New England Council member, NOAA Conservation Hero, high-liner, gear developer, industry spokesman, “Smart Gear” Grand Prize winner and one of the nicest guys any of us are likely to meet, went down with his boat, Seabreeze, 45 miles off Cape May while coming in to offload 50 tons of squid.

It’s difficult to get my head around the idea that Phil’s not going to be there any more. All of us who were fortunate enough to have known him will know what that means personally. But all of us who are commercial fishermen or who are involved in supporting commercial fishing should know what that means to the industry.

Phil was an industry leader, but not because of any position he held. He was an industry leader because of who he was, what he did and how he did it.

Not too long after the Magnuson Act, and the bureaucracy it mandated, became the overriding factor in fisheries, it became apparent that to be successful, fishermen were going to have to make attending meetings a part of their job. As daunting as that was, as time- and money-consuming, as frustrating and off-putting, Phil believed it and he lived it. But while doing so he remained a fishermen’s fisherman. With his son Phil Jr. he ran Seabreeze and they caught fish. And he also found – or perhaps made is the better word - the time and the energy to develop gear that, in the overhyped vocabulary in overuse today, was actually eco-friendly.

He was a supporter of and a participant in cooperative research. He was one of the primary industry folks involved in the so-called “Trawlgate” controversy a few years back, recognizing the importance of improperly calibrated sampling gear on the all-important stock assessments and working with NMFS personnel to improve their trawl surveys. He was named a National Oceanic and Atmospheric Administration Environmental Hero, an award honoring NOAA volunteers for their “tireless efforts to preserve and protect our nation's environment” for this involvement.

He was part of the team that designed the Eliminator Trawl. He and the other members subsequently won **the World Wildlife Fund Smart Gear International Competition** “to reward and inspire innovative ideas to reduce fisheries bycatch,” coming out ahead of over 70 other contenders from 22 countries. Team member and University of Rhode Island Sea Grant staffer David Beutel said “*the collaborative design and development of the Eliminator trawl is a great example of industry and scientists working together with managers to develop innovative solutions to reduce or eliminate bycatch.*” This was Phil’s approach, not just to bycatch reduction, but to management issues in general.

He didn’t get involved in management because he was appointed to the New England Council. He was there before he was appointed and he was there after he wasn’t reappointed. He took fisheries management seriously. He did his homework and could follow the management-speak “gobbledygook” about as well as anyone. The management system, its built-in frustrations, compromises, conflicts and downright inanities, sometimes got to him, but when it did he just about always seemed to maintain his sense of humor and, even more importantly, his sense of irony. He saw the system and the process for what it was, warts and all, but recognized that it was what we were saddled with and what we had to deal with. And he was among the best at dealing with it.

But apparently Phil did have his limits. In a profile of him written two days after Seabreeze was lost, Peter Lord of the Providence Journal wrote that NMFS’ failure to allow the timely use of the “Eliminator” trawl was the last straw for Phil and that his work with the agency was over.

Phil’s sacrifices to make the management system work, and to insure the future of the commercial fishing industry that depends on it, have earned him a tribute from all of us, those who knew him personally and those who didn’t. The best tribute that I can think of would be to adopt his approach; working within the system as much as possible but not accepting its shortcomings, and being willing to draw a line and not willing to step over it.

The anti-fishing movement; a U.S. perspective (Originally printed in **Fishing News International**, 10/01/08)

In the U.S., commercial fishing was once considered a valued profession by virtually everyone. In recent years that has changed, or perhaps “is being changed” is more accurate. A massive, heavily funded and well orchestrated campaign has eroded the image of commercial fishermen. Over a decade of relentless media assaults, anti-fishing propaganda in the truest sense is resulting in the increasing marginalization of fishermen in fisheries management and ocean governance.

For the record, from a resource perspective things aren’t bad here. Like always, some stocks are up and some are down. The New England groundfish fishery, the supposed “poster child” for mismanagement, has stocks at both high and low levels, with total biomass well above the problematic levels of the late 80s and early 90s and exhibiting a pronounced upward recent trend (see <http://www.nefsc.noaa.gov/publications/crd/crd0815/wp2-1.pdf>). Major Alaskan fisheries, among the largest in the world, and the East coast sea scallop fishery, the most valuable in the U.S., are in fine shape, as are many others. Aggregate landings in the U.S. in 1950 and 2004 were virtually identical, at 1.218 million tons and 1.186 million tons respectively. In spite of this, much of the U.S. public has been convinced that there’s a fishing spawned crisis in our oceans.

Remember the Exxon Valdez?

In 1989 she split open after hitting a reef, dumping 40 million liters of crude oil into pristine Prince William Sound in Alaska. The environmental damage was immense. So was the public outrage it generated. The oil industry became the focus of an unprecedented amount of public and political scrutiny, and Exxon became the target in law suits seeking billions of dollars in compensatory and punitive damages. As we will see below, this disaster went far in convincing the public that an inadequately regulated “Big Oil” industry was the greatest threat our oceans were facing.

Leaping ahead, in 1995 the multi-billion dollar Pew Charitable Trusts, one of the largest not-for-profits in the U.S., invested over \$4 million in the startup of SeaWeb. The Pew Trusts were established and controlled by the heirs of Sun Oil founder Joseph Pew and his wife Mary. From the SeaWeb website “at the time, no single, credible organization existed that presented the ocean crisis to media and others in an interrelated, consistent and systematic way.”

What was the ocean crisis that the Pew people had recognized and SeaWeb was created to address? One of the first undertakings of the new organization, a poll grandiloquently named **The SeaWeb/Mellman Group Landmark Poll on US Public Attitudes Towards the Oceans**, was commissioned to shed some light on this question.

Not surprisingly (remember that oil-soaked wildlife and destroyed shorelines from the Exxon Valdez disaster and the subsequent clean-up had been seared into the public consciousness a few years earlier), oil was seen as the biggest threat to the oceans. As reported in the Mellman Group's introduction and notes on the poll, "*Americans believe the ocean's problems stem from many sources, but oil companies are seen as a prime culprit. The publicity around oil spills in the ocean has undoubtedly led to the perception that these accidents account for the majority of the ocean's pollution. In fact, 81% of Americans believe that oil spills are a very serious problem.*" The report goes on "*chronic oil dumping in the ocean most clearly communicates that the oceans are in trouble, and makes people very angry. People see the fact that 3.25 million tons of oil enters the world's oceans each year as a strong indicator that the oceans are in trouble (71% 'great deal of trouble'). This statement also makes a plurality (40%) feel very angry.*" In spite of a string of high profile environmental tragedies that their industry was accountable for going back to the Santa Barbara oil spill in 1969, this must have been really bitter medicine for the "Big Oil" people to swallow. The writing was on the wall. Big Oil was in for a rough time.

Since the completion of the **SeaWeb/Mellman poll** just over a decade ago, the public's perception of the existence and causes of an ocean crisis has been shifted away from oil and towards commercial fishing. Much of this shift can be attributed to the efforts and expenditures of the Pew Trusts, to the ENGOs and academic institutions that they support with tens of millions of dollars each year and to their ability to manipulate the news media.

Thanks to the successful demonization of commercial fishermen, Big Oil appears to be off the hook. In fact, to contend with the recent run-up in energy prices, the U.S. is in the process of dismantling a long standing ban on offshore drilling.

The Pew Trusts

They aren't the average charitable foundation, having been taken far beyond the traditional role of grant giving. In "Charity Is New Force in Environmental Fight" in the NY Times (06/28/01), Douglas Jehl wrote "a \$4.8 billion foundation called the Pew Charitable Trusts has quietly become not only the largest grant maker to environmental causes, but also one that controls much more than the purse strings. Unlike many philanthropies that give to conservationist groups, Pew has been anything but hands-off, serving as the behind-the-scenes architect of highly visible recent campaigns...." Pew has moved beyond the role of facilitation to developing and advocating specific positions, a vast departure from business as usual in the foundation world. In the wrap up of his article, Mr. Jehl quotes Rebecca Rimel, president of the Pew Trusts, on Pew's effect on the national debate on global warming, "let's wait and see what the outcome is, let's see who has been able to win the hearts and minds of the public." She could have just as easily been speaking about fishing.

SeaWeb was only the start. Since its creation, Pew has been a major funder of "marine conservation" programs of anti-fishing ENGOs – almost \$5 million to Environmental Defense, \$3 million to Natural Resources Defense Council, \$3 million for the Marine Fish Conservation Network, \$4 million for Audubon, etc. Pew has also invested heavily in two organizations that it created; \$34 million for Oceana and \$40 million for the National Environmental Trust, both of which have been in the forefront of the anti-fishing crusade.

What's wrong with funding fisheries research? That depends – primarily on the kind of research being funded. If it's to learn more about fish or the environment they live in, it's fine. We don't know enough about any species for really effective management, and with generally meager government research budgets it will be a long time before we do. How about gear research? Anything that allows fishermen to fish more cleanly or, in these days of skyrocketing energy costs, more efficiently is going to be good for the fishing industry and good for the fish.

That's not what Pew buys. I've never seen reports of Pew-funded population, gear or habitat research that involves scientists out there on the water. Pew "research" involves sifting existing – and undoubtedly inadequate – data to "prove" that fishing practices, management regimes, just about anything to do with commercial fishing, is leading to the destruction of the oceans. Calling it agenda driven research seems a pretty good fit, and, as Ms. Rimel's comments demonstrate, it's not just the research that's agenda driven.

This was conveniently illustrated in a letter to the Telegraph on September 16 referencing an article about comedian Ted Danson's concern with spiny dogfish. Juliana Stein, Pew/Oceana's communications manager, wrote "*overfishing is the most severe threat facing our oceans, and if governments don't properly manage fisheries -- including shark fisheries -- using science-based measures, many fish populations could end up beyond the point of return.*" Not climate change, not massive oil spills, not unbridled offshore energy development and not the continuing and growing outwash of a world population approaching 7 billion that is increasingly dependent on noxious household chemicals and pharmaceuticals that end up in our estuaries and oceans; according to Pew/Oceana, it's all about those rapacious fishermen, and the Pew/Oceana/SeaWeb PR machine reinforces this whenever possible. I'll bet dollars to donuts that Pew won't kick any of its billions of Big Oil bucks into actually going out and counting, weighing or measuring sharks.

But Pew's severely distorted view of what's going on in the oceans isn't restricted to letters to editors, press releases and other trivial-seeming yet cumulatively damaging communications by salaried flacks. It goes far beyond that.

A few years back Pew spent \$5.5 million on **The Pew Oceans Commission**. Led by a former Congressman who had served as Bill Clinton's Chief of Staff, it was supposed to present an objective evaluation of who's doing what to the oceans and how to fix it. From its website, it is "conducting the first review of policies and laws needed to sustain and restore living marine resources in over 30 years. The Commission includes leaders from the worlds of science, fishing, conservation, business, and politics."

In the "follow the money" tradition established by Woodward and Bernstein in Watergate days, I did some digging into the relationships between Pew and the various commission members (discussed in greater detail in "The Pew Commission – a basis for national ocean policy?" at <http://www.fishingnj.org/netusa23.htm>).

"The Pew Ocean Commission includes the president of the Natural Resources Defense Council; the president of the Center for Marine Conservation (now the Ocean Conservancy); a trustee of the Rockefeller Brothers Fund (which has provided grants to the Conservation Law Foundation, the Natural Resources Defense Council, the Center for Marine Conservation, the American Oceans Campaign, and Audubon – each of which has contributed significantly to making life miserable and earning a living increasingly difficult and often impossible for large numbers of working fishermen); a trustee of the Packard Foundation (which has also provided grants to the Conservation Law Foundation, the Natural Resources Defense Council, the Center for Marine Conservation, the American Oceans Campaign and Audubon as well as Environmental Defense - ditto - and SeaWeb – ditto again); the past president of the American Sportfishing Association (which is a member, along with most of the NGOs listed above, of the Pew-funded Fish Conservation Network); the president of the Pew Center on Global Climate Change; a Pew Fellow; and two commercial fishermen, one of whom is the president of a trade association that has been funded by Packard and the other was a trustee of a trade association whose formation was supported by and with other ties to Pew."

(Were we talking matrimonial rather than funding relationships, that much incest would likely have brought about the hemophilia-driven expiration of the Commission long before that \$5.5 million was spent.)

I then did a simple analysis of the references that were used to support the conclusions of the Commission's report "Ecological Effects of Fishing in Marine Ecosystems of the United States." Two of the three authors of the report were Pew Marine Conservation scholars, well more than a third of the 179 references the report cited had at least one author who was financially connected to Pew, as did almost half of the cited references published since 1995 (it was then that Pew became actively involved in convincing the public that commercial fishing, not Big Oil, was ruining the world's oceans). This isn't scholarly research, it's a deck of cards stacked to support a particular player. Yet it's designed to inform national policy makers on what ocean governance should be. And there's no reason to think that this campaign isn't going international, particularly considering Oceana is also in business in South America and Europe. Who's next?

The proof is in the pudding

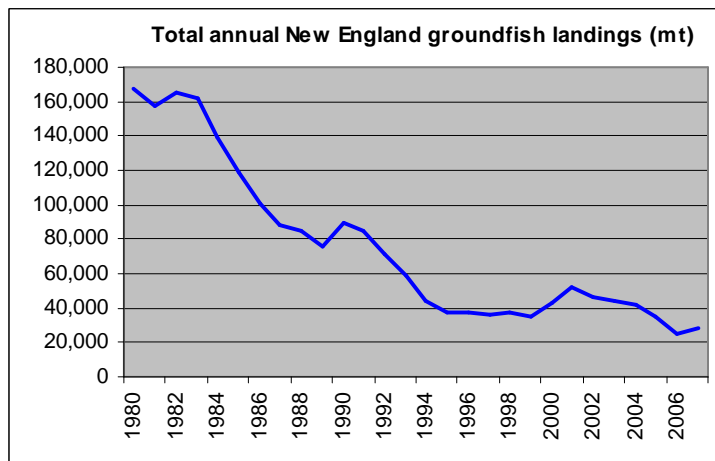
A Google search on "Exxon Valdez oil spill" will return 287,000 hits. The Exxon Valdez went on the rocks back when the internet was a tool for computer geeks and academics. A search on "Prestige oil spill" returns only 56,900 hits. The Prestige broke up in 2002, when the internet was a regular part of hundreds of millions of peoples' lives, and spilled twice as much oil as the Exxon Valdez. Damages and clean-up costs were roughly equivalent. A Google search on "overfishing" returns 933,000 hits.

New England groundfish – we're from the government and we're here to....

(in National Fisherman)

10/01/08

The graph below shows what's been going on with New England groundfish landings since 1980. Pretty impressive, isn't it? What would be even more impressive would be a representation of the failed businesses, human suffering and destroyed careers brought about by that 83% decline. Or all the public dollars it's taken to manage it.



It's hard to suggest that New England groundfish management has been anything but a dismal failure, and where does the responsibility for that lie? How about on the desk of the Secretary of Commerce? We've all heard the "blame it on industry influence, political pressure, conflicts of interest" arguments, in fact blaming it on everything but the Bossa Nova. But the Department of Commerce, adhering to the game plan provided by Congress, interprets the legislation, supplies and/or coordinates the research, provides the administrative support, and approves, imposes and enforces the management measures that have gotten us to where we are.

That's why it's impossible for me to understand the Secretary's insistence – as expressed at a special meeting of the New England Council addressing the latest bad news about the collective groundfish stocks – on staying the course for a couple more years. The landings have been going down almost 3% a year for almost 30 years. Does anyone have any reason to suppose that two more years won't mean another 6% decline? How many boats and how many groundfish fishermen, not to mention the people and businesses depending on them, will be left?

Groundfish landings are at 17% of their 1980 levels. What about the groundfish stocks? Are they down? Some stocks are higher than they were back then, some are lower, and some are at about the same level. Charts on pages 2-861 and 2-862 of the "Ecosystem Considerations" section of the GARM III report (available via the Northeast Fisheries Science Center website) show that in the spring and autumn trawl surveys, the stratified average weights per tow of "all GARM stocks" have in recent years been very close to what they were in the 1980s.

So, with as many fish out there today as there were in 1980, or for the sake of argument, even with 50% as many, where's the justification for landings reduced by 80%? Or by another 6% over the next two years?

Folks, what we have is a seriously broken system that we should have committed to fixing years ago. And fixing it is going to require much more than figuring out yet another way to divvy up an ever-diminishing catch, because the catch has already been diminished far more than it should have been.

For a start, what about questioning some of the basic premises of Magnuson management. Can we ever have every fishery out there at the Optimum Yield level simultaneously? From the "Ecosystems Considerations" referenced above, the answer to that is theoretically yes, but perhaps not. The big question, however, is that, considering the implications of managing for the weakest species, why should we?

How many dollars worth of flounder, cod and pollock do the dogfish that are now infesting our waters from Cape Hatteras to The Hague Line cost us – and we still don't have enough of them? How can we severely restrict fishing on historically large populations of haddock and redfish to protect small numbers of less robust species? How can we force fishermen to continue to struggle for an increasingly meager catch in a handful of fisheries when there are other fisheries "right next door" they can be successful in? How can we manage a dozen different species sharing the same water, eating the same food (or each other) and vulnerable to the same gear as if each is in its own isolated universe?

And most importantly, how much longer are we going to pretend that fishing mortality is the only thing that matters?

New England groundfish – or the way that we have been attempting to manage them for a generation - have put us in a box that we have to start thinking outside of, and just coming up with another way to allocate the same amount of fish doesn't seem to me like it'll do the job. At this point powerful people in Congress are focused on groundfish, and they should know as well as anyone that it's time for some significant changes.

Assume we're on the Titanic. Painting the grand salon, designing a new menu and rearranging the furniture isn't going to keep us out of the ice. Setting a new course will.

Pew and the media

Originally for **Fishing News International** in 11/01/08

The Pew Charitable Trusts established **The Pew Oceans Commission** back in 2000. It was chaired by Leon Panetta, former Congressman and Chief of Staff in President Clinton's Administration. On its website we are told "*in the first thorough review of ocean policy in 34 years, the Pew Oceans Commission released a host of recommendations in 2003 to guide the way in which the federal government will successfully manage America's marine environment.*" The recommendations focused on fishing. (Note this Commission had no connections with government agencies or any other "official" groups, and its data gathering, deliberations and recommendations were subject to neither external controls nor outside review. Some people got together and spent a bunch of Pew Trusts money for some reports and recommendations that they then spent another bunch of Pew Trusts money promoting to any audience that had been prepared by the expenditure of yet another bunch of Pew Trusts money.)

The release of the Pew Commission's report and recommendations was accompanied by a media barrage. As part of it, Mr. Panetta was interviewed by **National Public Radio's** Bob Edwards on Christmas Day, 2002. **National Public Radio** (NPR) describes itself as "*an internationally acclaimed producer and distributor of noncommercial news, talk, and entertainment programming.*" Mr. Edwards was host of NPR's flagship news program, *Morning Edition*, one of the most listened-to radio broadcasts in the country. Mr. Edwards, who has since left NPR and is now on satellite radio, remains a well-respected broadcast journalist and skilled interviewer.

During the interview, after a long description of the problems in ocean governance in the U.S. by Mr. Panetta, Mr. Edwards interjected "*you're also dealing with oil spills, with global warming.*"

In responding, Mr. Panetta mentioned overfishing, aquaculture, cruise ship pollution and invasive species. Mr. Edwards, displaying what I'd have to consider shockingly less than incisive reportorial skills – particularly considering the connections between the Pew Trusts and Big Oil – attempted no follow-up whatsoever, leaving the oil spills issue dead on the floor.

How, you might ask, was that possible? How could an established interviewer, particularly one who at the time rivaled #1 ranked radio broadcaster Rush Limbaugh in popularity, be so completely diverted from what was a legitimate and perhaps critically important line of inquiry?

Only Mr. Edwards can answer that, but an examination of the Pew Trust's relationship with National Public Radio and public broadcasting in general might provide some insight.

NPR doesn't have paying advertisers. Its acceptance as an effective and unbiased source of news and analysis is based on this. Such "objectivity" comes with a price. NPR and its member stations are dependent (decreasingly) on government handouts and (increasingly) contributions to stay in business. In fact, a line familiar to listeners is that it's supported "by listeners like you." This results in regularly scheduled on-air fund raising, generally one- or two-week ordeals during which the reporters, commentators, hosts, etc. devote hours of air time to begging for pledges hovering at around a hundred dollars a piece, and offering CDs, coffee mugs umbrellas and other trinkets in return. While I can't write for the people on the other side of the microphone, as a listener I find the process aggravating in the extreme.

NPR also has corporate-level sponsors, among which are the Pew Trusts. These aren't listeners like me, or like anyone else I know. Pew has donated on the order of \$5 million to National Public Radio itself, or its various local stations. I'd guess that the folks associated with public radio would much rather get a single check – or however "charitable" donations are distributed – for several hundreds of thousands of dollars from Pew than have to spend two weeks on the air pleading for a couple of thousand checks of a hundred dollars each.

And Pew's support of public broadcasting doesn't stop there. Take the Pew funding of the PBS (Public Broadcasting System) **Newshour with Jim Lehrer**, one of the most important and arguably influential news shows on television. Pew has given the **Greater Washington Educational Telecommunications Association**, the Washington, DC area PBS television station which produces **Newshour** and **MacNeil/Lehrer Productions**, at least \$7 million over the last decade.

If the world of public broadcasting works the same way that all of the worlds that I'm familiar with do, I'd imagine that keeping the folks at Pew happy is pretty high on the to-do list of everyone connected with PBS and NPR, (diminishing) support by government and by viewers and listeners like me notwithstanding. And not at all surprisingly, whenever the latest Pew-supported "doom and gloom in the oceans because of commercial fishing" study is released by members of the Pew anti-fishing team, PBS and NPR are both Johnny on the spot, slavishly reporting it to their influential listeners and viewers.

Hitting close to home with those of you in the EU, in 2005 PBS aired “*Gutted*,” a documentary about the tragedy of a multi-generational Scottish fishing family being forced to deliver their boat to a scrap yard in Denmark. Powerful in its own right, the film – and the ordeal that the West family was going through – was turned into yet another anti-fishing rant, both by radical PBS editing and by an “afterword” delivered by Mr. Panetta

In “*Preservation Takes Priority, and the Fisherman Struggles*” Virginia Heffernan wrote (also in the New York Times on August 23, 2005) “*the main insult of this American version is that the narration often contradicts the spirit of the original Scottish interviews. Tern Television, which provided all the images, does not seem to have intended to tell more than one side of the story of the Scottish Fleet's travails. And those travails are not ‘depleted cod stocks’ - as the European Union would have them, suggesting that the interests of environmentalists and fishermen are one and the same - so much as new regulations that demand not only that people stop fishing, but also that they destroy their beautiful boats. In its unadulterated form, ‘Gutted’ appears to have been the story of fathers and sons who love to fish suddenly confronted with decrees issued by wonks in Brussels....What was not meant to be a plot here was the toll taken on the seabed by the nets of the cod trawlers. No images of this damage appear; no talking head comes to warn about it; no fisherman seems to give it a moment's thought. But the PBS-version voice-over, noting the damage done by cod nets, says, ‘A 2004 report warned that Britain and its neighbors could soon be surrounded by a lifeless sea. (A connection between this alarming report and the use of cod nets is never made.)’*”

PBS adulterated (in Ms. Heffermen’s fitting phraseology) the original version of the film to conform to Pew’s “it’s mostly the fault of the fishermen” perspective.

And afterwards, Mr. Panetta, in a startling display of his lack of knowledge about commercial fishing, particularly considering his tenure as Chairman of the Pew Oceans Commission and his claim that his grandfather was a commercial fisherman, continued the attack. He cited supposed fishing-induced problems that were due in larger part to other factors. He addressed technological advances in fishing, stating “*they have these huge nets that can basically go down and scrape the bottom of the ocean.... oh, they're huge.... they can go as far as eight miles in some instances.*” And he also squeezed in a reference to the highly controversial – though Pew supported – “research” claiming that 90% of the world’s big fish were gone due to fishing.

There’s an old expression about getting what you pay for. When it comes to Pew and public broadcasting, that appears to be right on target.

What else is Pew paying for relating to the print and broadcast media?

Columbia University in New York City, Johns Hopkins University in Baltimore and the University of Pennsylvania in Philadelphia are among the top journalism/communications schools in the U.S. Pew has given Columbia over \$35 million, with over \$20 million of that for various journalism projects. One of these, the Project for Excellence in Journalism, received over \$15 million from Pew while it was located at Columbia. Since 2006 it has been located at the Washington, DC based Pew Research Center and has received an additional \$8 million from Pew. Pew has given Johns Hopkins University over \$20 million, with about \$7.5 million of that for journalism grants including \$3.9 million for an International Journalism project and \$2.9 million for International Journalism fellowships. Pew has given the University of Pennsylvania over \$40 million, with over \$12 million for print, broadcast and internet communications and over \$5 million to the influential Annenberg School for Communications.

The Project for Excellence in Journalism, at well over \$20 million one of Pew’s most expensive forays into the world of communications, is described on its website as “*a research organization that specializes in using empirical methods to evaluate and study the performance of the press. It is non partisan, non ideological and non political.*”

Pew has also funded the **Pew Center for Civic Journalism** at the **Tides Center** in San Francisco with over \$8 million. From its website, it “*helps print and broadcast news organizations experiment with ways to reconnect to their communities and engage their citizens in dialogue and problem solving.*” The Center for Civic Journalism spun off the Institute for Interactive Journalism at the University of Maryland, which has received over \$40 million in Pew grants. It “*helps news organizations and citizens use new information ideas and innovative computer technologies to develop new ways for people to engage in critical public policy issues.*”

Not only is Pew deeply financially entrenched in the crème de la crème of the U.S. universities where journalists receive their training and in the day-to-day operations and financing of the news media (including the internet), it also evaluates its performance.

And then there are the Pew connections with individual journalists.

Each year the Pew Fellows in Marine Conservation meet at apparently exclusive digs in various exotic locales. In 2002 the meeting was at the Plaza Resort in Bonaire. Cornelia Dean, then the Science Editor at the New York Times, was there, participating in the “Communicating for Results” session and listed as a “Presenter/trainer.” She was back at the 2004 meeting at the Ocean Reef Club in the Florida Keys. There she participated in the “optional” barside discussion, “*Oceans in the Balance: Is Science or Politics Tipping the Scales?*”

Ms. Dean seems to be a direct conduit between Pew-supported researchers and the Times’ 2 million or so subscribers, among whom are just about all of the shakers and thumpers on the domestic political scene. But on occasion her “reporting” seems to go a bit beyond objectivity. One can’t help but question whether this is due to the relationships that were formed barside in Key Largo and as a “trainer” of the Pew cadre in Bonaire.

Did this all come together due to happenstance? Douglas Jehl wrote in the New York Times (*Charity is New Force in Environmental Fight*, 06/28/01), “*from a suite of offices in a high-rise here, a \$4.8 billion foundation called the Pew Charitable Trusts has quietly become not only the largest grant maker to environmental causes, but also one that controls much more than the purse strings. Unlike many philanthropies that give to conservationist groups, Pew has been anything but hands-off, serving as the behind-the-scenes architect of highly visible recent campaigns to preserve national forests and combat global warming.*”

In a profile of Pew Trusts Board member and Executive Director Rebecca Rimel published in the Sunday (Philadelphia) Inquirer Magazine, Steve Goldstein wrote “*Pew, now beginning its 50th year, develops its own causes, creating and funding dozens of programs and independent organizations to carry out a vision -- Rimel's vision-- of social reengineering. The Rimel regime is not interested in merely supporting agencies and programs that maintain the status quo, but in championing high-profile, activist enterprises where the Pew impact can be felt --and seen.*”

“Reforming” fisheries, and not just U.S. fisheries, is now one of Pews’/Ms. Rimels “activist enterprises.”

What fisheries crisis?

(in National Fisherman)

11/01/08

Among the more useful services from NMFS is the online landings data base. With an internet connection and a little bit of skill with spreadsheets, it’s easy to determine what fishermen caught, where and when.

Now, and this might be a surprise to some of you, I’ve been a wee bit skeptical of the “fisheries crisis” claims being made *ad nauseum* by various anti-fishing groups. They’re easy to make, based on the “research” of a handful of advocates who are being sold to the public as objective scientists, but they never seem to be seriously substantiated. So, armed with a 10 megabytes/second connection and Microsoft Excel 2003, I set out to do a little substantiating, or not, of these crisis claims.

I started out with East Coast landings, but minus menhaden because their landings are determined by international commodity markets and politics, not resource availability. For the 57 year period starting in 1950, landings averaged 535,000 tons per year. They plummeted to just over 400,000 tons in the late 60s and early 70s, undoubtedly because of the foreign catcher/processor fleets fishing right off our beaches, recovered rapidly after the passage of Magnuson in 1975, and have bounced around the average since then.. Starting in 1996 they have been trending downwards, and 2007 shows the lowest landings since Magnuson became law, 424,000 tons.

Is this a reflection of a resource crisis? While the antis would have us believe so, it’s much more likely that it’s an artifact of how we’re now being forced to manage our fisheries, with precaution piled on precaution, with all stocks supposedly capable of being at high levels simultaneously, and with inflexible “rebuilding” requirements regardless of Ma Nature’s inability to conform to them.

The difference in landings between the post-Magnuson high in 1980 and the 2007 low is 160,000 tons. This seems like a big pile of fish, and indeed it is. But just how big?

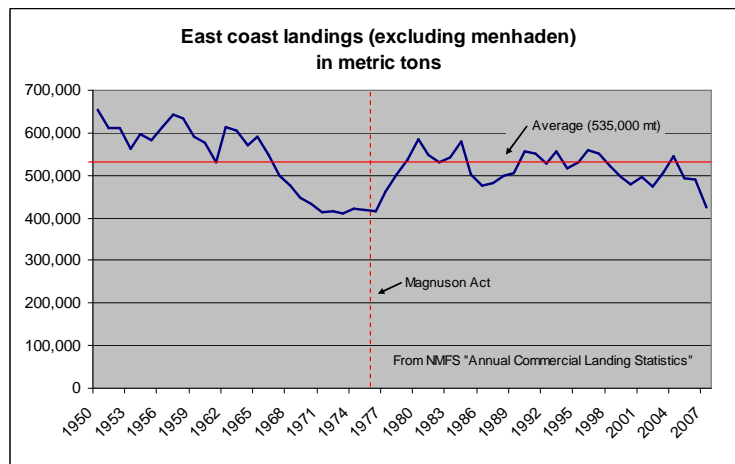
Off the Northeast there’s about a half a million metric tons of spiny dogfish, a quarter of a million tons of Acadian redfish and a third of a million tons of haddock swimming around. That’s well over a million tons of catchable and marketable fish. In 2007, 3,400 tons of spiny dogfish, 800 tons of redfish and 3,600 tons of haddock were landed. Over a million tons of biomass yielding less than 8,000 tons of landings, and most of those million tons within reach of boats from New England that are teetering on the brink of bankruptcy.

Can we convert those fish swimming around out there into landings that would reverse the decline that provides the antis with so much of the ammunition they use against commercial fishermen? In spite of the jobs that would mean, the businesses saved and the misery avoided, we

can't. There aren't enough large female dogfish, in spite of the fact that there are so many dogs that they're interfering with virtually every other fishery (and, according to a recent paper, eating about a third of the young cod and a third of the young fluke and, according to NMFS, 68 million tons of herring every year as well). It's just about impossible to fish for redfish and haddock because of gear and bycatch controls. And none of the restrictions on fishing for these three species can be eased because all of the discretion in the management system has been removed by the expensive and effective lobbying of the antis - who are all willing at any opportunity to expound on how they're only interested in saving the short-sighted fishermen from their own selfish selves.

So a hundred thousand tons or so of fish worth maybe \$50 million are going uncaught. But if they were caught, where would the evidence of a "fisheries crisis" be? A hundred thousand tons would get the Atlantic landings right up to the 57 year average, and that would sure cut into the old doom and gloom by the professional hand wringers, wouldn't it?

Thirty or forty years ago, when they saw the stocks they were fishing on declining, guys would go fish for something else. But they'd keep on fishing. That's the way it went for generation after generation, with the government there to help them – after all, it used to be called the Bureau of Commercial Fisheries. Today they can't. Inflexible management, unfeeling "conservationists," billion dollar foundations and a bureaucracy increasingly remote from fishing communities have left us with what is hard to describe as anything but a mismanagement system.



Real ecosystem based management

11/20/08

Seafood consumers are constantly bombarded with doom and gloom pronouncements concerning the dire straits that our fisheries are in, and these pronouncements are invariably connected to the supposed misdeeds of commercial fishermen. Many are along the lines of "X% of the world's (or the United States' or the Pacific's or whatever else fits) fisheries are being fished either at or beyond the level of sustainability."

"X" is always an alarmingly large number, and undoubtedly leads to widespread concern that commercial harvesting is leading to the demise of the world's oceans, or at least the demise of all the useful, edible or appealing critters in them. That is unquestionably the reason for combining overfished fisheries with those being fished at the maximum. After all, "75% of the stocks are overfished or at their MSY level" is a lot more impressive than "25% of the stocks are overfished," and when you're intent on convincing as many people as you can that fishing is the worst thing going on in the oceans, a bit of purposeful misdirection is a valuable part of the campaign.

How relevant are these dire sounding warnings? First off, with a world population rapidly approaching 7 billion, and with too many of those people being undernourished, shouldn't we be more alarmed by the fact that there are any fisheries that aren't being fished at their max? But that's another story. For now, let's focus on the concept of overfishing.

While definitions vary, it's generally agreed that an overfished fishery is one that's harvested at a rate that's too high for it to replenish itself. This assumes that fish stocks, when not being subject to fishing mortality, exist in some steady-state equilibrium regardless of other environmental perturbations. This is reflected in the fact that fisheries managers estimate natural mortality at some constant low level (usually around 20% per year). It also assumes that managing every fishery so that each will be at levels yielding the maximum harvest every year, year after year, is what we should be aiming for.

Those are two pretty big assumptions.

The first assumption, that fishing is the only thing needing management, is a logical outgrowth of our fishing-centric philosophy of management. Back in the early days the feeling was that the ocean fisheries would go on forever. According to T.H. Huxley in 1883, "*in relation to our present modes of fishing, a number of the most important sea fisheries, such as the cod fishery are inexhaustible.*" This wasn't so for lakes and ponds, relatively stable bodies of water where the effects of fishing were pronounced and readily observable. Hence fisheries management at the time involved little more than waiting for the ice to melt then regulating the fishing – with some hatchery replenishment thrown in now and then. (Another reason that fishing gets all the focus is because it's the only thing that the fisheries managers can manage. If they didn't have fishermen to control, they wouldn't have much of anything to do at all.)

Other than realizing that ocean fisheries aren't really inexhaustible, it seems we haven't gotten much beyond that. Natural mortality is taken as a constant. Environmental fluctuations are ignored, something that is really surprising considering the number of people, institutions and organizations that have jumped on the global warming bandwagon. The impacts of an ever-increasing population increasingly moving to the coasts and bringing with it an ever-increasing per capita use of pharmaceuticals and household chemicals are ignored. All of the fisheries management focus is on managing the fishermen.

The second assumption, that all fish stocks should be at a level that will produce the Maximum Sustainable Yield, might make sense if each stock of fish existed as a discrete and independent unit in the ocean, neither affecting nor being affected by other stocks. It works in farming; the corn in this field, the cows in that, the rutabagas over there in the corner. The farmer can maximize production of all three crops. But the farmer has fences, can selectively apply fertilizers and pesticides, and has a really good understanding of what's going on with each crop based on direct observations and a lot of history. A successful farmer knows that he's not going to maximize his milk, corn and rutabaga production with holes in the fences. The milk production is likely to go up and the vegetable production will undoubtedly go down. So he keeps his fences in good repair, his fertilizer levels up and his pest levels down. His production can be maximized.

We don't have any fences in the ocean. Nor can we do much to modify the ocean environment. And we certainly don't have a full understanding of what's really going on. Yet we – at least those among us who are responsible for managing our fisheries – have built an expensive, complex and cumbersome bureaucracy based on the idea that if we are controlling fishing properly all of our oceanic "crops" should be harvestable at maximum levels, and when they're not, it's because of too much fishing.

Is it any wonder that in fishery after fishery, in spite of constant and increasingly drastic reductions in fishing effort, stocks continue to decline?

While not the only example that comes to mind, the spiny dogfish situation off the Northeast U.S. coast points up the obvious shortcomings of this philosophy.

For those readers who aren't familiar with them, spiny dogfish are notoriously voracious small sharks with the disturbing capacity to interfere with just about every fishery – hook, pot or net – in areas where they are present in significant numbers. They steal bait, clog nets, damage targeted species in nets or on hooks, destroy gear and are a general nuisance.

But equally, or perhaps more, importantly, they eat just about anything that's their size or smaller. In its Global Information System Species Fact Sheet, the Food and Agricultural Organization of the United Nations says of dogfish "*this shark is a powerful, voracious predator that feeds primarily on bony fishes, and is capable of dismembering rather large prey with its strong jaws and clipper-like teeth. Its bony fish prey includes herring, sardines, menhaden and other clupeids, true smelt (Osmeridae) and their eggs, hake, cod, pollock, ling, haddock and other gadoids, midshipmen, blennies, sand lances, mackerel, porgies, croakers, flatfish and sculpins. It is thought to prey on most available bony fishes smaller than itself, and will often prey heavily on abundant schooling fishes, but newborn dogfish attack herring larger than themselves, as may adults with cod and haddock.*"

Having a lot of them available, with existing and robust export markets and very probably recognizing their deleterious effects on other fish and fisheries, the federal government invested significant effort and dollars into developing a commercial fishery for spiny dogfish in the Mid-Atlantic and New England states in the late 1980s. Larger females were targeted and landings peaked at just over 20,000 metric tons in 1998. At the time there wasn't, and there still isn't, any domestic demand for dogfish, but the government eagerly provided as much help as possible to allow U.S. dogfish to be exported.

What happened after 1998? In a nutshell, because of a significant decline in the proportion of large females in the population, the managers decided that a vigorous dogfish fishery wasn't a good idea after all. In the next two years, dogfish landings were halved, and by 2004 had shrunk to 900 tons. Among other things (other things being really unhappy costumers and a lot of wasted money and effort), this exercise added significantly to our fishermen's understanding of the phrase "we're from the government and we're here to help you."

After almost a decade, the dogfish population is now considered to be "rebuilt," and a small commercial fishery is being initiated. Landings will be in the neighborhood of 10,000 metric tons, considered sustainable for the rebuilt population. (For those who are interested, the Executive Summary of the federal Spiny Dogfish Fishery Management Plan is available at <http://www.mafmc.org/mid-atlantic/fmp/dogfish-suppl.htm>.) In theory, the fishery will be able to support annual landings at this level forever. At 30 cents a pound, that means that the fishery will return between seven and eight million dollars to the fishermen each year.

The current biomass is estimated to be approximately half a million metric tons. In a paper published in 2004, it was estimated that spiny dogfish consumed between 0.4% and 2.6% of their body weight each day. It's taking between 440 million and 2.8 billion pounds of prey every day to keep that amount of dogfish going.

As recognized by the FAO, most of the fish that dogfish eat are either commercially valuable or are eaten by commercially valuable species. So you would think it would be critical for any rational fisheries management program to consider the cost – at least in terms of other fisheries if not the ecosystem – of that sustainably harvested 10,000 tons of dogfish. It isn't.

Because of amendments to the Magnuson Stevens Fishery Conservation and Management Act, the legislation that controls fishing in the US EEZ, all fish stocks must be managed to produce the Maximum Sustainable Yield (actually, the legal requirement is for the Optimum Yield, which for the purposes of the Act is virtually the same). The amendments were added thanks to the efforts of the foundation-funded anti-fishing groups. So we're legally required to have at least a billion pounds of dogfish off our New England and Mid Atlantic states in perpetuity.

What's does that mean? New England Fisheries Science Center researchers estimate that spiny dogfish eat 68,000 metric tons of Atlantic herring annually. The total Atlantic herring catch is set at 194,000 metric tons. If, as seems logical, the spiny dogfish biomass was reduced by 50%, the dogfish predation on herring would be reduced by somewhere around 50% as well. That would mean another 34,000 tons or so of herring could be available for harvest or to provide other ecosystem services. If the total was harvested, at \$285 a ton that would equate to another \$10 million of herring landings.

It's also been reported that in 1998 spiny dogfish predation accounted for 62 million age 0 and 1 summer flounder (the biomass of dogfish in 1998 was close to what it is today). In 2005 the recruitment of age 0 summer flounder was approaching 100 million fish.

Historically this is one of the most valuable finfish fisheries on the U.S. Atlantic coast, and like all flatfish, summer flounder bring a high per pound price to the boat. Today there are severe harvest restrictions on it because of prior "overfishing." Landings were at 4,300 tons in 2007, but they have been as high as 18,000 tons in past years. With spiny dogfish predation reduced by 50%, how many more summer flounder would be available for harvest?

Spiny dogfish consume a lot more than herring and summer flounder, and as opportunistic predators they tend to feed on what's most readily available. So in New England we have a multi-species groundfish fishery that the managers are struggling to rebuild, all of the species in the groundfish complex are listed as preferred dogfish fare by the FAO and by just about anyone else who's compiled such a list, the dogfish stock has continued to increase as several of the groundfish stocks have continued to decline, and the fishermen are paying the price. It's inarguable that less dogfish mean more groundfish.

It's plain that increasing the spiny dogfish harvest to reduce the biomass would pump tens of millions of dollars into the coastal economy, not just through temporarily increased dogfish landings, but also permanently increased landings of other, competing species. And there's no benefit from such a massive dogfish population out there. Yet at this point that's what the law requires.

Unfortunately, this isn't a situation unique to dogfish. And it's not going to get better until we sell the idea that "it's not just fishing" and start to effectively manage our ocean ecosystems.

Maximum sustainable yield and effective fisheries management

01/19/09

Due to ill-advised amendments to the Magnuson Stevens Fisheries Conservation and Management Act, all federally managed fisheries are required to be at a level that will produce the maximum sustainable yield. This is a requirement in spite of the fact that having “competing” species at this level might be biologically impossible or undesirable for economic or other reasons. The folly of this legislative mandate becomes obvious in an examination of the current situation regarding the “plague” (according to both recreational and commercial fishermen) of spiny dogfish, *Squalus acanthias*, currently impacting many fisheries from South Carolina to Maine.

In specific instances, and the dogfish situation off the Northeast coast provides a sterling example, fishing pressure can—and should—be used as an effective management tool. Given the basic fact that a particular area of ocean can only support a limited biomass of fish, by fully understanding and carefully controlling the makeup of that biomass through selective fishing, the species mix of the fish available for harvest can be optimized, producing a true optimum yield.

The Maximum Sustainable Yield (MSY) of a stock of fish is a theoretical level of harvest that will allow the stock to replenish itself continuously. Most simply, the rate of increase of the stock will be balanced by the rate of removal from the stock. When this condition is reached, the conventional wisdom has it, the fishery will be sustainable.

If any assumption can be said to be basic to modern fisheries management, it is that the sustainability of a fishery can be guaranteed by properly controlling fishing mortality. In fishery after fishery in which the population is not at a level that will produce the theoretical MSY, management efforts consist primarily of reducing fishing effort. Implicit in this is the belief that fishing is the most significant factor in determining if a fish stock is at the MSY level or not and is the only variable, that all other sources of fish mortality are negligible relative to fishing mortality and are constant as well.

Obviously this is not the case. On the macro-scale, regime shifts affecting entire ocean basins are accepted as regular occurrences. These profound perturbations have significant consequences for entire ecosystems and on virtually all of the fish stocks in them. On a lesser scale, non-fishing anthropogenic and natural factors can and do affect processes like spawning success and recruitment. These directly affect stock size. And most obviously, big fish eat little fish, so a bumper crop of species X can have a dramatic impact, positive or negative depending on who's eating who, on species Y and Z. These phenomena aren't necessarily regular, predictable or identifiable, yet in fisheries management they are treated as if they are, all being lumped together under Natural Mortality and assumed to be constant.

Maximum Sustainable Yield and the Magnuson Stevens Fisheries Conservation and Management Act

One of the requirements of the Magnuson Stevens Act, the federal legislation that controls fishing in the US Exclusive Economic Zone, or more accurately one of the implied requirements of the Act, is that all fisheries be at the level that will produce MSY.

The first of the 10 National Standards that are applied to Fishery Management Plans put in place through the provisions of the Act is “conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the OY (Optimal Yield) from each fishery for the U.S. fishing industry.”

From the Act (16 U.S.C. 1802, MSA § 3):

104-297

(33) *The term "optimum", with respect to the yield from a fishery, means the amount of fish which—*

(A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;

(B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and

(C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

(34) *The terms "overfishing" and "overfished" mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.*

The definition of OY supposedly allows for departures from the MSY. However, as even the casual consideration of the above section of Magnuson indicates, that is not the case, or more accurately, that is only the case when a stock isn't at the MSY level. In that case the stock is considered to be overfished, and if it is considered to be overfished, it must be “rebuilt” to the MSY level by having the harvest level reduced.

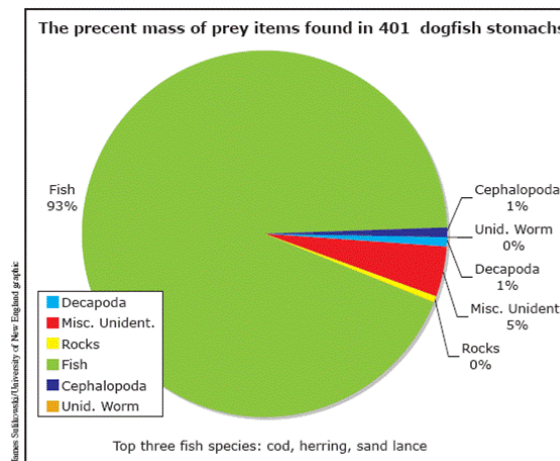
But will having every stock of fish in the U.S. Exclusive Economic Zone being managed at the MSY level be economically, socially or ecologically “optimum?” Will it automatically provide “*the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities?*” Economically and socially, emphatically no. Is it even possible? Ecologically a not so emphatic “maybe.” Considering all of the good intentions, all of the effort, all of the pain and suffering and all of the money – both from the public and the private sectors – that is being expended in efforts to reach what are perhaps undesirable and unattainable goals, the results of being tied to the Magnuson concept of OY can be and in demonstrable instances are far from optimum.

Spiny dogfish – the poster fish for mismanagement

The Food and Agricultural Organization of the United Nations, in its “Global Information System Species Fact Sheet,” says of dogfish “this shark is a powerful, voracious predator that feeds primarily on bony fishes, and is capable of dismembering rather large prey with its strong jaws and clipper-like teeth. Its bony fish prey includes herring, sardines, menhaden and other clupeids, true smelt (Osmeridae) and their eggs, hake, cod, pollock, ling, haddock and other gadoids, midshipmen, blennies, sand lances, mackerel, porgies, croakers, flatfish and sculpins. It is thought to prey on most available bony fishes smaller than itself, and will often prey heavily on abundant schooling fishes, but newborn dogfish attack herring larger than themselves, as may adults with cod and haddock.” Ranging up to four feet in length, spiny dogfish may be larger than all but the very largest of the listed prey species.”

The biomass of spiny dogfish off the Northeast coast of the U.S. is conservatively estimated to be in the neighborhood of 500,000 metric tons (that’s 1.1 billion pounds). If there’s one thing that everyone who is familiar with dogfish agrees on, it’s that they are exceedingly voracious. They are notorious for attacking anything that they can catch that’s about their size or smaller. They are primarily piscivorous (meaning they prefer a fish diet when available), they grow to three feet or more in length, and they are born as fully functional predators. Needless to say, many regulated species, species almost always more valuable commercially or recreationally than spiny dogfish, end up as their dinner.

How much do those 1.1 billion pounds of dogfish eat? In the 2004 NMFS publication *Biology of sharks and their relatives*, researchers Wetherbee and Cortés report that spiny dogfish consume between 0.4% and 2.6% of their total body weight per day. Assuming the median level of 1.5%, for the population of spiny dogfish off the northeast coast that amounts to 16.5 million pounds a day, or 6 billion pounds a year. “*Relative to the estimated stock sizes of age-1 fish, the mean number of potential recruits removed ranged from 2% (haddock) to 37% (Atlantic cod) for spiny dogfish With the minimum estimate, the number of juvenile fish that were eaten was generally much less than 10% of the standing stock. Conversely, with the maximum estimate, the number of juvenile fish that were eaten sometimes represents a notable proportion of the stock of prerecruit fish (e.g., 80% of Atlantic cod in the case of spiny dogfish predation).*” (J.S. Link, L.P. Garrison, F.P. Almeida, **Ecological Interactions between Elasmobranchs and Groundfish Species on the Northeastern U.S. Continental Shelf. I. Evaluating Predation**, *North American Journal of Fisheries Management* 22:550–562, 2002)



(from Commercial Fisheries News)

And what do they eat? Besides cod and haddock, apparently anything they can get in their mouths. A limited amount of research has been done on their dietary habits. Reporting on University of New England researcher James Sulikowski’s analysis of the stomach contents of adult dogfish from the Gulf of Maine, Janice Plante wrote in the May, 2008 Dogfish Special Report in *Commercial Fisheries News*, “but in the remaining 340 fish (36% of the fish sampled had empty stomachs), they found – with a few notable exceptions – just about everything: herring, sand lance, flounder, hake, cod, haddock, a few crabs, anemones, worms, and even a couple of rocks, which probably were a byproduct of groveling for crabs. All told, 87% of the stomach contents from these particular Gulf of Maine-caught dogfish consisted of bony fish – with cod, herring, and sand lance being the top three species.”

So, if we project the feeding characteristics of dogfish when they’re in the Gulf of Maine to when they’re elsewhere, approximately 80% of what they eat is composed of bony fish. That’s 5 billion pounds of northeastern fish eaten by spiny dogfish every year. And most of those 5 billion pounds is made up of either the species that fishermen target or the prey that the targeted species feed upon. To put that in perspective,

in 2007 the total commercial landings in the Mid-Atlantic and New England were less than 800 million pounds. Spiny dogfish are eating over six times as much of the region's fish as the entire commercial fishing fleet catches.

(Note that Professor Sulikowski has also done some preliminary dogfish tracking work with satellite tags and has estimated that the actual spiny dogfish biomass could be as high as 1.9 million metric tons – almost 4 times the “official” estimate.)

There are a number of important fisheries off New England and the Mid-Atlantic in which the harvest levels have been severely curtailed due to supposed overfishing. Many of these species serve as prey for the dramatically increasing spiny dogfish population, and virtually all of them compete with dogfish for one prey species or another. Among them is the complex of New England groundfish, which has been effectively used as a cause célèbre by the anti-fishing activists, but others, including summer flounder, are of comparable recreational and commercial significance. Some of these fisheries have not responded to the “traditional” cure for overfished stocks; cutting back on fishing effort. It's indisputable that the huge spiny dogfish population is retarding the recovery of these various other species.

Survey	lbs Dogfish	lbs All Species	% Dogfish
Fall '06	69,031	161,234	43%
Spring '06	66,680	107,349	62%
Winter '06	58,943	114,605	51%
Total '06	194,654	383,188	51%
Fall '05	73,321	152,666	48%
Spring '05	46,992	83,465	56%
Winter '05	79,900	121,062	66%
Total '05	200,213	357,193	56%
Fall '04	58,923	145,430	41%
Spring '04	32,341	94,848	34%
Winter '04	89,932	150,237	60%
Total '04	181,196	390,515	46%
Fall '03	32,661	124,099	26%
Spring '03	55,654	133,134	42%
Winter '03	86,862	163,578	53%
Total '03	175,177	420,811	42%
Fall '02	33,668	153,542	22%
Spring '02	49,496	111,770	44%
Winter '02	88,233	164,748	54%
Total '02	171,397	430,060	40%
Fall '01	58,062	128,892	45%
Spring '01	26,321	75,564	35%
Winter '01	91,686	186,301	49%
Total '01	176,069	390,757	45%
Fall '00	57,018	140,280	41%
Spring '00	24,961	96,789	26%
Winter '00	45,923	91,674	50%
Total '00	127,902	328,743	39%
Fall '99	34,720	118,596	29%
Spring '99	36,434	87,783	42%
Winter '99	88,268	139,124	63%
Total '99	159,422	345,503	46%

None of this is new information. In fact, in 1996 Steve Murawski, who is now the Director of Scientific Programs and Chief Science Advisor at the National Marine Fisheries Service, wrote “*whether species changes on Georges Bank (one of the world's richest fishing grounds located off Cape Cod) are the result of biological interactions among species or are simply the result of differential fishing mortality rates remains conjectural. However, total biomass in the system does seem to have again reached a threshold. The ability to increase the abundance of marketable species may thus be limited by predation from or competition with the elasmobranch species*” (Can we manage our multispecies fisheries? Fisheries 16-5:5–13).

The negative impacts of spiny dogfish on other fisheries aren't limited to predation and competition. In fact, it's difficult to find any ocean fishery, recreational or commercial, off the northeast US coast that isn't being directly and increasingly affected. Dogfish consume other fish after they are hooked or captured by a gillnet, their abrasive skins and sharp spines damage other species in the net, they prevent the capture of desirable species by clogging nets, eating bait or getting hooked, they greatly increase the wear and tear on any recreational or commercial fishing gear that they interfere with, and they force desirable species from traditional areas by their sheer numbers and rapaciousness.

The economic impact of this huge biomass of dogfish on recreational and commercial fisheries, while so far unaddressed, must amount to tens of millions of dollars annually. The social impacts, as evidenced by the prolonged and possibly futile efforts to rebuild New England groundfish and their corrosive effects on traditional fishing communities from Long Island to Maine, are staggering, as are the ecosystem impacts.

The billion plus pounds of these notoriously voracious fish are having a greater impact on the fish stocks from South Carolina to Canada than the combined commercial and recreational fishing fleets have had in recent history (and reliable commercial landings records go back to 1950). But as it stands today, the spiny dogfish Total Allowable Catch (TAC) is never going to exceed 10,000 metric tons per year, and that level will only be possible when the total dogfish biomass is officially recognized as being 450,000 metric tons – 990 million pounds (see the penultimate page of Paul Rago's Powerpoint presentation by following the link on the Philadelphia Dogfish Forum page at <http://www.fishnet-usa.com/dogforum1.htm>).

What can be done about this much less than optimal situation? With the Magnuson Act as it is today, distorted by anti-fishing activists, nothing at all. As long as Magnuson requires that every stock of fish be at MSY, a huge part of the productivity of some of our most productive waters is going to be squandered by preserving an artificially high biomass of a species of low recreational and commercial value.

And this is only one of the most egregious examples of an ever-increasing host of problems for fishermen, for seafood consumers and for the marine ecosystem resulting from an irrational and unrealistic Magnuson requirement .

Magnuson could – and should – be amended to allow management decisions to be made in accordance with the definition of OY that is already included in the legislation (“the amount of fish which will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems.”) The spiny dogfish biomass could be “fished down” to a more acceptable level, perhaps something on the order of 200,000 metric tons, by temporarily increasing the level of harvest. Once the lower, more desirable biomass was reached, the TAC would be lowered to a level that would maintain the biomass at that sub-MSY level, yielding a sustainable spiny dogfish fishery and allowing other far more valuable fisheries to be rebuilt to MSY levels, something that might well be impossible today because of dogfish predation and competition.

Too much of a good thing?

The biomass estimate for Atlantic herring is higher than that for spiny dogfish, hovering around a million metric tons. Two decades ago the biomass was approximately 10% of that.

Atlantic herring are among the most important forage species in Mid-Atlantic and New England waters. Based on harvesting the exploding population, a commercial fishery has developed over the past decade with large vessels utilizing efficient trawling and seining gear. This “new” herring fishery complements an existing traditional purse seine fishery.

The increase in herring landings this expansion of the fishery occasioned coincided with a decrease in the occurrence of some of the New England groundfish stocks and of migratory bluefin tuna, which support small yet significant hook and line and harpoon fisheries. The growth in herring landings, and the assumed relationship between that growth and decreasing numbers of groundfish and tuna, sparked the development of organized opposition to the newer herring fishery. Among the opponents were traditional New England fishermen and a coalition of “conservation” organizations created, supported and in other ways tied to the Pew Charitable Trusts (see the Oil Slick section of the Fishnet-USA titled Fisheries management – it's time for a new paradigm at http://www.fishnet-usa.com/new_paradigm.html). The goal of these people and groups is ever-increasing restrictions on the newer entrants into the herring fishery, based on the idea that they are catching fish that would otherwise be enriching the productivity of New England waters.

In a presentation to the New England Fisheries Management Council titled “Fishery Production Potential of the Northeast Continental Shelf” on November 20 last year, the National Marine Fisheries Service's Mike Fogarty focused on the ecosystem interactions between Atlantic herring and other species (go to <http://www.nefmc.org/actions/index.html> - and click on #13, for the audio of his presentation. The Powerpoint presentation is available at http://www.nefmc.org/press/council_discussion_docs/list_of_nov2008_discussion_docs.html). In what was to a large extent the justification for a shift to ecosystem based management, Dr. Fogarty discussed various impacts of the existing and growing herring biomass. As fairly non-selective feeders, herring consume larger zooplankton like adult copepods and larval fish (including larvae of the various groundfish species). They prey on groundfish as larvae and compete with groundfish as juveniles, and a couple of billion tons of herring can do a lot of eating and a lot of competing.

But the potential impacts of this huge herring biomass aren't just restricted to the groundfish stocks. The type of copepods that herring feed on are one of the principal food sources of right whales, and evidence points to an inverse relationship between their abundance and the calving

success of this endangered whale. Also, there's evidence of a reduction in the size of the herring at maturity and possibly a lack of condition. This could be having a negative impact on the bluefin tuna that feed so heavily upon them.

Menhaden, in the same family as herring, are another schooling, plankton-feeding species found in great abundance in Atlantic coastal waters and in the Gulf of Mexico. Like Atlantic herring, they are considered a forage species, and like herring, their "protection" (from commercial harvesting) is being sought by anti-fishing activists and recreational fishermen. As a response to a drive to shut down the menhaden fishery in Texas state waters, Omega Protein, a menhaden fishing and processing company, commissioned the consulting group Ocean Associates, Inc. to review the science relating to the ecological role of menhaden and their management. Ocean Associates' report, **Gulf of Mexico Menhaden: Considerations for Resource Management**, bears out much of what Dr. Fogarty reported on regarding the ecological impacts of sea herring. From the Executive Summary:

"Recognition by the (Texas Parks and Wildlife) department that menhaden are omnivores is profound, with far-reaching implications that are rooted in the menhaden scientific literature. As omnivores, the juveniles and adults consume the larger phytoplankton (drifting algae) and all the zooplankton (small animals) they encounter. The zooplankton consists largely of animals that spend all or most of their lives carried by currents, eating the algae and each other. However, it also includes meroplankton, "temporary" plankton – eggs and larval and very young juvenile fish, shrimp, oysters, and crabs. Capture efficiency of larger organisms during filtering is high and nearly all that enters menhaden mouths are consumed. However, as any organism that loses a high percentage of its population every day to predation (probably about 10%/day for the first year), the menhaden are most abundant when they are larvae. Menhaden larvae eat mostly zooplankton in directed attacks and have teeth to help them capture their prey, which includes all zooplankton and virtually all fish eggs and larvae found in their presence. As stated by TPWD, menhaden are "a key forage species for many other species in the gulf". Likewise, many other species in the Gulf, during their egg and larval and smallest juvenile stages, are also forage for menhaden. Menhaden adults, swimming at two ft. per second with large open mouths, can each clear zooplankton (including fish and shellfish eggs, larvae, and small juveniles) from over 25 quarts of water per minute.

Traditional stomach analyses have not captured the extent of juvenile and adult menhaden's animal diet because of their extremely rapid digestion and their regurgitation of stomach contents during sampling. Putting the sampled animals on ice does not stop digestion, which is complete in a few hours, and quickly works through even the stomach walls and into the flesh. Recent menhaden diet studies using fatty acid composition and carbon and nitrogen isotope ratios, confirm menhaden to be primarily carnivores at all life stages. DNA analysis of already-digested stomach contents in herring (a close cousin) shows that young stages of predatory fish are part of their diet, even though they are quickly rendered invisible by rapid digestion.

In a balanced ecosystem, species adapt reproductive strategies to cope with variations in predation and other factors. Since menhaden predators are below virgin levels, unfished menhaden will expand to the limits that food, disease, and habitat will allow. These increased menhaden populations could well spell the demise of shrimp, red drum, blue crab, oyster and other populations whose youngest forms share space with always-hungry, always-feeding menhaden. This is particularly true of species that are at reduced levels, with reduced spawning potential. We wonder if menhaden's extensive predation on, and competition for food with, other species has been considered in this proposal."

So, it appears, we're in the same situation with the massive stocks of menhaden in the Gulf of Mexico and off the South- and Mid-Atlantic coasts as we are off New England because of Atlantic herring. And what's the response of the managers - whose hands are tied by the inflexibility injected into Magnuson by the successful lobbying efforts of the anti-fishing activists? To restrict fishing even further.

How can yields actually be optimized?

The so-called conservationists involved in fisheries would have us believe that there's some sort of "natural balance" possible in our inshore and offshore waters and that, if fishing is reduced adequately across the board, this mythical balance can be reestablished. That is far from the case.

In their Rousseau-inspired misconception of what the oceans should be, they look at anthropogenic effects as categorically bad, with fishing in general and not harvesting every stock at the MSY level in particular among the worst. This is not necessarily the case. Fishing can be an effective management tool. In the case of species like herring, menhaden and dogfish, allowing – or encouraging – harvest levels above what would be considered "sustainable," and then maintaining the populations at lower than maximum levels by carefully regulating harvest might be all that is necessary to return "overfished" stocks of much more valuable species back to their OY levels.

Take, for example, the current situation regarding the New England groundfish complex. Fishermen have been hit with a seemingly interminable series of harvesting reductions extending back well over a decade. These cutbacks have been so severe that, if the most recent "management" proposal by NMFS is instituted, boats will be allowed to fish only 20 days a year (see **Sparks fly as feds propose new fishing curbs** by Becky Evans in the 01/15/09 New Bedford Standard Times at <http://www.southcoasttoday.com/apps/pbcs.dll/article?AID=/20090115/NEWS/901150373>).

This is due to the fact that several of the groundfish stocks haven't been recovering as they were expected to (at least by the managers) following previous drastic reductions in fishing effort. At the same time, as we've seen above, the stock of spiny dogfish, notoriously voracious predators on groundfish and their prey species, have been allowed to increase unrestrictedly. And the even larger Atlantic herring stock could be impeding the groundfish recovery as well.

Reduce the number of spiny dogfish? Of course not. The Magnuson Act won't permit it. Reduce the number of herring? Ditto, but for political rather than biological reasons.

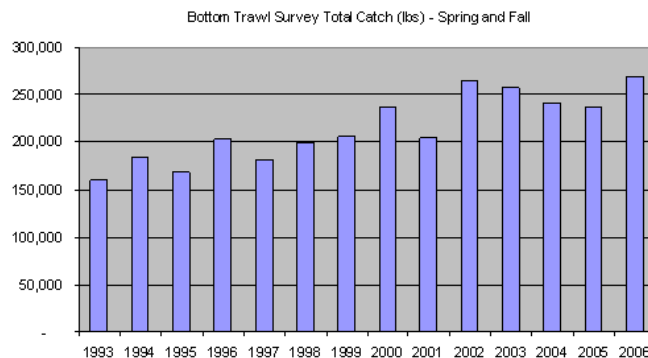
But what if we could? Using such an approach, the economy will benefit, the ecosystem will benefit (through increased biodiversity), and the fishing communities that are dependent on "balanced" fisheries will benefit as well.

And there are other fisheries that are facing ever more stringent harvesting restrictions each year because they aren't performing as the fishing-centric computer models predict that they should. The summer flounder fishery in the mid-Atlantic is one. What's the impact of spiny dogfish on the summer flounder stock?

An EEZ that is being managed to provide the optimal harvest from a complex of interacting species would seem to be preferable to what we have today. The way we're doing it today, our most valuable fisheries are increasingly subject to the depredations of other, less valuable species that enjoy the protection of a management regime that is totally stacked against rational management. If fewer spiny dogfish, fewer Atlantic herring or fewer menhaden will mean an increase in more valuable, more desirable or more threatened species, then why shouldn't the people responsible for fisheries management be provided with the administrative wherewithal to allow this? Legislation mandating that they can't isn't benefitting anyone beyond the few anti-fishing activists who have built careers on saving fish stocks that clearly don't need saving, and it's certainly not benefitting the ecosystem. So why do we have it?

How are the fish of the Northeast U.S. really faring?

While researching this FishNet I came across a spreadsheet that reproduced the Northeast Fisheries Science Center's spring and fall bottom trawl survey results going back to the mid 1980s. Before 1993 these surveys extended into Canadian waters north of the Hague line, but since then have covered the same areas from the Gulf of Maine to Cape Hatteras and essentially the same stations. Hence they provide a reasonable picture of trends in the abundance of those species that dwell on or near the bottom that can be caught with the sampling gear used (a standard otter trawl). The species sampled include dogfish, skates, Atlantic herring, hakes, cod, haddock, pollock, various flatfish, Atlantic mackerel, butterfish, Acadian redfish, goosefish, American lobster and squid.



As the plot to the right shows, the weight of the fish sampled in the two surveys has increased more or less constantly, the total in 2006 being about 70% greater than in 1993. Particularly considering that just about all of the species sampled are marketable, it seems really difficult to acknowledge any New England fisheries "crisis," nor to understand the fact that with so many fishermen—and so many of the businesses that depend on them—in such poor economic shape the only response from the managers being to restrict fishing even more.

It's hard to imagine a more compelling reason for a serious reassessment of our fisheries priorities.

Now is time for broad, national effort

(in National Fisherman)

03/01/09

On January 20th we're going to have a new Administration in Washington. While knocking on every piece of wood I can reach, it's hard for me to imagine that it will be worse for the fishing industry than the previous two have been.

Particularly considering all of the talk about President Elect Obama's people hitting the ground running, being in operation ASAP, I can't stress how important it will be to all of us to have our collective foot in the DC door just as quickly. That raises the question of how best to do that.

Too often in the past, the commercial fishing industry has been at internal odds with itself, and at odds with other fish/seafood "user groups" as well. In large part that is why we, our recreational fishing colleagues, and the other businesses depending on domestic fish and shellfish are in the sorry shape they're in. While all we've had to offer to the politicians are conflicting demands on every issue, the antis have come together and been able to successfully push their "fishing is bad" fiction.

We've been struggling with the results for over a decade.

We're sorely in need of a national agenda, but not just an agenda of commercial harvesters. While commercial fishermen have borne the brunt of the anti's foundation-funded campaign until recently, anyone who catches, processes, transports, buys, sells or in any other way benefits from catching domestic fish or shellfish is now paying a price. And more of them are realizing that every day.

How do we put together such an agenda? Fortunately, we have some tools to help us do that, at least from the commercial harvesting segment. Already in existence and operation are organizations that could – and should - represent just about everyone in the U.S. fish and seafood industry.

In no particular order, we have the National Fisheries Institute (NFI), Commercial Fishermen of America (CFA) and the Seafood Coalition (SFC). The CFA, representing individual fishermen, has made its mark in pushing for health coverage and disaster relief for domestic harvesters. NFI successfully represents the "corporate" side of the seafood industry from the ocean to the table. The SFC, made up of the leaders of harvester and processor associations, is an ad hoc group that has had a significant role in Magnuson reauthorization. Together they cover most of the waterfront, and quite a bit beyond.

There are other, fishery-specific organizations that could also contribute significantly to this effort. (While it probably goes without saying, any involved organizations or individuals must be free of any foundation funding "taint.")

So what's missing? Obviously, a national consensus on what, from the fishing perspective, the myriad of businesses that depend on our fisheries need to thrive. The antis have a consensus, though it's little more than "green" extortion based on mass-marketed fringe science. It's gotten them to where they are – with a virtual stranglehold on U.S. fishermen and every business that depends on what they harvest.

How do we achieve a national seafood harvesting consensus? Conceptually it's easy. Industry leaders would get together and hammer one out; one that's easy-to-understand and based on common sense and noncontroversial principles. Practically, it's not going to be that simple. It's going to require some people to stifle some animosity, it's going to require people in some fisheries that are doing ok to adopt a longer term outlook based on the fact that next year isn't next week, and it's going to require everyone to realize that we're all in it together, and act accordingly.

If we can do that, we should be able to enlist the support of associated groups. Who in the restaurant industry wouldn't support the fishermen's ability to continue providing fresh, domestic seafood. Or in the supermarket trade? How about truckers, or box or gear manufacturers? Or local Chambers of Commerce. Or anyone who benefits when fish are caught, no matter by who.

I don't know how much is possible or how far we can go, but I'll bet dollars to donuts that OFCT funded members of the anti-fishing clique are already knocking on doors and pushing their distortions. If we let them continue without attempting to present the real picture of what's going on in our waters, it will be hard to argue we don't deserve what we get down the line.

(In the interests of full disclosure, I'm one of the founding members of the SFC and in the past have worked on initiatives funded by both it and NFI).

Beyond our scope

(in National Fisherman)

02/01/09

The American Prospect describes itself as "*an authoritative magazine of liberal ideas...*" With a website that attracts a million visitors daily, and a paid circulation of 37,000 it's anything but inconsequential.

Accordingly, I approached the article in it on November 24th **Saving the Fishbanks** by journalist Colin Woodard (he also writes for *The Christian Science Monitor*) with trepidation. This was justified, not just because it was more of the same old same old, but because Mr. Woodard did such a curiously lopsided job of reporting on the underlying – or not – science and the involved scientists.

He reported on the work of, and quoted, Boris Worm, Callum Roberts, Daniel Pauly and Elliot Norse, four premier ocean crepe hangers funded by OFCT. While that is troubling, even more troubling is that he reported their work, which I don't consider as anything but advocacy science, as accepted fact. For example, he wrote of fisheries managers being concerned with the decline of the large sharks on the eastern seaboard but missing *"the knock-on effects (of the decline), which included the decimation of North Carolina bay scallops, Chesapeake oysters, and other shellfish."* I addressed this in a previous column, identifying it as the latest "fishing is the root of all oceanic evil speculation" based on nothing more substantive than shark and selected shellfish populations declining simultaneously (see http://www.fishnet-usa.com/natfish_sharks_rays.htm). He also covered "fishing down the food chain," a supposed phenomenon for which there is no supporting evidence in the U.S. fisheries (see http://www.fishnet-usa.com/then_now.html), the totally unsubstantiated and generally scoffed at prediction that *"the world's commercial wild-caught seafood species will have collapsed by 2048,"* and that *"ninety percent of the world's large predatory fish have been harvested since 1950,"* an idea that found virtually no acceptance in that segment of the scientific community that hasn't been swayed out of any semblance of objectivity by big-buck foundation funding.

On the slightly bright side, the anti-fishing science that Mr. Woodard reported on was "news" from several years or more back; nothing new and nothing particularly newsworthy from the sound bite perspective that controls news today. Perhaps once you've predicted that the oceans will be empty of useful fish in forty years, there's not much more to say. Even brighter, he also gave a lot of space to NMFS Chief Scientist Steve Murawski and Portland Fish Exchange general manager Bert Jongerden, both making it clear that our fisheries were improving, and to Maine fisherman Ted Ames and his controversial ideas for increased local control of fisheries. To his credit, Mr. Woodard didn't focus entirely on bad news, but then how could he?

U.S. fishermen are getting better at conservation, and Mr. Woodard did mention that the OFCT scientists grudgingly recognized that.

In fact, as far as the world's fisheries are concerned, US fishermen are demonstrably among the best. Debunked predictions of oceanic catastrophes can't be laid at their feet. Therefore, why this slavish devotion by supposedly objective writers writing for a predominantly U.S. audience – or by U.S. envirogrs whose membership and influence don't extend beyond our borders – to supposed excesses that our fishing industry is either beyond or is moving away from at head-spinning (and far too often, budget-busting) speed? Is it just "do-good" idealism or a somewhat darker pragmatism?

Getting back to Mr. Woodard, consider his book, **Ocean's End: Travels Through Endangered Seas**. According to Publisher's Weekly, *"drawing on his travels across six continents and 100,000 miles, Woodard skillfully supports his argument that pollution, harmful fishing practices, ignorance and global warming are destroying the world's oceans."* Obviously there's an audience for material like this, but it's a U.S. audience understandably focused on U.S. problems. So how can writers like Mr. Woodard, or organizations like Oceana, reach that audience? Sadly, it seems, by some kind of guilt by association that seeks to hold U.S. fishermen responsible for the supposed sins of their fathers or their overseas colleagues.

Suppose Mr. Woodard wrote that most US fisheries are in good shape and getting better (inarguably they are), and that the problems are in the rest of the world? As having a populace that the news media have convinced live in increasingly crime-ridden neighborhoods (they don't) demonstrates, local crises are the ones that sell. And what are the odds that anyone in Oceana's world is going to write a check or support legislation to "save" fish in the waters off Somalia or in the Antarctic. Accurate or not, what the US public takes to heart must be a lot closer to home than that.

Big ain't bad
(in National Fisherman)
03/01/09

I've been working with the commercial fishing industry for over 30 years. I represent people with big boats, small boats, medium boats and on-shore businesses. I work with leaders of organizations that represent the full gamut of commercial fishing; catchers, processors, marketers, exporters, importers, etc. They all have one thing in common. Big boat or small, corporate or mom-and-pop, they're all in it for the long haul and know that that demands sustainability.

Accordingly, I get seriously aggravated when I see one commercial fishing group attack another, particularly over misrepresented "sustainability" issues. I find this counterproductively self-serving and short-sighted at the best of times, but now – with virtually all of the industry "under siege" – it's particularly repugnant.

Hence, to write that I was less than enchanted by the most recent missive from Niaz Dory, ex-Greenpeace activist who is now managing director of the Northwest Atlantic Marine Alliance (NAMA), would be a serious understatement.

Ms. Dory is not a believer in "big is beautiful" in business, and that's fine. Her seeming Luddite sentiments are two centuries out of date, but they might relate to who she works for and perhaps what she actually believes. None the less, her attack of "industrial" fishing, likening it to her supposed evils of agribusiness and the energy industry, is particularly galling to me. In her words, *"think renewable clean energy (small)*

vs. *dirty non-renewable energy (big)*. We already know the effects of *bad energy practices (big)* on our health, economy and planet; and, *industrial scale food production (big)* on our environment, communities, and natural resources. So while not perfect, I rather see those with the potential to do right by the oceans (*small*) fishing than those who see it simply as the next commodity to be mined (*big*)."

Why? Let me count the ways.

First off, agribusiness may not be perfect, but where would most of the 7 billion of us who are trying to share this planet while maintaining semi-adequate diets be without it? Family farms are great. God bless and preserve 'em, particularly for those who can afford \$8 a loaf artisanal bread, \$4 a pound heirloom tomatoes and \$6 a pound free range chickens. But we've got a world of people who don't see \$6 in a week, let alone whenever they crave a chicken dinner. For them, corporate food production is a blessing, and that includes frozen mackerel and herring that our "industrial" boats harvest and ship around the world at affordable prices.

Then there's Ms. Dory's indictment of "big" energy. Perhaps when she came aboard, the folks at NAMA neglected to tell her that past NAMA trustee and Conservation Law Foundation vice president Peter Shelley "launched the Northwest Atlantic Marine Alliance" as his \$150,000 Pew Fellows project (information now missing from the Pew Fellows website), but considering that Pew goes together with "big oil" as much as Rockefeller does, isn't that somewhat disingenuous?

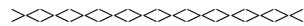
As far as her implying that "industrial" interests see fish/fishing/the oceans (it's hard to tell which, given the words she used) "as the next commodity to be mined," perhaps it's that way in other fisheries abroad, but here that's simply not so. A corporation won't invest millions, or tens of millions, in boats, in onshore facilities and in dealing with the management process to fish a fishery into oblivion. They wouldn't want to and they wouldn't be allowed to, but even if they were, where would they go afterwards?

But mostly I'm bothered by the "divide and conquer" snake rearing its malignant head once again.

It's no revelation to anyone reading this, but management-wise, times are tough and might be getting tougher. From what I've seen in my career, the big guys generally pull more than their weight when it comes to dealing with the management system, and the small guys have mostly benefitted from their efforts. Are their efforts completely selfless? No, but they realize that they need the small guys as much as the small guys need them. And a diminished fishing industry, whether it's by the loss of big boats or small, or of freezers, processors, truckers or markets, is going to be weaker. Commercial fishing can't afford that.

I applaud Ms. Dory's support of innovative marketing initiatives and the idea of community-based empowerment for fishermen (though not her deciding who belongs in the community and how they act when they're residents – that's too elitist for my blood), but fostering divisiveness isn't in any fisherman's interest, and it sure seems that's what she's peddling.

(Note: I tried unsuccessfully to contact Ms. Dory before press time. I invite Ms. Dory – or anyone else – to comment on this column for our next issue.)



Below is a response by Craig Pendleton to my above column **Big ain't bad**.

In it note first that he implies I suggested that "*NAMA was receiving Pew funding and that we were Conservation Law Foundation's baby.*" I never have suggested either. What I wrote in the column was that Peter Shelley received \$150,000 from the Pew Trusts to support his project, which was to design and establish NAMA. I never wrote in the column – or anywhere else – that NAMA had received Pew funding. Then he writes "*Peter Shelley, along with other CLF employees, helped us with administrative support and grant writing support for nearly two years.*"

From the Peter Shelly, J.D. page on the Pew Charitable Trusts' Pew Fellows website (<http://www.pewtrusts.org/en/projects/marine-fellows/fellows-directory/1996/peter-shelley>):

"Shelley used his Pew award to promote community-based, common property management of the marine resources in the Gulf of Maine. By fostering community participation in fisheries management, Shelley promoted co-management and helped restore health, diversity and abundance to the region's fish populations and other marine resources without sacrificing the long-term economic prosperity or social welfare of the region's fishing communities.

To this end, he participated in the creation and launching of the Northwest Atlantic Marine Alliance (NAMA), the first multi-stakeholder marine resources organization in the region. Although the geographic focus of his work has been on the US side of the Gulf of Maine, Shelley also has collaborated with Canadian conservation organizations and fishery groups."

And in Mr. Pendleton's own words from NAMA's first newsletter dated 11/12/2000:

"When I look back to June of 1995 and the very first meeting of concerned individuals, who would eventually create NAMA, I am amazed at what we have accomplished and the unity we built that continues to keep us together. The most enjoyable aspect of my job is the people I get to meet and work with. Whether it was finding friendship with Pat White of the Maine Lobstermen's Association or working together with Peter Shelley of Conservation Law Foundation to create a meaningful set of principles for NAMA..."

Participating in the creation and launching of the Northwest Atlantic Marine Alliance? Creating a meaningful set of principles for NAMA? It seems that Mr. Shelley's participation in forming NAMA was quite a bit above and beyond Mr. Pendleton's statement that *"Peter Shelley, along with other CLF employees, helped us with administrative support and grant writing support."* It's hard to imagine why Mr. Pendleton was so intent on downplaying Mr. Shelley's (and Pew's) role in establishing NAMA, but it sure seems like that's what he was trying to do.

I certainly wasn't flailing, blindly or otherwise, at Ms. Dory or anyone else in my column. I was disagreeing with her words and at the ideas that those words embodied. While writing that I was "flailing" anyone was undoubtedly easier than offering any substantive reasons for why I was wrong for that disagreement, I doubt that it informed anyone of much of anything.

However it does appear that when it comes to the fishing world Mr. Pendleton might be most familiar with red herrings.

While Mr. Pendleton contends that the Maine small boat fleet was "wiped out" in the public (fishery management) process, I suspect that that had a lot to do with the fact that the people who were representing the small boat fleet were somewhat less than effective than they should have been in their representation. I can't imagine much else that would account for it, even if I were actually anchored to my desk and out of site of the horizon. Apparently to Mr. Pendleton's way of thinking I'm not a fisherman so what I think doesn't count. Based on his assessment of where the Maine small boat fleet, that he was apparently representing, ended up, apparently what he thinks doesn't account for all that much either.

As far as my having "fired out" at Ms. Dory for "speaking (actually, it was writing) her mind," evidently in Mr. Pendleton's mind she is entitled to do that while I am not. Perhaps freedom of speech hasn't yet caught on in Maine.

Finally, I don't know whether it was the powers that be at National Fisherman who decided that Mr. Pendleton was "correcting" me or Mr. Pendleton himself, but either originating those words (if the latter) or allowing them to remain (if the former) definitely calls into question the journalistic integrity of the magazine.

Nils Stolpe

Marine alliance co-founder corrects Stolpe on Pew funds

I remain stumped as to why a trade magazine with such long-standing integrity would offer monthly space to an individual, Nils Stolpe, who clearly has a witch-hunt agenda and uses the space to attack others.

Over the years, as coordinating director and a founding member of Northwest Atlantic Marine Alliance, I have spoken to Nils following attacks that NAMA was receiving Pew funding and that we were Conservation Law Foundation's baby. In the April edition ("Big ain't bad," p. 7), he once again flails blindly in his attack on Niaz Dorry and in doing so has once again misguidedly attacked NAMA and Peter Shelley (vice president of Conservation Law Foundation) in the same swing.

Once more for the record: Peter Shelley and CLF are responsible for calling a meeting where several New England fishermen were invited to meet Mr. Dee Hock, CEO emeritus and founder, Visa USA and International. Dee had been lured out of retirement to teach those interested in new organizational concepts and designs. A small handful of us agreed to give Dee's ideas a try to see if we could form a new organization. That became NAMA.

Peter Shelley, along with other CLF employees, helped us with administrative support and grant writing support for nearly two years. At that point, I was chosen to become the first coordinating director, a role I kept for 11 years. Peter had a Pew fellowship. That is a correct statement. NAMA never applied for or received money from the Pew Foundation, not because we had some ethical reason not to, but in our early days, it was Peter Shelley and his staff that directed us to stay away due to Pew's heavy-handedness when it came to grants and the fact that Pew would want to weigh in heavily on what it was we wanted to accomplish. One thing I hold high is while I ran NAMA, we received grant money from organizations that were compelled and moved by the work we were undertaking, not vice versa.

This month's railing in Nils' column is quite the oxymoron story, as he is complaining that we shouldn't be launching attacks against other sectors of our own industry. I'm not sure the last time Mr. Stolpe got up from behind his desk and looked out on the horizon, but here in Maine, those complaints are real. No one looked after the loss of the inshore fleet. We have been virtually wiped out in the so-called public process. But, I guess according to Mr. Stolpe, we should just sit back and embrace it like it's OK. And at the same time he fires out at Niaz for speaking her mind and decides he needs to drag Peter Shelley and NAMA into it as well.

Sir, you can't have it both ways.

This man is doing a great disservice to your first class magazine. I urge you to pull his column space immediately.

CRAIG PENDLETON

*Founding coordinating director,
Northwest Atlantic Marine Alliance
Saco, Maine*

It's a subsidy because we want it to be a subsidy

(in National Fisherman)

04/01/09

"Fair is foul and foul is fair," territory that William Shakespeare carved out just over 400 years ago with his three witches in Macbeth, came to mind as I read a report on a study funded by cable TV pioneer H.F. Lenfest and his wife Marguerite's foundation, **Quantification of U.S. Marine Fisheries Subsidies**. Published in the current issue of the **North American Journal of Fisheries Management**, it was written by Renee Sharp of the Environmental Working Group and U. Rashid Sumalai from the University of British Columbia's Fisheries Centre. In it the authors first discuss the 30% plus overcapacity of the world's fishing fleet, a supposed primary cause of supposed universal overfishing, and then analyze the government subsidies that supposedly brought about the overcapacity in the U.S. fleet and the supposed downfall of the U.S. fisheries.

Sharp and Sumalai write that fuel subsidies and fisheries research accounted for 84% (44% and 40% respectively) of the total subsidies benefiting U.S. fishermen from 1996 to 2004. Their fuel subsidization consists of commercial fishermen being exempted from paying state and federal taxes on fuel purchases for their vessels. Seems to make sense – and in their estimation that's obviously the "foul" part, because it leads to overcapitalization, and that leads to overfishing.

But wait a minute. The federal tax on fuel purchases goes into the Highway Trust Fund, which is there to repair, improve and extend the federal highway system. It's pay as you go for road users. Out of fairness – that's the "fair" part - the government decreed that fuel purchases for non-highway use shouldn't be taxed. The state tax exemptions on non-highway use fuel are similar.

So how did Sharp and Sumalai conclude that fishermen not paying taxes that they were exempted from paying because they weren't using the services that the taxes were paying for was a subsidy? By assuming that *"if the government treated land-based and water-based transportation consistently, fishers (sic) would also be required to pay such taxes and the money would go toward port construction and maintenance, the Coast Guard, and other public facilities and services fishers use."*

Sharp and Sumalai determined that these fuel tax exemptions were the largest that fishermen received, worth \$2.8 billion over the study period. Based on what? Based on their "what if" supposition that fishing boats required an equivalent amount of public goods and services per gallon of fuel burned as cars and trucks and busses, and that fishermen should be paying for them. That's quite a "what if."

Sharp and Sumalai also considered \$2.5 billion of state and federal fisheries research a fishing industry subsidy – supposedly because it aided fishermen in harvesting. How many industries benefit from government research? Or perhaps a better question is how much government research doesn't benefit industry? By definition that's what applied research is for, and by design what pure research should be. Are Sharp and Sumalai suggesting that government should play no role in research unless it is reimbursed for the costs?

I should mention that the Lenfest Ocean Program is identified in the report as being "at the Pew Charitable Trusts" and from its website is operated "with the assistance of" Pew. Surprised?

Were Will penning Macbeth today, he could probably add a couple of places around the cauldron.

And while on the subject of Macbeth, his fatal flaw was hubris – an overbearing pride or arrogance – and he paid dearly for it in the last act, with his head. Shakespeare was carrying forward a favorite theme of the Classic tragedians; don't get too uppity 'cause the gods are gonna slap

you down. I just noticed that NOAA press releases now end in the boilerplate “NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources.” It used to be “NOAA works to understand and predict...” but it was changed sometime in the fall of 2008.

Anyone who has cleared the jetties expecting it to be blowing 5 to 10 out of the southeast with a 2 to 3 foot swell and an 11 second interval only to be smacked in the face by 20 to 25 out of the northeast with stacked up 6 footers has a pretty good handle on how well NOAA understands and predicts. So a helpful hint to our friends in DC; read the Iliad, read the Odyssey, read Macbeth and rethink what you “know and understand” before it's too late.

Chronic underfishing - the real New England groundfish crisis

08/01/09

“Commercial and recreational fishing constitutes a major source of employment and contributes significantly to the economy of the Nation. Many coastal areas are dependent upon fishing and related activities, and their economies have been badly damaged by the overfishing of fishery resources at an ever-increasing rate over the past decade” (The Magnuson Stevens Fisheries Conservation and Management Act.)

The New England groundfish fishery is one of the most historically significant fisheries in the world. The greatest parts of the New England character and all of New England's coastal communities have deep roots in it going back for centuries. Were it not for the groundfish fishery, for the money it generated and for the people that it attracted, New England would be a far different region, lacking much of what makes it so attractive today.

We have been told for years that the New England groundfish fishery in particular is in a state of crisis. In seemingly endless media accounts, in foundation-funded study after study and report after report, the New England groundfish fishery is held up as one of the best examples available of how a fishery can be destroyed by mismanagement. We are constantly told that because of the rapacity of the fishermen and their willingness to break the laws, the laxness of fisheries enforcement, the conflicts of interest in the management bodies, the overwhelming efficiency of the boats and gear, the overcapitalization of the fleet, in fact, because of virtually everything that the fishermen are either responsible for or have any influence over, they are all facing imminent financial ruin and will only be saved (from themselves, of course) by a revolutionary shift in how we manage our fisheries.

*“In New England, the groundfish fishery -- once among the richest in the world -- collapsed under the weight of a grossly bloated fleet controlled by tardy and ineffective regulations” (Natural Resources Defense Council, **Hook, Line, and Sinking: The Crisis in Marine Fisheries**, 1997.)*

It seems a classic disaster in the making, and thanks to a media machine that's hungry for bad news to report, and to journalists who generally have neither the resources and skills necessary for nor the interest in digging beyond the canned gloom and doom releases that are incessantly provided by the ocean branch of the crisis industry, it's a perception that's well on its way to becoming a reality. And it's doing so with the apparent encouragement of the upper echelon of the National Marine Fisheries Service in the US Department of Commerce's National Oceanic and Atmospheric Administration (NOAA/NMFS), the agency that is responsible for managing our federal fisheries and our coastal waters outside of three miles.

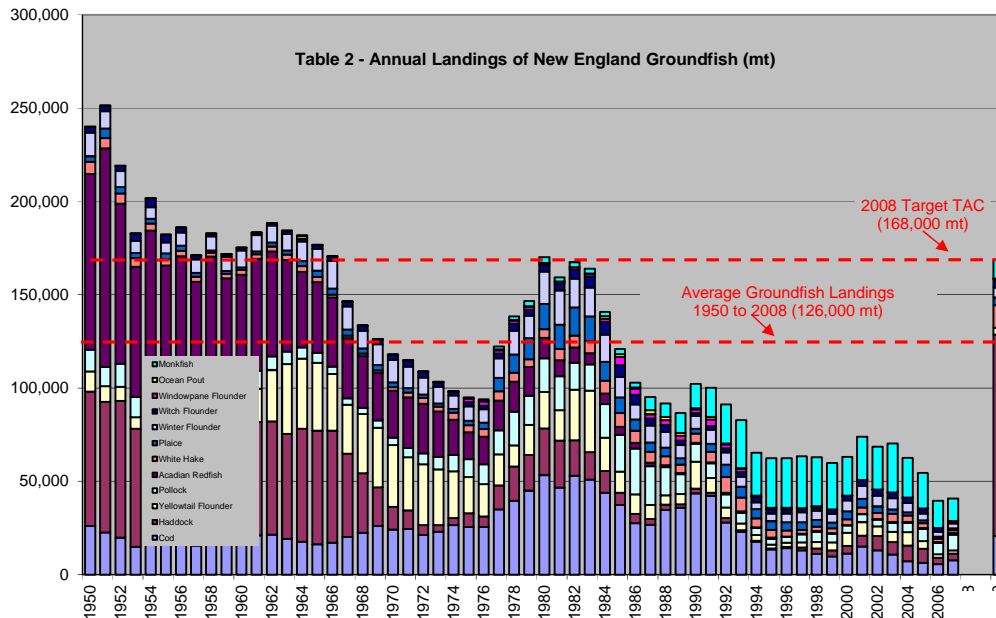
We'd be among the first to admit that the groundfish fishermen today are facing a crisis, but the crisis we see is a significantly different crisis than the one that's distorting domestic fisheries management and threatening the very fabric of fishing communities that have adapted, survived and thrived for generations.

What the data really shows

In July the NOAA/NMFS posted Northeast Preliminary Fisheries Statistics - Multispecies (May 2008 - April 2009) & Scallop (March 2009 - April 2009) on the Northeast Fisheries Science Center website (<http://www.nero.noaa.gov/ro/fso/mul.htm>). On the first page is a chart titled TAC Report Summary - Commercial Landings and Target Quota Utilization. The chart includes the commercial landings, the Target TAC and the Percent of TAC caught in fishing year 2008 for the 12 New England groundfish species (cod, haddock, yellowtail flounder, pollock, Acadian redfish, white hake, American plaice, winter flounder, witch flounder, windowpane flounder, ocean pout and monkfish).

The TAC (Total Allowable Catch) is the amount of fish, usually expressed in metric tons, that fisheries scientists determine may be removed sustainably from a stock of fish each year. Of the twelve species in the groundfish complex, fishermen had reached (or slightly exceeded) the target TAC for only two: white hake and monkfish. For monkfish, the target TAC was exceeded only in the Southern Management Area off the Mid-Atlantic. For the other ten species, fish that could have been caught (and landed and sold) were left in the ocean. The degree of underfishing (taking less than the TAC allows) ranged from 29% for monkfish from the Northern Management Area to 94% for haddock from Georges Bank. In 2008 the New England groundfish fishermen could have caught from 1/3 more monkfish to 16 times more haddock than they actually caught.

The total target TAC for the twelve groundfish species was almost 170 thousand metric tons. The total catch was less than 43 thousand tons. This was only 25% of what the fishermen could have caught without damaging the stocks. Assuming a conservative value of a dollar a pound for those fish (from 2000 to 2007, haddock returned an average of \$1.20 a pound to the fishermen), they didn't catch 280 million dollar's worth of haddock, cod, flounder, etc. that they were allowed to catch. If every dollar's worth of fish landed generates four dollar's worth of total economic activity, that's over a billion dollars lost to the New England economy, and lost primarily to New England's struggling fishing communities.



And this definitely isn't a one-shot phenomenon, an aberration due to the explosive growth of a single species. As Table 1 shows, New England groundfish stocks have been tragically underfished – if you count squandered resources and fishing communities in a state of institutionalized turmoil as a tragedy – for years. Going back in the NMFS reports, we see that in 1998, for example, only 20% of the pollock TAC, 1% of the redfish TAC, 9% of the white hake TAC, 15% of the plaice TAC, 21% of the winter flounder TAC, 7% of the witch flounder TAC and 2% of the windowpane flounder TAC was landed. While at that time the target TACs of several other much more valuable groundfish stocks were regularly and significantly exceeded, that is no longer the case.

And why haven't the fishermen caught this potential windfall? Not because they didn't want to, not because they didn't have the expertise or the capacity or the equipment, but because the unbelievably complex web of regulations dictating where, when and how they can fish wouldn't allow it. Fishermen today – and that includes New England's groundfish fishermen – are restricted by areas that are closed permanently or sporadically to particular types of fishing gear, they are restricted in the type or amount of gear they can use (net mesh size, number of hooks, size of nets, etc.), they are restricted in the number of days they can fish, in the amount of fish they can keep, in the size and horsepower of the boats they fish from, in where they can offload their fish, in who they can sell them to, in short in just about every aspect of fishing up to but not yet including what they can eat for lunch - but there's always next year.

(For a more complete listing of how fishing is regulated, see the June 2006 FishNet Full of sound and fury, signifying nothing at http://www.fishnet-usa.com/then_now.html.)

And in a particularly galling perversion of regulations supposedly designed to help fishermen, in far too many instances they are forced to throw back fish that are either dead or that they know won't survive because to have them in possession would be against the law.

What should landings be?

In real world terms what does this mean to the New England groundfish fishermen and to everyone who and everything that is dependent on them? Table 2 below shows the almost steady decline that we all expect to see in New England groundfish

It also shows something that very few of us expect; that the 2008 Target TAC was higher than the total landings in all but one year since 1966 and was 40,000 metric tons above the average annual groundfish catch over the entire period for which commercial landings data are available.

Accepting that if New England fishermen would have been allowed to catch all of the fish that could be sustainably harvested they would be landing well over the average for the last six decades because that's what the NOAA/NMFS data indicates, how can anyone conclude that the

crisis in the New England groundfish fishery is due to a lack of fish or too much fishing? Yet that's what has been force-fed to the public, the administration and Congress. No one speaking for NOAA/NMFS or any of the involved ENGOs, at least no one who's been in a position to be quoted in the media, has said anything even broadly hinting that the fish are there in such numbers but the fishermen aren't allowed to catch them.

“Peter Baker, manager of the Pew Environment Group’s New England Fisheries Campaign, said that the latest stock assessment of groundfish shows that current efforts to rebuild the populations are not working. In response to the most recent stock assessment of New England groundfish (including cod, haddock and flounder) from the Third Groundfish Assessment Review Meeting, Peter Baker said: ‘groundfish stocks are managed by limiting the amount of time fishermen can spend at sea. But under this system, known as ‘days-at-sea,’ many fish populations have collapsed and local fishing communities have experienced massive revenue declines. As a result, many traditional New England fishing communities have been forced by economics out of the groundfish fishery. It’s time for a change’” (FishSite in September, 2008).

Have any of the so-called conservation groups admitted that the reason that New England groundfish fishermen are in such dire financial straits is because foundation funding for slanted science and an ongoing media blitz has been used to virtually immobilize those fishermen in straitjackets of overlapping, contradictory and ineffectual (if the goals have anything to do with helping fishing communities – which is explicit in the Magnuson Act) restrictions, prohibitions and impossible-to-reach targets? How much Pew or Packard or Lenfest funding has gone into research to permit the fishermen to sustainably harvest enough fish to allow the industry to flourish once again? How does that amount compare to the collective investment in their ongoing agenda to privatize our fisheries, the change that Pew’s Peter Baker is referring to in the above quote?

“She (NOAA Administrator Jane Lubchenco) put the room on notice—Council members, agency staff, industry and other stakeholders—that we all needed to step up and move away from crisis management toward a lasting solution—catch shares” (from A Turning Point for New England Groundfish Fishery: Jane Lubchenco sends a clear message By J. Wormser, New England Regional Director for the Environmental Defense Fund oceans program).

Why isn't underfishing being addressed by NOAA/NMFS?

And what of the people in charge at NOAA/NMFS? They have been responsible for a management system that has resulted in chronic underfishing in what is inarguably one of our most important fisheries. They have been first-hand witnesses to severe and ongoing disruptions of entire communities brought about by the overzealous enforcement of what is in the view of anyone with a concern for the people and businesses involved a toxic management regime. If NOAA Administrator Lubchenco really did put the groundfish managers on notice, as Ms. Wormser of Environmental Defense claimed, at a New England Fishery Management Council meeting, the people at NOAA/NMFS have done little more than maneuver to force a largely unproven form of management down the collective throats of thousands of New England fishermen (and, according to the ex-Pew Environment Group staffer Monica Medina, who now heads the NOAA/NMFS Catch Shares task force, tens of thousands of fishermen nation-wide will be similarly force fed by a federal agency mandate). Utilizing what are called Sectors, New England groundfish management is about to embark on a journey which everyone recognizes as the first step towards a privatized fishery. This is really what Dr. Lubchenco means when she uses the much more innocuous sounding “catch shares.”

Those 100,000 plus tons of groundfish are still swimming around out there unmolested, and those ground-fishing-dependent businesses are still going bust. Could this be because a recovery of the groundfish fishery, a recovery based on the fishermen being allowed to catch the fish that could be sustainably harvested if it weren't for the success of the foundation-funded ENGOs in creating a regulatory nightmare precluding that, would destroy one of the most persuasive arguments for Dr. Lubchenco's and Environmental Defense's catch shares? If there wasn't any underfishing in the groundfish fishery there obviously wouldn't be much need for a revolution in how we manage it or in how we manage our other fisheries.

Catching that 100,000 tons of uncaught groundfish would get us away from “crisis management” a lot more quickly and, perhaps, a lot less traumatically (for the New England fishing industry and the fishing communities that have built up around it) than would a move to a catch shares.

But from Dr. Lubchenco on down our federal fisheries managers are committed to catch shares, whether they're necessary or not. And they have been since before she was put in charge. Could that be because in a fishery managed with catch shares there will be fewer boats and fewer fishermen – that's called “rationalization” in the vernacular of today's fisheries management - and a great deal of the responsibility for and the cost of management and enforcement will be shifted to them? This is what is being planned for the groundfish sectors. From a manager's perspective that sounds as close to nirvana as it is possible to get. From a fisherman's perspective, it's a way to have more say in how the fishery he or she is participating in is managed, but at what cost – both to the fisherman who remain in the fishery and to those who leave?

Ms. Lubchenco is working with the quasi-public National Fish and Wildlife Foundation to provide funding to regional fishery management councils to establish catch share management programs and has committed \$16 million of her own agency's budget as well. She has also established a Catch Shares Task Force chaired by ex-Pew Environment Group staffer Monica Medina in NOAA. In Ms. Medina's words, “transitioning to catch shares is a priority for NOAA.” To our knowledge, Dr. Lubchenco hasn't taken any similar steps to secure funding or estab-

lished any sort of bureaucratic mechanism for anything even remotely connected to reducing underfishing in the groundfish fishery or any other. It appears as if, under the Obama administration, the only “solution” to be made available to fishermen who have been maneuvered into a totally untenable solution regulation-wise is going to be the institution of catch shares, whether they want them or not.

A panel discussion at the Milken Institute’s Global Conference this spring was designed to get the investment world interested in buying catch shares a la NOAA Administrator Lubchenco’s salvation plan for the commercial fishing industry. The session was titled Innovative Funding For Sustainable Fisheries And Oceans. David Festa, one of the panelists, is Vice President for the West Coast of Environmental Defense. He served on the Obama transition team for the U.S. Department of Commerce. In laying out his arguments for why outside investors should buy catch shares in commercial fisheries he characterized an open access fishery, the West coast halibut fishery, thus: “...*that's not a full time job. All you have is essentially itinerant labor, that bounces around from job to job, it's unskilled, it's unprofessional, it's low-paid, there's high drug use, it's a rough life. It's romantic, um, you get great bar scenes in, um, you know the Perfect Storm, and George Clooney looks really sexy but, it's uh, well, speaking, well, anyway, my wife says that. But the problem is it's not a full time stable job.*” Then, in talking about the same fishery after catch shares were instituted, “*now you got a job, now you have professional fishermen, who many of them start to get degrees, go to college, advanced degrees in fishery biology and business (Mr. Festa has an advanced degree from Harvard), that begin to work on different various business plans.... they make good jobs they are full time, they live in the community they become, they stabilize the community.*”

And why the push by the ENGOS?

Paraphrasing the old Gold Rush rallying cry, there’s gold in them thar oceans, and it appears as if the EN-GOs (and we assume the foundations that support them) haven’t lost sight of this fact. A predicted re-turn of 1,000 to 2,000 percent from a solidly “green” investment – which is what the ENGOS, with a little help from their friends in NOAA/NMFS, have turned Catch Share managed fisheries into – is certainly worth raiding the piggy bank for. And it has the added benefit of allowing investors to not just control, but as Mr. Festa pronounced at the Milken Conference, to clean up both the fishery and the fishermen (more Clooney clones?). This would save those institutional investors who have done such a marvelous job with the general economy in recent years from having to deal with the “drug addicted, low paid, uneducated and unprofessional itinerant” fishermen that he evidently believes characterize fisheries that aren’t being managed by catch shares.

(Note: on the Oregon State University website - <http://lucile.science.oregonstate.edu/?q=node/view/131> - Dr. Lubchenco is identified as being an Environmental Defense Fund trustee.)

“Milken panel moderator Larry Band, who put in many years at Lehman Brothers, the investment bank that went down during the banking catastrophe, and now advises the Environmental Defense Fund, explained to the panel at the Milken conference that the ‘trick’ in executing the correct investment action involved a ‘little bit of a chicken and egg. The money needs to come in ahead of the catch shares coming in.’ But done right, Band said investors might achieve returns of 1,000 and 2,000 percent — far more than Festa projected.” (R.Gaines, Fishing catch shares suddenly become hot ‘commodities, Gloucester Daily Times, June 30, 2009)

The downside to catch shares – at least to Catch Shares as being promoted by Environmental De-fense

As every fisherman knows, all of the income produced by a fishing boat comes out of the fish hold. Those fish cover the captain’s and crew’s pay, the operating expenses, the fuel, the taxes, the return on the investment in the vessel and everything else.

Now it’s a sad fact that, thanks to the ministrations of foundations like the Pew Charitable Trusts and ENGOS like Environmental Defense, the Conservation Law Foundation and the Natural Resources Defense Council, and to years of NMFS fisheries management culminating in aberrations like the chronic underfishing in New England, much more than half of the seafood we consume in the U.S. is imported. One of the results of this is that our domestic industry doesn’t have any say in setting seafood prices. In essence they take what they can get in a market dominated by imports, and while costs go up, prices can’t be increased correspondingly, no matter how the fishery is managed.

So where are those 1,000% to 2,000% returns envisioned by Environmental Defense’s Larry Band going to come from? Unquestionably out of the fish hold, but just as unquestionably out of the pockets of the fishermen, the processors, the wholesalers, the suppliers and anyone else associated with the fishing industry.

Coincidentally, Ecotrust Canada has just released an analysis of British Columbia’s halibut fishery, which is managed via individual transferable quotas (ITQs, or in this year’s version of NMFS English, catch shares). Of the study, Tasha Sutcliffe, Fisheries Program Manager for the Ecotrust, writes “individual transferable quotas (another name for catch shares) are being heavily promoted as a solution for both conservation and the financial ills plaguing fishing fleets around the world. However, our experience in B.C. is that highly unregulated, speculative ITQ markets can create as many problems as they solve. Under ITQ markets, working fishermen in B.C. are increasingly becoming ‘tenants’ who pay exorbitant rents to landlords, or ‘sealords,’ who own all the quota. The lucrative leasing has, in turn, driven up the cost of fishing and the price of purchasing quota, making ownership prohibitively expensive for many fishermen” (**Study cautions against repeating mistakes of**

B.C.'s speculative fishing quota markets on Ecotrust Canada's website at <http://www.ecotrust.ca/fisheries/study-cautions>). This appears to be exactly what Environmental Defense representatives Band and Festa were proposing at the Milken Conference.

The bottom line

We have the New England groundfish fishery languishing because the fishermen can't catch the fish that are supposed to be available to them because of an inflexible and repressive management regime in place as a result of the lobbying efforts of Environmental Defense and several other foundation-funded ENGOS. We have the federal agency that has been doing nothing substantive to help the fishermen catch those fish, instead supporting (with millions of agency and outside dollars) drastic reductions in the number of boats and fishermen in the fishery via a form of management that holds far more appeal to academics, bureaucrats and "conservationists" than to fishermen. We have the head of that agency (along with several of her staffers) with strong ties to the foundations that did the funding as the chief proponent of catch share management as well as to the ENGOS that have been and still are lobbying for their imposition. We have a Canadian ENGO, Ecotrust, that is waving red flags about the catch share program in use in the Canadian halibut fishery, and we have another ENGO, Environmental Defense, that appears to be using the exact characteristics of catch share management that Ecotrust is and every commercial fisherman, should be concerned about to drum up outside investor interest in acquiring catch shares.

But this doesn't mean that Catch Shares won't work for the fishing industry?

As is becoming increasingly obvious, catch shares, fishing quotas, limited access privilege programs or whatever they are termed can have less than optimal impacts on the people and/or the businesses in a fishery. On the other hand, they can also be beneficial to the same people and/or businesses. It all depends on how they are initially organized and how stringently the rules which govern them are enforced. If the people in a fishery decide that it's in their own best interests to adopt catch shares in their fishery, if they own and if they control those catch shares, and if there are adequate safeguards guaranteeing the transparency of that ownership and control, there shouldn't be any objections to this form of management.

Are catch shares a fisheries management panacea? In spite of all of the foundation influenced prattle, which has apparently now been adopted by NOAA/NMFS, to the contrary, of course not. As the recent article in Science by Ray Hilborn, Boris Worm and 19 other authors (Ending Global Overfishing July 30, 2009) makes clear, fisheries can be and are being managed sustainably both with and without them.

The apparent ease of management that catch shares offer shouldn't be used as an incentive to institute them in fishery after fishery, and the fact that quota in particular fisheries could be an attractive "green" investment shouldn't be used as a reason for transferring control of those fisheries to "outside" people, institutions and organizations, regardless of how the people at Environmental Defense, the Pew Trusts or elsewhere feel about it.

Give fishermen reasonable access to underfished stocks, and the need to "revolutionize" fisheries management would in many instances evaporate. That would do more to maintain the small fishing communities that Dr. Lubcenco now values than a mandatory reshuffling of an industry that has been doing pretty well for centuries. Of course it would kill the goose that was about to lay Mr. Band's 1,000 to 2,000 percent Golden Egg, but he and Mr. Festa and their colleagues at Environmental Defense could probably come up with another idea or two for green investments in fairly short order.

All hands on the stacked deck

(in National Fisherman)
09/01/09

The latest in the Chicken Little litany of the supposed problems with our oceans is a report by an Environmental Defense "working group" titled **Oceans Of Abundance**. The group, co-chaired by former U.S. Secretary of the Interior/former Governor of Arizona Bruce Babbitt and former U.S. Congressman James C. Greenwood, is made up of public luminaries a la Greenwood and Babbitt, and members of the scientific community that has developed – perhaps metastasized is a better word – around the ocean crisis they created.

Not surprisingly, considering the study was done by Environmental Defense, the conclusion was that the world's oceans could be saved from commercial fishermen by the widespread adoption of what are now called "catch shares." Also called individual fishing quotas, sectors or limited access privilege programs, you probably have a fairly good idea of what they are; a granting of fishing privileges to a limited number of participants.

As I've written previously, I have nothing against fisheries management based on individual quotas (or whatever they're called). They are – or should be – one of the tools available to managers if they are acceptable to the participants in a particular fishery and if they will make management of that fishery more effective.

I do have problems with the way the concept is being sold here, and the connections of the people who and the organizations that are doing the selling.

Starting at the top, co-chair Greenwood is on the board of the Marine Conservation Biology Institute, an anti-fishing organization that has financial and personnel ties to Our Favorite Charitable Trust going back for most of the last decade. Co-chair Babbitt is Chairman of the Board of the World Wildlife Fund, which is solidly allied with Pew on ocean issues. Member and former NJ governor Christine Todd Whitman chaired the Pew Oceans Commission, member A.G. Christophe was Executive Director of the Commission and member Jane Lubchenco was a Commission member (and is slated to be the next head of NOAA). Member Ellen Pikitch is Director of the Pew Institute for Ocean Science and a Pew Fellow, as are members Les Kaufman and Bob Steneck. Members John Ogden and Terry Garcia are respectively nominator and advisor to the Pew Fellows program. Member N.J. Nichols is Chairman of the Pew-funded Environmental Defense Fund. Member Wendy Paulson is the wife of Secretary of the Treasury Henry Paulson, past president of the Nature Conservancy's board. The Conservancy and the Pew Environment Group have embarked on a \$12 million program to "save" wild Australia. Ms. Paulson is a member of the Conservancy's President's Conservation Council. Member Andrew Rosenberg, past NMFS Northeast Regional Administrator, was a Pew grantee.

Members Christopher Costello and Steve Gaines were two of the three authors of a paper in **Science** in 2008 concluding rights-based management might save the world's fisheries (based on an analysis of 11,135 commercial fisheries worldwide, 121 - or 1.1% - of which used this form of management).

The Environmental Defense website describes the panel as "an independent, bipartisan working group of 23 current and former federal and state elected officials, cabinet officers, scientists and administrators." With at least 13 members connected to OFCT (including all but four of the scientists), with another two professionally wed to catch shares as a solution to ocean problems, and with previous OFCT initiatives that weren't what they were presented as (see The Oil Slick at the end of the Fishnet "A New Management Paradigm" at http://www.fishnet-usa.com/new_paradigm.html), that "independent" is a little hard to swallow.

Get the feeling that we're dealing with a stacked deck here?

I don't know how many fisheries scientists there are in the U.S.; certainly in the tens of thousands. I do know there are many who haven't bought into the crisis mongering, and haven't for a perfectly good reason. The oceans, at least those whose management can be influenced by OFCT, aren't facing a fishing-induced crisis. Our fish stocks are generally in good shape. Those that aren't that can be improved by controlling fishing are improving. The primary crisis our fishermen are facing – other than the ongoing pollution of our marine ecosystems – is that they aren't allowed to catch the available fish. And why not? In largest part, because of the efforts of the Pew clique.

We don't need any management measures forced on us by ocean activists. We need better science and better management, including rights based management where it fits. We have the scientists and managers to provide it. We need a management milieu that will let them.

Our friends in Washington are catching on

(for SavingSeafood.com)

09/24/09

I know it's asking a lot, but imagine that you're a career employee of a mega-billion dollar foundation or one of the non-government organizations that depends on it for handouts. You get paid regularly and well as long as you "produce" for the folks who sign the checks, because the interest from those endowments keeps on rolling in. If you're on the high end of the foundation/NGO foodchain, you're probably the product of an Ivy League school or two, and to suggest that your connections with anyone in the real world, or with the day-to-day problems they increasingly face in just trying to get by, is severely limited would be a understatement of earth shattering proportions.

What, you worry? Sure, but not about the stuff that keeps the common folk awake at night. Wallowing in financial security thanks to the earnings of those Big Oil investments, you worry about the fish. You don't worry about the thousands or tens of thousands of working stiffs whose lives are going to be immediately and severely impacted by your "devotion" to the fish because you're convinced that in the long run the fishermen, their families and the working communities they support will be better off thanks to your concern.

A couple of lean years for them? So what? You're facing economic challenges as well. The market's way down and those investments aren't generating bucks the way they used to. You've had to reduce your travel budget (no fun and frolics in Molokai, La Paz or Virgin Gorda this year – see <http://www.oceanconservationscience.org/events/events-listing.php?ID=25>) along with letting a few clericals go, and haven't renewed some contracts, but when the economy improves, your budget will be back where it belongs and your privileged world will be intact once again.

And here comes this Senator from New York, a guy who has actual working people as his constituents, and actually cares about them. He cares so much about them, in fact, that he ignores all of the ecocatastrophic babble that you and your foundation-funded colleagues have been spewing and introduces legislation that attempts to give working fishermen and their families as much consideration as you have given the fish. Needless to say, it's time to crank up the PR machine, and your opening salvo is an editorial in the New York Times. Why the NY Times? The

editorial board is as solidly Ivy League and apparently as out of touch with real working people as you and your colleagues, and you've hung out with Ivy educated Cornelia Dean, the Times' premier science editor/writer at Pew "retreats" at upscale resorts in Key Largo and Bonaire.

Seems a little elitist, doesn't it?

I fact, it sounds a lot elitist. But, fortunately, we have some people in Washington who are finally looking beneath the ever-expanding oil slick and seeing what's really going on in our oceans. New York's Senator Schumer is as concerned about his fishing constituents as he is about the fish, just as Congressmen Pallone, Frank, Jones, LoBiondo, Kennedy, Adler and others in the House of Representatives are. Hence they have formed the nucleus of a growing movement in Congress that, in spite of the editorial opinion of the New York Times and the expenditure of many millions of dollars by the Pew Charitable Trusts, is aimed at preserving recreational and commercial fishing, the lifestyles of millions of fishermen, and the tens of thousands of businesses and hundreds of fishing communities that they support. Just like the Magnuson Act intended before it was sabotaged by supposed marine conservationists.

At face value it's about nothing more than timing; a stock can be rebuilt in ten years by inflicting a massive amount of damage on those who depend on harvesting it, or it can be rebuilt in a slightly longer period with a correspondingly lessened impact. And while I'm not telling anyone reading this anything they don't already know far too well, with today's economic climate, most of us – unless we have our hands in the deep pockets of one tax exempt mega-foundation or another – aren't in any position to absorb any unnecessary economic impact.

What's the difference between having a particular fishery rebuilt today or rebuilt in a couple of years? To the fishermen and to the fishing dependent businesses the difference is obvious. They get to keep on fishing and they get to keep the money coming in. They get to stay in business, and our coastal communities get to maintain economies that aren't entirely tourism-dependent. The consumers get to continue to enjoy fresh-caught local seafood. The coastal developers don't get to swallow up even more out-of-business commercial docks, marinas, marine railroads and packing houses and replace them with cookie-cutter condos, but considering that once gone, a fishing-dependent waterfront business is very unlikely to be replaced, haven't we had too much of that already?

To the anti-fishing claque, however, the difference is that with rigid time frames you get to treat fishermen like criminals deserving punishment.

The bottom line is that virtually every fish stock under management in the US is rebuilding (and the few exceptions are due to non-fishing factors like habitat loss, climate change or pollution), and the management regime will insure the rebuilding will continue. So why inflict more economic pain on people who are already suffering in order to get to the same place rebuilding-wise a few years earlier?

Is it that the "marine conservationists," the foundations that fund them and the media people that support them are so completely out of touch with anything having to do with people who work for a living that they actually believe that their "fish first" philosophy is in any way justified, or are there some ulterior motives involved? Whatever the case, at this point Senator Schumer and his Congressional colleagues in the House deserve the thanks and the support of every one of us who fishes, whether for fun or profit.

These academics are going to fit square pegs into their round holes whatever the consequences

(on SavingSeafood.com)

07/02/09

Ask law enforcement officers whether they thought that the people who were issued summons were guilty, regardless of whether the summons resulted in a penalty of any sort or not. What are the odds that the majority of responses would be that the recipients of the summons were guilty, regardless of the outcome? Common sense and human nature argue that it would be pretty high – that's why we have judges, courts, trials, hearings and such.

Our system of justice is predicated on the assumption that people are innocent until proven guilty. Evidently Jon Sutinen's (University of Rhode Island) and Dennis King's (University of Maryland) isn't.

In the report on their research on the New England Groundfish Fishery that they published in the journal *Marine Policy* in April of this year (Rational noncompliance and the liquidation of Northeast groundfish resources), Professors Sutinen and King demonstrated that the academic world they inhabit isn't constrained by such silliness.

Examining 1,689 "probable violations" in a NMFS database, they state "33% of (the) violations reported by law enforcement resulted in one or more types of penalties." Particularly considering the cloud of overzealous prosecution that has been hanging over the fisheries enforcement bureaucracy in the Northeast for the past year or so, to most of us it would seem reasonable to believe that those fishermen who were not penalized were in all likelihood innocent.

Not according to Sutinen and King. They write in a footnote "*interviews with NOAA enforcement staff and others familiar with this database indicate that in many cases enforcement officers have probable cause to inspect for a violation and, if after inspecting they decide to report a*

violation, it probably is a violation even though it may not be prosecuted or have a resolution that results in a penalty.” This leads to “based on this criterion, 1,614 of the 1,689 incidents (95.6%) reported during this period probably are actual violations and, for purposes of this analysis, will be treated as actual violations.”

In Sutinen’s and King’s analysis you’re damned if you’re convicted and you’re damned if you’re not. Judge Roy Bean would have approved whole-heartedly.

And of course there’s more. They use the assumption that only a third of the fishermen who cheat are cited for fishing violations in making the determination that “by fishing illegally a midsize trawler in the NEGF fishery is estimated to increase expected earnings per trip by \$5,500.” With the \$1,116 cost of the average penalty assessed, they conclude that “when compared with the illegal gain, the economic incentive not to comply is \$4,334 per trip.” They continue “normative factors, such as moral obligation and peer and community pressure often induce fishers to be law-abiding despite potential illegal gains,” but in the case of the New England groundfish fishermen those “normative factors” are weak because, in essence, the fishery is in such a mess and the fishermen hold management responsible for the mess it’s in. Hence, more fishermen in New England cheat.

Andrew Cohen, Special Agent-in-Charge for the National Marine Fisheries Service’s Office of Law Enforcement, was quoted in a recent article in the Boston Globe (B. MacQuarrie, **Seafood auction gets ban of 10 days**, 06/20/09) as estimating “that 98 percent of the US fishing fleet from the Canadian border to the Carolinas adheres to the law.” He should know. It’s not news to anyone reading this that many of the thousands of fishermen that Agent Cohen is referring to aren’t satisfied with how their fisheries are being managed, a lot of them realize that they could do quite a bit better economically if they “cheated” on the rules, and their chances of getting caught don’t differ significantly from their colleagues’ in the groundfish fishery. Yet we’re to assume from Sutinen’s and King’s paper that the New England groundfish fishermen are somehow different.

So what’s the impact of this “condemned by probable cause” view of commercial fishermen? Naturally, the up-front conclusion is that the fishery management system has broken down and needs radical surgery before it can work again. Another conclusion is that an awful lot of fishermen, particularly in New England, are bad actors who look at breaking the law simply in terms of the probability that they’ll get caught and what it will cost them if they do. They’re not the victims of a management system that has been distorted beyond reasonableness by megabucks of foundation-funded interference; they’re coldly calculating “criminals” that deserve anything that the conservationist community does to them.

Being published in an academic journal would normally relegate this research to the dust bin of history, only being dredged up by other academics every once and while to be used in other such studies. Not this time. The research was supported by the Lenfest Ocean Program, which as of May of ’09 was being administered by the Pew Environment Group (surprise, surprise!) As with other Pew-connected research critical of fishing and fisheries management, Professors Sutinen and King and their inescapable indictment of commercial fisherman - that given a reasonable return to compensate for the risk involved in cheating, fishermen will do it, and that their doing it in New England is a significant factor in preventing the recovery of groundfish - enjoyed an uncharacteristically wide coverage for such academic esoterica in the media.

Can this be considered anything but another step to marginalize commercial fishermen? The timing is impeccable. The study – and the media attention that was generated for it – saw the light of day only a few weeks before the New England Council was due to make its final determination on taking management of the groundfish fishery in a totally new direction, a direction, I probably don’t have to add, that while virtually untested is supported whole-heartedly by the heavily Pew-connected higher-ups at the National Oceanic and Atmospheric Administration, the National Marine Fisheries Service’s parent agency, and various and sundry ENGOs that are hell-bent on “fixing” our fisheries regardless of the costs to fishing communities.

Would yet another indictment of how the groundfish fishery is being managed, and of the fishermen who are being managed, help nudge this transformation? Borrowing a line from the movie Fargo, “you’re darn tootin’.”

Peter Shelly might be right about the existence of a conspiracy

(for SavingSeafood.com)

07/14/09

Peter Shelley, Vice President of the Conservation Law Foundation in Rockland, Maine, sent a letter to the editor of the **Gloucester Daily Times** published on the Fourth of July that was critical of the thorough and ongoing commercial fishing coverage the paper has been providing. In it he raised the specter of a conspiracy regarding fisheries management and a pending upheaval in the way New England groundfish will be managed.

He ended his letter with the question “*isn't it time to put the conspiracy theories away?*” Of course Mr. Shelley wasn’t claiming that a conspiracy is actually ongoing behind the massive shift in management philosophy in our nation’s oldest fishery, he was suggesting that the **Times** was supporting (or proposing) the idea that a conspiracy actually existed when it didn’t.

Now why would he do that? Obviously, that's something that's impossible for me to even speculate about. But I have a pretty good idea of what the effects of his suggestion were on those who read it. To the general public, conspiracy theories are automatically associated with wild-eyed fanatics, black helicopters, grassy knolls and Roswell, New Mexico. Whether he intended to or not, Mr. Shelley was putting reporter Richard Gaines, the editorial staff of the Times and the fishermen up and down our coasts who know that things aren't right in many of our commercial fisheries in that same category, aluminum foil hats and all.

Need I mention that Mr. Shelley and the **Conservation Law Foundation** have benefited from the Pew Charitable Trust's largess since he was awarded a Pew fellowship back in 1996.

According to Merriam-Webster, a conspiracy theory is "*a theory that explains an event or set of circumstances as the result of a secret plot by usually powerful conspirators.*"

Now we've definitely got an "*event or set of circumstances*" going on in fisheries management and ocean governance in the U.S., and the New England groundfish fishery is at the epicenter. It's a fact that a number of people with high level, long term relationships with the multibillion dollar **Pew Charitable Trusts**, established with Sun Oil megabucks and apparently still under the control of the family of founder Joseph Pew, have been chosen for leadership roles in the **National Oceanic and Atmospheric Administration** (NOAA). This is the federal agency that is responsible for just about everything non-military in the world's oceans that involves the U.S. government and the U.S. people. But this is hardly a secret, and "secret" is the operative word in defining a conspiracy. That cat's much too far out of the bag – and has been for much too long – for it to be considered anything but common knowledge by anyone who's interested. As is the fact that Pew has funded to the tune of many tens of millions of dollars much of the current campaign to reform our commercial fisheries and to convince legislators, media and the public that such reform is urgently needed.

Nor is it a secret that those Pew-connected officials at NMFS/NOAA are convinced that the solution to our supposedly overwhelming fisheries problems, beginning with the New England groundfish fishery, lies in privatizing those fisheries, as are their colleagues in the foundation-funded Environmental Non-government Organization (ENGO) world. In fact it is so far from a secret that at a high level investment conference in Los Angeles earlier this year, representatives of one of these ENGOs, the Environmental Defense Fund, were touting fisheries quotas as a good place for the attendees to put their bucks. No secret there; in fact an audio transcript of the seminar session is available on the web (<http://www.milkeninstitute.org/events/gcprogram.taf?function=detail&EvID=1599&eventid=GC09>).

And, as the ongoing investigation by the Department of Commerce's own Inspector General's office into NOAA/NMFS enforcement activities in New England indicates, it isn't any secret that things might not just be rotten in Denmark. Putting the icing on that cake, NOAA/NMFS was apparently hand feeding information about pending legal actions in Gloucester, Massachusetts to specific members of the media even before notifying the people who were supposed to be on the receiving end of those actions. It's hard to see that as anything other than an attempt by a government agency to manipulate press coverage, favoring particular reporters and papers over others in an effort to influence what the public sees and when. There is such a taint there that a federal judge has demanded an explanation from NOAA/NMFS.

None of this is secret, in fact, in much of the fishing industry it's common knowledge. That makes it kind of difficult to credit Mr. Shelley's claim that the people at the Times, or anyone else, are pushing the idea of a conspiracy.

But all of this is minor compared to the fact that in a recent publication NOAA/NMFS revealed that in 2008 the New England fleet caught just 43,000 metric tons of groundfish out of a target TAC (total allowable catch) of 172,000 tons (**Northeast Preliminary Fisheries Statistics**, July, 2009, NMFS/NEFSC, http://www.nero.noaa.gov/ro/fso/TAC_apr_WEB.pdf). The participants in a fishery which supposedly is and has been in an overfishing crisis, at least according to NOAA/NMFS and the foundation-funded "conservationist" organizations including Mr. Shelley's Conservation Law Foundation, were allowed to catch only 25% of the fish that were available to be caught. This crisis, supposedly incapable of being addressed via conventional fisheries management tools, is being claimed as justification for a switch to a management regime that will have a cataclysmic impact on New England's fisheries; a type of management demonstrated to be effective in only a handful of fisheries worldwide. To suggest that "catch shares" have been a proven management method in the real world (as opposed to the computer programs of the theoreticians who are now in control, that's the one with real fish, real fishermen, real boats and real salt water) and to implement them because of that strains credulity a lot more than the average government action does. Yet here we go. And why? To save the fish and the fishermen from overfishing in a fishery in which only a quarter of the fish that could be are actually being caught.

If fishermen really make a difference to those who are influencing or formulating government fisheries policy, why wasn't there a crash program at NOAA/NMFS, perhaps utilizing some of those tens of millions of dollars that the people at Pew spend so eagerly on pushing their agenda, to figure out how all of those fishermen with time on their hands and boats at their docks could catch and sell some of that 130,000 metric tons of groundfish that went uncaught and unsold last year? If the harvest of groundfish could be doubled or trebled sustainably, why isn't doing so getting as much attention from the managers – and from the "conservationists" who have been claiming they are on the side of both the fish and the fishermen – as is reducing the fleet size and totally disrupting the lives of so many people who depend on such an important fishery?

Could it be that Mr. Shelley wasn't far off base in raising the specter of a conspiracy after all, just not the one he wanted readers to buy into?

The sky's not falling in fisheries, but you wouldn't know it by reading Cornelia Dean

(for SavingSeafood.com)

08/02/09

If you're at all familiar with fishing issues, and if you're reading this it's a safe bet that you are, you're aware of the publication in the current issue of the journal *Science* of an important article dealing with fisheries management from a global perspective. In the article, *Rebuilding Global Fisheries*, lead authors Ray Hilborn and Boris Worm and over a dozen coauthors conclude that not all is doom and gloom in the world's fisheries and that we're not facing the inevitable decline of all in all of them culminating in an ocean filled with jellyfish and similar critters.

There's been a reasonable amount of media coverage of the article, and I don't intend to add to or rehash any of it here, so to stay informed I suggest that you examine some of it on your own (starting with Richard Gaines' work in the *Gloucester Times*). What to me is much more interesting is the character of some of that coverage, particularly relative to the coverage of other "blockbuster" fisheries research that we've been subject to over the past few years.

For anyone familiar with the real-world status of domestic or international fisheries, the article didn't break any new ground. Most simply stated, some of the world's fisheries are in good shape, some are improving, some are in trouble, and fisheries management can and does work though it's not effectively applied everywhere. There aren't any revelations there unless your understanding of fisheries issues is no more profound than that provided by the anti-fishing, marine conservationist clique with their "the oceans are devastated and it's all the fishing industry's fault" mantra.

Also not news, though still edifying to see in print, is the fact that the fisheries off the Northeast US were doing well and getting better (be on the lookout for an upcoming issue of *FishNet USA* in which I'll be writing about what's really happening with the New England groundfish fishery). Management in New England and the Mid-Atlantic is paying off, at least for the fish.

Most of the media coverage of the report made note of this, adopting the general tone that things aren't as bad as they might be, and there's light at the end of the tunnel.

However, a curt press release by Rebecca Goldberg, **Director of Marine Science** at the **Pew Environment Group** (which along with all of the other Pew-supported organizations has been part of a frighteningly well-financed campaign pushing for a revolution in how we manage our fisheries and our oceans) totally ignored all of the positive content in the report, ending with *"two scientists who once held opposing views about the state of ocean fisheries now agree about the significance of global fisheries declines and the solutions needed to reverse these trends. If fishery managers worldwide heed these important scientific findings, then we have an extraordinary opportunity to restore ocean fisheries."* No surprises there, why would anyone connected with the Pew machine want to admit that there's anything positive going on in the oceans? Pew's been pushing an agenda, and why should that change?

But what about the supposedly objective media?

In her coverage, Cornelia Dean at the *New York Times* focused almost exclusively on the "human" dimensions, rhapsodizing about scientists from two previously opposing camps finally coming together for the greater good of us all, and of the world's oceans and fisheries.

While she did report that the authors *"wrote that management techniques like closing some areas to fishing, restricting the use of certain fishing gear or allocating shares of the catch to individual fishermen, communities or others could allow depleted fish stocks to rebound,"* Ms. Dean failed to mention that the fish stocks in the Northeast have rebounded quite well. This is one of the most positive aspects of the report as well as the one most relevant to **New York Times** readers, and it happened without the imposition of catch shares. Need I mention that catch shares, in essence a system of privatization of our fisheries, are at the foundation of the fisheries management revolution that the Pew campaign has been fomenting?

Looking back at Ms. Dean's coverage of the publication by Boris Worm that was the first in the string of events that led to the recent *Science* article (**Study Sees 'Global Collapse' of Fish Species**, 11/03/2006), she went much farther into the scientific nitty-gritty, among other things quoting Jane Lubchenco, at the time at Oregon State University and now head of the National Oceanic and Atmospheric Administration, as saying the article was *"compelling.... It's a meta analysis and there are challenges in interpreting those, but when you get the same patterns over and over and over, that tells you something."* Somehow Ms. Dean failed to get Dr. Lubchenco's reaction to **Rebuilding Global Fisheries**, about as close as one can get to an outright refutation of the study she found so compelling, and one by that study's principal author. Now there's an opportunity that I can't imagine any journalist passing up, but Ms. Dean did.

(As a perhaps relevant aside, Josh Reichert, Director of the Pew Trusts' Environment Program, fully endorsed Dr. Worm's earlier work.)

Is Ms. Dean's coverage of *Rebuilding Global Fisheries* reporting or is it editorializing? The people at the **New York Times** didn't identify Ms. Dean's piece as "opinion" so it's probably meant to be the former. However, when looked at in relation to her reporting on Dr. Worm's prior, though objectively less compelling, work and considering her penchant to educate Pew-supported researchers in how to deal with the media in

tropical resorts (see **Sea Around US Project Newsletter**, November/December, 2002 at <http://www.fisheries.ubc.ca/archive/members/dpauly/miscellaneous/2002/bonaire90millionyearsplusfewdaystothink.pdf>), is that what the readers of the New York Times, still one of the most important daily newspapers in the country, are actually getting?

Do a web search on “Cornelia Dean Pew” and compare any of the pieces Ms. Dean has written on Pew funded, supported or endorsed initiatives to her almost totally dismissive coverage of the good news content of **Rebuilding Global Fisheries**. While she did write “*but they [the authors] also agreed that fish in well-managed areas, including the United States, were recovering or doing well,*” that’s hardly the take home message I came away with.

One of the most important points in **Rebuilding Global Fisheries** is that managing fisheries as we have been doing it in the United States has been and will continue to be effective. We don’t need a revolution in fisheries management to get to sustainable fisheries because in fishery after fishery we are either there or well on the way and the mega-foundations that are pouring money into “reforming” how we do it would do well to find something really useful to do with their dollars. For whatever reason, that got right by Ms. Dean. Unfortunately, that means that it probably got by the people who read the New York Times.

They deserve more than that, and so do our fishermen and those that depend on them.

It’s part of your job, so keep the pols, bureaucrats and scientists informed
(for SavingSeafood.com)
08/19/09

First off, there are few things that I find as rewarding, at least work-wise, as hearing from anyone in the fish and seafood industry that something I’ve written has been right on target. That kind of feedback is invaluable to me, because without it, what do I know?

Running a close second on my reward meter is constructive criticism of what I’ve written. I’m not familiar with every segment of the industry and I don’t converse regularly with people from all over who are involved in fishing. If I step on a toe, if I misstate a fact, if I screw up in any way, shape or form, I’m only going to know if somebody tells me. Once you get past the stage where you’re sitting in a lecture hall taking notes on how one expert or another interprets his or her little corner of the world, that’s in large part what learning is all about.

Unfortunately, but pleasantly, I get far more of the former than the latter, and while the compliments feel a lot better, there’s not a lot I can do with them. If I didn’t already think that what I wrote was accurate, incisive, valuable, useful, illuminating, revolutionary, etc., in all probability I wouldn’t have written it.

However, this is all taking us to a much more important point. Whether you read it here or elsewhere, if you come across something that you know should be considered by the people who shape our fisheries policies, it’s up to you to make sure that they consider it. Don’t count on someone else doing it, because if you do, it might not get done. If you do it and another person does it as well, so much the better. And if a dozen or so do it, that’s better still. When it comes to substantive public participation (and that doesn’t mean signing on to a form letter on a web site), the more the merrier definitely applies.

There’s one thing that you have to keep in mind. No one can present your perspective on fisheries issues to the people representing you in Washington with anywhere near the effectiveness that you can. But that’s only if they know who you are, where you live and what you do. It’s your job to see that they do.

How do you do that? If you know your zip code and have a telephone, it’s really pretty simple.

There are a number of websites that give you free and easy to get information about your two Senators and one Representative. As an example, I’ll use Roll Call at Congress.org (<http://www.congress.org/congressorg/directory/congdir.tt>), but there are others. While it and similar websites have a wealth of useful information, for now let’s focus on reaching your Senator X, Senator Y and Representative Z.

Enter your zip code in the window and click on “GO.” You’ll be provided with a list of your state and federal elected officials. Click on their names and you’ll get a lot of relevant information including their local and Washington office phone numbers. Call and ask to speak to the Chief of Staff, who’s listed on the website.

After introducing yourself, tell the COS your background in and local connections to the seafood industry and your general concerns about federal fisheries management. Then say you’ve got some particular concerns and you’d like to talk about them with whoever is responsible for environmental/fisheries issues.

Make sure that the staffer you're referred to knows that the referral was by the Chief of Staff. After talking about your current issue, say that you'll be forwarding relevant information on this issue, and that you want to be sure that the Congresswoman, Congressman or Senator is made aware of it. Also mention that you'll be sending other important information as you come across it in the future.

Get the staffer's email address, send the article, letter, etc., wait a few days then call back and ask what the Representative or Senator thought of it. If you don't get a satisfactory answer, say you'll call back in a day or two. And follow through.

Use a similar approach with members of the print or broadcast media. When something gets printed or aired about fishing that's wrong, let the reporter, the producer, the editor or the station's or paper's ombudsman know, and let them know that you're a local business person whose business is being hurt by their failure to "get it right." Offer whatever proof you have demonstrating that they're wrong, or offer to put them in touch with people who will show them the error of their ways.

The more people who do this, the more responsive – and responsible – they'll get.

None of this is a lot of work, but it will take some effort and might make you uncomfortable, but your future depends on it.

And on another, related note, it's become the vogue among some of the defenders of the way things are heading to argue that complaints without suggested solutions are without value. Let me be the first on the block to label that argument as utter nonsense. We have thousands of scientists and bureaucrats on the government payroll getting paid well and regularly to manage our fisheries. Their job is to keep you catching or cutting or selling fish or manufacturing boxes or repairing marine electronics or whatever. Your job, as far as fisheries management is concerned, is to keep them apprised of how they're doing at keeping you catching or cutting or selling. If you have suggestions about how they could do it better, fine, but don't buy into the idea that unless you can tell them how to do it better, you have no right to criticize what they're doing or how they're doing it. Fortunately, that's not the way our government works.

NOAA/NMFS to the rescue in New England?

(from SavingSeafood.com)

09/16/09

The people running the National Marine Fisheries Service are hell bent on "fixing" the New England groundfish fishery regardless of the impact that their "fix" is going to have on the tens of thousands of people who directly or indirectly depend on it. NMFS' solution, a variation of catch shares called sectors, is going to make the groundfish fishery easier and cheaper to manage, and it's unquestionably going to put some people in the commercial fishing industry (and if Environmental Defense has its way, some people not in the commercial fishing industry, as well) in a better economic position. At the same time it could also destroy much of the social fabric that holds together New England's fishing communities while irrevocably altering a way of life that's become synonymous with the New England character.

But what's broken? I've already pointed out that there are enough groundfish off New England to, if sustainably managed, keep today's entire groundfish fleet working (see Chronic Underfishing – the Real New England Groundfish Crisis at http://www.fishnet-usa.com/chronic_underfishing.htm). If the groundfish fishermen hadn't been hobbled by a Machiavellian morass of fishing restrictions, in 2008 they could have harvested most, if not all, of the 170,000 metric tons of groundfish target TAC (that stands for Total Allowable – read that again: Allowable Catch) rather than the 40,000 tons they did land.

If catching the Total Allowable Catch of groundfish had actually been allowed over the last decade, something that might well be considered heresy on Great Republic Drive in Gloucester, there's not much in the groundfish fishery that would actually need fixing. If it weren't for foundation-funded "marine conservationists" strangling the groundfish fishery into submission via ecologically unsupportable and economically devastating regulations, how many tons of catchable and sellable groundfish would have been caught in those years? With each pound of groundfish landed generating five bucks or so of economic activity, every 100,000 metric tons of landings means over a billion dollars pumped into the New England economy. That kind of money would do some serious "fixing."

And what about spiny dogfish? There are about a million tons of them out there, and they're having a huge negative impact on other species and other fisheries from Cape Hatteras to up past the Hague Line. How many boats, how many fish cutters, how many truckers and how many of every other kind of tradesman or woman that gets a piece of the fish pie could an extra fifty- or a hundred-thousand tons of dogfish support? And what would a significantly reduced dogfish biomass do for all of those competing stocks, including groundfish (see the note below)?

The groundfish stocks definitely aren't broken. As the folks at NMFS admit, the fish are there. Going by the target TAC, there are enough catchable groundfish to support a fishery as big as it was in the late 1960s or the early 80s. And if the huge biomass of spiny dogfish could be reasonably reduced, there would be even more, and more fluke, and scup, and sea bass, and striped bass, and on and on and on as well. But the 2009 spiny dogfish TAC is under 6,000 metric tons. That's not going to make a noticeable dent in the dogfish stock, which will thereby continue to make sizeable – and very noticeable – dents in just about every other stock.

But, with their seemingly obsessive focus on implementing the groundfish sector program, Phase I of Dr. Lubchenco's "catch share revolution," and with that huge uncaught TAC staring us in the face, it's awfully difficult not to suspect that the NMFS leadership has turned a blind eye towards anything that would allow more of the allowable groundfish to be caught. And it seems the same blind eye has been turned towards anything – say, for example, reducing the spiny dogfish biomass - that would increase the allowable groundfish catch. If there's any rational reasoning behind the former other than reducing the perceived need for revolutionizing groundfish management it's really hard to understand what it might be. It's not so difficult to see why no one is doing anything serious to increase the TAC. A hundred and thirty thousand tons of uncaught TAC must be hard enough to explain (or to not explain, which has been the case up until now). Could you imagine being a manager and having to explain – or not – even more?

Putting it as succinctly as possible, there are four times more catchable groundfish in New England than are being caught, and if it wasn't for a huge biomass of spiny dogfish that ratio would be higher. Yet the people at NMFS haven't made any substantive efforts to allow fishermen to harvest more of the uncaught groundfish TAC or significantly more (in terms of predation on or competition with other species) spiny dogfish. And while not doing all of that, they've apparently also botched the job of groundfish record keeping, which to the fishermen is undoubtedly the most critical part of the entire catch shares process.

And last but certainly not least, from the September 10 Gloucester Daily Times, "*ignoring the wishes of 109,817 Massachusetts online voters, the federal government has rejected Gloucester's Man at the Wheel for engraving on the back of a series of U.S. quarters. Chosen in a landslide over hundreds of other sites in Massachusetts in Internet voting this spring, the Gloucester Fishermen's Memorial and its iconic image of the man at sea was deemed ineligible for the quarter program because it is not federally maintained, according to a Mint spokeswoman*" (**Feds nix 'Man at the Wheel' for state quarter honor** by Patrick Anderson).

In addition to the comedy of errors that management of one of our oldest and most important commercial fisheries has become, in addition to commercial fishermen being frozen out of the Obama Administration's selection process for the leader of the National Oceanographic and Atmospheric Administration, and in addition to commercial fishermen being frozen out of the selection process for the head of the National Marine Fisheries Service, commercial fishermen are now even being denied recognition on the back of a U.S. coin. Kind of makes me wonder what's coming next, but while I'm wondering I'm strapping on my crash helmet and mapping out my quickest route to the bomb shelter.

Note: According to **The Ecosystem Status Report for the Northeast U.S. Continental Shelf Large Marine Ecosystem** by the NMFS Ecosystem Assessment Program just published this month, "*the direct and indirect effects of species-selective harvesting patterns have also contributed to shifts in fish community composition which is now dominated by small pelagic fishes and elasmobranch species (skates and small sharks) of low relative economic value.*" Assuming each spiny dogfish consumes 1.5% of its total body weight in prey species daily, every 60 days the total biomass of dogfish off New England will eat an equivalent weight in other species, for a total of 6 million metric tons of spiny dogfish predation a year.

It should have been a rockalypse now

(from SavingSeafood.org)

10/08/09

Remember a couple of years back when satellite photos revealed the "devastation" due to sediment trails kicked up by shrimp trawlers? A staggered line of shrimp boats were shown, each preceding a plume of cloudier water, and Daniel Pauly, University of British Columbia researcher and one of the chief crepe hangers of the Pew funded "let's blame it all on commercial fishing" campaign, was quoted widely as saying "*these images of trawler mudtrails confirm that this mode of fishing is terrible. Think of the story about China's Great Wall being the only human artifacts (sic) visible from space. Now we can add the mudtrails of trawlers.*"

The satellite pictures are at a level of resolution that is available to billions of us (for free) on the web's Google Earth, as it was when Dr. Pauly was waxing catastrophic on trawling. Now I've spent a reasonable amount of time messing with Google Earth, and while I'm not an expert in satellite photo interpretation, using it I can clearly distinguish the three skylights on my house, each of which is perhaps two feet wide and four feet long. The Great Wall of China is, I think, somewhat larger. So it appears that we can add to Dr. Pauly's Great Wall of China and the mudtrails of trawlers perhaps a billion or so other human artifacts (including my skylights) visible from space. But hey, why should anyone, even if he is a respected scientist, be held accountable for everything that he is quoted as saying to make his "doom and gloom" predictions more worrisome?

But back to the shrimpers and their "catastrophic" sediment plumes. They were fishing on the Yangtze River delta. The Yangtze is one of the world's largest rivers, until the recent construction of a series of dams it transported an average of 472 million tons of sediment to the sea each year. Needless to say, most of this sediment ended up being deposited on the delta. The finer sediment layer (these are the sediments that would be resuspended by trawling) ranges from about 130 feet thick at 60 to 100 foot water depths to 3 to 6 feet in thickness at 300 feet. It's estimated that this "mud wedge" contains 500 billion tons of sediment.

While I'm certainly not the fisheries scientist that Dr. Pauly is, I'd be willing to bet that the critters in and around the Yangtze delta are pretty much adapted to suspended – or resuspended – sediment in the water. Any bottom dweller that can't deal with suspended sediments shouldn't

be hanging out on the Yangtze (or Mississippi, Nile, Amazon, Mekong, or you name it) delta, and the way that nature works, they definitely aren't. In spite of this, Dr. Pauly convinced a bevy of media people that trawling was dooming us to yet another ocean Armageddon. Quintessential sound bite science.

Well, Dr. Pauly and his somewhat less than compelling "science" is back, this time in the pages of that widely regarded scientific semimonthly journal, The New Republic.

In an article provocatively entitled **Aquacalyse Now** – with no acknowledgement of Francis Ford Coppola, Marlon Brando or Martin Sheen, but we all get it, don't we? – Dr. Pauly once again tries to convince us, or at least those of us that read The New Republic, that the biological integrity of the world's oceans is being destroyed. His *ogre du jour*; that the oceans are being stripped of their big and visually appealing (no kidding, he actually wrote "*boats began to catch fish that were smaller and uglier*") critters by what he's termed the "fishing-industrial complex," whose operations he relates to Bernie Madoff as well as a "giant Ponzi scheme." Sort of like the military-industrial complex that the talking heads of the Sixties were assiduously trying to make us all believe was well on the way to ruining the free world. In spite of the best efforts of what at the time was only a fledgling crisis industry to convince us otherwise, we did survive it. Now it appears we're being threatened by its aquatic sibling, the fishing-industrial complex, but with more greed, corruption and rampant illegalities thrown in. The parallels are kind of staggering and, according to the best thinkers in the fisheries science/marine ecology world in a recent paper in Science magazine (Worm, Hilborn et al, *Rebuilding Global Fisheries*, 07/31/2009), we'll more than likely survive this latest product of the crisis mongers as well.

Dr. Pauly continues that this all began "*in the 1950s, as their (the fishing industrial complex, I presume) operations became increasingly industrialized—with onboard refrigeration, acoustic fish-finders, and, later, GPS.*" That makes a nice story for all of the Luddites who read The New Republic, but from what I remember about Kipling's **Captains Courageous**, the cod fishermen on the Grand Banks a century ago did really well with salt, with an intimate knowledge of their fishery, with a compass and dead reckoning, and with not even an inkling of a fishing-industrial complex. And let's not forget the Atlantic halibut, a still unrecovered casualty of the prefishing-industrial complex.

Interestingly, Dr. Pauly has the fishing-industrial complex developing at about the same time as the military-industrial complex. Perhaps the sun spot activity was at a peak in the 1950s?

He also resurrects yet again the specter of oceans filled with jellyfish and writes prophetically about "the end of fish," even going so far in a strained and labored effort as to blame the oceanic dead zones – including our very own in the Gulf of Mexico – on trawling for shrimp, rather than on nutrient-laden agricultural runoff, their indisputable and long recognized cause.

Most of this could be overlooked as artistic license, particularly if Dr. Pauly was an artist, but he's not. He's a scientist and we have to assume he's writing as a scientist.

But he seems to be moving pretty far from objective science and into the role of polemicist when he writes "*one study, published in the prestigious journal Science, forecast that, by 2048, all commercial fish stocks will have 'collapsed.'*" Boris Worm, the lead author, has since recanted his position on this universal collapse in such a high profile manner in **Rebuilding Global Fisheries** cited above that even Dr. Pauly up there in the wilds of British Columbia should have been aware of it. I can only assume that he missed it because he failed to renew his subscription to **Science**.

Most disturbing from the US fisherman's perspective, **Aquacalyse Now** is underneath all of the doom and gloom hyperbole nothing more than another argument for catch shares, the form of fisheries management that has been adopted as the Holy Grail by NOAA head Jane Lubchenco, that has been touted by the Pew-supported "conservationists" as the only salvation of the world's fisheries, that seems to be well along a path to self-destruction in the New England groundfish fishery, and that has been repudiated as unworkable by the fisheries managers in the European Union (whose lack of success based on catch share management speaks for itself). Not at all surprisingly, Dr. Pauly, the programs he is involved in at the University of British Columbia and the University itself have received on the order of 10 million Pew fisheries/oceans dollars.

He takes the catch shares argument a step farther, suggesting that fishing rights be auctioned by government to the highest bidder (while doing this, he also manages a slam aimed at "most fisheries economists," but that's for another column). This definitely rang a bell for me, thinking back to one of the initial meetings on sector management in New England when the "marine conservationists" were rhapsodizing about what they were calling conservation sectors. How'd you like to co-own a fishery with the people at Pew? And he doesn't miss getting in a plug or several for ocean zoning, another Pew priority that came to NOAA/NMFS with Dr. Lubchenco and is yet another way to wrest control of the oceans from the fishermen, and to wrest their future away from them as well.

On the other hand, the title **Aquacalyse Now** is particularly apt for this, Dr. Pauly's most recent venture into it's-the-fishermen's-fault ocean alarmism. What he writes is identical in feel to the phantasmagorical world of Colonel Kurtz in the movie (minus the fog/mist/smoke, the tiger and the pyrotechnics, of course). But, not wanting to be outdone by anyone in the field of new word coinage, I'd like to offer my own humble effort – **Acrockalypse Now**.

On dogfish it's NMFS that's not seeing the whole picture

(for SavingSeafood.com)

10/21/09

If you're a commercial, recreational or party/charter boat fisherman and if you've put any time in on the water from North Carolina to the Gulf of Maine in the last several years, there's a high probability that your fishing has been directly impacted by the huge stock of spiny dogfish infesting out near-shore waters. There's an even higher probability that it's been indirectly impacted. Increasingly, these indiscriminate and voracious predators are stealing bait, plugging nets, fouling gear, invading chum slicks and forcing other fish – and the fishermen who are pursuing them – from areas where they have been fished for years.

How significant are these impacts? While that's much more than a million dollar question with much more than a million dollar answer, at this point we don't know, because up until now nobody has been looking. But they have been, and are continuing to be, significant enough to spur the formation of **Fishermen Organized for Responsible Dogfish Management (FORDM)**, an ad hoc association of fishermen from both sides of the recreational/commercial divide. They have been and are continuing to be significant enough so that 500 people, either as individuals or representing the widest imaginable spectrum of recreational, commercial and party/charter fishing organizations and businesses, signed on to a letter to newly appointed NOAA Chief Lubchenco for her help in dealing with the issue (available at http://www.fishnet-usa.com/FORDM_Letter.pdf). – For the record, I had a hand in the formation of **FORDM** and am continuing to work on the spiny dogfish issue – or plague, if you'd rather. Perhaps not so surprisingly, Dr. Lubchenco's response was to pass the issue down to Jim Balsiger, acting head of NMFS (available at <http://www.fishnet-usa.com/BalsigerDogReply.pdf>), whose response seemed at best somewhat less than helpful and at worst an out-of-hand dismissal.

Needless to say, fishermen and fishing-dependent business owners up and down the East coast are extremely aware of, are concerned about, and have gotten organized to deal with what they clearly see is the threat of the overabundance of spiny dogfish. Not surprisingly, some reporters have become interested in the spiny dogfish situation. Last week **Associated Press** reporter Jay Lindsay wrote an article on what he rightly recognized and termed the dogfish dilemma (see http://news.yahoo.com/s/ap/20091013/ap_on_re_us/us_dogfish_dilemma).

He did a good job of putting together a balanced piece – or as balanced as it should be, considering that he had just been on a bottom longlining trip for cod off Chatham, Massachusetts and had first-hand knowledge of what the overabundance of dogfish really means to fishermen trying to squeeze a living out of our coastal waters. He wrote *“on a recent trip off Chatham, dogfish were hanging from almost all 300 hooks fisherman Jamie Eldredge spooled into the ocean 20 minutes earlier. One hook held an unfortunate blue fish, stripped to its spine by the swarming dogs, as they're called. Other hooks had only blue fish heads and gutted whips, the nickname for male dogfish.”* Jay Lindsay was witness to yet another fishing trip gone to the dogs.

However, I found one part of his article particularly troubling. Mr. Lindsay wrote *“federal regulators say though fishermen see dogfish everywhere, ‘they're not seeing the whole picture,’ said Maggie Mooney-Seus, a National Marine Fisheries Service spokeswoman.”* When I read that, a number of terms came to mind. Among the nicest were “condescending” and “ill-informed.” Fishermen see dogfish everywhere because dogfish are everywhere, not just off Chatham or Cape May or Barnegat Light or Cape Hatteras. Not just at the ten fathom line, or the twenty, or all the way out to the edge. They are seeing them because they are there, and they haven't seen them in that profusion in the past. And Jamie Eldredge isn't the exception, he's the rule. A day ruined by spiny dogfish - damaged gear, lost bait, fouled hooks, wasted effort and ruined product - is becoming much too familiar up and down our coastline. How much more of the picture is there for the fishermen to see?

While putting forth the idea that today's fishermen are uninformed and isolated and can't see beyond their own self-interested horizons might make the job of defending NMFS position's and actions easier, that's no longer – if it ever was – the case. As a matter of fact, with all of the fishing websites available, with the instantaneous ability to communicate via email and cell phone, and with the proliferation of various and sundry meetings, hearings, workshops, etc. that it's almost mandatory that they attend, fishermen today are unquestionably seeing a larger picture than they ever have before. And spiny dogfish are making up an increasingly significant and bleak part of that picture.

There's a sampling of spiny dogfish quotes that FORDM collected at <http://www.fishnet-usa.com/DogfishQuotes.htm>. Anyone who read them might be disinclined to insist that fishermen aren't considering the whole picture when it comes to spiny dogfish. Anyone who had paid any attention to the **FORDM** letter to Dr. Lubchenco linked above might be similarly disinclined.

But perhaps not. The fact that no one at the policy level NMFS was interested enough to dig into the issue at all or did dig into it and then blew off the fishermen's concerns as more meaningless “anecdotal information” is symptomatic of why relationships between NOAA/NMFS and many of the commercial, recreational and party/charter fishermen that it's supposed to be there for are so strained. On the other hand, NMFS scientist Paul Rago has enough of a grasp of the dogfish situation to have said to Mr. Lindsay *“it's always a concern to me that if we're off on some assumption, we've missed something, you know, it has immediate outcomes. It's fine for us to say ‘Whoops.’ But for the guy that's at the end of that thing, it's not acceptable.”* To contend with the vagaries of fish populations in the open oceans you need the kind of open mindedness that Dr. Rago demonstrates here. Anyone who deals with knowledgeable fishermen, and who is committed to dealing with them fairly and

effectively, will listen to them and give credence to what they are saying (particularly if they are saying it virtually unanimously over 2000 miles of coastline).

That's obviously not the case with far too many people in the upper echelons at NOAA/NMFS. Particularly considering that they are public employees now, I sincerely hope that they don't realize to what an extent they are marginalizing both commercial and recreational fishermen in the management process. Sadly, considering that's a large part of the strategy that the ENGOS have used so successfully to wrest political control of fisheries management from commercial and recreational fishermen, and considering the myriad ties that now exist between those ENGOS and the people in charge at NOAA/NMFS, there does seem a reasonable chance that they do and that this marginalization is part and parcel of the Obama Administration's fisheries/oceans policy. Consider, for example, how closely Ms. Lubchenco consulted with fishermen of any stripe before deciding that "catch shares" were going to be the new basis for US fisheries management. After all, why should this newest crop of bureaucrats, fresh from the privileged world of the lavishly foundation-funded ENGOS, want a bunch of working fishermen interfering with their plans for the fish and for the oceans?

The Dogfish Follies

11/20/09

“Spiny Dogfish Record Tow - After the standard bottom trawl survey work was completed on October 31, 2007 (during leg V), additional trawls were deployed where the vessel repeated a series of three twenty minute tows along the same track line in as short a time frame as possible to see what effect these tows would have on the total catch (did each tow's successive catch become smaller?). While towing just north of Provincetown, MA, one day after hurricane Noel passed through, we brought aboard the largest catch of spiny dogs that I had ever seen. With great effort, the net was brought aboard and 90 minutes later, over 26,000 pounds of dogfish (7,261 individuals) had been processed. We left the area without completing the two other planned tows!” (from the Report for the NMFS Autumn 2007 Bottom Trawl Survey http://www.nefsc.noaa.gov/esb/rsr/fbts/fbts_2007/large_file.pdf)

An overview

According to anecdotal evidence based on on-the-water observations by a multitude of commercial and recreational fishermen, there are so many spiny dogfish (*Squalus acanthias*) in the coastal waters from Cape Hatteras to Canada that they are significantly interfering with major fisheries. The latest information from the National Marine Fisheries Service (NMFS) is that the total biomass was over 1.3 billion pounds. For reference, the total commercial harvest of all edible finfish and shellfish on the East Coast in 2008 was just slightly over 1.4 billion pounds.

Many experienced fishermen are of the opinion that these small sharks, which have always been known as nuisance fish, are now present in unprecedented numbers. They occur in huge schools that make it all but impossible to fish, clogging nets and damaging the commercial catch or taking baited hooks that are meant for targeted species.

Besides interfering with commercial and recreational fisheries, spiny dogfish – which are notorious for their voracious feeding habits – are efficient predators, both of more valuable fish species and of the organisms that these species feed upon. They were heavily harvested in our waters by European distant water fleets in the 1960s and early 1970s. This fishery ended with passage of the Magnuson Act in 1976, but a domestic fishery aimed at supplying European markets was started in the late 1980s with the enthusiastic support and encouragement of the federal government. Continuing into the early 2000s, it was at one point landing as many dogfish as the Soviet Block factory trawlers had been thirty years before. The primary targets of the commercial harvesters were the large, predominantly female fish,

To the relief of just about everyone, and to the undoubted benefit of just about every commercially and recreationally important fish species in the western North Atlantic, the spiny dogfish stocks started to decline.

Seems like a classic win-win scenario in the making, doesn't it? A species that has always been considered at best a nuisance is being reduced in numbers, removing a significant source of natural mortality and reducing fishing pressure on more valuable species while pumping money into the economies of half a dozen coastal states and benefiting our balance of trade?

Not quite. Several years ago the directed commercial fishery for spiny dogfish was closed. It's again open, but with a severely restricted harvest, the number of dogfish are increasing dramatically, and each year the recreational and commercial fisheries are being more heavily impacted by that increase. All to supposedly benefit a species that has been held in contempt by many generations of fishermen.

The dogfish data

Going back to the 1960s, the Northeast Fisheries Science Center's (NEFSC) bottom trawl survey series is touted as one of the most comprehensive and reliable sources of data on a particular group of fish species (those living on or near the bottom) in a particular area (the waters off the New England and Mid-Atlantic states) available. The survey is composed of three annual sampling cruises, one in the spring, one in the fall and one in the winter. On each cruise from 100 (winter) to 350 (spring and fall) samples are taken by measured and monitored tows of a stand-

ardized net at selected stations. The catch from each station is counted, weighed, measured and recorded. In recent years the various survey results have been made available on the Center’s website (<http://www.nefsc.noaa.gov/nefsc/publications/online.htm>).

The individual survey reports specifically identify about two dozen separate species – usually the most common and/or those for which significant fisheries exist. The rest of the catch is lumped together into the catch-all category of “Total-other.” Interestingly, and in spite of the doom and gloom prognostications of the environmental industry, the total poundage taken each year in the three surveys has been trending upward since 1999, the first year for which the reports are available on line (see Chart #1 below).

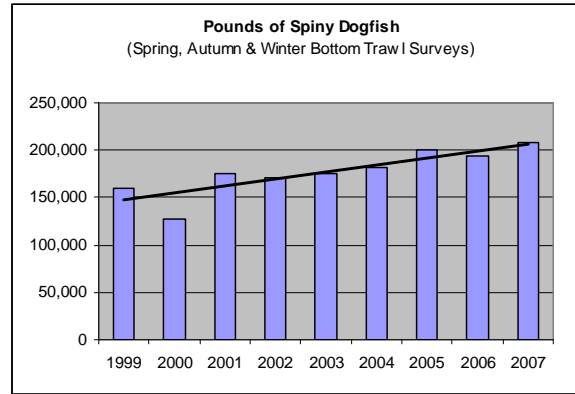


Chart 1

For every year that we examined, the fish that has made up the bulk of the samples – by an incredible margin – has been the spiny dogfish. As demonstrated in Chart #2, in the years from 1999 to 2007 spiny dogfish have made up from 49% to 66% of the total sample weight (we took the average of the spring, fall and winter surveys each year to smooth over seasonal differences). In 2000, the year that the commercial fishery was essentially closed, the poundage of dogfish in the trawl survey began to increase dramatically.

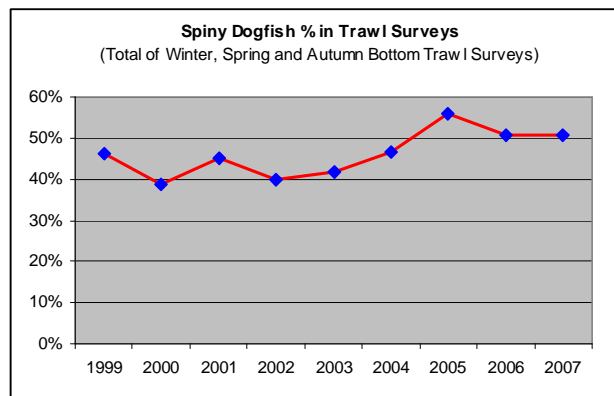


Chart 2

Dogfish as good neighbors

In the classic **Fishes of the Gulf of Maine** (Henry B. Bigelow and William C. Schroeder, 1953), dogfish are described as “voracious almost beyond belief, the dogfish entirely deserves its bad reputation. Not only does it harry and drive off mackerel, herring, and even fish as large as cod and haddock, but it destroys vast numbers of them. Again and again fishermen have described packs of dogs dashing among schools of mackerel, and even attacking them within the seines, biting through the net, and releasing such of the catch as escapes them. At one time or another they prey on practically all species of Gulf of Maine fish smaller than themselves, and squid are also a regular article of diet whenever they are found.” And the Food and Agricultural Organization of the United Nations, in its **Global Information System Species Fact Sheet**, says of dogfish “this shark is a powerful, voracious predator that feeds primarily on bony fishes, and is capable of dismembering rather large prey with its strong jaws and clipper-like teeth. Its bony fish prey includes herring, sardines, menhaden and other clupeids, true smelt (*Osmeridae*) and their eggs, hake, cod, pollock, ling, haddock and other gadoids, midshipmen, blennies, sand lances, mackerel, porgies, croakers, flatfish and sculpins. It is thought to prey on most available bony fishes smaller than itself, and will often prey heavily on abundant schooling fishes, but newborn dogfish attack herring larger than themselves, as may adults with cod and haddock.”

We must note here that the Atlantic States Marine Fisheries Commission, the interstate organization responsible for managing spiny dogfish in state's waters (out to three miles) on the Atlantic coast, describes their diet as consisting of "*of several commercially important species, such as Atlantic herring, Atlantic mackerel, Loligo and Illex squid, and to a lesser extent cod and haddock.*"

Regardless of whether the dietary habits of dogfish are being accurately described in Bigelow and Schroeder and by the FAO, or glossed over by the ASMFC, if we assume that it takes ten pounds of prey to make one pound of predator, it took 8 billion pounds of a number of other species that almost all support commercial and/or recreational fisheries to produce the current 800 million pounds of spiny dogfish biomass. Many of these other fisheries are supposed to be undergoing rebuilding because of overfishing but, considering that any given piece of ocean is only going to be able to support a given biomass of fish, the probability of any of these species that are competing with spiny dogfish for – or are providing them with – food being rebuilt is less than likely, no matter how much

The dogfish fishery

Recognizing this, the National Marine Fisheries Service started to encourage the development of a dogfish fishery in the Northeast in the late 1980s. This was accompanied with an ambitious marketing program aimed at identifying spiny dogfish as "Cape shark" and establishing a domestic market.

While the domestic market never took off, a number of U.S. companies became quite successful in exporting spiny dogfish to Europe. They were so successful, in fact, that the domestic fishery had expanded to the point that over 50 million pounds were landed in 1996.

The effect of all those dogfish on other fish stocks?

You've already read about the impacts of all of these dogfish on recreational and commercial fishermen. What of their effects on other fish stocks?

Not too surprisingly for anyone with the slightest grasp of ecosystem dynamics in our coastal waters (and in complete agreement with Bigelow's and Schroeder's and the FAO's description of these pint-sized eating machines), the overall abundance of those species that dogfish prey upon has plummeted as dogfish stocks have increased, and this isn't a phenomena that's been restricted to recent years.

Going back almost 50 years, dogfish and their cousins, the various species of skates (which make up a large part of the "Total-other" category in the NEFSC's trawl surveys) have been undergoing a prolonged population explosion in the waters off the Mid-Atlantic and New England (see Chart #3). While there was a small decline in the skates and spiny dogfish from 1990 to 1997 which can be attributed to the domestic dogfish fishery, this decline has since been reversed.

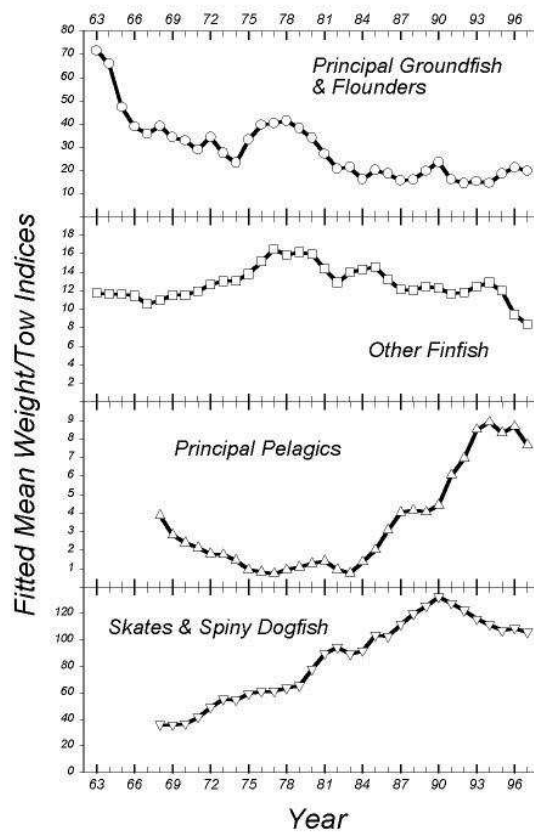


Chart 3

The influence of the overabundance dogfish and other elasmobranchs (sharks, skates and rays) was noted by NMFS' Steve Murawski in 1992, who wrote in **Multi species size composition: A conservative property of exploited fishery systems** (with J.S. Idoine in **Journal of Northwest Atlantic Fishery Science**, Volume 14: 79-85) "*given the current high abundance of skates and dogfish, it may not be possible to increase gadoid (cod and haddock) and flounder abundance without 'extracting' some of the current standing stock.*"

So we've got an ocean that's filled with dogfish, each year the amount of them out there appears to be increasing, they severely interfere with both recreational and commercial fishing, and they're undoubtedly eating large – and increasing – amounts of more valuable species as well as the food those species prey upon. It seems like the only logical solution to an obvious problem – unless we're willing to allow our local waters to remain dominated by this single, low-valued species – would be to increase the harvesting of spiny dogfish, doesn't it? Particularly when you consider the fact that some of the traditional and far more valuable fisheries had been in a protracted decline.

Well, not quite.

Spiny Dogfish management

Amending the Magnuson Fisheries Conservation and Management Act in 1996, the Sustainable Fisheries Act (SFA) implemented a number of measures that removed much of the discretion from the fisheries management establishment and, in many knowledgeable folks' estimation, resulted, among other things, in ridiculously rigorous protections for spiny dogfish, a species that should most sensibly come with a government bounty, not government protection.

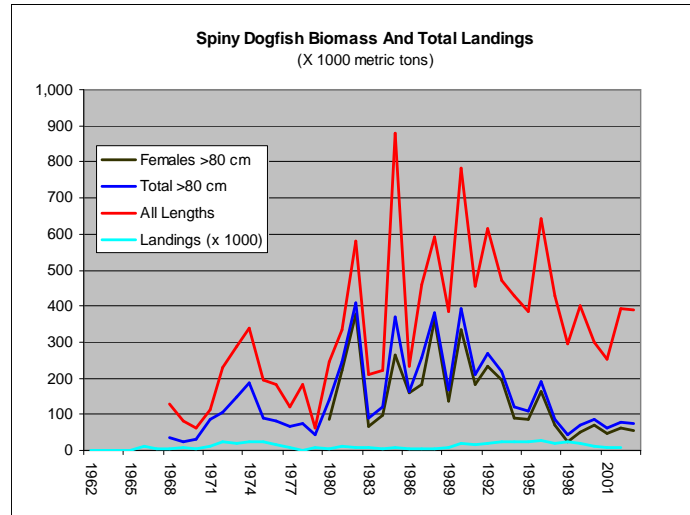
Because a commercial fishery has existed for dogfish, the dogfish fishery has to be managed. And because it has to be managed under the strictures of the Sustainable Fisheries Act, the stock has to be maintained at a level of high abundance.

According to the SFA, fisheries that can't be harvested at maximum sustainable yield are being overfished, and overfished fisheries must be rebuilt within 10 years. Unfortunately, because of the government encouraged and supported development of the commercial dogfish fishery, there is no way that the stock can be "rebuilt" by restricting the directed fishery. This is because there are so many dogfish that they have become a large part of the bycatch in virtually every other fishery.

The dogfish fishery management plan isn't based on estimates of the amount of dogfish in the ocean, it's based on the proportion of large female dogfish in the population. In spite of the increase in the biomass of spiny dogfish, in spite of a drastically curtailed commercial fishery, and in spite of dogfish making up almost two thirds by weight of the fish caught in the three NEFSC bottom trawl surveys in 2004, there isn't a

high enough proportion of large females. Hence, in 2000 a yearly quota of 4 million pounds was set. Landings were almost 50 million pounds only four years before.

As the chart below shows, the total biomass of spiny dogfish in recent years has been much higher than it was in the late 60s and throughout the 70s, and it appears as if the spawning stock biomass (mature females) is at approximately the same level today as it was then. The level of landings attributable to foreign vessels in the 70s was at about the same level as domestic landings were during the 90s, and (and perhaps unfortunately for competing stocks), and the stock, including females, “recovered” to staggering levels of abundance within 5 or 6 years.



(from data in the 47th Stock Assessment Workshop at the NEFSC)

Dogfish as a cause célèbre

The “plight” of the spiny dogfish was seized upon by anti-fishing zealots, people who are seemingly always on the lookout for situations that can be turned into “crises,” carrying forward their and their supporters’ anti-fishing zeal. So we had the creation of a “save the spiny dogfish” bandwagon.

Thus we saw ominous pronouncements along the lines of “*reproductive females have been mined out, pups are flat-lining and the population may not recover within our lifetimes.... this systematic extermination of a valuable part of the marine ecosystem represents a shameful waste of public resources and sets a dangerous precedent for other exploited ocean species*” (the Ocean Conservancy), and “*Fishermen and politicians teamed up to promote dogfish consumption.... Speak up for the much-maligned cape shark! Dogfish conservation continues to face an uphill battle due to industry opposition and rampant disrespect for dogfish*” (Center for Marine Conservation)

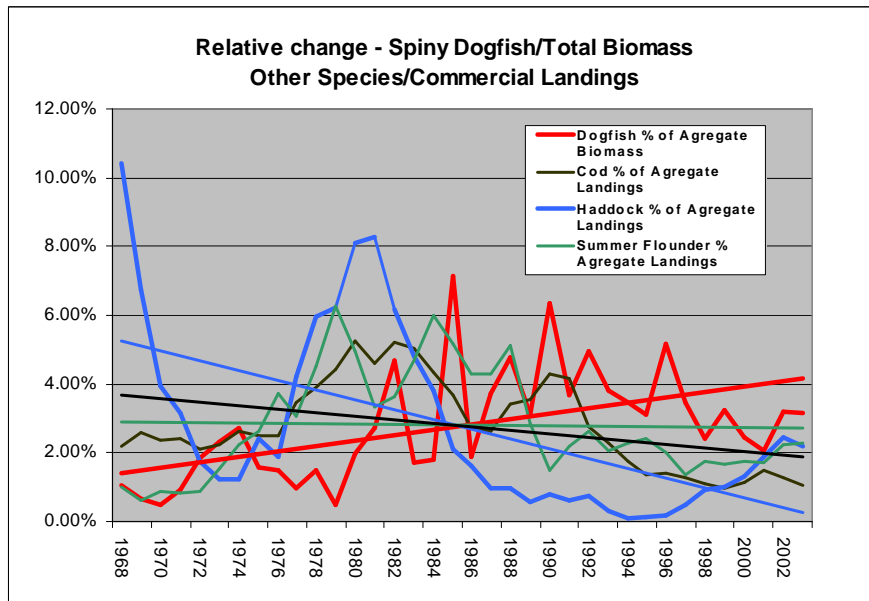
These appeals to save the dogfish invariably included a reference to the species’ supposed low fecundity. It’s true that they, like all sharks, produce a relatively small number of young each year. While females of some species might produce millions of eggs annually, a dogfish will only give birth to a dozen or so live “pups.” This might appear to put dogfish populations at risk, particularly when compared to other species. However, for every half million eggs released by a female cod, only an infinitesimal number will survive to the size of a newly born juvenile dogfish, 8 to 11 inches in length. The juvenile dogfish, on the other hand, is a completely functional and efficient predator from birth.

These appeals also fail to note that, as shown in Chart 4 above, the stock did “recover” to levels of abundance equivalent to today’s within a few short years following an equivalent level of harvesting only two decades ago.

Bear in mind that many of the stocks that dogfish prey upon or compete with are tremendously important to both the commercial and recreational fisheries in the Northeast, and to the consuming public. When market conditions are right, codfish and haddock and the various flounders can return several dollars a pound to the fishermen that land them, and they provide sport – and table fare – to millions of sportsfishermen. Restored groundfish and other stocks would pump additional hundreds of millions of dollars into the coastal economies of the Mid-Atlantic and New England, were they not being both directly and indirectly impacted by the presence of millions of pounds of dogfish. But the anti-fishing zealots have been hard at work convincing anyone who will listen – unfortunately, that includes a lot of media folks - that those stocks aren’t rebuilding solely because of continued overfishing.

Chart 5 below illustrates 36 years of change, from a relative abundance perspective for the spiny dogfish and from a relative harvest perspective for three commercially important species in the same waters (the annual biomass or harvest levels are expressed as a percentage of the aggregate biomass/harvest for the period). The biomass of dogfish has been increasing (red trend line) and the harvest of haddock and cod and

summer flounder have been decreasing – in spite of fishing effort for each of those species being continuously ratcheted downwards for well over a decade.



The need for change

The dogfish dilemma that the recreational and commercial fishermen in the Northeast are facing is one of the most compelling examples of what we are doing wrong in fisheries management. Through the Sustainable Fisheries Act in particular we have locked managers into a lock-step approach to managing our fisheries, based on the erroneous assumption that they all can be and should be managed in the same manner, with the same strictures, and to the same end.

You don't need an advanced degree in biology to know that competing species can't all be present in a given area at maximum population levels, yet that's what modern fisheries management – at least as it is practiced in the United States – demands.

You don't need an advanced degree in economics to know that development pressures along most of the 12,000 miles of U.S. coastline are such that once gone, commercial fishing infrastructure is never coming back, and that economic pressures are already threatening the future of much of that infrastructure. Yet rigid adherence to arbitrary rebuilding schedules – particularly if they are biologically impossible to meet – will do nothing but add to those economic pressures.

And you don't need a degree – advanced or otherwise – to know that commercial fishermen are far less in need of protection from themselves than they are from the anti-fishing zealots who piously proclaim that their multi-million dollar campaigns to “save” the fisheries will ensure that things will be better for those fishermen in the future.

References:

- NEFSC Spiny Dogfish Advisory Report - <http://www.nefsc.noaa.gov/nefsc/publications/crd/crd0317/spinydogfish.pdf>
- NEFSC Status of Fishery Resources: Spiny Dogfish - <http://www.nefsc.noaa.gov/sos/spsyn/op/dogfish/>
- Fishes of the Gulf of Maine - <http://www.gma.org/fogm>
- United Nations' Global Information System Species Fact Sheet, <http://www.fao.org/figis/servlet/species?fid=2834>

Jane Lubchenco and chutzpa – perfect together

11/03/09

First off, when I wrote my last column - **On dogfish it's NMFS that's not seeing the whole picture** - I believed that Associated Press reporter Jay Lindsay had accompanied fisherman Jamie Eldridge on a trip targeting cod that was ruined by the profusion of spiny dogfish. Since then I learned that Captain Eldridge had been targeting dogfish on the trip. An application of Forest Gump's “**when life gives you lemons, make lemonade,**” this particular trip wasn't ruined by dogfish, but their numbers have made the tub trawl fishery for cod off Cape Cod unworkable, and the damage they're inflicting on other recreational and commercial fisheries still continues.

That column was directed at the NOAA/NMFS and “conservation community” propensity for marginalizing commercial fishermen in the fishery management process. Subsequently NOAA Chief Jane Lubchenco provided one of the most egregious examples of that campaign that’s yet come down the pike.

In what is usually NMFS Acting Assistant Administrator Jim Balsiger’s column in the Gloucester Daily Times, on October 30 she wrote about the many contributions that the federal employees at the NMFS Northeast Regional Office (NERO) in Gloucester make to the Cape Ann area’s economy and culture. These contributions include NERO employees shopping locally and sending their kids to local schools, volunteering “*for countless (?) community programs and civic organizations,*” allowing works by area artists to be displayed at NERO, donating “*5,000 pounds of top quality lobster, crab, shrimp and other fish from its routine inspections each year to The Open Door, a Gloucester food pantry that serves the hungry,*” providing meeting space in NERO to “*local businesses*” and supporting various local/regional science education initiatives.

Towards the end of her list, she wrote with a sense of gallows humor that I never suspected that she had “*with our new building, we are able to invite numerous school and community groups to see the work we do.*”

Do the people in charge actually believe that school and community groups in Gloucester need a tour of a new \$25 million government building to see the work that NOAA/NMFS is doing? Gloucester is a fishing port, one of our oldest and most important, that is in the process of losing most of its commercial fishing fleet, and many of the businesses that depend on that fleet. The local folks definitely don’t need a tour of what has been referred to as the **Castle on the Hill** to see that. They just need to take a walk or a ride down to the waterfront.

While giving 5,000 pounds of top quality seafood to needy people is a good thing to do, the giving is being done by the same people whose policies have been forcing fishermen to throw hundreds of tons of even higher quality seafood over the side every year because no one has been able to come up with an acceptable – to the so-called conservationists – way to avoid doing so.

And all of the rest of it is what people in towns and cities all over the country do where they live and work. Some of it is laudable, some of it is necessary, all of it helps the community, but none of it is unique to NOAA/NMFS employees. In fact, if the people at NOAA/NMFS were able to figure out how to let Gloucester’s fishermen catch their proportionate share of the uncaught annual TAC (see **Chronic Underfishing – the Real New England Groundfish Crisis** at http://www.fishnet-usa.com/chronic_underfishing.htm), say 30,000 metric tons or so, the tens of millions of dollars that would pump into the local economy would have a far more dramatic effect than ten times as many federal employees.

But these are only minor quibbles. My major quibble is that this column appeared on the same day that hundreds of fisherman from Maryland to Maine converged in the NERO parking lot to peacefully demonstrate against the impact of “the work” that Ms. Lubchenco and her subordinates there and in Silver Springs, Maryland is having on their communities and on their lives. Coincidence? Do you believe in the Tooth Fairy?

These fishermen have valid grievances. Some of them are shared by their fellow fishermen who are working, or trying to work, under the NOAA/NMFS regime on both coasts, in Alaska and the Gulf of Mexico, in the Caribbean and the US Trust Territories. It’s not just Gloucester, it’s not just New England, and it’s not just the East Coast. They and their colleagues who work in the recreational fisheries are being strangled by an increasingly repressive management regime. It doesn’t need to be repressive unless it’s true that it’s worth inflicting a tremendous amount of economic suffering on working people to get a population of fish to an arbitrary level of abundance in ten years rather than twelve or thirteen. Is there a difference as long as the stocks are improving? How many jobs is it worth, how many lives should be disrupted, to get to that arbitrary population level a day or a week or a month sooner?

But the official comment from NOAA/NMFS for the day focused on the significance of such banalities as agency employees being in the PTA, shopping at Sainsbury’s supermarket and hanging works by local artists in the new office building we just bought them.

The **Free Dictionary Online** defines chutzpa as unmitigated effrontery. That just about fills the bill.

The Consultative Group on Biological Diversity

(for SavingSeafood.com)

11/23/09

I just came by some information on an organization called the Consultative Group on Biological Diversity (CGBD). In the words of its Executive Director, Michael Fischer (in an interview on this past January 27th buried in the Convention on Biological Diversity website at <http://www.cbd.int/doc/fin/submission/fin-cgbd-en.pdf>), “the CGBD was founded in 1987 by the U.S. Agency for International Development (USAID) and several U.S. private foundations. We are currently a unique association, small by design, of 55 funders engaged in environmental grantmaking.” He added “they (USAID) provided seed funding to establish the association, and they continue to provide membership support... About half a dozen of their staff members regularly attend our meetings.” Among the CGBD’s 55 funders are the Pew, Rockefeller, Munson, Surdna and Packard foundations. It’s hardly news to most readers here, but for the uninitiated, these foundations have collectively pumped hundreds of millions of dollars into anti-fishing campaigns of various types in the United States.

The U.S. Agency for International Development, the federal agency that started it, is a participating member of the CGBD and is providing administrative support to it. According to its website, it is involved in supporting “long-term and equitable economic growth and advances U.S. foreign policy objectives.” It does this by “supporting economic growth, agriculture and trade; global health; and democracy, conflict prevention and humanitarian assistance.” In essence, it provides foreign aid to other countries while receiving overall foreign policy guidance from the Secretary of State. Apparently a strong part of its Environment program is preserving and protecting biological diversity and the CGBD is one of the tools it uses to do this.

Part of the CGBD is the Marine Conservation Group, with the mission of saving “the global oceans and the biodiversity contained therein by strengthening marine conservation grantmaking and providing a vehicle for information sharing, dialogue, strategy development and collaboration among funders” (<http://stage.cgbd.org/visitors/aboutcgbd/workinggroups/marineconservation/>).

We’re fine up until this point. If the USAID, a federal bureaucracy paid for with our tax dollars, has decided that U.S. foreign policy goals and objectives can be supported by spending taxpayer bucks abroad on biological diversity, who am I to argue against it? If one of the ways it spends those bucks is through establishing, supporting and participating in the CGBD, ditto.

However, as in so many other dealings between our appointed officials in Washington, the increasingly influential multi-billion dollar NGO sub-government and the huge foundations that support it, there’s a snake in that woodpile.

On the CGBD website among the objectives listed (link above) is one to “ensure funder coordination and collaboration on long-term strategies to implement the recommendations of the Pew Oceans Commission and the National Oceans Commission.” The Pew Charitable Trusts website states “the Pew Oceans Commission released a host of recommendations in 2003 to guide the way in which the federal government will successfully manage America’s marine environment.” The “National Oceans Commission” (actually the U.S. Commission on Ocean Policy) addressed reforms it felt were needed for governance of waters over which the U.S. has jurisdiction, oceans (out to the 200 mile limit of the Exclusive Economic Zone), coasts and the great lakes.

There’s something distinctly unsettling about the fact that the CGBD, an organization that USAID (with no apparent domestic authority or mission) established and is still participating in and supporting, has as an objective the implementation of the recommendations of the Pew Oceans Commission and the National Oceans Commission. These recommendations deal only with policies and issues in U.S. waters. Why this USAID connection? Unsettling as well is the fact that USAID is partnering with several of the foundations which have demonstrated a frightening ability and willingness to influence national fisheries policies to the detriment of the domestic commercial fishermen and commercial fishing industry.

But most unsettling is the question of how far U.S. foreign policy might be advanced through the trading away of a significant portion of our own fishing industry’s ability to supply our domestic seafood markets. Funding by several of the foundations partnering with USAID for over 20 years through the CGBD is in large part responsible for the fact that the U.S. is now importing in the neighborhood of 80% the seafood that we consume. In 2008 our fishery product imports were a record \$14.2 billion. Needless to say, minus the regulatory morass that these USAID “partner” foundations has created, domestic commercial fishermen would be supplying far more than their current 20% of the domestic market (I’ll refer you again to my FishNet on chronic underfishing, http://www.fishnet-usa.com/chronic_underfishing.htm, which describes a situation which is far from limited to New England and the New England groundfish flee).

Is it paranoid to even remotely consider that our domestic fisheries policies might be linked to the U.S. State Department’s foreign assistance programs? Just consider that fifteen or twenty years ago the suggestion that federal fisheries management – and ocean governance – would largely be in the hands of minions of the same foundations in the CGBD, and that the commercial fishing industry was being effectively dealt out of the fisheries management process would have been considered equally paranoid. And consider as well how many foreign policy concessions could be “bought” with \$14 billion in U.S. market opportunities today and who knows how much in the future. As an added bonus, this would be advancing the anti-fishing agendas of a passel of increasingly influential ENGOS. Far fetched? Of course, but we’re living in some mighty strange and trying times, and our government’s increasingly and overly stringent “management” of our fisheries and the concomitant destruction of the people, businesses and communities that depend on them demonstrably aren’t a requirement for fully recovered stocks.

In his interview, Mr. Fischer acknowledged that “we call ourselves a back-office think-tank and collaboration hub for leading environmental funders. Emphasis on the ‘back office;’ hence our opaque name.” I can see why.

The BIG LIE
(for SavingSeafood.com)
12/08/09

A reduction in sea scallop landings of thirty percent. A total closure of the Gulf of Mexico recreational amberjack fishery. A reduction in spiny dogfish landings of twenty-five percent. A total seasonal closure of the recreational sea bass fishery in the Northeast. A total closure of the red snapper fishery in federal waters from Florida to North Carolina. Recreational summer flounder restrictions that have decimated the for-hire

fleet. Massive West coast rockfish closures based on less than adequate science. A looming lobster bait crisis stemming from a massive though biologically unnecessary reduction in herring landings. One hundred and thirty thousand tons of uncaught groundfish TAC. A labyrinth of MPAs off California established wherever catchable fish are found. And the list could go on, and on, and on....

These are either proposed, recently instituted or ongoing management initiatives, initiatives being imposed on fishermen who are looking at fisheries that are healthier today than they have been in decades. In total they are going to cost commercial and recreational fishermen, the businesses that depend on them and fishing communities in every coastal state billions of dollars. The pending sea scallop cutback alone is estimated by industry experts to come with a quarter of a billion dollar price tag and the cost of the red snapper closure will undoubtedly be in the tens of millions. All of those uncaught Northeast groundfish, if caught, would have pumped a billion dollars into the fishing communities in New England.

Those fishermen have been laboring – and suffering – under severe management restrictions for those decades with the understanding that the sacrifices they would make today would be more than justified by the rewards they would reap in the future. Well, judging by the status of the stocks the future is finally here but judging by the foregoing list of management actions the rewards definitely aren't.

Are you starting to detect a subtle trend here, or perhaps one that's not so subtle?

The Magnuson Act, when passed by Congress in 1976, broke new ground when it established that managing our nation's fisheries was to be accomplished jointly by scientists, resource managers and resource users – fishermen. It was intended as a tool to enable U.S. fishermen to more effectively utilize those fisheries, something that it was effective, in instances too effective, at doing.

Needless to say, there were teething pains. It's hard to imagine a new management system that would work from the beginning, and this one didn't. In the beginning there was a "catch 'em all" attitude that was probably due more to the Cold War than to fisheries management concerns. And starting in 1981, an ill-advised "economic recovery" program by the Reagan administration brought far too much fishing capacity to the domestic fleet than was necessary and shortly afterwards, in 1984, the World Court awarded much of the New England fleet's fishing grounds to Canada. Obviously, in the first decade or so of Magnuson management some fisheries suffered, but external factors were much more responsible than anything intrinsic to the fishing industry or to the management process itself.

But, using these early stumbling blocks as the reason, over the intervening three decades fishermen have been gradually dealt out of the Magnuson process, the scientists have been put in charge, and as the list of closures and restrictions up above painfully demonstrates, the Act has been turned into a weapon that is now being used against fishermen and fishing communities.

How has this been accomplished? Through a well-orchestrated campaign based on what has come to be known in the world of propaganda as The Big Lie – a lie so outrageous and repeated so often that the people will eventually accept it as the truth.

In this case The Big Lie is that fishermen are inherently incapable of sustainably managing the fisheries they participate in. The sole basis of this theory is The Tragedy of the Commons, an article published in the journal Science by an ecologist, Garrett Hardin, in 1968. Hardin's article describes the dilemma of hypothetical herders sharing a hypothetical plot of land in medieval Europe. It's been used and is still being used as proof positive that fishermen are incapable of rationally harvesting fish that "belong to everybody." Hardin is reputed to have said later that his article might better have been titled "The Tragedy of the Unregulated Commons," which has no bearing at all to today's over-regulated fisheries. This obvious fact is understandably ignored by the foundation-funded anti-fishing activists in their so far successful campaign to marginalize fishermen in the management process. (Note that this year's Nobel Laureate, Elinor Ostrom, convincingly – at least to the Nobel selection committee - argues that Hardin's "tragedy," though applicable in limited situations, suffers from over-application.)

So with the fishermen on the way out, or at least the independent fishermen who don't kowtow to Silver Spring or the anti-fishing clique, who's taking up the slack in the fisheries management process? That would be the scientists that work for NMFS and those on each regional management council's Science and Statistics Committee. At this point they're in charge, and their statistics and their computer models, no matter how imprecise, based on their samples, no matter how meager, and their budgets, no matter how inadequate, are what's determining what we can and can't (emphasis on the latter, of course) catch. And don't forget that extra 20 or 30 or 40% "off the top" that is used to make up for the uncertainty of their science.

Those imprecise statistics, meager samples and inadequate budgets are exactly why Congress decided over 30 years ago that fishermen and resource managers should have a major say in fisheries management. The experience and observations of the fisherman and the concern of the managers for the resource users as well as the resource were put there to balance the narrow input of the scientists.

But, thanks to the last two Magnuson reauthorizations, and to what it's impossible for me to see as anything other than the "let's get rid of as many fishermen as we can" vibrations emanating from NOAA/NMFS headquarters, that's no longer the case. The science, no matter how limited, rules and the experience, judgment and concern for the human impacts have become completely irrelevant.

This wasn't the intention of the Magnuson Act's authors, it wasn't the intent of the Congress that passed it, and if they understood how purposefully fallacious this particular Big Lie is and the full extent of the damage it has unnecessarily caused and continues to cause in every fish-

ing community in the U.S., it's hard to imagine any of our elected officials allowing it to continue. But as we are all too well aware, continue it does.

So what do we do to fix this mess? First off, the members of every aggrieved recreational or commercial fishery, and name more than one or two in the lower 48 that aren't, have to realize that the most serious of their problems begin and end with the purposely mutated monster that Magnuson has become. Then, as members of that fishery, they have to make the demand that Magnuson be returned to its former state, once again with the balance for the inadequate science provided by the judgment of fishermen (nominated and approved by their peers, not forced on the system by the palace guard in Silver Springs) and resource managers. And finally they – but at this point it's we – have to set aside our differences and come together, along with all of the associated businesses and organizations and individuals that have a stake in viable fisheries, in the effective lobbying power that we should be, and start to get the job done.

This is a process that's already started, both in Congress and with a number of fishing organizations. But it's not going to succeed without your support and your participation. You can start off by demanding that your reps in Washington join Congressman Barney Frank's East Coast congressional caucus, which he plans on starting within two weeks to organize "*an uphill battle against environmental forces to create a more equal balance between the reconstruction of fish stocks and community interests.*" And there are other, industry-focused efforts in the works as well. Do everything you can to get them and keep them going. I'll keep you posted to the extent that I can, but remember that ultimately it's up to you.

In keeping with the season, they're your chestnuts and you're the only one that's going to get them out of the fire that we've allowed to burn for way too long.

The Times They Are a-Changin'

12/19/09

It's been a long time coming, but it appears as if a critical number of fishermen have finally reached the conclusion that the way things are heading, there's not going to be an acceptable fishing future for any of us, that it's time for some long overdue changes, and that the place to effect those changes is in Congress.

It's really difficult to identify all of the major factors responsible for this, but among them I'd list the excessive and in-your-face obvious influence on the Obama Administration's NOAA/NMFS by foundations with a long track record of actions inimical to fishermen, the looming crisis (of management, not of fish) in the New England groundfish fishery, the sorry state of the economy for us mere mortals who haven't benefitted and won't benefit from any bail-out \$billions, massive fishery closures or cutbacks without adequate science behind them, an ongoing investigation of what appears to be institutionalized strong-arm tactics in the federal fisheries enforcement branch, and most importantly, the unnecessary and incessant erosion of our ability to fish – either recreationally or to earn a living – by a management system that is focused solely on the fish and that we as fishermen are now effectively isolated from.

And I can't forget the role that a long list of coastal legislators – most have already been mentioned here - in Washington and elected and appointed officials in Massachusetts have played in demonstrating that the ongoing overzealous, verging on punitive, management of fishermen is becoming far more of a threat to fishing communities than declining stocks ever were.

One of the most edifying byproducts of the management morass that the majority of U.S. fishermen are mired in is the growing cooperation between people in the commercial, recreational and party/charter industries, the businesses that depend on them and the communities that they support. Are we one big happy family? No, and we probably never will be, but every day more of us are realizing that there's a common enemy that we've allowed to take control of the management process while we've been almost totally focused on throwing rocks at each other.

What's the payoff of this nascent spirit of cooperation?

On Capitol Hill, in no particular order of importance:

- New Jersey Congressman Frank Pallone and twenty-four co-sponsors reintroduced the Flexibility in Rebuilding America's Fisheries Act. New York's Charles Schumer introduced corresponding legislation in the Senate.
- Massachusetts Congressman Barney Frank announced a caucus of East Coast legislators to discuss the modifying the Magnuson-Stevens Act. Congressman Frank said "the effort was justified because of the unrequired harm being done to the fishing communities along the Atlantic coast by regulators who misinterpret the legal principle imbedded in the Magnuson-Stevens Act to balance ecological with economic and sociological interests."
- Fourteen House Members and twelve Senators sent letters to the Secretaries of Commerce and Interior objecting to the CITES listing of spiny dogfish.
- Thirteen House members and five Senators sent a letter to the Secretary of Commerce expressing "extreme disappointment" in the New England Council's decision to severely cut back sea scallop landings.
- The Senate Commerce, Science and Transportation Committee unanimously approved Maine Senator Olympia Snowe's International Fisheries Agreement Clarification Act (S. 2856), relieving the management of trans-boundary groundfish stocks in U.S.

waters from the irrationality of what the Magnuson management regime has become. Companion legislation has been introduced in the House.

- Florida Congressman John Mica and 16 cosponsors introduced legislation to prevent the Secretary of Commerce from closing the red snapper fishery without further analysis.

There is a core group of federal legislators from Texas to Maine who now realize that things are far from well in fisheries management, and that the problems don't lie with the fishermen but rather with what the Magnuson-Stevens Act has been turned into by foundation funded activists and how it is being interpreted by NOAA/NMFS.

It's up to all of us to capitalize on that.

Inspired in part by the successful fishermen's demonstration at NOAA/NMFS Northeast Regional Office that was organized by Amanda Odlin, a fisherman's wife and business partner in Scarborough, Maine, a number of fishermen's groups from both sides of the recreational/commercial fence are organizing a demonstration on the steps of the Capitol on February 24. With fishermen of every stripe participating, the message to Congress will be straightforward; put the original flexibility back in the Magnuson Act that will allow the needs of the fish to be balanced with the needs of the fishermen.

And make no mistake; this is a result of grass roots activism at its most pure. No massive corporations, no "charitable" trusts, no foundation funded ENGOs are behind it, just commercial and recreational fishermen, the businesses that they support and the trade organizations that support them.

But what's the other side up to?

They're sure not about to enter into a public discourse, seek acceptable compromises with the aggrieved fishermen or find some middle ground that will let fishermen fish and let fishing-supported businesses remain viable while stocks continue to rebuild. That's not what their billions are for. Instead those organizations that have made life so miserable for so many fishing dependent people for so long are going to respond as they have since they became involved in "saving the oceans from fishermen." They're going to throw even more money at what they perceive as a growing problem; the increasing awareness in Washington that fisheries can be and should be rebuilt in a manner that is consistent with maintaining viable fishing communities.

Accordingly, we learn from the Careers@Pew website, since December 1 the folks at the Pew Charitable Trusts have been looking for a Manager, Federal Fisheries Policy Reform Campaign. Among the responsibilities for this position:

- The campaign will provide financial support to key NGOs for campaign assistance. This project manager will be responsible for determining the nature and amount of this support
- Oversee and manage campaign staff and environmental, commercial fishing and recreational fishing NGO consultants. The campaign will provide financial support to key NGOs for campaign assistance.
- Working with PCT (Pew Charitable Trusts) and PEG (Pew Environment Group) public affairs staff on messaging and media strategy, the project manager will help ensure that communications and outreach are used to advance the campaign's overall goals.
- The project manager will be responsible, in consultation with the project director, for identifying and contracting with scientists, legal experts, economists, polling firms, communications and other technical specialists as necessary to provide information, prepare reports, brochures or other documents as required to advance the campaign goals.

What greater example do we need of the difference between real grass roots and astroturf? Need a fisherman, a scientist or an environmentalist to help you spin? Write a check. Buy one or two or a dozen. Want to manipulate the media? The Pew PR machine – backed by Pew's tens of millions of dollars of media grants – will lend a hand. With billions of Big Oil/high tech dollars to draw from, a couple of decades of expensive successes under their collective belt and access that few enjoy to what I'd guess are excessively sympathetic ears at the highest levels of NOAA/NMFS, why would we expect them to do otherwise? And they have a bunch of people in Congress from inland states who have proven more than susceptible to their well oiled anti-fishing spin machine in the past. That's why we're in the position that we're in today, with a mutated Magnuson-Stevens Act that gives scant consideration to the people and businesses involved in fishing and every consideration possible to the fish – which time after time have been shown to be far more resilient (how many fish stocks are "recovered" or on their way to recovery? How many fishing businesses that have gone bankrupt have come back?)

As applied to fisheries management, without Congressional intervention government "of the people, by the people, for the people" might well perish, to be replaced with checkbook activism. We're most of the way there already.

When the Magnuson Act was written over 30 years ago, the intent wasn't to have fisheries managed from the Board Rooms of multi-billion dollar foundations but from the docks, the marinas and the beaches where fishermen – let's not call them fishers – were plying their trade or pursuing their sport. That's the way it was and that's the way it can be again, but not without your serious support and participation, no matter what your fishery.

Have a great holiday and I hope to see you in Washington.

Mad as hell? We all should be

(from SavingSeafood.com)

01/20/10

Every day it seems that an increasing number of us, either fishermen or those working in associated businesses, are taking solid steps to change the public image that has been so successfully manipulated with multi-millions of foundation dollars to wrongfully depict fishermen as uncar- ing plunderers of our fishery resources. We all know that's not the case. If it ever was it hasn't been for at least a full generation, and now we're sharing that knowledge with the public.

Several industry efforts are well ahead of the curve on this issue.

The first is the documentary produced by Rhode Island dragger owner/operator Brian Loftes. It's titled **Truth: Fishing Crisis or Government Mismanagement**. In under an hour, and with disturbing yet illuminating on-board footage, Brian nails a number of issues, direct results of what passes for fisheries management today, that are plaguing fishermen. The first of these is regulatory discards, fish that in any resource management system approaching rationality would be destined for dinner plates rather than the deep six. The second is the misguided belief that if fisheries are being managed "correctly" – which I suppose means that the number of fishermen, the number of boats and the total allow- able catch have been reduced to perhaps a quarter of what the particular fisheries could actually support – all of the stocks would be at maxi- mum levels simultaneously. He also throws some light on the enforcement morass that has been inflicted on parts of the industry for so long.

The documentary doesn't mince words or tiptoe around these issues, but that's one of its strengths. The fishermen aren't throwing perfectly good fish over the side out of any choice, they're doing it because that's what the management system is forcing them to do, and Brian ham- mers that point home. Of course it's all a part of the so-called marine conservationists' program, and it's hard to imagine that it's not part of the agenda of the foundations that are funding them. This misperception reinforces the charade that fishermen are bad guys and shouldn't have a say in their own fishery's future, something that has paved the way for the takeover of the management system that we're experiencing today.

The second documentary, **Fish for Tomorrow – Promoting Sustainable Fisheries**, was the brainchild of John Larson, Barnegat Light, NJ fishing pioneer and leader who passed away last month, and filmographer David Kaltenbach. **Fish for Tomorrow** details the benefits that have accrued to the fishermen who work out of Viking Village in Barnegat Light through their participation in the management process and their support of and participation in cooperative fisheries research, providing data, specimens, boats and expertise in many of the fisheries they are involved in.

The increasingly popular dock tours that Viking Village offers on the weekends during the summer tourist season were covered. Popular with both the residents of Long Beach Island and vacationers, they allow people who have been exposed to years of media distortions to get hands- on knowledge of what a working commercial dock is all about, and how important resource sustainability is in its day-to-day operations.

Another theme that underlies the entire hour is the emphasis on product quality that Viking Village has successfully made a part of the entire operation, from boat to truck and beyond. The segment on tuna grading

These two documentaries focus on the different sides of what the commercial fishing industry is suffering from. The first deals with a man- agement system that is out of touch and unresponsive legislation – the Magnuson Act – that has been lobbied by people with no practical expe- rience at all into rules and regulations that have turned fishing into a bureaucrat's dream and a fisherman's nightmare. The second deals with a management system that is based on using the "best available science" that is generally inadequate to the job it's supposed to be doing, in large part because the resources that could be used to do it better are being squandered on the bureaucrats required by the distortions introduced into the Act by the so-called conservationists instead. From the government side it's the Bad and the Ugly – in many instances inflicted grudgingly, and from the fishermen and the scientists that they are cooperating with it's the Good.

Unfortunately the Bad and the Ugly can't be addressed as constructively as the Good, and no matter how much the underlying science is im- proved, the Machiavellian morass of management measures that today's fishermen are facing is turning fishing into a one way trip to oblivion for many of them. In fishery after fishery it's becoming glaringly obvious that the management Kool-Aid that a generation of fishermen has been forced to drink by unaware, misinformed or uninterested federal lawmakers leads to nothing more than a continuously declining catch, no matter how much the stock has rebuilt. More than anything else, that's where the "mad as hell" is coming from.

And while I'm on the Bad and the Ugly, and with some cooperative research thrown in, the Gloucester Daily Times just ran an article by Rich- ard Gaines' - **Fishing family appealing case to NOAA chief** - that is one of the most egregious examples of NOAA/NMFS getting it thor- oughly and obscenely wrong that I have come across.

Lars and Dan Axelsson own the **F/V Flicka** and **F/V Dyrstan**, two large draggers that fish out of Cape May. They have never had a fishing- related violation. They have never been guilty of possessing too many fish, possessing fish that were too small, fishing out of season, fishing

with the wrong gear, fishing in the wrong place, or doing anything else that would involve a fishing violation. They have landed many millions of pounds of product. The fisheries they participate in – mainly squid, mackerel and herring – are in good shape and meet anybody’s criteria of sustainable. They have been eager and able participants with NOAA/NMFS in cooperative research.

At maximum their boats employ twenty crew members. When fishing to capacity, they are responsible for perhaps 80 to 100 full-time jobs and every year they contribute tens of millions of dollars to New Jersey’s economy.

With forebears who were fishermen in Scandinavia going back untold generations, the Axelsson family came to the United States in 1950. They carried on that tradition, and how they did it personified the American Dream. They did it right; they worked hard, they worked smart, they were involved in management and research and they fished by the rules.

So what was their reward? A fine of more than a quarter of a million dollars and a 1 year permit sanction for both of their boats because they messed up their paperwork and missed some reporting deadlines. They weren’t willfully or even carelessly violating fishing rules, they simply didn’t get the right forms to the right bureaucrats when they were supposed to.

This is frighteningly similar to the situation that the owners of the Gloucester Seafood Auction and a handful of fishermen are in. They are fighting penalties involving permit sanctions and fines of tens or hundreds of thousands of dollars for not doing the paperwork the way the bureaucrats have decided it should be done (and I’ll emphasize here that this is a thoroughly daunting task – estimates are that a New England groundfish fisherman can receive up to 500 pages of government notifications and announcements and queries and other assorted bureaucratic missives every year).

An administrative law judge, who determined that *"the reporting violations did not result in over-fishing nor did Respondents obtain increased economic gains. The evidence shows Respondents negligently failed to accurately comply with the regulations but did not intentionally attempt to circumvent fishery limits."* reduced the Axelsson’s penalties significantly, but that doesn’t alter the fact that the involved NOAA/NMFS enforcement people couldn’t have had anything in mind other than to put the Axelsson’s out of the fishing business. How’s that for turning the American Dream into a nightmare?

George Orwell, who wrote **Nineteen Eighty-Four** in 1949, died in 1950. If his unfortunate death at an early age wasn’t so well-documented it would be easy to believe that he was alive and well and hanging out in Silver Springs, Maryland.

Mad as hell? You bet, and with more than enough reason. What are we doing about it? Wait until the next installment of Another Perspective and I’ll cover at least some of what’s going on.

The agency that brought us Trawlgate now presents Investigate, the next in the series

(for SavingSeafood.com)

01/30/10

I can only imagine how much satisfaction hundreds of fishermen and folks from fishing businesses are deriving from the recently released first installment of the US Department of Commerce Inspector General’s report on the scandalously inadequate, unbalanced and inequitable job that NOAA/NMFS has been doing in enforcing fishing regulations, particularly in the Northeast. I can likewise only imagine the frustration that they must feel, knowing that their lives, their reputations, their finances and their future prospects were severely damaged – and in some tragic instances, destroyed – by what appears to be nothing less than an out-of-control bureaucracy. I sincerely hope that those people pursue whatever avenues of institutional and personal redress are available to them and wish them the best of luck in that pursuit. (The full report is available at http://www.savingseafood.org/images/documents/enforcement/noaa%20oig_1_21_10.pdf, a summary at <http://www.savingseafood.org/enforcement/brief-summary-of-the-inspector-generals-report-on-noaa-fisheries-law-enforc-2.html>).

The follow-up report, looking at specific cases that have been investigated by the Inspector General’s office, is on the way. That could be even more satisfying.

To nobody’s surprise, NOAA head Jane Lubchenco’s response to this report consisted of assuring us that NOAA/NMFS would be revising regulations, creating a policy manual, improving communications and convening a national “summit” on agency enforcement policies.

Shouldn’t we expect a bit more than that?

The “summit” sounds like it could be just another white-washing junket for those members of fishing organizations, ENGO staffers and academic researchers on the foundation-funding gravy train that are so interested in saving us from ourselves. I wonder if the NOAA/NMFS leadership is planning on holding it at the Mount Washington Resort in New Hampshire. Once again that would keep the working people away in droves.

And I don't find it all that comforting to know that in these days when just about everyone is suffering from a surfeit of communications - to such an extent that the NY Times deemed it front-page worthy - someone is in charge of NOAA/NMFS who actually thinks that more communications could be the answer to anything. In issue after issue that fishermen are facing we've had much too much communication and much too little substantive action.

What it all boils down to is that for you folks at the NOAA/NMFS Offices of Law Enforcement and General Counsel for Enforcement and Litigation, brace yourselves. You're about to get your knuckles rapped really, really hard.

That isn't anywhere near an adequate response for an agency that has purposely kept proud, honest and hardworking members of one of our oldest industries in a state of undeserved terror for most of a generation.

If there was ever a reason for Congressional oversight, this is it, and everyone who is demanding it - and that list is growing every day - is definitely heading in the right direction. But they're not yet where they need to be.

It shouldn't be oversight limited to the Inspector General's report and the NOAA/NMFS Offices of Law Enforcement and General Counsel for Enforcement and Litigation. That's not the disease that's infecting NOAA/NMFS. That's only one of the symptoms.

I've already heard and read that this enforcement fiasco can't be laid at Ms. Lubchenco's feet, or at the feet of the foundation/ENGO people she brought to Washington with her; that most of the enforcement mess-ups occurred before they were in Washington and running NOAA.

But let's give that idea a bit more consideration.

First off, as we all know far too well, an ever intensifying anti-fishing malaise has afflicted NOAA/NMFS for at least a decade. What's its source? To a very large extent, it's come from a very successful and very expensive campaign bankrolled by very large foundations to convince as many people as possible with an interest in the world's oceans that fishing is one of the greatest scourges to ever afflict them. Through the skillful - did I mention expensive? - manipulation of science and scientists, and through the selective - did I mention expensive? - manipulation of the print and broadcast media, a large proportion of those people, and the officials who represent them, have bought into this fantasy.

Unfortunately, when the people and their legislators in Washington go in a particular direction, whether that direction is right or wrong, most federal agencies aren't too far behind. Thus, it's fairly easy to suggest that the NOAA/NMFS Office of Law Enforcement's "treat 'em like criminals" attitude towards fishermen and fishing businesses is an understandable outgrowth of the institutional attitude of the parent agency. No one in the front office, no matter how many complaints fishermen registered and no matter how surreal their persecution became, was concerned enough to do anything about it, so the whole mess just continued to spiral out of control.

That might be passed off as bureaucrats simply being bureaucrats. We could assume that it was only ineptitude that caused the people in charge to pay no attention to all of those official press releases going out with, we assume, their or their underling's approval that were announcing with pride the most recent apprehension and prosecution of fishermen. We could as easily assume that Ms. Lubchenco's ho-hum response to the partially completed Inspector General's investigation, an administrative reshuffling and a feel-good "summit," was just more of the same.

But is it? In case after case, fishermen were investigated and treated as criminals by an Office of Law Enforcement staff trained and paid as criminal investigators when virtually all of the supposed offenses, the Inspector General's report puts it at 98%, were non-criminal in nature. And even now this trend is apparently continuing in NOAA, with the newly appointed NOAA Chief Counsel's most notable accomplishment as an Assistant Attorney General being development of the Environment and Natural Resources Division's environmental crimes program.

Is it a stretch to suppose that much of this was due to the demonization of fishermen by the media?

How this took place, what was - and is - behind it, and how else it has affected and is affecting NOAA/NMFS in carrying out its mission regarding fishermen and fishing is every bit as deserving of oversight investigation by Congress as the dysfunction endemic in the NOAA/NMFS Offices of Law Enforcement and General Counsel for Enforcement and Litigation. In general that wouldn't be the case, but the leadership at NOAA in the Obama Administration, the close ties of those leaders to the foundation/ENGO world that has so successfully persecuted so many people connected with harvesting fish for fun or profit, takes this beyond the realm of the "general."

For all of the fishermen who were wrongfully criminalized, for their families, for the businesses they support, for the communities they are a part of, for all of the rest of us in or associated with fishing and for the future of fishing in the United States, we deserve answers to some crucial questions. How involved were the people now in the upper management levels of NOAA/NMFS in this process? To what extent, if any, were they responsible for establishing the institutional mindset at NOAA/NMFS from the outside that allowed the abuses reported by the Inspector General to flourish? And, of course, how much of that involvement, if any, has been carried over into the current management and philosophy of NOAA/NMFS?

As Ms. Lubchenco's unilateral shifting of the entire management focus of NOAA/NMFS to the implementation of catch shares virtually overnight illustrates so clearly, she is in a position to tremendously influence the lives and futures of millions of fishermen, the economic well-being

of tens of thousands of fishing dependent businesses and a huge segment of our coastal economy. If that isn't justification for intense Congressional scrutiny, it's hard to imagine what is.

Even now the Boston Globe just doesn't get it

(for SavingSeafood.com)

12/10/10

The successful politicians in New Jersey, in Massachusetts and in Virginia do, and those in every other state – if they want to remain in politics - better get it as well. In the U.S. we're starting to lose patience with having our public policies forced down our throats by arrogant elitists who are convinced that they know better than us common folk. Government by condescension is finally on its way out, and none too soon.

But, on the morning after the drubbing that was handed the party in Massachusetts that is so closely identified with that "we know what's best for you in spite of what you believe" attitude, the Boston Globe still doesn't get it.

In an editorial this morning the Globe bemoaned the fact that the New England Fishery Management Council would be reconsidering its decision to reduce next year's sea scallop harvest by almost a quarter, an action that would cost the coastal economies of Massachusetts, New Jersey, Virginia and every other coastal state from North Carolina to Maine hundreds of millions of dollars and hundreds of jobs.

The editorial finished up with the words "while the industry is all too willing to risk permanent harm to scallop stocks - and its own livelihood - the council must be steadfast in protecting the region's marine resources." That fits perfectly with the condescending attitude towards us just plain folks espoused by the Ivy League mafia running the multi-billion dollar foundations behind so much of the current – and unnecessary – suffering in the commercial fishing industry; the attitude that they're there to protect us from ourselves.

But it's dead wrong.

The members of the sea scallop fishery have been leaders in campaigning for the sustainable management of their fishery. The idea that those fishermen, with lifetimes invested on the water, with boats worth several millions of dollars each, and with respectable incomes from those boats, would jeopardize it all for a "get rich quick and the hell with tomorrow" assault on the resource they depend on is nothing short of absurd, and fisheries scientists with international reputations (and without funding from those crusading foundations) have attested and will attest to that.

A newspaper with editorial offices only an hour's drive from New Bedford, the busiest scallop port in the country, is condemning the reconsideration of a decision that would rip a huge amount of money from the economy next year. That decision is going to precipitate a corresponding economic fall-out at a time when us regular folks are still going to be in the grips of a devastating economic downturn. It's going to cost Globe readers jobs and money they can ill afford. Finding any fault at all with that reconsideration is even more absurd, no matter what advice the foundation flacks whose careers depend on selling the notion that their only interest is saving the fish and the fishermen are offering.

As I wrote a few weeks back, the times, they are a-changin' and yesterday's special election in Massachusetts demonstrated that it's not just in how we're relating to fisheries management that's changing; it's the whole social, cultural and economic shebang. The people don't want elitist control and feel good rhetoric, they want – and they're going to have - a say in what's going on.

Perhaps the folks at the Boston Globe will figure that out, but they're going to have to venture into the real world to do it. If they do, their first foray should be down to New Bedford to meet with some real conservationists who have a real stake in the fisheries management process.

Who needs research? We're going to have catch shares

02/13/10

When you hear the whistle blowin' eight to the bar

Then you know that fishing heaven's not very far

Shovel all the coal in

Gotta keep it rollin'

Woo, woo, Catch Shares there you are

(With apologies to the memory and the art of Glenn Miller)

First off, a disclaimer of sorts. I am not an opponent of catch shares, limited access privilege programs, individual transferable quotas, sectors, or any other management tool. However, I am seriously opposed to any form of management being forced on a fishery and the people in it and I am just as opposed to it being misrepresented to gain industry, public or political support for its imposition. To suggest that the people in charge at NOAA/NMFS aren't using their position in the Obama Administration to force catch shares on US fishermen would be tantamount to suggesting that black is white, night is day and foul is fair. And to claim that the New England groundfish fishermen have enthusiastically ac-

cepted catch shares, as the catch shares bully boys and girls have become so adept at doing, couldn't pass the straight face test with anyone who was actually following what's been going on in that fishery. So, with that taken care of...

It seems as if Dr. Jane Lubchenco, as the newly appointed head of the Commerce Department's National Oceanic and Atmospheric Administration, didn't even stop off at her new digs in DC to check on the freshly printed stationery before travelling to Boston and announcing that her agency was going to solve the ills of our fisheries by instituting a national policy "encouraging" the use of catch shares as the management technique of choice. Boston, of course, is ground zero for ineffectual fisheries management revolving around the Northeast groundfish complex (to discover what ineffectual is really all about, read *Chronic Underfishing* at http://www.fishnet-usa.com/chronic_underfishing.htm).

This was hardly surprising. Dr. Lubchenco had been on the Board of the Environmental Defense Fund (EDF), an ENGO that has been among the leaders in enthusiastically inflicting damage on fishermen, fishing-related businesses and fishing communities since doing so had become the rage among a handful of foundation funded "conservation" organizations. The people at EDF had been working towards the institutionalization of catch shares, and on establishing the financial infrastructure to capitalize on it, for years.

What has been surprising is the cynical manipulation of our federal fisheries governance system that has been ongoing for a decade or so that it reveals; a manipulation that seems to have reached its apex since the new regime took over at NOAA/NMFS.

This manipulation is most evident in the recently released NOAA/NMFS budget for Fiscal Year 2011 (available at http://www.corporateservices.noaa.gov/~nbo/11bluebook_highlights.html). Along with asking for \$36.6 million in new money for the Catch Shares campaign, it transfers \$11.4 million out of Fisheries Research and \$6 million – about half of last year's request - out of Cooperative Research into it as well.

At first glance this seems only a simple matter of robbing Peter to pay Paul – shifting funding from one program area to another. But the fallout is going to be much more significant than that.

It all begins with the fact that in recent years what is known as the "precautionary principle" has been zealously applied to fisheries management. Most simply, what this means is that the less is known about the status of a stock of fish, the more stringently fishing effort must be managed on that stock. Simplifying a bit, if a stock size is estimated with a 10% margin of error, it can be managed safely as if it's at 90% of the estimate. If it is estimated with a 40% margin, it must be managed at 60% of the estimate. Hence, the worse the data on a fishery is, the more the fishermen have to pay – in terms of foregone harvest – for its inaccuracy.

Needless to say, recreational and commercial fishermen realize this and are constantly striving for better science and better data, which can only be had through better research, i.e. larger research budgets. This is because at this point they know that the more that is known about fisheries, the better off they, and the fish, will be.

Considering the full spectrum of fisheries science, the gold standard – at least from a fisherman's perspective – is cooperative research. In cooperative research projects, a team of scientists goes to sea on a commercial fishing boat crewed by a commercial fishing crew using commercial fishing gear and measures, weighs, counts, and etc. the fish that are caught. I doubt anyone will be surprised to read that such sampling by professional fishermen just about always yields better results (as in more of the target species caught) than that done on research vessels by research crews. And more fish caught means more accurate estimates because while it's impossible to catch fish if they aren't there, it's fairly easy to not catch them if they are.

(I wrote about cooperative research in 2007 in *Improving the best available science*. It's available on the FishNet USA website at <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Best%20Science>.)

I don't know of any fishery supported with a cooperative research program in which the harvest was reduced because of the data it provided. Cooperative research has been a win-win proposition for the fishermen, for the scientists and for the managers.

In fact, cooperative research had been so popular with fishermen and with NOAA/NMFS that last year's budget requested "*a net increase of \$1,247,000 for a total of \$11,455,000 for Cooperative Research to expand and fully implement a nationwide, regionally based cooperative research and management program as directed by the reauthorized Magnuson-Stevens Act.*"

While not so popular, at least with fishermen, and perhaps not so accurate, the research carried out by NOAA/NMFS through its recently upgraded fleet of research vessels is just as critical to the fishermen and to the fish. Keeping in mind the mandates of the precautionary approach to fisheries management, the more we know about the status of the fish stocks, the closer we can approach their ideal harvest levels. You would think that would be in everyone's interest, even the folks in the ENGOs and those at NOAA/NMFS.

So why the big cuts in the Research and Cooperative Research budgets?

Consider the fact that Dr. Lubchenco was wed to the almost completely untried concept of catch shares* through EDF before taking over as head of NOAA/NMFS and has continued in that union since she came to NOAA/NMFS. As I've written before, the plan to force catch shares

on US fisheries will have revolutionary impacts on those fisheries, on the people in them and on the people, businesses and communities that depend on them. And, for many of those people, businesses and communities, those impacts will be devastating (as she put it a little more nicely though perhaps not quite as exactly, the shift to catch shares would result in “fewer jobs, but better jobs.”) Obviously such a revolutionary change and such economic hardship couldn’t be forced on millions of fishermen and the people and businesses that depended on them if everything was ok in their fisheries. There’d be no reason to, at least none that was acceptable to the public, to Congress or to President Obama’s administration with its recently declared focus on jobs.

Now it doesn’t take a rocket scientist to figure out that better fisheries research means better fisheries data, nor that better fisheries data almost invariably means better catches for the fishermen. Taking two major Northeast fisheries, monkfish and sea scallops, as examples, a decade or so ago both were facing major cutbacks because the best available science indicated that the stocks weren’t doing well. In both fisheries, at the urging of the fishermen, who generally seem to have a good understanding of the status of the fish stocks they are fishing on, successful cooperative research programs were established that showed that the stocks weren’t in as bad shape as had been believed. The drastic cutbacks that were planned were avoided and the fisheries, the fishermen in them and the businesses that depend on them have thrived. Without that cooperative research, there would be two additional fisheries appearing to need the salvation offered by the imposition of catch shares.

How many other fisheries could be brought back from the supposed brink of disaster, a brink enthusiastically manufactured by the ENGOs, by better science? That’s impossible to tell, but as I wrote above, more and better sampling is never going to indicate fewer fish than are actually there, but less and worse sampling definitely will. Couple that with the precautionary principle and you have a recipe for a real disaster – and that’s what NOAA and the ENGOs are going to need to sell their Catch Shares revolution.

That certainly puts the NOAA/NMFS leadership’s decision to cut the research budgets so severely, otherwise an action that is really difficult to understand coming from a supposedly science-based agency, in a different light. Could it be as simple as “better research equals better data equals better fishing, and that’s going to make it a lot harder to sell an imminent crisis, so we at NOAA/NMFS don’t want anything to do with that?”

And we can’t forget the carrot that this fiscal shuffle holds out to the regional Fisheries Management Councils. They’re all in line to get big bucks for jumping on the Catch Shares choo choo as well. Can you imagine a bureaucrat or a bureaucracy that wouldn’t enthusiastically accept a budget increase, particularly considering the current state of the economy? They’re committed, not by force but by bureaucratic expediency.

Adding the icing to this particular cake, all of the pronouncements about the Catch Shares Nirvana that we’re about to enter make it sound like all is known that needs to be known about catch shares, that all of the answers are in hand. It’s just a matter of applying all of that knowledge gleaned from all of those other fisheries* (actually only 1.1% of all of the world’s fisheries, and those undoubtedly pre-selected for success), and we’re in business – at least a few of us - better than we’ve ever been before.

But the 2011 Budget Request justifying the \$50+ million for the Catch Shares program states “*the funding also increases NMFS’ analytical capacity to evaluate and report performance of catch share monitoring programs with respect to economic performance, fleet behavior, annual catch limits, and bycatch reduction.*” Someone at NOAA/NMFS (or EDF?) knows that catch shares are going to make it better for some of us, but doesn’t know any of those troubling specifics like which of “us” or how much better.

It’s not a matter of robbing Peter, it’s more like taking his watch and wallet, beating him severely and leaving him bleeding in the gutter on his way home after his last day on the job. And then of determining who Paul is going to be.

*I wrote in March 2009 of the EDF working group that put together the Oceans of Abundance report, a supposed justification for the universal imposition of catch shares, “*members (of the working group) Christopher Costello and Steve Gaines were two of the three authors of a paper in Science in 2008 concluding rights-based management might save the world’s fisheries based on an analysis of 11,135 commercial fisheries worldwide, 121 - or 1.1% - of which used this form of management.*” Dr. Lubchenco was also a member of the working group. (see All hands on the stacked deck at <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Stacked%20Deck>).

Fishermen find their voice

02/28/10

Wednesday, February 24, 2010 was the day that US fishermen* found their collective voice, and that voice was a roar. And that roar echoed in the halls of Congress. It was the day that two dozen US legislators heard that roar loudly and clearly, and responded unequivocally that they were committed to the cause that brought us all to Washington - to Fix Magnuson Now.

The day was a complete success from the fishermen’s perspective, and I can’t imagine it turning out any better than it did. Upwards of 5,000 fishermen were there, on the very steps of the Capitol, to express their dissatisfaction with the anti-fishing weapon that federal fisheries management has been turned into; a weapon based on the Big Lie that fishermen shouldn’t be involved in managing their own fisheries. Some fish-

ermen expressed it with religious fervor and some expressed it with humor, but they all expressed it with passion, with pride, with integrity and with conviction. Anyone who was there and was listening couldn't have missed that.

But there was a downside.

One of the major themes was the chasm that has developed separating fishermen from the federal fisheries managers and the federal fisheries management system. This was echoed by speaker after speaker. The NOAA/NMFS presence at and reaction to the rally provided compelling evidence that this chasm is getting wider and deeper, and that the people in charge at NOAA/NMFS aren't at all interested in bridging it.

Two days before the rally Jim Donofrio, Executive Director of the Recreational Fishing Alliance and one of the rally's chief architects, was contacted by NOAA/NMFS with a request to have Eric Schwaab, newly appointed NOAA Assistant Administrator for Fisheries, added to the agenda. When Jim found that Mr. Schwaab wasn't interested in supporting our cause, legislation to bring much needed flexibility back to the Magnuson Act, he graciously declined and he did so with the unanimous support of all of us who were involved in putting the rally together.

On the day of the rally Mr. Schwaab issued a press release, which he passed out to the media reps in attendance, stating that he was there "to listen to those who have come to rally Congress." But, as Tony Bogan, another rally organizer and president of the party/charter boat association United Boatmen, said, "his press release stated that he was 'there to listen' to fishermen, but he spent the majority of his time talking to reporters instead of listening to any of the thousands of us that were available." And from what I've read subsequently, and based on his press release, his talking had everything to do with convincing those reporters that neither the rally nor the changes to the Magnuson Act that it was in support of were necessary.

In other words, according to Mr. Schwaab and NOAA/NMFS, all of those fishermen had wasted their time, their money and their energy and had wasted the time and energy of all of those legislators as well, because we didn't need what we were asking for.

I'm not going to speculate here on how appropriate it was for the person in charge of the Obama administration's fisheries agency to be actively campaigning against legislation introduced by high ranking Democrats and sponsored by more than thirty legislators from both parties at a rally of people who are supposed to be his constituents during his second week on the job. Nor on exactly whose interests he was representing while he was doing it. But for the sake of all of our fishermen, there are some serious questions about this that demand to be answered.

What of the rest of his press release?

I'll start off with his plea for patience on the part of fishermen, predicated on his agency's success in rebuilding four fisheries.

I'm familiar with two and know that the "success" in their management only started when cooperative research projects inarguably demonstrated that there were far more monkfish and sea scallops available than the NOAA/NMFS vessels, crews and scientists had been able to find on their own. While perhaps Mr. Schwaab hadn't yet been briefed on these fisheries (the sea scallop fishery is the most valuable in the country and the monkfish fishery is the most valuable federally managed finfish fishery on the East Coast), his claim that their management success was due to "rebuilding" was slightly less than accurate. They were both cases of fishermen working cooperatively with NMFS scientists and showing them how to find the monkfish or scallops that were there all along. (Unfortunately, such positive outcomes are unlikely in the future because NOAA/NMFS plans to transfer \$6 million from the cooperative research budget to a campaign to force catch shares on fishermen who might not want them.)

As far as the third of the four species he mentioned, for as long as people have been fishing on the East Coast, the bluefish population, regardless of fishing pressure, has cycled from high abundance to low. In fact, a page on Mr. Schwaab's agency's own website states "cycles of low and high abundance of bluefish follow a pattern.... Several recent studies have examined potential causes of this pattern and have found no biological explanations." This cycling happens with or without management, and bluefish are at a high level of abundance now. His scientists don't know why but Mr. Schwaab wants us to believe that his agency and its management program are what did it.

I don't know anything about the king mackerel fishery, the fourth that he claimed as a "we rebuilt it" success. Perhaps he got that one right.

But most troubling to me was his ongoing advice to just sit back and let the management measures work because the sacrifices that fishermen are making now "have the potential to result in significant long-term economic benefits to fishing communities." In his release Mr. Schwaab asserted "I am familiar with fishing communities, their proud traditions, and the challenges we face in keeping them vibrant for future generations." I don't know how much time Mr. Schwaab has actually spent on the ground in those fishing communities, but I'll bet he's never seen a fishing business or a fishing-dependent business closed down because of management cutbacks required by unnecessarily restrictive rebuilding requirements that was eventually replaced by another fishing business. Tee shirt shops, condominiums, convenience stores and fast food places definitely, but never another fishing business.

And what are the displaced business owners and employees in these fishing communities going to do while they're waiting for these arbitrary rebuilding targets to be reached? Become investment bankers and finally get something from the federal government other than pain and suffering? That might keep them vibrant, but it sure won't keep them as fishing communities.

Mr. Schwaab's press release ended "I am interested in hearing the concerns of everyone involved, and I look forward to a cooperative and productive relationship," but it seemed as if he wasn't really interested enough to listen to the biggest gathering of involved and committed fishermen than I've ever seen.

On Wednesday I heard 5,000 fishermen saying that they were tired of, threatened by and paying grievously for a federal management system that was being run from the board rooms of billion dollar foundations by people who are about as far removed from the docks, beaches or marinas that any of us frequent as it's possible to be. Those foundations have spent hundreds of millions of dollars on legislation that makes the fish more important than the fishermen and has taken all of the human judgment out of a system that was originally designed to rely on that judgment.

Congressman Pallone's and Senator Schumer's legislation is the first step, now that we have the knowledge, the safeguards and the will to avoid another plunge into overfishing, in getting us back to the level of sustainable management where the fishermen matter as much as the fish. It's too bad that the new head of the National Marine Fisheries Service had decided by his eighth day on the job that we don't need anything like that, that what we really need is more of the kind of "fish first" management that brought us all to Washington.

I'd respectfully suggest that Mr. Schwaab find a somewhat more accurate definition of "cooperative" than the one he's presently using.

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*When I write "fishermen," that's my personal shorthand for men who fish, women who fish, kids who fish, and all of the people whose livelihoods depend in all or in part on those fishermen keeping on fishing.

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In what is an unfortunate postscript, on February 26 Mr. Schwaab sent out an invitation to "participate in an informal stakeholder call to introduce and familiarize myself with the interests and view points of you and your community," scheduled for the afternoon of Monday, March 15. While it's a sure thing that a host of foundation subsidized fishermen and so-called marine conservationists will participate, that is the first day of the Boston Seafood Show, the most important annual event for the seafood industry in the U.S. That's about the best way I could imagine to guarantee that an awful lot of commercial fishing industry leaders would not be available. Let's assume that it was just an oversight. Considering that one or two phone calls or about a half a minute's worth of web surfing would have revealed this conflict, Mr. Schwaab seems even more out of touch with the real fishing industry than his press release would indicate.

Fish and oil: NOAA's attitude gap

05/14/10

"At the global scale, probably the one thing currently having the most impact (on the oceans) is overfishing and destructive fishing gear" (National Oceanic and Atmospheric Administration head Jane Lubchenco in an interview on the website Takepart.com on April 7, 2010.)

Jane Lubchenco was awarded a Marine Fellowship from the Pew Charitable Trusts in 1992. Since then she has been in the forefront of a handful of foundation-subsidized scientists supported by a frighteningly effective media machine that has trumpeted one and only one message: fishing is behind most of our ocean-related problems.

The Pew Trusts were established by the children of Sun Oil founder Joseph Pew and are directed by a Board of which Pew family members are in the majority.

Since Ms. Lubchenco was a Pew Marine Fellow, a small handful of ultra-rich foundations – led by Pew – have spent tens of millions of dollars on demonizing fishermen via ENGOS and academic institutions. Chief among the organizations and academics has been the Environmental Defense Fund and Ms. Lubchenco (prior to becoming NOAA head, she was Vice Chair of the EDF Board). The mechanism to do this has been the creation and perpetuation of the belief that we're in the midst of an ocean crisis caused by fishing.

These foundations have spent millions of dollars initiating and supporting legislative changes that have put fishermen's boats, livelihoods and futures at risk for stepping afoul of any of a seemingly endless array of meaningless (in terms of conservation) regulations. They have spent millions of dollars on insuring through the courts and the federal bureaucracy that the Secretary of Commerce zealously enforces every burdensome regulation inflicted on U.S. fishermen. And they have spent millions of dollars to convince the public, as Ms. Lubchenco stressed less than two weeks prior to the beginning of the Deepwater Horizon tragedy began in the Gulf of Mexico, that fishing is the major threat to the health of the oceans.

In the time frame over which this has been done, the fisheries in U.S. waters have been steadily improving. In fact, the latest NOAA/NMFS report on the status of our domestic fisheries charts the steady increase - in terms of that agency's own Fish Stock Sustainability Index - over the last decade from 357 to 573, an increase in the sustainability of our fisheries of 60% (http://www.nmfs.noaa.gov/sfa/statusoffisheries/sos_full28_press.pdf).

You can see the end results of these anti-fishing expenditures in fishing ports from Maine to Florida to Texas, from Southern California to Alaska, in Hawaii and in the U.S. offshore possessions: empty docks, abandoned vessels and shuttered businesses that used to depend in whole or in part on fishing for their existence. And for the last decade you could see them as well in the print and broadcast media's treatment as headline-level gospel of every biased bit of fisheries "research" accomplished by foundation subsidized scientists and blaming virtually all of the oceans' ills on fishing.

You can also see the results in the huge slick that is now floating in the Gulf of Mexico, in the closed fisheries, the lost tourism dollars, the threat to beaches and wildlife from Texas to Florida's East coast and beyond, and in the weeks of futile efforts by the oil industry and the federal government to shut down the well. It's sort of like the Keystone Cops, but with wide-ranging and tragic consequences.

Just about every working fisherman is more than familiar with what it feels like to have foundation-supported "marine conservation" zealots breathing down his or her neck, whether fishing from a twenty foot skiff or a two hundred foot catcher processor. And that fisherman had better be familiar with every one of dozens of regulations, no matter how inconsequential, and be fishing in conformance with the latest "conservation" mandates as far as how, when, where and etc., mandates designed farther up the bureaucratic ladder by other zealots. The level of scrutiny, the level of mistrust, the level of overbearing bureaucratic control inflicted on every commercial fishery operating in U.S. waters by the federal government today is becoming - some fishermen would argue it has been for years - overwhelming.

There hasn't been a meeting of any federal regional fishery management council in at least a decade that hasn't been attended by representatives of various ENGOs, constantly striving for more and more stringent controls on fishing and fishermen. And time after time, when the Secretary of Commerce approves a Fishery Management Plan or plan amendment that the ENGOs think doesn't punish fishermen adequately, they will sue the Secretary in federal court to "save the fish" even more thoroughly.*

Fishermen are required to take federal observers on board on request to insure that they are fishing in conformance with applicable regulations. The frequency of these "observed" trips can vary from several times a season up to 100% coverage. In the latest amendment to the New England Multispecies Fisheries Management Plan, vessels are required to have observers on 38% of their trips. In some fisheries fishermen are required to notify federal personnel a set time before landing so they can be met at the dock and their catch for that trip can be inspected. In some fisheries, each boat is required to have a vessel tracking system installed and operational so that the federal government knows where the boat is and what its doing 24/7, three-hundred and sixty five days a year.

This is supposedly necessary to protect our oceans, and yet an exploratory drilling rig, a rig twice as big as a football field, worth upwards of a half a billion dollars and with a crew of well over a hundred, operating forty-some miles out in the Gulf of Mexico and drilling in a mile of water, exploded and sank on April 20. It was in operation with little or no federal oversight, with nothing resembling an environmental impact statement filed for its operations in US waters, and with nothing more rigorous than the oil industry's, the rig operators' and the owners' assurances that there were adequate systems in place to allow it to avoid environmental disasters such as the one that has now been ongoing in the Gulf for almost a month.

Over a mile of pipeline from the rig to a defective "blowout preventer" is a twisted mass a mile down on the sea floor, it's hemorrhaging oil that when it finally makes it's way to the surface is forming a slick, now approximately 2,500 miles in area, that is threatening not just the Gulf of Mexico but, via the Gulfstream, the entire East coast.

The tag line to NOAA press releases is now "*NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources.*" Perhaps "unless it has to do with offshore drilling" should be added.

An act of God or nature?

Not hardly. To attribute this to anything other than human error would be beyond the wildest dreams of British Petroleum, Transocean, Haliburton or the Department of the Interior's Minerals Management Service. While at this point it's impossible to say whether the original blow-out was due to faulty design, faulty engineering, faulty operation or faulty materials, the emphasis has to be on "faulty." And to suggest that the federal oversight of anything to do with the Deepwater Horizon was anything but faulty, or that the "let's try this" attitude that has applied to almost a month's worth of fruitless attempts to staunch the flow of oil, would be tantamount to suggesting that black was white or wrong was right.

Reportedly based on the oil industry's assurances that nothing like this could happen, there were no contingency plans, no reliable fail-safe systems, no "what do we do if..." scenarios in place, and as a result we have what has already become an economic and environmental catastrophe of epic proportions.

Dr. MacDonald and other scientists said the government agency that monitors the oceans, the National Oceanic and Atmospheric Administration, had been slow to mount the research effort needed to analyze the leak and assess its effects. Sylvia Earle, a former chief scientist at NOAA and perhaps the country's best-known oceanographer, said that she, too, was concerned by the pace of the scientific response. But Jane Lubchenco, the NOAA administrator, said in an interview on Thursday: *"Our response has been instantaneous and sustained. We would like to have more assets. We would like to be doing more. We are throwing everything at it that we physically can."* (J. Gillis, **Size of Oil Spill Underestimated, Scientists Say**, NY Times, 15/13/10 - <http://www.nytimes.com/2010/05/14/us/14oil.html?ntemail0=y&emc=tnt&pagewanted=print>).

According to the New York Times on May 10, *"federal regulators warned offshore rig operators more than a decade ago that they needed to install backup systems to control the giant undersea valves known as blowout preventers, used to cut off the flow of oil from a well in an emergency. The warnings were repeated in 2004 and 2009."* Obviously they weren't installed on the Deepwater Horizon or, evidently, on any other rigs operating in US waters (E. Lipton & J. Broder, **Regulator Deferred to Oil Industry on Rig Safety** - <http://www.nytimes.com/2010/05/02/us/02gulf.html?pagewanted=print>)

The Times continues *"agency records show that from 2001 to 2007, there were 1,443 serious drilling accidents in offshore operations, leading to 41 deaths, 302 injuries and 356 oil spills. Yet the federal agency (the Minerals Management Service) continues to allow the industry largely to police itself, saying that the best technical experts work for industry, not for the government.... Last year, BP, the owner of the well that blew up in the gulf, teamed with other offshore operators to oppose a proposed rule that would have required stricter safety and environmental standards and more frequent inspections. BP said that 'extensive, prescriptive' regulations were not needed for offshore drilling, and urged the minerals service to allow operators to define the steps they would take to ensure safety largely on their own."*

So we have a government "watch dog" agency that isn't doing its job; that has established a too comfortable relationship with the industry it's supposed to be regulating. There's no news there, it happens all the time. If that was all there was to it the feds could slap some wrists, fire or transfer some lower echelon bureaucrats, levy some fines and get back to business as usual.

But as the opening quote from Ms. Lubchenco, the widely acclaimed and world renowned ocean scientist who is now running the United States' ocean agency, clearly indicates, there seems to be a lot more going on than simple bureaucratic ineptitude.

In a letter from September 2009, obtained by The New York Times, NOAA accused the minerals agency of a pattern of understating the likelihood and potential consequences of a major spill in the gulf and understating the frequency of spills that have already occurred there. The letter accuses the agency of highlighting the safety of offshore oil drilling operations while overlooking more recent evidence to the contrary. The data used by the agency to justify its approval of drilling operations in the gulf play down the fact that spills have been increasing and understate the "risks and impacts of accidental spills," the letter states. NOAA declined several requests for comment. (I. Urbina, **U.S. Said to Allow Drilling Without Needed Permits**, N.Y. Times, 05/13/10 - <http://www.nytimes.com/2010/05/14/us/14agency.html?ntemail0=y&emc=tnt&pagewanted=print>).

At the time the letter quoted in the NY Times article cited above was written, Ms. Lubchenco had been in charge at NOAA for the greater part of a year. Why was there no substantive follow-up by her agency over the intervening half a year before the Deepwater Horizon disaster? Where were the foundation-funded ENGOs as this situation was developing? In view of what was clearly an ever-increasing risk of an environmental catastrophe of an unprecedented magnitude, how could the same individuals, organizations and governmental agencies – which were and still are slavishly toeing the "it's all about fishing" line** – be so blind to what the oil industry was and apparently still is doing in our coastal waters while carrying on their relentless and environmentally nonsensical persecution of fishermen?

How much is this attitude responsible for the inadequate performance of the Minerals Management Service, an attitude which is exemplified by the Deepwater Horizon disaster but has staggering implications for the thousands of other rigs and wells in US waters? How much is it responsible for the fact that NOAA, the agency charged with protecting our oceans, the creatures in them and the businesses that depend on them, was so obviously engaged in a campaign to perpetuate a fictional yet all-encompassing fishing crisis? These questions are obviously impossible to answer. I hope they are just as impossible to ignore.

"Cutoff valves like the one that failed to stop the Gulf of Mexico oil disaster have repeatedly broken down at other wells in the years since federal regulators weakened testing requirements, according to an Associated Press investigation...The government has long known of such problems (faulty blowout preventers), according to a historical review conducted by the AP. In the late 1990s, the industry appealed for fewer required pressure tests on these valves. The federal minerals service did two studies, each finding that failures were more common than the industry said. But the agency, known as MMS, then did its turnaround and required tests half as often. It estimated that the rule would yield an annual savings of up to \$340,000 per rig. An industry executive praised the 'flexibility of regulators, long plagued with accusations that it has been too cozy with the industry it supervises." (J. Donn and S. Borenstein, *AP Investigation: Blowout preventers known to fail*, 05/08/10 - <http://www.wbur.org/2010/05/08/oil-spill-blowout-preventers>)

Consider the mindset exhibited by Ms. Lubchenco in the opening quote. As she was being confirmed as head of the federal agency in charge of just about everything in the U.S. 200 mile zone that's of a non-military nature, she was widely lauded as one of the international leaders in the marine science world. If she wasn't worried about a massive blowout in a drilling rig in our coastal waters, why should anyone else be? If she

wasn't concerned about a total lack of contingency planning in the case of an oil-based environmental disaster, that could only be because such a disaster could never happen. How could anyone assume anything other than that if it wasn't a problem for her, a world-class ocean expert, why should it be a problem for anyone else? After all, she was really doing a great job of protecting those waters from overfishing, something that she was and is still hard at work convincing everyone is the greatest threat to the world's oceans. Just look at all those out of work fishermen, bankrupt businesses and empty boat slips, with more on the way every day.

Where were the ENGOs, organizations that have been so intent on collecting those foundation millions to save the oceans from fishing, when it came to allowing the Deepwater Horizon to drill less than fifty miles off our coastline with such inadequate environmental safeguards and such potentially grave consequences? Of course they are all jumping on the drilling is bad bandwagon now (witness Pew/Oceana's online petition to that effect – perhaps the most on-target example of gone horses and locked barn doors in a decade), but where were they a month ago, besides standing next to Ms. Lubchenco and damning fishing at the slightest opportunity?

And propping up this whole charade, we had a “Blue Ribbon” panel, the Pew Oceans Commission - headed by no less a luminary than Leon Panetta and paid for by the Pew Trusts - that glossed over just about everything potentially threatening the oceans other than those rapacious overfishing hoards. Controlling oil pollution got hardly a nod.

Ms. Lubchenco was a member of that commission.

The Pew Oceans Commission has had a profound effect on legislative, government and public attitudes towards ocean governance for much of the last decade. The “investment” of even more foundation dollars for PR made sure of that. But it's members were so focused of the evils of fishing and the need for “reform” in fisheries management that they overlooked the potential impacts of the oil industry's virtually unfettered access to our coastal waters (an example of this myopic focus on fishing and corresponding disregard of anything to do with oil is provided in a National Public Radio interview of Leon Panetta, Chair of the Pew Commission, see <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Pew%20and%20media>).

While the finger pointing has already begun, and a restructuring of the Minerals Management Service has been announced, it's obvious that we're not going to have anything approaching a rational oceans policy until there's a full realization that fishing is far from the worst thing that's ever happened to or in our oceans – bear in mind that even after three weeks the Deepwater Horizon spill still has a very long way to go to make it into the dirty dozen of the world's largest oil spills – and that we'd have a much cleaner Gulf of Mexico today if Ms. Lubchenco's agency had paid a fraction of the attention it's squandered on fishermen and fishing to the thousands of drilling rigs and wells at work in the Gulf.

And finally, why has Ms. Lubchenco's agency and Ms. Lubchenco herself been so invested in minimizing the size and, obviously, the severity of the Deepwater Horizon spill. NOAA's Emergency Response document dated April 28 (a Sunday) reported *“two additional release points were found today in the tangled riser. If the riser pipe deteriorates further, the flow could become unchecked resulting in a release volume an order of magnitude higher than previously thought.”* It was identified as not being public, and when questioned about it, *“NOAA spokesman Scott Smullen said that the additional leaks described were reported to the public late Wednesday night.”* (B. Raines, **Leaked report: Government fears Deepwater Horizon well could become unchecked gusher**, Mobile Press-Register, 04/30/10).

As reported by Justin Gillis in the NY Times, *“the 5,000-barrel-a-day estimate was produced in Seattle by a NOAA unit that responds to oil spills. It was calculated with a protocol known as the Bonn convention... However, Alun Lewis, a British oil-spill consultant who is an authority on the Bonn convention, said the method was specifically not recommended for analyzing large spills like the one in the Gulf of Mexico... NOAA declined to supply detailed information on the mathematics behind the estimate, nor would it address the points raised by Mr. Lewis. Mr. Lewis cited a video of the gushing oil pipe that was released on Wednesday. He noted that the government's estimate would equate to a flow rate of about 146 gallons a minute. (A garden hose flows at about 10 gallons per minute.) ‘Just anybody looking at that video would probably come to the conclusion that there's more,’ Mr. Lewis said. ‘I think the estimate at the time was, and remains, a reasonable estimate,’ said Dr. Lubchenco, the NOAA administrator. ‘Having greater precision about the flow rate would not really help in any way. We would be doing the same things.’”*

These are the words of the head of the agency that requires government monitors on one out of every three trips taken by boats engaged in the New England groundfish fishery, counting every fish that is brought aboard and documenting exactly where it was taken, and yet whether BP's runaway well is spewing an Exxon Valdez worth of oil into the Gulf of Mexico once a week or once a month is immaterial to her and in her estimation immaterial to the public as well.

Go figure.

“(Massachusetts Congressman Barney) Frank said it is now clear to him that Lubchenco is fundamentally hostile to the fishing industry. ‘I am more disappointed in her than I was before,’ Frank said. ‘And some of my colleagues are coming around to the more realistic evaluation of her.’” (S. Urbon, **Congress members press Locke on fishing rules, Frank ramps up criticism of NOAA chief Lubchenco**, New Bedford Standard Times, 05/12/10)

It's too bad that Ms. Lubchenco didn't direct some of that hostility in another direction.

* Pew/Oceana filed suit this week in federal court over Amendment 16 to the New England Multispecies FMP, an amendment that imposes restrictions on one of our oldest fishery that many are convinced will unnecessarily force at least half of the fishermen and boats out of the fishery and, because of a lack of alternative fisheries, off the water. The suit claims that the restrictions are too lax.

** A NOAA press release dated May 5 concerning an increased number of sea turtle strandings (in this case that means dead turtles washed up on the beach) from Alabama to the Mississippi delta since April 30 stated that “the stranding numbers are higher than normal” but, sticking with what is now apparently the agency line, “based on careful examination, NOAA scientists do not believe that these sea turtle strandings are related to the oil spill.” Think about that for a moment. Here’s a huge oil slick floating around in the Gulf of Mexico just offshore of the beaches where the turtles were found. Thousands of pounds of chemical dispersants, demonstrably injurious to all sorts of sea creatures, have been sprayed on the oil slick to break it up. Bits of the slick have been burnt to get rid of it. But, according to NOAA spokesperson Sheryan Epperly, investigators will be looking at whether some shrimp boats taking part in an emergency shrimping season before the oil slick reached their traditional fishing grounds removed devices from their nets that are intended to allow turtles to escape. Of course it can’t be the ongoing oil spill, the resultant oil slick or the continuing efforts to control it that are responsible for the dead turtles. In what has sadly become the NOAA mindset from the top on down, it’s got to be those fishermen once again.

NOAA Inaction in the Gulf of Mexico

06/12/10

For over a decade the precautionary principle has been the mantra used by anti-fishing “conservation” organizations and federal fisheries managers in their relentless efforts to get recreational, commercial and party/charter fishermen off the water. Most simply, the precautionary principle states that when there is any doubt about the accuracy of the data propping up a proposed management action, assume the worst and manage accordingly. Thus, if the estimate of a stock of fish is in the range of 75,000 to 125,000 metric tons (plus or minus 25% would be doing really well considering the average stock assessment), the managers should assume that the lower figure is accurate and set catch parameters as if it were. No allowance for fishermen’s on-the-water observations, no allowance for common sense or intuition, no allowance for “anecdotal” observations; just go with the lowest possible estimate regardless of the costs to the affected fishing communities.

Needless to say, this forced and arbitrary conservatism has unnecessarily cost fishermen and the businesses that depend on them untold millions of dollars and untold thousands of jobs (lest there be any doubt about this, the current “realignment” in the management of the New England groundfish fishery and the imminent closure of all bottom fishing off the coasts of Northeast Florida and Georgia - and the billions of dollars of direct and indirect economic impacts of these arbitrary actions on fishermen and fishing related businesses - have many people on the East Coast on the verge of active revolt against today’s fisheries management regime.)

Jane Lubchenco was one of the outspoken proponents of the precautionary principle, at least when applied to fishing and used to punish fishermen, in her past employ as a foundation subsidized researcher and “conservation community” leader and now in her role as the head of the National Oceanic and Atmospheric Administration, the federal agency in charge of regulating fisheries in federal waters.

Yet when it comes to non-fishing activities, or at least to non-fishing activities involving Big Oil, Ms. Lubchenco’s commitment to the precautionary principle is nowhere near as well developed. In fact, it appears that it is virtually non-existent.

Lubchenco’s/NOAA’s role in the Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015

In her September 21, 2009 twenty-six page response to Lisa Birnbaum, Director of the Mineral Management Service on the Draft Proposed Outer Continental Shelf Oil and Gas Leasing Program for 2010-2015. Ms. Lubchenco precedes her comments with a rundown of the federal laws that give her and NOAA specific responsibility in the areas covered by the draft proposal. These are “*the Coastal Zone Management Act, the National Maine Sanctuaries Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act, the Marine Mammal Protection Act, the Oil Pollution Act of 1990, and the Coral Reef Conservation Act as well as NOAA’s statutory roles under the Outer Continental Shelf Lands Act, the Ocean and Coastal Mapping Integration Act, and the Hydrographic Services Improvement Act.*”

Ms. Lubchenco then brings up a series of issues that were not adequately or accurately addressed in the proposal. Clearly she and NOAA had the ability, the foreknowledge and the duty to intercede in those issues. But did they? Anywhere from 10,000 to 100,000 barrels of oil still spewing into the Gulf of Mexico -we still don’t know how much - every day attest to how effective that intercession was.

And then there are the subsurface oil plumes

A growing group of independent researchers (independent of NOAA and BP, that is) have been reporting huge plumes of subsurface oil at various depths scattered about the Gulf. Understandably, BP has been denying their existence since their discovery was announced almost a month ago.

“(BP CEO) Hayward said that oil’s natural tendency is to rise to the surface, and any oil found underwater was in the process of working its way up. ‘The oil is on the surface,’ Hayward said. ‘There aren’t any plumes.’” (Associated Press, May 31)

But what's a little more difficult to understand is Ms. Lubchenco's continuing attempts to call into question the presence and the significance of these plumes.

"Media reports related to the research work conducted aboard the R/V Pelican included information that was misleading, premature and, in some cases, inaccurate," (Deepwater Horizon Response website, Statement from NOAA Administrator Jane Lubchenco on Ongoing Efforts to Monitor Subsea Impacts of the BP Oil Spill, 05/17/10)

"But the samples have not been analyzed," Lubchenco said. "They have taken good samples. And we need to make sure that we're not jumping to conclusions.... And that's part of the -- the normal process that science has. We want to make sure that we have good information."

"We have seen something irregular. But, you know, science is a process. We're in the very early stages of understanding what it is that they saw. It's clear that there is something at depth, but we don't even know that it's oil yet. That's -- that's a good possibility." (G. Ifil interview, PBS Newshour, 05/17/10)

"But to Lubchenco, the Obama appointee running the National Oceanic and Atmospheric Administration, all the accumulated evidence is just "circumstantial." And what others call oil, she calls "anomalies." "I can tell you that there have been a number of anomalies identified by a number of different cruises," she told reporters in a conference call. "Those anomalies are features at various different depths in the water column that may be oil, they may be other features. It is quite possible that there is oil beneath the surface," Lubchenco finally acknowledged under repeated questioning. "I think there is reason to believe that may be the case." But that's as far as she would go.

"I am not at all in denial," she insisted. (D. Fromkin, The Huffington Post, 06/02/10)

"We are all served best by proceeding in a careful, thoughtful, and quantifiable manner." Lubchenco appeared to be referring to her previous criticisms that the initial claim of a plume was premature. In her presentation, Lubchenco highlighted new results from a NOAA research vessel, emphasizing that concentrations of oil in a plume fell off quickly and were undetectable 20 kilometers from the leaking well. "Even in a fairly short distance, the signal is becoming significantly diminished." (E. Stokstad, Science Insider, 06/04/10)

What happens to the precautionary principle when Ms. Lubchenco is addressing what is being claimed to be the worst environmental disaster that has ever been inflicted on the United States? Why is it that the lack of scientific certainty elicited from a marine scientist, one who has often been described by her supporters as "world class," and whose job it is to protect our coastal and offshore waters, is awfully hard to look at as anything other than knee jerk deniability regarding subsurface oil plumes regardless of her claim to the contrary? How did the precautionary principle play into her deliberative processes regarding these now confirmed subsurface plumes when so much more was at stake than getting some more fishermen off the water?

And she maintained this deniability for three weeks, in the face of mounting scientific evidence to the contrary. It wasn't until June 8, at the point at which other researchers had conclusively proven the existence of the plumes, that she finally admitted *"there is definitely oil subsurface"* though she continued in her attempts to minimize its significance, saying the oil was present *"in very low concentrations"* - tell that to the critters that are trying to survive in it - and adding the world class weasel words *"that does not mean it doesn't have significant impact."*

However, in the words of another researcher, one with extensive experience in the Gulf of Mexico...

"It's an infusion of oil and gas unlike anything else that has ever been seen anywhere, certainly in human history," said Samantha Joye of the University of Georgia, the expedition leader. Bacteria are breaking down the oil's hydrocarbons in a massive, microorganism feeding frenzy that has sent oxygen levels plunging close to what is considered "dead zone" conditions, at which most marine life are smothered for a lack of dissolved oxygen. (P. Quinlan & J. Voorhees, NY Times, 06/08/10)

Irregularities and anomalies? For sure, but they're not emanating from the BP well head.

And what about research support?

"The administration acknowledges that its scientific resources are stretched by the disaster, but contends that it is moving to get better information, including a more complete picture of the underwater plumes. "We're in the early stages of doing that, and we do not have a comprehensive understanding as of yet of where that oil is," Jane Lubchenco, the NOAA administrator, told Congress on Wednesday. "But we are devoting all possible resources to understanding where the oil is and what its impact might be." (J. Gillis, NY Times, 05/19/10)

On May 13 the NOAA research vessel **R/V Bell M. Shimada**, set sail from Key West. On May 18, the day before Ms. Lubchenco's above statement to Congress, the Shimada was locking through the Panama Canal. As the most recent addition to the NOAA research fleet, the Shi-

mada is equipped with state-of-the-art instrumentation, and this instrumentation - according to NOAA - was at least partially operational (the **Shimada** had undergone acoustic trials prior to its Key West departure).

As another indication of its readiness, once in the Pacific on its way to its home port in Oregon, the Shimada would be “*engaged in trials en route to the West Coast, including acoustic mapping of the Shimada Seamount, a young, isolated volcanic feature located off the coast of Baja California.*”

Considering NOAA’s and Ms. Lubchenco’s lack of a comprehensive understanding of something as critical as the location and characteristics of the underwater oil plumes at that time, a lack that we’re still contending with a month later, and considering Ms. Lubchenco’s assurances that “*all possible resources*” would be devoted to adding to that understanding, why after leaving Key West did the Shimada make such rapid tracks for the Panama Canal rather than turning North and contributing to the Gulf spill research effort.

“*It seems baffling that we don’t know how much oil is being spilled,*” Sylvia Earle, a famed oceanographer, said on Capitol Hill. “*It seems baffling that we don’t know where the oil is in the water column*” (J. Gillis cited above). Perhaps it wouldn’t have seemed so baffling to Dr. Earle if she had known that NOAA’s newest and presumably most capable research vessels was getting out of the Gulf of Mexico as quickly as possible to survey a sea mount that has been off Baja and not doing much of anything since the Miocene epoch, which ended 5 million years ago.

Faithful to the bitter end?

C-Span’s video library archives televised updates on the Gulf oil spill. In her response to a question about the availability of video from BP in the update on June 8, Ms. Lubchenco said “*there were problems early on. We have directed BP to give everything they have and that has been forthcoming*” (starting at 16 minutes into the video, which is available at <http://www.c-spanvideo.org/program/293950-1>).

In a letter on the same day to Lamar McKay, President and CEO of BP America, Senator Ed Markey wrote “*it has come to my attention that the Flow Rate Technical Group (the panel of scientists and engineers tasked with determining the rate of oil release from the Deepwater Horizon) has not yet received archived video data for this period (after the riser was severed and before the cap was installed). Since I have previously requested that you archive all video, I expect that you have stored a copy of all the chronological video feeds. Any efforts on your part to prevent experts from determining the size of the spill is unacceptable. I request that you immediately release the archived video to the Flow Rate Technical Group and to me so that the size of this spill can be determined.*” Senator Markey is the Chairman of the Energy and Environment Subcommittee of the Energy and Commerce Committee.

One has to assume that the Chairman of the Senate subcommittee that is and has been most directly involved in the BP provided and NOAA permitted environmental atrocity that is still happening in the Gulf of Mexico knows what materials are and aren’t available to a federally convened panel of experts. So why would Ms. Lubchenco be asserting on the same day that he made his request to BP that “*everything has been forthcoming*” from BP? This seems to be another of Ms. Lubchenco’s irregularities and anomalies, but it appears that none of them are random in nature, all seeming to fall on the BP side of the fence.

So why is Ms. Lubchenco so ready, willing and able to invoke the precautionary principle when it comes to saving a relative handful of fish from U.S. fishermen, fishermen who are unquestionably among the most highly regulated in the world, but becomes totally disinclined to do so when it comes to dealing with the worst environmental catastrophe that has ever been inflicted on us? And what has her disinclination cost thousands of Gulf fishermen and tens of thousands of other people on the Gulf and elsewhere whose lives have been totally disrupted by this ongoing disaster?

Her past ties to Big Oil, both as a researcher and as a highly placed official in the world of Environmental Non-Governmental Organizations, are a matter of public record, as are her bona fides as one of the leaders in the foundation-funded “blame it all on fishing” campaign. At this point we’d like to think that she is starting to realize where the blame really belongs.

Fishing industry leaders have long debated whether the anti-fishing ENGO’s goal has been to destroy all of the fisheries or just most of them, retaining only those whose participants are willing to toe the ENGO line and parrot the right ENGO phrases. Whatever the case, on the Gulf and East Coasts they’re a lot closer now than they were before Ms. Lubchenco was put in charge of our oceans.

We’re from the government and we’re here to shake you down

07/12/10

Fishermen and people in fishing-dependent businesses had been complaining for years about the heavy-handed and arbitrary “justice” that was meted out by the enforcement arm of the Department of Commerce’s (DOC’s) National Oceanic and Atmospheric Administration (NOAA). Their complaints generally had to do with vindictiveness, pettiness and coercion, and ranged from the enforcement agents “on the street” to the administrative law judges that heard the cases. In the spring of 2009, bombarded with what seemed to be an ever-increasing number of complaints from their constituents, legislators from the US Congress and the Commonwealth of Massachusetts demanded that the troubled relationship between the fishing industry and the federal agencies responsible for policing it be examined.

Imagine a federal enforcement agency with a “slush fund” accumulated from fines that the agency personnel levied on the owners of small businesses for making administrative errors and spent by employees of that same agency with inadequate or non-existent controls. Imagine that this flourished under at least two Administrations and was brought into the light only after Congressional pressure initiated an investigation by the departmental Inspector General aided by an international accounting firm. And imagine that the agency and the people responsible were soundly condemned by high ranking federal legislators from both parties. What are the odds that this would be studiously ignored by the mainstream media?

Kind of remote, wouldn't you think?

Well, welcome to post turn-of-the-century Realpolitik as brought to you by the shadow-government increasingly in charge of shaping our national environmental policies. Made up of ENGOs that are lavishly funded by “charitable” foundations with blatant corporate connections, this shadow government exists thanks to its cadre of “advocate scientists,” its pervasive influence with the print and broadcast media, and a public that, because it is largely incapable of understanding exceedingly complex environmental issues, is all too willing to accept scapegoats rather than personal responsibility.

*For a brief synopsis of the influence of ENGOs and the foundations that fund them on fisheries policy, see my 2008 column **The anti-fishing movement** from Fishing News International at [http://www.fishnet-usa.com/All Stolpe Columns.htm#Anti-Fishing Movement](http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Anti-Fishing%20Movement).*

*Also see Richard Gaines article **Green activists take the wheel** in the June 28 Gloucester Daily Times -*

*(<http://www.gloucestertimes.com/seasundersiege/x1703942597/Green-activists-take-the-wheel>) and Nancy Gaines **Getting help from the press** in the same edition (<http://www.gloucestertimes.com/fishing/x1703942593/Getting-help-from-the-press>).*

This resulted in Todd Zinser, the Inspector General of the DOC, launching an internal investigation of the NOAA Offices of Law Enforcement (OLE) and General Counsel for Enforcement and Litigation (GCEL). Note here that while Jane Lubchenco, the current head of NOAA, has insisted the this investigation moved forward at her “urging,” those of us who have been closely following the evolution of what can't be seen as anything less than a full-blown scandal know that it began only as the result of significant bipartisan pressure on her and the Secretary of Commerce. Quoting from the memo from the Inspector General to Ms. Lubchenco on January 21, 2010 accompanying the report on his preliminary investigation “*your memorandum reiterated concerns raised by members of Congress and elected state officials about reports of heavy-handed and unfair enforcement...*”

Inspector General Zinser's report (<http://www.oig.doc.gov/oig/reports/2010/OIG-19887.pdf>), was damning in its own right. Among a slew of other problems, this internal investigation revealed that while virtually all of the cases brought by NOAA against fishermen and people in fishing dependent businesses were noncriminal in nature (98%), its investigative workforce was overwhelmingly trained in and oriented to criminal investigations (90%). It also disclosed a so-called Asset Forfeiture Fund (AFF) with an estimated balance of \$8.4 million and that “*OLE officials are not aware of the fund's having ever been audited.*”

The Office of the Inspector General (OIG) investigation was summed up with “*in short, we found systemic, nationwide issues adversely affecting NOAA's ability to effectively carry out its mission of regulating the fishing industry. These issues have contributed significantly to a highly-charged regulatory climate and dysfunctional relationship between NOAA and the fishing industry...*”

One of the recommendations of the OIG was a forensic review of the AFF. This review was in part accomplished by the international accounting firm KPMG. Of this review of AFF transactions, the OIG wrote “*though it did not identify many anomalous transactions, KPMG was limited to, and relied on available supporting documentation, and did not carry out additional inquiries beyond review of existing records to identify evidence of potential irregularities.*”

Regarding the paucity “*of existing records to identify evidence of potential irregularities,*” on March 4 the New York Times reported “*House Oceans and Wildlife Subcommittee Chairwoman Madeleine Bordallo (D-Guam) said that NOAA Law Enforcement Director Dale Jones should be at least temporarily relieved of his duties, given questions over whether he may have tried to destroy documents to avoid an even more scathing report from the Commerce Department's top investigator. ‘As the top cop at NOAA and a longtime investigator himself, Dale Jones must be acutely aware that shredding documents during a federal investigation raises serious questions about his commitment to a full and fair look at all the facts,’ Bordallo said at a subcommittee hearing on the issue yesterday. ‘At a time when transparency and accountability in the way our government operates is of utmost importance, this type of behavior cannot be condoned, and Mr. Jones should step aside until the IG's investigation is completed.’*”

The first page of the brochure for the Third Global Fisheries Enforcement Training Workshop organized by the International MCS (Monitoring, Surveillance and Control) Network, an international organization of fisheries enforcers, started out provocatively with:

They think no one can see what they're doing

They think no one cares

They think it doesn't matter

They think no one will stop them

They're wrong!

Dale Jones, who was the Director of the Office of Enforcement at NOAA until a document shredding spree while the office was being investigated by the Department of Commerce Office of the Inspector General came to light at a Congressional hearing, is still identified on the website as the Chairman of the International MCS.

I had been under the impression that those words were directed towards those folks who were guilty of illegal, unreported or unregulated fishing. This sordid saga involving the enforcement people - and their bosses - at NOAA kind of makes me think that whoever put the brochure together might have been looking in the mirror instead.

Due to missing - and possibly intentionally shredded - records, the OIG reported that it was “unable to verify the \$8.4 million balance provided by OLE and NOAA’s Office of Finance, as cited in our January 2010 report. KPMG’s analysis suggests that the AFF’s current balance likely falls within a broader range. Based on complicated definitional, data analysis, and reconciliation efforts, KPMG found that during the period of its forensic review (January 1, 2005, through June 30, 2009), the AFF received approximately \$96 million (including interest on prior balances), while expending about \$49 million through over 82,000 transactions. This analysis suggests that the balance could be much higher than \$8.4 million.”

Bear in mind that, as the name Asset Forfeiture Fund indicates, these tens of millions of dollars weren’t from federal taxes. They were from fines and seizures imposed on fishermen and on owners and employees of fishing-related businesses.

And how was the Asset Forfeiture Fund misused?

The KPMG review disclosed:

- While OLE policy did not allow vehicle purchases, only leasing and rentals, the OLE vehicle inventory listed 202 vehicles, two of which were leased and 200 of which were purchased at a cost of about \$4.6 million. These 202 vehicles were for a staff of about 172 enforcement personnel.
- While OLE policy did not authorize vessel purchases, the OLE vessel inventory listed 22 vessels purchased at a cost of nearly \$2.7 million. The most expensive vessel, advertised as “luxurious,” cost \$300,000 and its purchase, bypassing an internal review process instituted by OLE headquarters, was approved by Dale Jones, the Director of OLE at the time, “prior to competitive procurement procedures being applied.”
- The OLE Special Operations Fund, used to pay for covert and undercover activities (payment of rewards, purchase of evidence and information, and set-up and operation of covert businesses) lacked “oversight and accountability, including by headquarters.” With a case-load that was 98% noncriminal, why was there even a need for such a fund?
- While AFF funds are supposed to pay only for travel related to enforcement activities, “between January 2005 and June 2009, OLE and GCEL charged nearly \$580,000 to the AFF for international travel to over 40 destinations. However, only about 17 percent of the cost for this travel was directly related to specific investigations or enforcement proceedings... The remaining 83 percent of the cost for such travel was for the purpose of training or attending meetings.”
- Approximately 4,000 OLE and GCEL purchase card transactions appeared to be split into two or more transactions (i.e., those involving the same card holder, date, vendor, and the same or different amounts) to circumvent single purchase limits and/or avoid competitive procedures—in violation of Federal Acquisition Regulation requirements that protect against improper or fraudulent purchases.
- As reported by Saving Seafood (<http://www.savingseafood.com>) on July 12, “in response to a Congressional inquiry last week, NOAA has confirmed that until the current fiscal year, 60% of the funds used to pay for the services of the United States Coast Guard Office of Administrative Law Judges (ALJ) who adjudicated cases brought under marine conservation laws were obtained from assets forfeited and liquidated as a result of fines levied in these cases.”

So we have a bunch of criminal investigators in the position of paying for their unauthorized cars, boats, and international junkets and questionable “covert” operations by apprehending fishermen for noncriminal activities. And the controls on how they spent the money, once they lifted it out of the fishermen’s pockets in administrative proceedings that seem more “kangaroo court” than anything else, was apparently not being controlled, or even noticed, by anyone. Having spent 15 or so years in government, I find it impossible to imagine that anyone I worked with would have considered, or been allowed to carry out, the fiscal maneuvers that were evidently standard operating procedure in NOAA. Kind of amazing, isn’t it? Even more amazing was - and as far as I know, still is - the reaction of NOAA to what should go down in history as the most shameful episode in the 40 year existence of the Agency. Congressman John Tierney has on his website an article by Gloucester Daily Times reporter Richard Gaines that says in part “members of the East Coast congressional fishing caucus are prepared to challenge the announced intention of top fisheries regulators to tackle systemic failings in law enforcement — including excessive penalties and possible vindictive motives — without reviewing past miscarriages of justice by federal enforcement agents against fishermen and related businesses.” The source was a memo from Lois Schiffer, Chief Counsel of NOAA, and Eric Schwaab, NOAA Assistant Administrator for Fisheries, to NOAA Administrator Lubchenco.

“In case after case, fishermen were investigated and treated as criminals... And even now this trend is apparently continuing in NOAA, with the newly appointed NOAA Chief Counsel’s most notable accomplishment as an Assistant Attorney General being development of the Environment and Natural Resources Division’s environmental crimes program.

Is it a stretch to suppose that much of this was due to the demonization of fishermen by the media?

How this took place, what was - and is - behind it, and how else it has affected and is affecting NOAA in carrying out its mission regarding fishermen and fishing is every bit as deserving of oversight investigation by Congress as the dysfunction endemic in the NOAA Offices of Law Enforcement and General Counsel for Enforcement and Litigation. In general that wouldn’t be the case, but the leadership at NOAA in the Obama Administration, the close ties of those leaders to the foundation/ENGO world that has so successfully persecuted so many people connected with harvesting fish for fun or profit, takes this beyond the realm of the “general.”

For all of the fishermen who were wrongfully criminalized, for their families, for the businesses they support, for the communities they are a part of, for all of the rest of us in or associated with fishing and for the future of fishing in the United States, we deserve answers to some crucial questions. How involved were the people now in the upper management levels of NOAA in this process? To what extent, if any, were they responsible for establishing the institutional mindset at NOAA from the outside that allowed the abuses reported by the Inspector General to flourish? And, of course, how much of that involvement, if any, has been carried over into the current management and philosophy of NOAA?

As Ms. Lubchenco's unilateral shifting of the entire management focus of NOAA to the implementation of catch shares virtually overnight illustrates so clearly, she is in a position to tremendously influence the lives and futures of millions of fishermen, the economic well-being of tens of thousands of fishing dependent businesses and a huge segment of our coastal economy. If that isn't justification for intense Congressional scrutiny, it's hard to imagine what is."

(From my January 27, 2010 Saving Seafood column **The agency that brought us Trawlgate now presents Investigate** - available at http://www.fishnet-usa.com/All_Stolpe_Columns.htm#Investigate.)

The financial loss that people suffered at the hands of this out-of-control NOAA police force was huge. Has there been or is there going to be an accounting? How many people lost their boats, their businesses, their homes, their very way of life because they were targeted by criminal investigators in search of crimes to prosecute and with a growing inventory of crime-stopping toys like new SUVs and "undercover" yachts to "protect the fish" with? And when the investigators couldn't find any real crimes to stop with their wrongfully acquired toys, they manufactured them out of petty reporting and paperwork violations in an enforcement system that had become really adept at suffocating fishermen with an avalanche of largely irrelevant paperwork years ago.

NOAA is sitting on a large pot of money which was taken from fishermen and other business people through what it's hard to see as anything but strong-arm tactics. NOAA has also let another large pot of money from those same fishermen be improperly spent without adequate safeguards and/or supervision. But the NOAA leadership seems intent on fixing the corrupt enforcement system that it allowed to fester for so long with no concern for the victims of what was at best their inattention and at worst their active encouragement. Since this whole sordid affair started, how many dollars went to the salaries of NOAA administrators who were looking the other way when their responsibilities should have included oversight of these two renegade offices? How many of those administrators are still there (or are retired and collecting government pensions)? And more importantly, what were the total costs to the people and the businesses that were so wrongfully prosecuted - and persecuted - because of this pervasive blind spot that they conveniently developed?

Are Ms. Lubchenco and the rest of the NOAA/NMFS leadership proposing to ignore all of this? I really hope not, but if that's the case, it's up to all of us to make sure that Congress steps in post haste.

In a NY Times article following her appointment to head NOAA, Jane Lubchenco said "*fishing communities, scientists, regulators and other stakeholders in the debate need to overcome a legacy of bitterness and distrust. 'It really is pretty dysfunctional'*" Unless and until she convincingly turns her agency's enforcement efforts around, sees that agency personnel who committed or allowed to be committed the many infractions reported by the OIG and KPMG are appropriately punished, and willingly makes adequate restitution to the fishermen and others who were so unnecessarily and vindictively damaged by her agency's actions, she'll be doing nothing but adding to what has now become her very own legacy of bitterness and distrust, and the level of dysfunction is only going to increase. Some bureaucratic reshuffling isn't going to do the job that needs to be done.

- On July 1, North Carolina Congressman Walter Jones introduced H. R. 5668, "*to amend the Magnuson-Stevens Fishery Conservation and Management Act to require the use of sums received as fines, penalties, and forfeitures of property for violations of that Act or other marine resource laws to be used to reduce the Federal deficit and debt.*"
- On July 8, Massachusetts Congressman Barney Frank and John Tierney publicly called for Jane Lubchenco's resignation.
- On July 9, North Carolina Congressman Walter Jones demanded that Jane Lubchenco step down as head of NOAA.
- On July 9, Congressman Frank, after communicating with the Obama Administration, backed away from his demand that Ms. Lubchenco resign, pending indications that she would become more responsive to the fishing industry. (For the Gloucester Times' take on this issue, see <http://www.gloucestertimes.com/opinion/x739952758/Editorial-Frank-better-be-right-on-new-White-House-fishing-priority>.)
- On July 12, New York Senator Charles Schumer demanded that NOAA sell unauthorized assets, return proceeds to fund, and return arbitrary and excessive fines to fishermen who committed no wrong doing or were excessively fined.

The Oil Slick – Oceana scientists “roughing it” in the Gulf

08/16/10

When I received a fund raising email from Andrew Sharpless, the Chief Executive Officer of Oceana, to help support Oceana's scientific efforts in the Gulf of Mexico with a \$500 donation, I was a bit intrigued in a positive sort of way. Anything that distracts him and his minions from persecuting fishermen is well on the way to being a winner in my estimation.

As I was getting my checkbook out, I followed the link ([here](#)) to the YouTube video of a tour of the Oceana "research vessel" identified as the Oceana Latitude that was to be employed in this two month long scientific "expedition" (Pew/Oceana's term for the undertaking). Some of the content of the video tour, conducted by researcher Margot Stiles, really piqued my interest. First, there was more well-kept teak decking on the Oceana Latitude than I had ever associated with a research vessel. Second, the working research boats that the Oceana Latitude carries all appeared to have never done a lick's worth of work in their obviously well polished existence; in fact, they resembled luxury sports fishing vessels far more than research platforms. Next, Ms. Stiles stated that some tarps that she was sharing a scene with were to cover an unspecified "bunch of stuff" that was being stored on deck. Finally, what she referred to as a "mini office" seemed to have far more of the yacht than the sea-going office about it.

Needless to say, this whole production struck me as curious, particularly considering that it was in support of a fund-raising plea from an EN-

GO that was tied to more Big Oil \$Billions than any of us mere mortals, at least those of us who don't work for the federal government or a "charitable" foundation, could ever imagine.

I put my check signing impulses on temporary hold.

After a couple of minutes with Google, I found that the Oceana Latitude was really the M/Y (that stands for "motor yacht") Latitude, described as an expedition motor yacht built in Germany and listed for charter - at \$99,000 per week - at CharterWorld.com ([here](#)). The shiny work boats are listed as "water toys" on the charter agent's page and include "a 43 ft Mares Catamaran Sport Fisherman motor boat, which is completely equipped and rigged for fishing" and "a 27' Catamaran rigged for fishing (New in 2007)." The M/Y Latitude also features a really big Jacuzzi with room enough for a dozen intrepid scientists, perhaps part of the "bunch of stuff" covered by that tarp, and the accompanying photos indicate that the interior décor is about as far from "scientifically Spartan" as it's possible to be.

But in all candor, I have to admit there was no mention of an on-board sauna.

Now I realize that I don't have any right to question what fabulously well-endowed ENGO leaders spend on or what they chose to call "research vessels" or on how those vessels are equipped - after all, we wouldn't want visiting NOAA, EPA or MMS personages, New York Times reporters, Spanish models (the originally linked picture of Spanish model Almudena Fernandez was removed from the M/Y Oceana Latitude Flickr page. However, another picture including her - in a more "scientific" context - is available [here](#)) or network producers to really have to rough it like all of those fishermen helping to fix the BP screw-up. But for Andrew Sharpless to be seeking such large donations - at least in an "us regular folks" context - to subsidize the operation of such a floating palace, regardless of the work that the people who are slaving on it for two months actually do, does seem a bit much, doesn't it?

For anyone who is wondering, the Greenpeace research vessel in the YouTube clip [here](#) (ABC Action News) looks much more like a working research vessel than the M/Y Latitude, but imagine actually trying to do science on steel decks and without plush furniture, wet bars and water toys. No models are going to be visiting the R/V Arctic Sunrise, I'd be willing to bet. So what are they going to do for photo-ops?

C'mon, Andy! My checkbook went right back into the drawer.

(Note that if any of the linked websites are taken down, I will attempt to post pdf files of them [here](#).)

Ps - Ms. Stiles, if you chance to read this, the next time you have a starring role on YouTube, I'd advise you to either ditch the footwear or have a sound tech edit out that distracting "flip, flop, flip, flop...."

Pps - I posted the above column on a fisheries-oriented listserve that I subscribe to. In reply, a member who is on the staff of the Marine Conservation Biology Institute suggested that I was somewhat lacking in ability in using Google and then wrote, referring to the M/Y Latitude aka the Oceana Latitude "it's clearly a research vessel and not a motor yacht." I replied with another link ([here](#)) to a website that features a more complete slideshow and an extensive video tour of the vessel including the spa/hot tub/pool, what it was rebuilt for - to reiterate, an expedition motoryacht - and it's origins. I find it hard to believe that anyone visiting that website with an even cursory knowledge of working research vessels could consider that's what the M/Y Latitude actually is, but the MCBI staffer, conceding that he had missed the spa/hot tub/pool on the first go 'round, still ended with "teak decks and the general layout of the vessel are not out of the ordinary, but hot tubs certainly are. Perhaps it's an upgraded dive boat?"

The audio track that accompanies the M/Y Latitude video starts out "at first glance this might not look like a yacht, but don't be fooled. She's the power lifter of the yachting world... the interior was transformed into a spacious luxury beach house." The Marine Conservation Biology Institute has been closely tied to the Pew Charitable Trusts and their various iterations since its founder and President, Eliot Norse, was a Pew fellow. Perhaps, as his staffer wrote, such vessels - sans the hot tub - are the norm for Pew connected ENGO researchers, but they're definitely not for anyone else.

Do we really need a fisheries management "revolution?"

12/23/10

The Biggest Lie is that fishermen are inherently incapable of sustainably managing the fisheries they partici-pate in. The sole basis of this belief is The Tragedy of the Commons, an article published in the journal Science by an ecologist, Garrett Hardin, in 1968. Hardin's article describes the dilemma of hypothetical herders sharing a hypothetical plot of land in medieval Europe. It's been used and is still being used as proof positive that fishermen are incapable of rationally harvesting fish that "belong to everybody." Hardin is reputed to have later said that his article might better have been titled "The Tragedy of the Unregulated Commons," which has no bearing at all on today's over-regulated fisheries. This obvious fact is understandably ignored by the foundation-funded anti-fishing activists in their so far successful campaign to marginalize fishermen in the management process. (Note that Nobel Laureate, Elinor Ostrom, convincingly - at least to the Nobel selection committee - argues that Hardin's "tragedy," though applicable in limited situations, suffers from over-application.) From It's time to stop Magnuson from being a weapon against fishing communities at <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Magnuson%20Weapon>.

Jane Lubchenco, head of the National Oceanic and Atmospheric Administration, the parent agency of the National Marine Fisheries Service, is in the process of trying to “privatize” as many U.S. fisheries as possible. This form of privatization, also termed “catch shares,” grants exclusive harvesting rights for the fish in our Exclusive Economic Zone to private individuals. Of the hundreds of individual fisheries managed by the federal government, at this point only 16 are managed by a form of catch shares, but if Ms. Lubchenco has her way, this list will include as many more as she and her ENGO cronies can add.

If she is successful in this, there is no way to look at it as anything less than a revolution in how we manage our fisheries, in how our fisheries resources are caught, in who catches them, and in how they get to market.

Is this a revolution that we really need?

From the National Marine Fisheries Service 2009 Report to Congress - The status of U.S. fisheries (http://www.nmfs.noaa.gov/sfa/statusoffisheries/sos_full28_press.pdf):

NMFS measures progress towards the sustainability of our nation’s fisheries through the Fish Stock Sustainability Index (FSSI). The FSSI measures the performance of 230 key stocks and increases as additional assessments are conducted, overfishing is ended and stocks rebuild to the level that provides maximum sustainable yield. This index increased from 357.5 in 2000 to 573 in 2009, see Figure 1 below. The 60% increase in the FSSI in 9 years represents significant progress in improving our knowledge of stock status and sustainably managing our fisheries. More information about the FSSI can be found at <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

For the third quarter of 2010 the FSSI was 582.5.

Each of the 230 fish stocks are rated individually to make up this composite measure. The maximum rating for each stock is 4.0. Therefore a “perfect” FSSI would be 920. However, 25% of the FSSI for each stock is based upon whether the “overfished” and “overfishing” status for that stock is known. For 51 stocks, the “overfished” status is unknown. For 38 stocks, the “overfishing” status is not known. If it weren’t for this lack of knowledge - a lack for which NOAA/NMFS is entirely responsible - the composite FSSI would be at least 637. If the people at NOAA/NMFS knew the status of all 230 stocks, and if those stocks presently with an “unknown” status were all found to be neither “overfished” nor subject to “overfishing,” the composite FSSI would be 726.

Clearly our fisheries are improving steadily, and have been doing so for more than a decade. Just as clearly, they might well be in better overall shape than NOAA/NMFS is willing to admit. In fact, one of the most common observations of commercial, recreational and party/charter fishermen is that there are more fish now than there have been for the last thirty years. An equally common question is that, with so many more fish available, why is our ability to catch them being increasingly reduced by the federal government?

This increase in NMFS’ arbitrary index of “sustainability” is even more impressive when you take into account the fact that it allows for neither natural nor anthropogenic environmental shifts. While the warming of our coastal and inshore waters is causing some of our fish stocks to alter their migratory habits, the surveys that are the foundation of all of our stock assessments aren’t designed to follow the fish. Rather, they depend on sampling at the same stations that have been sampled for decades. While it would be extremely difficult to quantify, it’s impossible to imagine that some stocks aren’t classified as “overfished” only because they have changed their natural range and the areas sampled in the surveys are cast in concrete.

Reinforcing the NMFS Fish Stock Sustainability Index is the fact that many fish stocks are at or are approaching record levels of abundance. In the Mid-Atlantic region, for example, the biomasses of three of the most important species sought by recreational and commercial fishermen are at or approaching levels greater than any measured in the past. These are scup (Stock Assessment for Scup 2010, M. Terceiro, Northeast Fisheries Science Center, Table 35, Pg 55 - <http://www.nefsc.noaa.gov/publications/crd/crd1016/crd1016.pdf>), summer flounder (Summer Flounder Assessment Summary for 2010, Southern Demersal Working Group, Figure 4, Pg 11 - http://www.mafmc.org/fmp/current/SF-SC-BSB/Summer%20flounder/F2010_Assess_Summary.pdf), and black sea bass (Black Sea Bass Assessment Summary for 2010, Northeast Fisheries Science Center, Figure 3, Pg 6 - http://www.mafmc.org/fmp/current/SF-SC-BSB/BSB/BSB2010_Assess_Summary.pdf).

In fact, of all of the species managed by the Mid-Atlantic Council, only one (butterfish) is listed as overfished.

But what of New England, supposedly ground zero for ineffectual fisheries management and rapacious fishermen?

The sea scallop fishery, the most valuable commercial fishery in the U.S., is shared by the Mid-Atlantic and New England regions, as is the monkfish fishery, the most valuable finfish fishery on the East Coast. Neither is classified as overfished and overfishing isn’t occurring in either. There are definitely no crises associated with these fisheries, two of our most valuable.

The groundfish fishery, one of the earliest targets of the “catch share revolution,” and also one of our oldest and most historically important fisheries, is made up of a complex of 16 overlapping and intermingled stocks. I wrote in August, 2009 in *Chronic Underfishing - The Real New*

England Groundfish Crisis (http://www.fishnet-usa.com/chronic_underfishing.htm) “the total target TAC for the twelve groundfish species was almost 170 thousand
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metric tons. The total catch was less than 43 thousand tons. This was only 25% of what the fishermen could have caught without damaging the stocks. Assuming a conservative value of a dollar a pound for those fish (from 2000 to 2007, haddock returned an average of \$1.20 a pound to the fishermen), they didn't catch 280 million dollars worth of haddock, cod, flounder, etc. that they were allowed to catch. If every dollar's worth of fish landed generates four dollar's worth of total economic activity, that's over a billion dollars lost to the New England economy, and lost primarily to New England's struggling fishing communities.” A year and a half later, seven months into the first year of catch share management in the groundfish fishery, only 21% of the groundfish Annual Catch Limit (ACL) has been caught. The groundfish fleet appears to be on the way to taking most of the ACLs of the least plentiful stocks, with 47% caught, but only 15% of the four most numerous stocks (Georges Bank haddock, Georges Bank haddock East, pollock and redfish).

The groundfish stocks that were severely underfished pre-catch shares are still severely underfished, and NO-AA/NMFS doesn't seem to be doing very much about it. If the four most plentiful stocks were being fished at the same level as the least plentiful stocks, a large part of the groundfish fleet that is now tied up at the dock (estimated at up to two thirds of the total groundfish vessels) could be at work. Instead, every indication is that 50,000 metric tons of haddock, pollock and redfish - fish that could be harvested sustainably - will be left in the ocean. This represents approximately half of the Annual Catch Limit for the groundfish fishery.

The only crises in the New England groundfish fishery are those caused by a management regime that has put an estimated two-thirds of the fleet out of work and a federal fisheries bureaucracy that is willing to support that management regime while doing nothing substantive to help the fishermen they have forced out of the fishery to catch the huge biomass of available fish.

“Overfishing” is fast becoming a part of the past

In the ever-diminishing group of fisheries that are still considered to be overfished, changing or deteriorated environmental conditions are such that in all probability the majority of them will not be considered fully recovered until their biological reference points are modified to reflect the changed or deteriorated conditions. Unfortunately, “underfishing” is still with us, and it appears as if NOAA/NMFS isn't particularly anxious to anything about it.

(I would be remiss here if I didn't point out how inadequate science also plays a role in the supposed deteriorated condition of some of our supposedly overfished stocks. The most recent - and I hope the most egregious, but only time will tell - example of this was the NMFS determination early this past summer that Atlantic pollock wasn't overfished [as it was previously believed to be] and the pollock Total Allowable Catch was increased by a factor of five. This decision was based on an updated assessment of the stock [see <http://www.nefsc.noaa.gov/publications/crd/crd1017/pdfs/ctext.pdf>] utilizing a more appropriate computer model, not new or better survey data. There's no reason not to believe that the wrong model or inadequate data or some other technical oversight is just as responsible for the supposed status of every other “overfished:” stock.

I'd be equally remiss if I didn't also point out that a tremendous amount of political pressure was brought to bear on NOAA and Ms. Lubchenko by the New England Congressional Delegation and state and local officials to fix the ongoing groundfish debacle. It would be hard to imagine that this pressure wasn't in part responsible for the federal fisheries managers' discovery that the model they had been using up until then for pollock wasn't doing the job.)

I've written before on Ms. Lubchenko's decision to redirect millions of NMFS research dollars into pushing her decision to manage as many fisheries as possible with catch shares (<http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Catch%20shares%20choo%20choo>). Thus, it's not surprising that the idea that a beefed-up research effort could be responsible for getting even more stocks off the overfished list hasn't really caught the attention of the higher-ups at NOAA/NMFS - or perhaps it has. Just think how much more difficult it would be to sell Ms. Lubchenko's idea that a revolution in how we manage our fisheries was needed if we didn't have all of those supposedly “overfished” stocks for her to use as examples of how bad we're doing without catch shares. How much could the harvest levels in our other fisheries be increased if the NOAA/NMFS scientists reviewed the underlying data, assumptions and models with as much zeal as they did in the pollock fishery?

But apparently that isn't what it's about at NOAA. It's hard to justify the need for a revolution in fisheries management if things are going along well without one, and allowing fishermen to catch more fish and putting out of work fishermen back to work would be admissions that things are going well. With the leadership we now have at NO-AA/NMFS, don't hold your breath until that happens. A manufactured fishing crisis is what got them there, and a manufactured fishing crisis is what's been keeping them there.

And finally, is what is termed overfishing necessarily catastrophic?

The scientists at NOAA/NMFS aren't particularly good at estimating the size of fish stocks. In fact, as was just demonstrated with Atlantic pollock, they can be abysmally bad. To make up for this, they have adopted what is called the precautionary principal, which I have discussed

previously. The bottom line is that this forces managers to manage as if stocks were at the lowest point of their estimated size. Hence, with a stock like monkfish, which is classified as data poor, the landings are constrained to somewhere between a half and a third of what they might actually be because not enough is known about the health of their population.

This conservatism in monkfish management could be costing fishing communities from North Carolina to Maine upwards of \$100 million a year.

So what would happen if the allowable catch was doubled (with the agreement of the fishermen), if it's landed value went from \$14 million a year to \$28 million a year? First off, and using a conservative 4:1 multiplier to determine total economic activity generated by each dollar in landings, at least \$64 million would be pumped into the coastal economy. Of course, after the increase in landings the stock would be surveyed (at a cost of perhaps a million dollars). If it was found to be below the desired level, landings would be reduced in subsequent years until it was back to that level. If it wasn't, the increased landings would continue.

In either case, it's not much of a big deal. We know that at the current level of landings the stock is increasing. The fishermen would be taking a calculated risk, but that's what fishermen have been doing for generations, and successful fishermen are good at it. That's what makes them successful.

Were the monkfish stock allowed to be "overfished" for a year, there wouldn't be any negative effects on anyone outside of the fishery, and those would be minimal, short-lived and accepted by the people dependent on the fishery. No catastrophe, no devastation, no crisis. But it's not allowed, and even making the suggestion will have the same effect on the anti-fishing activists, including those who have infiltrated NOAA/NMFS and who are supposed to be supporting our fishermen, as stepping on their hill will have on a colony of fire ants. It's not about the fish and it's not about the fishermen.

Dead turtles in the Gulf – another NOAA shell game?

01/05/11

Last year's BP oil spill resulted in one and a half to two and a half million gallons of petroleum products being released into the Gulf of Mexico every day for three months. It was the largest accidental oil spill that has ever been inflicted on any ocean anywhere. It resulted in floating oil slicks and subsurface oil plumes that were hundreds of miles in extent. Exacerbating a horrendous situation, with the blessing of the Feds the people at BP sprayed and injected millions of gallons of chemical dispersants, chemicals the use of which has been outlawed abroad because of their toxic environmental effects, into the gulf waters that they had already done such a thorough job of contaminating to "break up" the oil in some totally misguided effort based on "out of sight, out of mind."

Needless to say, none of this was particularly good for the flora or fauna of the Gulf. This fact was brought home by the 600 or so dead turtles that were collected from the areas affected by the spill and by the dispersants used to "control" it.

However, according to Jane Lubchenco, head of NOAA, in a statement in the Miami Herald on December 30, in her estimation it wasn't BP and the biggest accidental oil spill that the world has ever seen or the wanton use, with her approval, of toxic chemical dispersants that was responsible for the dead turtles. It was fishermen.

Now anyone who has followed Ms. Lubchenco's career, either before or since taking control at NOAA, wouldn't be surprised to discover that she would be willing to hold fishermen responsible for anything bad that's happened since the day that primitive humankind discovered that fish were good to eat. But her attempt to pin the blame for the dead sea turtles on fishermen is stretching the bounds of credulity farther than she's ever stretched them before (and that's up to and including the prediction that our oceans would be populated with nothing but jellyfish at some point in the future because of fishing.)

Her statement about the turtle deaths and fishing was "*while nearly all the rescued sea turtles were visibly oiled, to our surprise, most of the dead stranded sea turtles had no observable oil on their bodies and were in good health prior to their death. Necropsies (autopsies on animals) on more than half of 600 carcasses point to the possibility that a majority may have drowned in fishing gear. The evidence is that natural causes of death were ruled out, and that shrimp and fish - not a natural part of turtle diets - were found in their digestive tracts.*"

First off, what does "*the possibility that a majority may have*" actually mean? Those seven words have clearly earned a place near the top of the list of the world's greatest bureaucratic non-communications.

This is followed by "*the evidence is that natural causes of death were ruled out.*" I guess so. Dumping a quarter of a billion gallons of petroleum products and chemical dispersants on top of any critters' neighborhood would probably rule out all of the natural causes of death.

Then we get to the part where the dead turtles had ingested shrimp and fish - not a natural part of turtle diets according to Ms. Lubchenco, but not according to numerous web sites (search on "sea turtle diet"), which label them as "opportunistic" feeders. meaning they'll eat whatever they can get. Are we to assume that the fishermen force fed the turtles before they done 'em in? That the turtles choked on those shrimp and fish that they were forced to eat? Or that as the turtles were drowning in the fishermen's nets, they were busy gorging themselves on the shrimp and fish that were in there with them?

Or how about that the turtles were feeding on fish and shrimp because everything else that they could eat had either died or skeddaddled because of what BP had done, with the federal government's approval, to their particular part of the Gulf of Mexico? Or that the turtles were forced out of their normal haunts and away from their normal food by all that oil and Corexit and had to try to feed on what was available? Nah... it couldn't be any of that, could it?

So we have thousands of Gulf fishermen who, because of BP's actions and the government's lack of effective oversight, lost their markets and at least half a year's worth of fishing and were actually getting some well-deserved public sympathy. Ms. Lubchenco appears unwilling to put up with that, so with the careful use of words that no one will be able to hold her accountable for she seems to be doing what she can to stop that sympathy its tracks.

And, as an added benefit, she'll probably be able to get rid of even more fishing boats, and fishermen, in the bargain.

As is becoming increasingly evident, it's well past the time when the powers that be in the Department of Commerce, in the Obama Administration and in Congress should give serious consideration to the real-world implications of having someone with such a profound bias against fishermen and fishing as Ms. Lubchenco so obviously does at the helm of NOAA. After decades of demonstrating that they are world leaders in the conservation of species after species, our fishermen deserve more from Washington than a target painted on their collective backs.

Happy New Year from our friends at NOAA!

Just do it!

01/16/11

If federal fisheries management policy isn't drastically altered, for a far too large part of the industry all that's in it is economic oblivion for you, your boat and your business.

If you participate in, are associated with or dependent upon any kind of fishing and you think that things are moving in the right direction, you're either not in the United States, you're a fisheries manager, you work for an anti-fishing ENGO, or you're not looking much beyond your own self-interest. It's as simple as that.

Fishing in the United States has evolved over generations, supported by centuries-old traditions and close-knit fishing communities. All of this evolution, all of these traditions and our unique and irreplaceable communities are being threatened by a federal fisheries management regime that is based on nothing more than reducing the number of fishermen and the number of fish that they are catching, reducing the areas in which they can fish, and reducing the administrative burden on the government in the most expeditious way possible. This isn't a policy that has been endorsed by Congress, this isn't a policy that reflects the will of the people and it certainly isn't a policy that is supported by a significant proportion of the fishing industry. It is nothing more than the culmination of a carefully orchestrated decades-long campaign by a highly influential group of anti-fishing ENGOs and the multi-billion dollar foundations that support them that has infiltrated its way into the highest offices of the federal oceans bureaucracy.

All of this in spite of the fact that our domestic fisheries are in better shape today than they have been in decades (Steve Murawski, who retired from his position as the chief scientist for NOAA Fisheries last week, said unequivocally that as of this year overfishing in U.S. fisheries is over – see http://www.nola.com/business/index.ssf/2011/01/overfishing_has_ended_top_us_s.html).

Why do we have more fish today than we've had in several generations? Certainly not because of anything that any so-called environmentalist has done using foundation funding and carrying out agendas which have little to do with fish or fishing. The only reason we have more fish is because you and your fellow fishermen have taken sustainability seriously and have made the necessary sacrifices. Now that we're over the hump, do you want to have a say in decisions that directly affect your business, your family, your community and your future? Do you want to have a say in how our nation's extensive marine resources are sustainably managed? Are you tired of agenda-driven top-down decisions made by people who at best care not a whit for and at worst are openly antagonistic towards fishermen and fishing?

If you answered yes to any or all of these questions, then try one more. Have you done anything substantive about it? The chances are pretty good that you haven't. And if you don't, the chances are pretty good that the same people and the same organizations backed by the same big money interests will continue to be in charge, will continue to call the shots, and will continue to successfully push their anti-fishing agenda.

But what, I hope you're asking, can I do against multi-billion dollar foundations using their tremendous power to institute policies that protect the fish and ignore the fishermen, against the ENGOs with annual budgets of tens or hundreds of millions of dollars that those foundations support, against the scientists they've bought and the bureaucrats they've put in place?

You've got a voice. Learn how to use it, and use it effectively. Here's your chance to get involved, and to get involved in an issue that should be critical to every commercial, recreational and party/charter fisherman that values fishing sustainably however and whenever he or she wishes (and this isn't a plug for unregulated fishing – thankfully we outgrew that decades ago).

Massachusetts Congressman Barney Franks is on the record with *“we will introduce amendments to the Magnuson Act so that we can continue rebuilding fish stocks without causing undue economic harm.”* For those of you who aren't familiar with this issue, most – but surely not all – of the problems facing fishermen today revolve around the Magnuson Act requirement that all fish stocks be “rebuilt” to maximum and often unrealistic levels within a specific time period (generally 10 years). Regardless of how steadily a stock of fish is growing, if it doesn't reach a certain level by a certain date, the managers will severely cut back or even eliminate fishing on it until it is “recovered.” This is regardless of the economic damage that will be visited on the people, the businesses and the communities that depend on that fishery. Businesses can be and have been driven into bankruptcy, homes and boats can be and have been lost, futures can be and have been eroded and entire communities can be and are in the process of being destroyed because instead of reaching some arbitrary level of abundance this year, a population of fish is on schedule to reach it next year or the year after.

Why? Because the anti-fishing activists who are now dictating federal fishing policy have used their foundation-supplied \$millions to convince our elected leaders in Washington that it's actually good for the fishermen and others who depend on fishing, but that they are too blinded by the necessity to make a living to realize that themselves.

Obviously, such a Magnuson amendment as the one Congressman Frank is offering would be of tremendous benefit for every fisherman and for every business that depends on fishing. Obviously it would be of no harm to the fish stocks – aside from their reaching that arbitrary “re-built” level a year or two later (a requirement would be that they had to maintain their rebuilding trajectory). Just as obviously, the anti-fishing activists would lose one of their most effective weapons in their campaign against fishing, so we can expect some fierce and obscenely well-funded resistance.

That means the Congressman Franks is going to need some significant support from other coastal legislators, and you are among the folks who can provide him with that support.

If you don't know already, find out who represents you in Washington (the easy to use House and Senate Member locator websites are at <https://writerep.house.gov/writerep/welcome.shtml> and http://www.senate.gov/general/contact_information/senators_cfm.cfm , call their district or DC offices and find out who on their staff works on environmental or fisheries issues. Talk to them, let them know where you live and vote, what your connection to fishing is, and then explain how important it is to you and to other constituents to amend the Magnuson Act to allow some flexibility in the rebuilding schedules. Do that three times; once for your Representative in the House and once for each of your Senators. And then get as many of your friends, neighbors, relatives and business connections to do the same thing.

This year is going to be a great one for talking to the officials you and your neighbors elect about maintaining jobs. Don't pass up the chance, and remember that the so-called conservationists can only talk about speculative jobs that some people might have at some point in the future while you'll be talking about actual income generating jobs employing actual flesh and blood voters right now. You'll have far more credibility than the foundation flacks hiding behind pumped-up membership rosters and virtually meaningless “click here to save the fish” website responses.

That's the way legislation is supposed to happen and the election in November showed that that's the way it can happen. It has the interest of every elected official in Washington, at least everyone who wants to be reelected. But it's only going to happen that way if you make it. You can communicate directly and effectively with your Washington reps on a real world basis. The only way the anti-fishing activists can is through what ifs and speculation. That doesn't generate productive jobs, that doesn't generate real income and that doesn't sustain real communities.

But don't let it end there.

Right now there are more writers putting out well researched articles about what the antis are doing to fishing and to fishermen than there has ever been, and each year an increasing number of scientists with impeccable credentials are publishing articles that put the lie to what the anti-fishing forces are presenting as gospel. Keep your eyes open for any that seem particularly important to you. There are a number of free “clipping services” for fishermen. Saving Seafood keeps people who subscribe to its alerts and visit its website up-to-date on fisheries issues, particularly in the Northeast (<http://savingseafood.com>). On the West Coast, Pacific Fishing provides a similar service through its website and emailed Fish Wrap News (<http://www.pacificfishing.com/>). And there are many other sources, including newsletters from fishing associations, fishing trade publications, government services and just plain old web searching. Get familiar with what's available and use it.

Make the investment in staying current with what's going on in fisheries locally, regionally, nationally and internationally and when an issue sparks your interest, call up the staffer you now have a relationship with and discuss it. When you read an article that you think he or she should see, send it along (but use judgment here. Congressional staffers tend to be very busy people).

We have a Congress with Members who are almost overwhelmingly ignorant of fish and of fishing. They aren't going to learn anything – at least anything that you are going to want them to learn – from either the leadership of NOAA/NMFS or from ENGOs that have bloated their treasuries and their leaders' salaries by selling out to the highest agenda-driven foundation bidder. Their education depends on you, and on anyone else who you can convince. If they don't start to get federal legislation right when it comes to fishing, you'll have nobody to blame but yourself.

Note: The New Bedford Harbor Development Commission has developed a 'top ten' list of issues as a press briefing to inform journalists, talk show hosts, and other newcomers to the issues facing the New England fishing industry. While presented as issues facing New England, in some form or another, virtually all ten of them apply to fishermen and fishing anywhere in the United States. The list, along with links to supporting material, is on the Saving Seafood website at <http://www.savingseafood.org/state-and-local/pressing-challenges-facing-the-commercial-fishing-ind-3.html>. Particularly if it serves as a starting point, this list should be an invaluable tool in challenging the anti-fishing management status quo that is being used to curtail fishing, drive fishermen off the water, and bankrupt fishing dependent businesses from Alaska to Maine (including Hawaii and the island complexes that are under US jurisdiction).

Is this the future of fishing?

02/02/11

*The Catch Shares Choo Choo's Leaving the Station
When you hear her whistle blowing, then it's too late
Getting rid of "fishers" is number 1 on her slate
Billionaires for competition
Controlling how you're fishin'
Jane Lubechenko's catch shares program, isn't it great?
(With more apologies to the memory and the art of Glenn Miller*

What's the probability of a federal agency becoming involved in an attempt to wrest control of a public resource-based industry away from the communities that have built up around it since colonial times - an industry with a Congressionally mandated role in the management of the resources it depends on - and turn it over to private "charitable" foundations and the business entities they are linked to? If your answer is "pretty low," give some serious consideration to the following.

The David and Lucile Packard Foundation commissioned a study, **Financing Fisheries Change: Learning from Case Studies**, by Manta Consulting, Inc. that was completed last month (January, 2011). The report, which is available as of this writing at http://www.packard.org/assets/files/conservation%20and%20science/Financing-Fisheries-Change_case_study_report.pdf (if it disappears, contact me and I'll provide you with the file) lays out in 119 pages how foundation supported ENGOs and the "green" businesses they support can take over recreational and commercial fisheries. This could have the effect of reducing people who were previously independent vessel or fishing-related business owners/operators to wage slaves working for the environmentally correct "company store," being forced to adapt their methods, their technologies and ultimately their lifestyles to what billionaire industrialists and their heirs deem they should be. Is this anything but elitist social engineering at its worst?

*"The expectation is that the lessons from each (of the presented case studies) will help new innovators and entrepreneurs to adapt and design their own investment and governance structures to achieve significant change on the water." (Packard/Manta report, pg 7)
How is this to be accomplished? According to Packard/Manta, "foundations in the field are now looking to support this transition from fisheries conservation as a purely philanthropic investment to a blended conservation and business investment by encouraging non-profits, social change leaders and business entrepreneurs to create innovatively structured projects that can both build value for private investors and improve the speed and scale of fisheries conservation impacts."*

In the report, several examples of "sustainable" seafood marketing companies are cited. They got an initial boost from the Sea Change Investment Fund, launched by Packard and California Environmental Associates. It *"is funded equally from low-interest Program Related Investment debt from the Packard Foundation and private equity from independent investors."* How would you like to be an owner of a truly independent business and have to compete with a business on the next block that has the Packard Foundation behind it?

It's glaringly obvious that when foundations have billions of dollars in assets, an unprecedented amount of political clout and highly effective PR machines, the potential "encouragement" they are able to offer to what they have decided are acceptable businesses is going to be staggering. It's going to be particularly staggering if you're the owner of or if you're dependent on one of the businesses that is about to find itself with a competitor of such Brobdingnagian proportions.

Mega-foundations whose directors in their ivory towers are convinced that they know more than the hundreds of thousands of people who depend on fishing and on healthy fisheries to support their families and their way of life is an issue that's been studiously ignored by the main stream media. A handful of these foundations have spent tens of millions of dollars pushing their dream of catch shares, the form of fisheries management that is most amenable to this kind of "encouragement," with no apparent thought given to the human repercussions.

Then there's the role being played by ex ENGO super-star Jane Lubchenco and her no-holds-barred campaign as head of the National Oceanic and Atmospheric Administration to convert every US fishery she can to catch shares, whether the conditions of the fishery warrant such a cataclysmic change – or any change, for that matter - or not. (Relative to any so-called necessity for massive changes in how we manage our fisheries, I recommend reading an interview with recently retired NOAA/NMFS head scientist Steve Murawski. In it he announced that by the end of this year overfishing would be a thing of the past in U.S. fisheries. It's at http://www.nola.com/business/index.ssf/2011/01/overfishing_has_ended_top_us_s.html.)

But is that all there is? Not hardly!

You're probably aware that some of these "charitable" foundations, generally characterized as anti-fishing by fishermen, are associated with what they call sustainability guides rating various fish and seafood species. Packard is one of them, through the Monterey Bay Aquarium's Seafood Watch. These guides are compiled with seemingly scant consideration given to whether the fishery is pursued in compliance with the appropriate fisheries management plans, whether it is free of overfishing, or whether it is anything else, apparently, other than what the whims of the people doing the rating dictate. If they like the way the fish are harvested – or perhaps if they like the people who are doing the harvesting – they'll stamp the products of that fishery as acceptable. If they don't, they'll give them the thumbs down.

With the increasing market focus on the sustainability of fish and shellfish, itself the response to a huge investment in PR by the same foundations, these "thumbs down" ratings have a significant influence on the demand for the seafood products being rated. This is reflected in the prices that are paid for those products from the boat all the way up the chain.

So we have huge foundations spending millions of dollars to convince the public that what they've decided is "sustainability" should be the critical criterion when buying seafood and spending other millions of dollars on supporting rating programs that grade whether seafood products should be embraced or avoided by seafood consumers, we have fishermen who are fishing well within the letter of the world's most stringent array of fishing laws here in the U.S., and there is no connection between the two. The fish labelers at the Monterey Bay Aquarium are ready, willing and able to brand a product "avoid" simply because they don't like how it's caught.

Take monkfish as a case in point. The National Marine Fisheries Service monkfish page on its own seafood rating website, Fish Watch, states "*monkfish are primarily caught with bottom trawls and gillnets. Dredges also account for a small percentage of landings. Monkfish habitat has been determined to be only minimally vulnerable to these fishing gears,*" and continues regarding bycatch in the monkfish fishery "*measures have been implemented to reduce any impact.*" Yet the Monterey Bay Aquarium warns consumers against eating monkfish "*due to high bycatch concerns and severe habitat impacts.*"

Needless to say, the National Marine Fisheries Service doesn't have anything approaching the dollars that the Monterey Bay Aquarium, with its connection to the Packard Foundation (in 2010 the Aquarium received \$36 million from the Foundation) has. So the federal agency with the responsibility to manage our marine fisheries is saying to go ahead and buy and enjoy monkfish with a clear conscience and the Monterey Bay Aquarium is saying don't you dare. Guess which message is reaching more consumers?

Why the discrepancy?

To collect its own data, the aquarium could have a fleet of research vessels manned by a crew of scientists that no one knows anything about, but operating in a low-profile stealth mode is uncharacteristic of the foundation funded crowd. As the Pew/Oceana folks showed us in the Gulf of Mexico during the BP disaster, when going down to the sea in ships they want their creature comforts with them and they want everyone to know – see The Oil Slick – Oceana scientists "roughing it" in the Gulf at the bottom of the page at <http://fishnetlite.blogspot.com/>. Minus collecting their own data, the Monterey Bay Aquarium fish raters must be using the same information that NMFS is using. They're sure coming to different conclusions. So having their own, independently gathered information is probably out.

Is it because they don't like gill nets and otter trawls? They rate black sea bass as a "good alternative," and they're caught with otter trawls, as are silver hake ("good"), Alaskan pollock (used in surimi and rated "good"), sand dabs ("good") and lingcod ("good"). They rate Atlantic croaker a "best choice," and they're caught with gillnets, as are bluefish ("good"), Spanish mackerel ("good") and salmon ("good" to "best"). It's apparently not the gear being used.

Whatever their reasons for this rating, it puts a dent in the demand for monkfish. That's why they are doing it. This dent in demand is translated into a lower price for the fish that is felt by everyone from the fishermen to the retailers.

The monkfish fishery is one of the initial candidates for Jane Lubchenco's catch shares revolution. As I'm writing this, a series of public hearings are being held from Maine to North Carolina so that federal regulators can gauge the interest in catch shares in the fishery. If she is successful, rights to the annual monkfish harvest will be divided among some of the "historic" participants. Fitting in with the Packard Founda-

tion's grand plan for "saving the fisheries" while at the same time turning a profit, this could open the door for green organizations and individuals to start buying control of the fishery. The Packard Foundation has now provided them with a roadmap of how to do this and, based on past actions, might well be willing to provide them with financing as well.

The lower the consumer demand for monkfish, the lower the cost for outsiders to "buy" into the fishery.

Putting the icing on this particular cake, monkfish are classified as a data poor stock. In other words, the fisheries scientists claim they don't know as much about the condition of the monkfish population as is necessary to manage them adequately. This being the case, the monkfish quotas are set extremely conservatively. If the scientists were more comfortable with the condition of the stock, if the uncertainty was less, the quotas would be increased, and they'd probably be increased significantly.

The level of knowledge that scientists have about any fish stock is determined by the amount of money available to collect and analyze data about that stock. Given adequate funding, monkfish could be taken off the data poor list in fairly short order. What would result? It's impossible to believe it would be anything other than a significant increase in the quota. Ms. Lubchenco has taken millions out of the NMFS research budget and put it into her catch shares campaign. At least for the time being, it's apparent that monkfish are going to continue as a data poor stock. (Note that I work for the Monkfish Defense Fund, an industry trade group.)

It's safe to say that less data = lower quotas = less income to the fishery participants = lower price for acquiring catch shares in the fishery.

But is it possible for a foundation – or an ENGO that it supports – to decide to start supporting a massive monkfish survey effort as soon as it becomes a catch share fishery and a bunch of those shares have been acquired by the "right" kind of people, businesses and organizations? Why not? And then monkfish could be taken from the data-poor category, the allowable catch could be increased significantly, monkfish could be promoted to a "best choice" by the fish labelers, the value of the catch shares could increase dramatically, and everyone would be happy – except for the fishermen and the other folks who would be casualties of this green takeover of their fishery.

So we're looking at a possible scenario where the value of the shares in a fishery can easily be driven down by a combination of government and foundation efforts and where the value of those shares can just as easily be increased by making a few adjustments in consumer ratings and research funding levels.

It's not just monkfish.

In spite of formidable and totally justified political pressure to do so, the Secretary of Commerce has just refused to allow Northeast groundfish fishermen to catch significantly more of the uncaught 80% or so of the target Total Allowable Catch that a complicated web of extremely harsh regulations presently prevents them from catching. The groundfish fishery is in a tailspin because of this government mandated underfishing, and thanks to a catch share system instituted at Ms. Lubchenco's insistence last year, quota can be acquired at bargain basement rates. (See Chronic Underfishing - The Real New England Groundfish Crisis at http://www.fishnet-usa.com/chronic_underfishing.htm.)

These regulations resulted from successful lobbying by the foundation-funded ENGOs, and their heavy-handed implementation has been guaranteed by a series of lawsuits brought by those same ENGOs. Several of the projects detailed in the Packard report focus on this fishery, and its current dismal condition and future promise (a harvest with the potential to increase at least 400%) would seem to make it a natural for investment. But to allow that investment to be made, guided or encouraged by members of the same complex of foundations, ENGOs, investors and bureaucrats who are responsible for the dismal conditions that exist in the fishery today (and the attendant human suffering) is, or should be, far beyond the pale.

As of now, it isn't.

It would seem that a couple of amendments to the Magnuson Act could forestall some serious potential problems. The Act already requires that before any individual quota system is put in place by either the Gulf of Mexico or New England Fishery Management Council it has to be approved by two-thirds of the permit holders in a fishery-wide referendum. This should be expanded to apply to all of the Councils, all of EEZ fisheries and all proposed Catch Share programs, not just those dealing with individual quotas. And any quota acquisition by a non-fishing entity should only be allowed with the express approval of a certain percentage (20%?) of the permit holders in that fishery. Without these provisions at the least, it's very possible that the type of speculation that destroyed the U.S. housing market could be inflicted on our commercial and recreational fisheries.

Trouble in the catch share paradise or something else entirely?

The Alaskan halibut fishery, which has been operating on a catch shares basis for several years, has been held up as one of the examples of what a superior form of management it is; in fact, the only system that guarantees sustainability. On December 10 Craig Medred wrote in 2011 halibut quota cut nearly in half:

"Fishermen who borrowed money to finance the purchase of "shares" of the allotted halibut harvest are struggling to make payments as the value of those shares goes down along with the harvest.

Everything was rosy in the commercial halibut fisheries off Alaska's shores as long as it was rosy. Now the dark side of what is called "privatization" has begun to emerge.

Shares looked like a good investment in 2005 when the International Pacific Halibut Commission, which sets catch quotas for the water off Alaska and Canada, set a limit of 10.93 million pounds for Area 2C in the Gulf of Alaska off the panhandle. Catch quotes, however, have been going down ever since. The commission is recommending a catch of only 2.33 million pounds for next year. The area had a 2010 quota of 4.4 million pounds this year"

(Alaska Dispatch <http://alaskadispatch.com/voices/medred/7796-halibut-quota-cut-in-half-for-2011>).

The Big Green Money Machine – how anti-fishing activists are taking over NOAA

(<http://www.FishTruth.net>)

04/01/11

"Oh what a tangled web we weave...." Sir Walter Scott, Marmion, Canto vi. Stanza 17.

For the first time in at least a century, U.S. fishermen won't take too much of any species from the sea, one of the nation's top fishery scientists says." This is from an article written by Jay Lindsay for the Associated Press ([link](#)) and the top fishery scientist is Steve Murawski, who retired early in 2011 as Director of Scientific Programs and Chief Science Advisor at NOAA Fisheries. So why are so-called "marine conservationists," ENGOs, the handful of billion dollar foundations that support them and the upper echelons at the National Oceanic and Atmospheric Administration in the U.S. Department of Commerce still claiming that radical surgery is needed to "save" our fisheries? The answer to that question is beyond me, and beyond anyone who's likely to be looking at this website.

However, exploring the relationships – spelled out in dollars, generally a really lot of dollars – might help to understand what's really going on. Following the advice that Deep Throat - Mark Felt - gave to Bob Woodward during his Watergate investigation, it is an exercise in following the money. Hence this website.

The heart of it is a database ([link](#)) in which I've listed the foundations that have funded what most fishermen consider to be anti-fishing efforts, the grants that they have made, the amounts of those grants and the recipients who have benefited from them (note that not all of the listed grants are deleterious to fishermen - just most of them). You can easily search the database by clicking on the down arrow in the box, revealing a drop-down list of grantors, grantees, etc. The information it contains is taken directly from the foundation websites. Unfortunately the web access they provide to their grant-giving activities extends back for varying amounts of time and the search engines they provide appear to have limitations which make searches somewhat unreliable. While not all of the listed grants might apply directly to fishing, they almost certainly apply to the influence that the foundations making them have on the recipients. (It is also available as an html file [here](#).)

The tabs on the "Connections" page that you can reach by clicking on the button up above are linked to the people, the organizations and the work products that the hundreds of millions of dollars of "investments" by this small group of foundations have yielded. To get there, click on the button above this paragraph. Even a cursory examination of the connections they make will demonstrate that what has been sold as a massive "scientific" movement is in fact controlled by these few very powerful, and if the degree of human suffering they are responsible for is any indication, very uncaring "charitable" institutions.

Just as it was important in the Watergate investigations, following the money is also important in determining who is doing what and why in fisheries management and where the impetus for a management "revolution" is coming from. In order to help untangle what seems to be an overly tangled web, I'm putting together information on the mega-foundations behind the anti-fishing juggernaut and the individuals and organizations that are most heavily involved.

The inclusion of individuals, organizations or events here is not meant as an indictment of any sort. They are simply listed because they are connected to hundreds of millions of dollars doled out by a small handful of foundations, and the sum total of the effects of those millions of dollars is the destruction of what since colonial times has been considered an invaluable part of the heritage of our coastal communities: fishermen and the businesses that depend on their fishing.

The full database is also available as a Microsoft Excel file by clicking [here](#).

Setting Ocean Priorities for the Obama Administration and Congress Workshop

04/01/11

<http://www.fishtruth.net/ObamaPriorities.htm>

The title says almost all you need to know. The participant list, after a little research, says all of the rest.

The workshop lists sixty-five participants and thirteen staff. Of the participants, at least 75% can be directly tied to at least one of the four mega-foundations that are leading the anti-fishing movement. All four of the participants from the commercial fishing industry are tied to at least one of the four mega-foundations as is the sole participant from the recreational fishing industry. Of the fourteen participants with no discoverable - at this point - ties to the mega-foundations, two are from the offshore energy industry, seven are from research oriented institutions which, if not receiving funding from one of the four mega-foundations at this point, will certainly have their institutional hands out in the future, one is from a California state agency (no one who is familiar with what state government is doing to fishermen in California is going to find any comfort in that - see <http://www.fishtruth.net/MLPA.htm>) and the other is from NOAA (ditto on a national level). Of the remaining three, one is from the travel and tourism industry, one is from the reinsurance industry and one is from the aquaculture industry. Oh yes, two participants are now in high leadership positions at NOAA.

All of the staff for the workshop are directly tied to funding from the four mega-foundations.

Is it any wonder that the Obama administration is completely out of touch with commercial, recreational and party/charter fishermen? All of the fisheries advice its members have been getting is being controlled by hundreds of millions of dollars' worth of funding from four foundations with inarguable track records in putting fishermen of every stripe out of work and off the water.

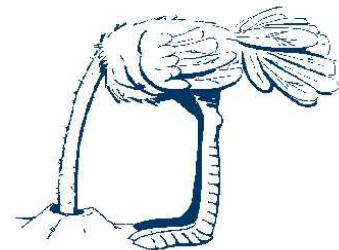
Link to spreadsheet with relevant details of the workshop participants and staff.

Call it conspiracy, cooperation or coincidence, but no matter what you call it, the public record isn't going to change
05/08/11

In his latest column in Saltwater Sportsman magazine, New England Fishery Management Council member and chairman of the Council's Groundfish Committee Rip Cunningham devoted almost a thousand words to refuting the existence of a catch shares "conspiracy" that, he leaned towards thinking, was "a bunch of BS conjured up by anti-regulation crackpots with too much time on their hands and too little brainpower to figure out something constructive to do."

I've been chronicling – and documenting – the push for catch share management for several years, and in doing that I haven't come in contact with any fishermen who I would describe as anything close to anti-regulation, as crackpots, with too much time on their hands, or with too little brainpower to figure out something constructive to do. Rather, I've found virtually all of them to be hard working, hard fishing individuals who are concerned about a multi-million dollar taxpayer funded campaign to transfer ownership and/or control of what are now public fisheries resources into private hands (see my article *The Catch Share Choo Choo is leaving the Station* at http://www.fishnet-usa.com/Future_of_fishing.pdf). And at a national level I suspect I'm at least as well connected to recreational, commercial and party/charter fishing circles as he is.

So why is he using such a derogatory and grossly inaccurate description of fishermen concerned about catch shares and the future of fishing? Perhaps for the same reason that his column is accompanied by a half-page illustration of three hovering helicopters in silhouette: a transparent attempt to paint all of the fishermen – and the people in fishing-dependent businesses – who are opposed to any unilateral, top-down imposition of any form of management on their fisheries as over-the-edge extremists and therefore not worthy of anything other than ridicule. That's called marginalization, and it's something that the anti-fishing activists, the foundations that support them and the fishermen – and perhaps even the journalists - who they've bought off have become very effective at doing.



And then Mr. Cunningham gets into funding by the Pew Charitable Trusts of the Environmental Defense Fund (EDF) and other ENGOs that advocate for catch shares, writing "don't confuse the conspiracy with the truth; we have learned that the last funding happened 10 years ago." While I find it admirable when anyone admits to learning anything at all, in this instance Mr. Cunningham didn't learn anything approaching

enough. All told EDF got less than \$2 million from Pew - minimal dollars in the mega-foundation world (see <http://www.fishtruth.net/EnvDefense.htm>) - and that funding appears to have stopped in 2004. That's not quite ten years, but I guess it's close enough for **Saltwater Sportsman**. However, EDF has received over \$20 million from the Marine Conservation program of the Walton Family Foundation (Walmart) from 2007 to 2009, over \$9 million from the Gordon and Betty Moore Foundation (Intel) since 2005 (all of which was for the EDF catch shares campaign), and \$1.5 million from the David and Lucille Packard Foundation since 2008.

Further, the National Fish and Wildlife Foundation (NFWF), a federal quasi-agency, just announced that it will fund 18 new projects totaling over \$2 million that "*will engage fishermen around the country in the design and implementation of effective catch-share fisheries.*" The funds for this were provided by the Walton and Moore Foundations, two of NFWF's "foundation partners," which are described as "*supporting NFWF's National Fisheries Innovation Fund, which will assist the transition of United States fisheries to catch share programs by encouraging fishermen to pursue innovative management strategies through a competitive grant award process.*"

The NFWF lists among its corporate partners Exxon/Mobil, Shell, Chevron, BP, Conoco Phillips and Walmart.

That's either a pretty big bundle of truth that Mr. Cunningham seems to have overlooked or a trophy-sized red herring that he wanted his readers to swallow. While he zeroed right in on the relatively paltry funding of EDF by Pew from way back when, in his zeal to further discredit the "crackpots" he completely missed the boat on \$30 million plus in funding for promoting catch shares by other foundations which are apparently working in close coordination with government agencies (the National Oceanic and Atmospheric Administration, parent agency to the National Marine Fisheries Service, is one of the NFWF's Federal partners).

On top of this, NOAA head Jane Lubchenco has transferred tens of millions of sorely needed research dollars from the National Marine Fisheries Service research budget into her catch shares program, and many of these millions are available to the regional fisheries management councils for instituting catch shares programs.

I've been directly and indirectly involved with the federal fisheries management process since its inception in 1976, and one of the most noticeable changes that it has undergone in the intervening three plus decades is its enthusiastic embracing of rampant bureaucratization. Both NMFS and the regional councils have become administrative empires and are accordingly subject to all of the bureaucratic pressures that entails. Chief among these, particularly over the last several years, are budgetary pressures. Quite simply, the money isn't flowing from the taxpayers the way it used to. So what impact on the regional council system do you think the availability of millions of dollars to establish catch share programs is going to have? If you are on a regional fishery management council, if you work for a regional fishery management council or if your job depends on the workings of a fishery management council, should you be expected to think anything is more important than swelling the coffers of that council? And, considering today's economic realities, what's the only way to do that? Push catch shares, of course. With an arrangement like that, it doesn't take an edict from on high to make catch shares management the rule. All it takes is an understanding of how bureaucracies work and a cynical willingness to take advantage of that.

And we can add to this the fact that, besides providing transportation to and bed and bread in what tend to be fairly nice digs in fairly pleasant locales at least several times a year, serving on a regional fishery management council can contribute significantly to one's bank account. Because of this, some council members (though definitely not all of them) put a high premium on being reappointed to their council seats when their terms expire.

The governors of each coastal state recommend several people for each council seat as it becomes available. The final decision on who is appointed is made by Ms. Lubchenco's agency. Speaking in Boston in May, 2009, she said "*the scientific evidence is compelling that catch shares can also help restore the health of ecosystems and get fisheries on a path to profitability and sustainability. These results, ... these scientific analyses, ... are why moving forward to implement more catch share programs is a high priority for me. I see catch shares as the best way for many fisheries to both meet the Magnuson mandates and have healthy, profitable fisheries that are sustainable.*" How far do you think being a catch share proponent will go in getting someone appointed or reappointed to a council? How far do you think not being a catch share supporter will go in the other direction?

And then we have the following three paragraphs taken from the Alex C. Walker Foundation website (at <http://walker-foundation.org/net/org/project.aspx?projectid=81773&p=50769> - emphasis added). The Walker Foundation is a strong supporter of catch shares and other such market manipulations as a way to regulate us and effect social change.

*“EDF staff continues to support managers and industry leaders in an increasingly broad and rapid transition to catch shares in many different New England fisheries. **We coordinate our policy change efforts with allies including the Cape Cod Commercial Hook Fisherman's Association, Oceana, Earth Justice, Conservation Law Foundation, the New England Aquarium, and The Nature Conservancy.***

*New NOAA Administrator Dr. Jane Lubchenco played a leadership role in securing \$35 million in combined FY09 and FY10 federal appropriations to help the groundfish industry transition to sectors. **EDF staff played key roles in broadening consensus support for her leadership. We continue to coordinate closely with NGO, fishing industry and agency allies to work through priority issues critical to the successful implementation of sectors by May 1, 2010.***

*In the months leading up to the sector vote, support for catch shares far outweighed opposition in the regional media. As fishermen come to grips with low catch limits and a new management system, **however, opponents have been more vocal than supporters. In response, we have had to increase our regional media focus and sophistication, including online media tools such as fishermen's forums, blogs, and news aggregation websites.** Our goals include identifying and amplifying pro-catch share fishermen's voices, answering misinformation about catch shares and addressing genuine concerns about catch share design.”*

Whether this is evidence of a conspiracy or not, it's obvious that the people in charge at Saltwater Sportsman want their readers to believe that there's neither cooperation nor coordination involved in the national drive to implement catch shares. By the use of black helicopter imagery and demeaning descriptions of people who recognize what's really happening, they're trying to manipulate their readers into writing off people who recognize the extent of the push by mega-foundations, ENGOs and federal agencies working together to “revolutionize” fishery management. These organizations want, and are still campaigning for, this in spite of the fact that our most credible fisheries scientists agree that this year, for the very first time, we'll be free of overfishing in U.S. waters. (I have to add that we've gotten here with catch share management in place for a meaningful time in less than 5% of our fisheries.)

The evidence that this coordination and cooperation, or whatever it's called, exists is overwhelming, even without the on-the-record recognition of it by the very same groups that are involved in coordinating and cooperating. Arguing that it doesn't seem an awfully strange role for a publication that claims to be “the fishing authority since 1939.” Perhaps Saltwater Sportsman should stick to fishing.

And I would strongly suggest that you etch indelibly into your memory the use of the phrase “*anti-regulation crackpots with too much time on their hands and too little brainpower*” by someone who serves – and is well paid to serve – on a federal regional fisheries management council. Whether we see the future of fisheries management the way they do or not, don't we all deserve better from council members than that?

When it comes to the NOAA Law Enforcement scandal, “we're sorry” doesn't cut it

05/28/11

“An environment with poor internal controls, a lack of standards, contradictory regulations, and it creates a circumstance that's ripe for exploitations. It's what you would see in embezzlement cases, where no one's watching the store. And if someone's predisposed to take advantage, they do” (Gloucester mayor Carolyn Kirk in an interview with Gloucester Daily Times reporter Richard Gaines addressing the **Special Master's report on NOAA fisheries enforcement** – the interview is available at http://www.savingseafood.org/wbsm/WBSM_2011-05-26.html).

Much has been made of the coordinated apologies and associated media machinations of Secretary of Commerce Gary Locke and NOAA chief Jane Lubchenco for specific enforcement abuses targeting mid-Atlantic and New England fishermen and associated businesses. Ditto for the return of some fines wrongfully levied as a result of these abuses. I was left with the distinct impression that they felt that after their not quite mea culpas they would be able to move on, leaving a whole bunch of satisfied fishing industry folks in their wake.

I don't want to rain on anybody's parade, particularly that of the DOC/NOAA/NMFS spin masters, but they weren't even off to a good start. Sure, some of the industry people who were most egregiously impacted by what it now appears were nothing more than agency encouraged goon squads - both on the streets and behind the desks - got something back, but are they whole after their individual ordeals? Not hardly. What of their legal fees? Their loss of business? Their personal suffering and that of their families and their employees? For a first-hand grasp of how well they have fared through the ministrations of Secretary Locke and Ms. Lubchenco, invest 27 minutes into listening to the interview of NOAA victims Larry Ciulla and Larry Yacubian by Saving Seafood's Bob Vanasse and radio station WBSM's Phil Paleologos (http://www.savingseafood.org/wbsm/WBSM_2011-05-19.html). I can only hope that the aggrieved fishermen and business people find what

Secretary Locke and Ms. Lubchenco have offered them as inadequate as I do and have the wherewithal to seek full compensation for what they've suffered.

But significant as these federal agency depredations were to the 11 people and/or businesses that were singled out by the Special Master for at least partial payback, they were and are only a small part of a sordid and shameful story that continues to affect the entire domestic fishing industry and the hundreds of millions of consumers who do or should depend on it for fresh local seafood.

These out-of-control agents, attorneys and judges didn't just arise spontaneously; they were all products of a still ongoing devolution of NOAA/NMFS from an agency primarily concerned with supporting fishermen in catching fish into one that is focused on nothing beyond protecting the fish from fishermen. It's true that this devolution has peaked with the current leadership at NOAA/NMFS. Ms. Lubchenco is on the record (on April 7 on the website Takepart.com) with "at the global scale, probably the one thing currently having the most impact (on the oceans) is overfishing and destructive fishing gear," and her oft-stated goal is fewer boats and fewer fishermen. But, sadly, this devolution has been going on for most of two decades.

It's impossible to believe that the cops and robbers mentality that was behind law enforcement behavior so repugnant that it occasioned a public apology from a member of President Obama's cabinet could have developed and so blatantly flourished in anything other than a "fishing and fishermen are bad" culture that percolated down from the leadership cadre at NOAA/NMFS. An apology and the return of a few hundreds of thousands of ill-gotten dollars out of a slush fund a couple of hundred times larger isn't going to change that.

How many press releases in the same vein as one dated June 19, 2009 titled "NOAA Notifies Gloucester Seafood Display Auction of 10-day Sanction" by NOAA/NMFS have bombarded fishermen over the last decade (http://www.nmfs.noaa.gov/mediacenter/docs/gloucester_auction_june09.pdf)? The fact is that the trumpeting of these discredited NOAA enforcement actions by NOAA/NMFS press offices, actions judged as unacceptable by the Department of Commerce's own Inspector General and a Special Master brought in from outside the agency, have done incalculable harm to the public perceptions of fishermen and fishing. Given the anti-fishing agency attitude necessary to allow this disgraceful situation to evolve, should we assume that this was also unintentional and spontaneous?

And what about "research" such as that carried out by Professors Jon Sutinen and Dennis King and funded by Pew/Lenfest? The inescapable conclusion of their article, Rational noncompliance and the liquidation of Northeast groundfish resources is that the supposed sorry state in the New England groundfish fishery was in large part due to fishermen and those running fishing businesses breaking the law. I did a critique of Sutinen's and King's efforts in a column for the Saving Seafood website (<http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Law%20enforcement>), but in it I hadn't mentioned that their "special thanks" went to "the staff of the NOAA Office of Law Enforcement and NOAA National Marine Fisheries Service regional offices who provided researchers with enforcement data." That's not data that I or anyone else should be willing to hang a mortarboard on, but is this research going to be redone in view of the shambles that NOAA law enforcement in New England was in at the time? Is anyone at Pew or Lenfest going to correct the public record?

And how much in unnecessary and/or duplicative regulatory overkill did this institutionalized (in NOAA/NMFS and a handful of universities, ENGOs and the foundations that enabled them) "you can't trust fishermen" myth cost those fishermen, the businesses they supported, the consumers they supplied and the U.S. taxpayers? The people who and the organizations that manufactured and perpetuated the myth all profited handsomely, and those profits came out of the holds of U.S. fishing boats and the pockets of U.S. seafood consumers.

"Fishermen and fish dealers believe that they are treated like criminals. It is an "us against them" mentality. The regulations are complex, complicated, constantly changing, and in some cases, contradictory. Fishermen are paranoid every time they come ashore to offload their catch that they will be met at the dock by a Special Agent who will look for and find a violation of some obscure or even well known regulation. They feel that the offloading of their catch is fraught with peril. Fish dealers who daily offload volumes of fish are always apprehensive that they would be charged with a violation committed by a fisherman, over whom they have little or no control or that the daily requirement of reporting substantial volumes of fish may inadvertently be in error. All of these occurrences can result in a violation, which in turn, can result in a substantial monetary penalty or permit sanction. Either may be enough to put a fisherman or fish dealer out of business. There are cases reviewed in this Report that support this conclusion. This is the plight of the regulated."

"I have noticed in practically every case a pattern of assessing high monetary penalties in order to force a settlement of approximately half of the assessed penalty. The fisherman or fish dealer has no option but to settle because as previously pointed out in this Report and discussed later, they have no confidence that they could get a fair de novo hearing before an ALJ. The choice is simple. Settle with the Enforcement attorney for a coerced amount or run the substantial risk that the ALJ will uphold the original assessment which could force the fisherman out of business. This scenario becomes even more egregious because of the constant use of permit sanctions as a substantial bargaining chip and advantage to the Enforcement Attorneys in negotiating a settlement." Hon. Charles B. Swartwood, III ret., Report and recommendation of the Special Master concerning NOAA enforcement action of certain designated cases. April, 2011 – available at <http://www.noaa.gov/lawenforcementupdates/specialmasterreport.pdf>.

There were people in charge at NOAA/NMFS who had to know that the judges who were presiding over their in-house courts were in the position of benefiting from the penalties they assessed. They had to know that their in-house enforcement agents – and judges - were acquiring luxurious yachts, personal automobiles and exotic foreign travel much more easily and with far less oversight than should be acceptable for federal employees, that they were overseeing a force that consisted almost entirely of highly paid criminal agents who were involved almost entirely in civil violations, that data being supplied to researchers with the intention of indicting fishermen was, in the most charitable way I can phrase it, suspect. Or if they didn't know, they were more grossly incompetent than anyone who is getting paid with public dollars has any right to be. But it was all ok at NOAA/NMFS because they were catching those bad guys who thought fish were there to be caught. In fact, if they were good enough at catching those fishermen, the NOAA enforcement people were given bonuses – sort of like bounty hunters, only with federally issued “get out of jail free” cards.

If Ms. Lubchenco and Secretary Locke are really interested in changing things at NOAA/NMFS, or if Congress is really interested in seeing that things are changed, the job has to begin with changing this increasingly pervasive agency attitude. Could you imagine the condition our agriculture industry would be in if the Department of Agriculture looked at farmers the same way the NOAA/NMFS leadership so obviously looks at fishermen? Along with importing 80% of our seafood we'd be importing 80% of everything else that we eat as well. If the Secretary of Agriculture announced that his goal was to get rid of farms and farmers do you think it would be more than a week or so before we had a new Secretary?

Ask a farmer if the federal government is on his or her side and I'll bet dollars to donuts that you'll get an unqualified yes as an answer. What are the odds of getting the same answer from a fisherman?

But we've got someone in charge of NOAA, the parent agency of the National Marine Fisheries Service, who has publicly acknowledged that fishermen are on her hit list. And we've got someone in charge of the Department of Commerce, her boss, who is willing to apologize to a handful of fishermen when a bunch of his fish cops get caught with their hands in the cookie jar up to their waists, but has yet to say anything on the record about Ms. Lubchenco's “get rid of fishermen” fixation. And need I write yet again that we've reached the point of no overfishing and rebounding stocks with all of those boats and all of those fishermen that she's committed to getting rid of?

So how much do you think the in-house attitude towards fishermen has changed at NOAA/NMFS? Using a Titanic analogy, something that I try to do at least once a year and that's become increasingly easy of late, we've heard the captain and first mate telling us that they are shifting crew from job to job, messing with the paperwork that keeps everything running about the way it has been, and giving new fake books to the orchestra, but their ship is still unsinkable. They would be telling us this on April 16, 1912.*

“It had the tone of a renegade law enforcement agency that felt it was above the law.... That's a complete breakdown in checks and balances that we have in our responsibility as government officials in protecting the public but also in protecting the accused.... They used their enforcement power as an adhesion type of relationship where they would lay out what they thought the penalty would be and if you don't comply with what we've indicated, it's going to be a lot tougher on you. They completely took due process out of law enforcement.... It was completely Un-American.” (New Bedford mayor Scott Lang in the same interview with Gloucester Daily Times reporter Richard Gaines referenced above).

*The Titanic sank on April 15

Underfishing in New England: have things really changed?

07/09/11

Note: I stated below that “previously used Target TACs had been replaced with Annual Catch Limits or ACLs, which are essentially the same measure.” This is not quite accurate. In fact, the Target TAC is equivalent to a measure called the Overfishing Limit (OFL), the level of harvest that can't be exceeded with risk being in an overfishing condition (exceeding the natural productive capacity of the fishery). The ACL is set lower than the OFL to protect the fish from additional risk caused by imprecision in the management process. In the case of the New England groundfish stocks, the ACL is 75% of the OFL. This introducing another level of complexity into an already far too complex a subject, I treated the ACL and the TAC as equivalent when the ACL is actually 25% lower. Hence the level of underfishing in FY 2010-11 was significantly higher than reported below.

Back in April NOAA/NMFS was trumpeting “good news” about increased catch limits in the New England groundfish fishery (see NOAA/NMFS press release dated 04/08/11 titled New England fishing season to open with higher catch limits). The total amount of groundfish available for harvest was 39% lower in FY '10/11 than it was in FY '08/09, and the amount of groundfish excluding haddock was 24% lower. From the release:

“The increase in catch limits is a result of the rebuilding process underway and is one of many steps we are taking to grow economic opportunity in diverse, working waterfronts that support fishing jobs in the Northeast,” said Jane Lubchenco, Ph.D., under secretary of commerce for

oceans and atmosphere and NOAA Administrator. "This year's higher catch limits will affect 12 groundfish stocks. These stocks include: Georges Bank cod, Gulf of Maine cod, Georges Bank yellowtail flounder, Southern New England/Mid-Atlantic yellowtail flounder, Cape Cod/Gulf of Maine yellowtail flounder, American plaice, witch flounder, Georges Bank winter flounder, Southern New England winter flounder, redfish, white hake, halibut."

Several years back I wrote **Chronic Underfishing - The Real New England Groundfish Crisis** (http://www.fishnet-usa.com/chronic_underfishing.htm). In it I examined the Target Total Allowable Catch (Target TAC) and the actual landings of the various species for Fishing Year (FY) 2008-09 in the New England groundfish (multispecies) fishery. Using NOAA/NMFS data, I determined that the mostly New England fleet, because of an overabundance of management-demanded restrictions, had landed only 20% of the total groundfish that it could have caught sustainably.

Accordingly, when the same data was passed out for FY 2010-11 at the New England Fishery Management Council's most recent meeting (NMFS Preliminary Catch and Landings information for NEFMC FMPs for Fishing Year 2010-11), I was most interested in comparing the underfishing performance pre- and post-catch shares in the groundfish fishery.

A very preliminary analysis seemed to indicate that the New England fleet had indeed performed better, landing 35% of the groundfish that it could have sustainably landed (note that the previously used Target TACs had been replaced with Annual Catch Limits or ACLs, which are essentially the same measure). This appeared to be quite an improvement and quite a recommendation for catch shares in this and every fishery.

But is it really an improvement? In FY 2008-09 the Target Total Allowable Catch (Target TAC) for the groundfish species was 162 thousand metric tons and total landings were 32 thousand tons. Haddock made up 66% of the target TAC (108 thousand tons). Less than 7 thousand tons of haddock were landed. The non-haddock target TAC was 54 thousand tons and the non-haddock landings were 25 thousand tons (46% of the non-haddock TAC).

Then in FY 2009-10 the Target TAC was 135 thousand tons and total landings were 33 thousand tons. Haddock made up 67% of the Target TAC (91 thousand tons). A bit more than 7 thousand tons of haddock were landed. The non-haddock Target TAC was 44 thousand tons and the non-haddock landings were 26 thousand tons (59% of the non-haddock TAC).

In FY 2010-11 the Annual Catch Limit was 95 thousand tons and landings were 33 thousand tons. The ACL for haddock was 53 thousand tons (56% of the total ACL) and haddock landings were under 9 thousand tons. The non-haddock ACL was 42 thousand tons and non-haddock landings were 23 thousand tons (55% of the non-haddock TAC).

For FY 2011-12 the overall ACL is 86 thousand tons, with 34 thousand tons (40%) of that being haddock. This leaves a non-haddock ACL of 52 thousand tons.

According to NMFS/NOAA, in four years the amount of sustainably harvestable haddock has decreased by 68% (76 thousand tons). It went from 108 thousand tons to 90 thousand tons from 2008 to 2009 - a drop of 17% - then plummeted to 53 thousand tons in the following year and to 34 thousand tons in 2011-12, drops of 42% and 36%. As the lack of any trend in the level of underfishing in the non-haddock stocks (45% to 59% to 55%) clearly demonstrate, this decrease in the haddock TAC/ACL is what has driven the level of underfishing in the groundfish fishery lower.

It's kind of difficult to imagine such a decrease in the acceptable haddock harvest being implemented without there being a really noticeable decrease in the haddock biomass.

But, as the chart below demonstrates, the Northeastern Fisheries Science Center Spring and Autumn Bottom Trawl Surveys don't reflect any precipitous decline in the haddock population. The survey data hints at nothing approaching a crash of the haddock stocks, yet what else could account for such a drastic cut in the TAC/ACL?

(Note that in the 2007 Autumn Trawl Survey, 2 adjacent stations yielded over 11,000 pounds of the total of 15,000 pounds for the entire survey. In the series of 23 surveys extending over 12 years - involving well over 7,000 sample tows, only about a dozen tows yielded over 2,000 pounds of haddock.)

If haddock were removed from the calculations, or if the haddock stocks weren't represented as declining precipitously over such a short time, the underfishing situation would appear to be significantly different.

Let's assume, solely for illustrative purposes, that the haddock TAC/ACL was reduced only half as much as it actually was, and that the decline was spread out evenly over the three years post 2007. A 34% total decrease would equal a haddock ACL of 108 thousand tons in 2008-09, 96 thousand tons in 2009-10, 84 thousand tons in 2010-11 and 72 thousand tons in 2011-12. In that case total landings would have been 20, 24 and 26% of the total TAC/ACL in FY2008-09, 2009-10 and 2010-11 respectively. Or, if the haddock TAC/ACL had remained constant at 108 thousand tons, 20%, 22% and 22% would have been landed in each of the three years respectively. The only thing that makes the efficiency of

the groundfish fleet (efficiency here meaning the percentage of the TAC/ACL that is actually landed) appear to be improved under the current catch shares regime is a drastic decrease in the haddock TAC/ACL. That decrease doesn't appear to be warranted by the haddock caught in the Autumn and Spring Bottom Trawl Surveys extending back over ten years.

In FY 2008-09, 56% of the Target TAC of all of the sustainably harvestable groundfish species minus haddock were harvested. In FY 2010-11 this figure was 59% - considering the precision of the data involved, I think we can consider them identical.

So what happened to those missing hundreds of thousands of tons of haddock (assuming that, like other species, 25% or so of the total biomass can be sustainably harvested every year)? Were they conveniently swallowed up by the same statistical black hole that all of those pollock that were responsible for increasing the pollock ACL by 500% were pulled out of last year? One of the nice things about dealing in highly complicated statistical manipulations and esoteric computer modeling is that no one "on the outside" really has much of an idea of what you are doing.

But in this instance at least, the why it's being done seems obvious.

NOAA head Jane Lubchenco, the people who work for her and the ENGOs and the foundations that are behind them are committed to their catch shares revolution, arguably to make the fisheries more efficient but unquestionably to get rid of boats, to get rid of fishermen, and to get rid of the influence on fishing and ocean-use policies that fishermen have rightfully had for generations. Of course the best way to demonstrate that catch shares actually work would be to have the fishermen in a fishery catch more fish, but it just seems as if this idea is anathema to Ms. Lubchenco and everyone behind her. You certainly don't spend hundreds of millions of dollars convincing the world that fishermen are and have been the ruination of the world's oceans and then tell them - those few who you've allowed to survive - to go ahead and catch more fish. But you can tell them that the proportion of the fish they could catch relative to the fish that they are catching is improving, and considering that you've effectively whittled down the number of them who are still fishing, their individual catches are improving as well. Those "black holes" can sure come in handy.

But regardless of all of that, the big question is - or should be - why is so little being done by NOAA/NMFS and the ENGO community to increase the proportion of the TAC that is landed in the groundfish fishery? In FY 2010-11 only 16% of the haddock ACL was landed. While it could be argued that this was significantly better than the 6% taken in FY 2008-09, the difference is only 2 thousand tons. With at least 50 thousand more tons of haddock out there to catch and with boat after boat and fisherman after fisherman leaving the fishery, that's inarguably not enough of an increase - unless, of course, you're intent on getting rid of boats and fishermen.

What of foundation-supported programs like World Wildlife Fund's Smart Gear contest? I used to be impressed with WWF's efforts there until I did a little research into the dollars behind it. WWF received \$400,000 from the Moore Foundation in 2005 to fund the Smart Gear competition in 2006 and 2007. In 2006 the awards amounted to \$35,000. In 2007 they totaled \$55,000. It seems like WWF raked in at least \$310,000 to give away (someone else's) \$90,000. They're sure doing their bit, aren't they? WWF has a PR bonanza playing ocean savior (WWF even won the NOAA Sustainable Fisheries Leadership Award in 2007) while making 340% "overhead" on the bucks handed out. Do you think anyone there ever considered that if they only kept 200% they could more than double their awards to fishermen?

The fish are out there and they're out there in numbers that are large enough so that their harvest could be substantially increased yet still be sustainable. If Ms. Lubchenco would implement a crash program to decrease the level of underfishing, not just in New England and not just in the groundfish fishery, with the same zeal that she has put into her catch share revolution, I doubt if that or any other revolution in how we run our fisheries would be necessary. Could there be a connection in there somewhere.

Another idea whose time has come

09/02/11

It's generally agreed that traveling has become one of the less agreeable inflictions that people have to deal with. Whether by automobile or airplane (and I assume by train, but I can't conveniently get anywhere from here via Amtrak), it's increasingly expensive, it's increasingly time-consuming, and it's increasingly uncomfortable.

And, while I can't document it, it sure seems like there are an increasing number of fisheries management meetings, and those meetings are dealing with increasingly important - and increasingly complex - issues.

Unless you are fortunate enough to have a council, monitoring committee, advisory committee, plan development team or other meeting an easy commute away, you're going to spend at least a day and at least a couple of hundred bucks every time something comes up that could affect your fishery. If you are in one of the fisheries that is so blessed, you get to do it not just for the appropriate regional management council but for the appropriate regional commission as well - and in that case you'll have to travel even farther. And I can't leave out the various stock assessment exercises, which are possibly the most important meetings for any fishery, because that's where everything starts and where informed input can be invaluable.

Thanks to the diligence of the leadership at NOAA/NMFS, just about everybody in the fishing industry - at least anybody whose job involves catching fish - now has time to attend this myriad of meetings. But, thanks to that same diligence by those same people, few can afford to.

However, North Carolina Congressman Walter Jones is once again coming to the rescue of - or at least trying to make as good a deal as he can for - fishermen and people in fishing dependent businesses.

He has introduced the **Fishery Management Transparency and Accountability Act** (H.R.2753), an amendment to the Magnuson Fisheries Conservation and Management Act that will require that each Regional Management Council will make available on the Internet website of the Council "a live broadcast of each meeting of the Council, of the science and statistical committee of the Council, and of the Council coordination committee" and "complete audio, complete video if the meeting was in person or by video conference, and a complete transcript of each such meeting" within 30 days of the meeting and maintained on the Council website for three years.

While I haven't surveyed the others, the Mid-Atlantic Council has started to webcast their full Council meetings. Last week I listened "live" to the monkfish discussion at the meeting in Wilmington, Delaware. Video wasn't available, but audio and an accompanying Power Point presentation were. Obviously it wasn't the same as attending in person, but it cost nothing and took half an hour instead of a big chunk of two days. At this point there isn't any provision for direct live feedback - questions and/or comments - but this could prove particularly valuable, and I hope the Council staff will include it at some point in the future.

The people at the Northeast Fisheries Science Center - and perhaps the other Centers as well - are quite a bit ahead of the Councils on this with their webcasts of stock assessments. These are exercises that demand as much information, anecdotal and otherwise, as possible. Having fishermen attend in person is asking an awful lot, but having several who are knowledgeable about the fishery - and particularly about the interactions with other fisheries - could be extremely important. With the system in use for assessments, people participate from remote locations via voice and/or keyboard, and this adds another valuable dimension to the discussions.

Having the meetings archived for three years could be useful. Having full transcripts available could be even more useful and more convenient as well, but it would probably increase the cost significantly. That not being possible, having a detailed index of all of the contents would make them much more user friendly. While listening to an entire discussion extending over several hours might be useful, being able to quickly identify a segment that you were particularly interested in would greatly expand the usability.

It's obvious from the title of his proposed legislation that Congressman Jones is interested in increasing the transparency of the federal fisheries management process. The need for more transparency was made more than obvious in an article by Richard Gaines in the Gloucester Daily Times on 12/14/2010. He wrote "also figuring in the legal tussle (surrounding a suit brought by the cities of New Bedford and Gloucester, MA against the Secretary of Commerce over Groundfish Amendment 16) is the Conservation Law Foundation, which has filed a brief against a request — still pending before Zobel — by the cities and fishing interests for the right to conduct discovery into possible improper influence by environmental groups such as the Environmental Defense Fund and the Pew Environment Group on federal policy" (<http://www.gloucestertimes.com/topstories/x1666503922/New-suit-targets-need-for-catch-share-referendum/print>).

I'll note here that the Conservation Law Foundation is another of the environmental groups that has been deeply involved in groundfish management in New England. I'll also note that Judge Zobel denied the request. Whatever improper influence did or did not take place affecting Amendment 16 has yet to be discovered.

While Congressman Jones' **Fishery Management Transparency and Accountability Act** is a giant step forward in making the public portions of the Regional Management Council process more accessible to more people - particularly to fishermen who can afford neither the time nor the expense of attending the meetings in person - it isn't going to shine a light on every area of federal fisheries management that is screaming out for more illumination. Why, for example, would a federal agency - or the people running that agency - resist a request for copies of communications pertaining to how a fisheries management plan affecting the lives of tens of thousands of people as Amendment 16 is doing was created? And why would an environmental group support that resistance?

In a press release issued by the Obama White House on July 28, just barely a month ago, Vice President Biden was quoted as saying " we are tapping the top leaders across government who have been most aggressive in cracking down on waste to drive change and make the government work for our nation's families. With our nation's top watchdogs at the helm, we will deliver the kind of transparency and accountability for Federal spending that the public deserves and expects." Unless fishermen, people in fishing dependent jobs, their families and their communities are somehow exempted from the "public" that the Vice President was referring to, the members of the Administration's newly launched Government Accountability and Transparency Board isn't going to look very much beyond the Department of Commerce - which we assume is already on the radar screen because of the still continuing NOAA enforcement mess - for ideas on where to start.

But assuming that doesn't happen, and when it comes to fisheries issues that seems to be a fairly safe assumption, lets hope that Congressman Jones is looking at H.R. 2753 as a well thought out and necessary starting point, because it is. But it's not going to solve any of the problems in what is increasingly being described as a "rogue agency."

If it's going to save a few sharks and, more importantly, screw a bunch of fishermen, so what if your nose grows a bit? - Any of us who have interacted with elected officials know that those officials put their interactions into one of three categories. The first is "constituents," and the officials pay attention to them. The second is "donors," and the officials also pay attention to them. The third is "non-constituents/non-donors," and their contacts tend to not garner as much attention as the other two.

The most simple way for the officials and/or their staffers to determine whether people contacting them are constituents or not is by asking for their zip codes. I don't know how they know whether someone is a donor or not, but know they do, I'd bet. Needless to say, accurate zip code information is important to the office holder, and it's impossible to assume that people who contact an elected official would think that he or she - or his or her staffer - would be seeking anything other than the zip code where they live.

So we have an organization in Princeton, New Jersey called the Shark Research Institute which is interested in the passage of a bill by the California Legislature which would ban the sale, trade or possession of shark fins. In a member newsletter, Marie Levine, the executive director of this "research institute" urges members to contact California state senators to urge the bill's passage. She then goes on "*because the senators are most likely to heed the wishes of constituents, if asked for your zip code remember that SRI has an office in Malibu, California; as an SRI member, you are entitled to use our Malibu zip code - 90265. Phone as many Senators as you can - the Senate is in session right now.*"

Now I'm not up to the finer points of what's legal or ethical or moral or anything of that nature when it comes to dealing with elected officials and/or their staffers, but I am of the opinion that if one of them asks for a zip code, then you know, they know, and I know that what they are asking for is the one where you live. Giving them instead the zip code of an office of an organization that you belong to, or your second cousin's mother in law's summer house, or the store where you bought your new toaster oven, or any zip code other than the one where your mail gets delivered isn't playing by the right set of rules.

A good fisheries crisis is hard to find*

10/10/11

***but if you have tens of millions of someone else's dollars it's pretty easy to invent one.**

"People with a mission to save the earth want the earth to seem worse than it is so their mission will look more important." P.J. O'Rourke, **All the trouble in the world**, 1994

Crises just keep getting harder to find

Do you think folks in the so-called marine conservation community look fondly back to their "good old days?" Those would be the days when - in their collective and jaundiced estimation - overfishing was running rampant, the oceans were on the brink of a fishing-induced collapse and they could delude themselves, the foundations that support them so lavishly and an unknowing and gullible public into believing that they were the white hat guys here to save fishermen from their greedy selves.

Alas for them, those days are over.

Every year sees more domestic fisheries added to the sustainable list. (It's another issue, but because of arbitrary management restrictions, every year also sees another 5 percent or so added to the total amount of seafood we import into the U.S. It's now at a staggering 80 plus percent, but hey, that's only lost jobs and money for fishermen and fishing dependent businesses.)

So what's a dedicated and devoted ocean savior to do? Having oceans - at least the U.S. EEZ parts of the oceans - filled with fish and having the number of bothersome fishermen, fishing boats and the waterfront businesses that keep them fishing whittled down dramatically, perhaps a consideration would be to move on, finding new nature to save and new businesses to destroy.

But that doesn't seem to be happening. Instead, those folks in the foundation funded greenish-tinged white hats are still setting their sights on domestic fishermen, but they're doing it for increasingly picayune reasons.

Take the issue - or perhaps I should use cause célèbre, because that's what it's been turned into - of bycatch, and of the Endangered Species Act/Marine Mammal Protection Act implications of bycatch. In a report recently released by the National Marine Fisheries Service (U.S. National Bycatch Report http://www.nmfs.noaa.gov/by_catch/BREP2011/2011_National_Bycatch_Report.pdf), as of 2005 the overall rate of bycatch in domestic commercial fisheries - defined as the ratio between the total bycatch divided by the total catch) was 0.17. Note that this was in 2005. In the intervening six years many more bycatch reduction strategies and mechanisms have been developed and implemented, but the initial estimate that only one-sixth of the total catch of the entire domestic fleet is not used - and this includes regulatory discards that would be saleable but the management measures in place make it illegal for fishermen to land them - puts the bycatch "crisis" in the proper, real-world perspective; a crisis only in the eyes of the ocean eco-alarmists.

"Bureaucracy defends the status quo long past the time when the quo has lost its status" Laurence J. Peter - Canadian author who formulated the Peter Principle

But why are the people in the ENGOs grasping at such seeming straws as bycatch rather than moving on? Why are they focused so fixedly on inflicting ever more destruction on fishing people, fishing businesses and fishing communities? The current ENGO push for listing as endan-

gered Atlantic sturgeon, thorny skates and American eels, the ongoing efforts to list bluefin tuna, the past - and pathetic - attempts to list spiny dogfish (spend some time browsing the Plague Of Dogfish website at <http://www.fishnet-usa.com/dogforum1.htm>) and barndoor skates and the seemingly endless - and outrageously expensive to the taxpayers and to the fishing industry - string of lawsuits aimed at the sea scallop fishery to "save sea turtles" whose populations are increasing dramatically anyway seem to be little more than attempts to use federal legislation and apparently unlimited access to legal talent to continue the anti-fishing onslaught.

*"Voracious almost beyond belief, the dogfish entirely deserves its bad reputation. Not only does it harry and drive off mackerel, herring, and even fish as large as cod and haddock, but it destroys vast numbers of them. Again and again fishermen have described packs of dogs dashing among schools of mackerel, and even attacking them within the seines, biting through the net, and releasing such of the catch as es-cape them. At one time or another they prey on practically all species of Gulf of Maine fish smaller than themselves, and squid are also a regular article of diet whenever they are found." (Fishes of the Gulf of Maine, Bigelow, H.B. and W.C. Schroeder, 1953) A plague of spiny dogfish (*Squalus acanthias*) is interfering with fisheries in coastal states from Maine to North Carolina. Unprecedented numbers of these voracious predators are clogging nets, stealing bait and ruining the catch in fishery after fishery, needlessly penalizing the affected fishermen and coastal fishing communities. In addition to this direct interference with other fisheries, dogfish are eating vast quantities of much more valuable species, negating the effects of drastic management-mandated fishing effort reductions in those fisheries. Fishermen are sacrificing to conserve extremely important recreational and commercial species and their efforts are doing little more than providing more food for an ever-increasing population of dogfish." (from the website A Plague of Dogfish linked above).*

(Another update on the extinction of the Barn Door Skates) – In the late 1990's the foundation-funded doomsayers manufactured a media tempest by predicting the imminent extinction of the barndoor skate. A number of these anti-fishing activist groups lobbied to have the species listed as endangered, some-thing that would have negatively impacted many of the trawl/dredge fisheries operating in the skate's range. Recognized as one of the most egregious examples of overblown environmental alarmism that had been manufactured to date as an assault on commercial fishing, the fishing industry came together with the managers to prove conclusively that the "plight" of the barndoor skate was non-existent. (Google "barndoor skate extinct" for an idea of how the anti-fishing claue piled on to this non-issue). Far from these long-lived skates being "endangered," the Northeast Fisheries Science Center reported in the 2007 Spring Bottom Trawl Survey *"history was made at Oceanographer Canyon, station 204, when over 3200 pounds of barndoor skates and 1500 pounds of winter skates came over the stern and ended up sliding all over the back deck. This is the first time in survey history that so many barndoor skates were landed"* (http://www.nefsc.noaa.gov/esb/rsr/sbts/sbts_2007/large_file.pdf). Unfortunately, while these activist groups and foundation-funded researchers are adept at spreading their erroneous information far and wide, they are characteristically inept at getting the right information out when they are shown to be misinformed. (from Fisheries Management – It's time for a new paradigm, 07/18/2007, http://www.fishnet-usa.com/new_paradigm.html) .

Yet in spite of these expensive exercises in futility, the same circle of ENGOs are persisting in their attempts to further cripple fishermen via raising the spectre of one supposed extinction "crisis" after another

I'm pretty sure that I'm not the only one who's wondered why. How can anyone attempt to inflict such economic devastation on so many hard working people time after time?

I was sent a link to the webpage titled "Our Team" on the Pew Environment Group website. Each of the over 200 Pew "team" members is listed individually. Many of them have titles that seem to be somewhat more grandiose than necessary (how'd you like to have, **Deputy Director, Lands, U.S. and Canadian Oceans and Ocean Science** or **Officer, Offshore Energy Reform Campaign, Global Conversation Initiative** on your business card and the door to your office?). Having dealt with bureaucracies fairly extensively, I've observed that lots of employees with impressive seeming titles are often an indication of rampant bureaucratization. And it goes without saying that any "successful" bureaucracy is one that has reached critical mass. It won't be diminished regardless of the status of its original mission, just keeps chugging along.

This whetted my appetite. While I have researched and written quite a bit about fishermen-focused ENGOs and the foundations that support them, I've never gotten very much involved in their inner workings. I decided to correct that obvious lapse, so I set out to find what I could about the ENGOs that had done such a thorough job of "saving our fish" that U.S. fishermen, with the most productive EEZ in the world, are now permitted to supply less than a fifth of the seafood we consume in the U.S.

As I've observed before, having the ability to examine the most remote nooks and crannies on the internet facilitates effective research in a truly dramatic fashion. After a few minutes with Google, I discovered a website that makes available the IRS Form 990 (Return of Organization Exempt From Income Tax) filings for not-for-profit organizations, including those that have made life miserable for fishermen for most of a generation.

Organization	Net Assets	
David and Lucille Packard Foundation	\$5,524,740,637.00	
Pew Charitable Trusts	\$5,513,279,092.00	(from Annual I
Pew Charitable Trusts	\$379,662,254.00	(from Form 99
Natural Resources Defense Council	\$232,304,192.00	
Environmental Defense	\$161,775,725.00	
Ecotrust	\$22,401,000.00	
Oceana	\$22,102,232.00	
Ocean Conservancy	\$15,828,705.00	
Conservation Law Foundation	\$13,676,279.00	

One of the things that these forms reveal is the total assets of the organizations. For some of the ENGOs and foundations that fishermen have become far too familiar with, net assets were reported as follows:

Organization	Net Assets
David and Lucille Packard Foundation	\$5,524,740,637.00
Pew Charitable Trusts	\$5,513,279,092.00
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Oceana	\$22,102,232.00
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Conservation Law Foundation	\$13,676,279.00

This sure makes these ENGOs' willingness to pursue, for example, a seemingly interminable string of suits in federal courts easier to understand. If you've got tens of millions of dollars in the bank and a stable of lawyers in house or on retainer, and if the foundations that have funded you to this point have billions of dollars available, why not? The alternative would be something akin to downsizing, something that's probably not all that acceptable to either bureaucrats or bureaucracies.

Another Form 990 reporting requirement is the compensation from the particular organization to "Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees." Again, for employees, etc. of some select and familiar ENGOs and foundations, total compensation from the organization (not necessarily the total compensation that person received from all sources) in the most recent year for which a Form 990 was available was as follows:

Position	Organization	Total Compensation from Organization
Chief Investment Officer	David and Lucille Packard Foundation	\$1,196,037.00
President & CEO	The Pew Charitable Trusts	\$1,071,525.00
President/CEO	David and Lucille Packard Foundation	\$696,687.00
President	Natural Resources Defense Council	\$432,742.00
President	Environmental Defense	\$423,359.00
Managing Director	Pew Environment Group	\$400,487.00
Executive Director	Environmental Defense	\$347,963.00
VP West Coast, VP Land, Water and Wildlife	Environmental Defense	\$304,626.00
Executive Director	Natural Resources Defense Council	\$277,846.00
Development Director	Natural Resources Defense Council	\$265,001.00
President and CEO	Ocean Conservancy	\$261,111.00
Finance Director	Natural Resources Defense Council	\$259,460.00
Chief Executive Officer	Oceana	\$247,164.00
VP Marketing and Communications	Environmental Defense	\$242,947.00
Executive Vice President	Oceana	\$237,589.00
EVP/COO	Ocean Conservancy	\$217,911.00
Communications Director	Natural Resources Defense Council	\$213,737.00
Executive Director of Oceana in Europe	Oceana	\$205,868.00
Senior Vice President for North America, Chief Scientist	Oceana	\$203,272.00
VP Legal Affairs	Ocean Conservancy	\$180,426.00
President	Ecotrust	\$178,527.00
VP Resource Development	Ocean Conservancy	\$172,381.00
VP Communications	Ocean Conservancy	\$172,161.00
Jim Ayers Oceana Regional Director in North Pacific	Oceana	\$170,114.00
Shark Conservation Program Director	Ocean Conservancy	\$152,754.00
Managing Director	Ecotrust	\$151,050.00
VP State Advocacy Center Director	Conservation Law Foundation	\$141,141.00

And this chart represents only the proverbial tip of the iceberg. Remember that the Pew Environment Group, for example, lists in the neighborhood of 200 "teammates," and well over a third of them are in the Pew oceans campaign. It's apparent that while the gold might be gone from them thar hills, there's still plenty available in the oceans, though it's not going to fishermen - at least U.S. fishermen - any longer.

With this level of "commitment" to solving ocean problems, is it any wonder that the involved ENGOs are more than willing to pump up any of those problems that come along or come to mind to the greatest extent that they can? And with what seems to be virtually unlimited access to geese that are far more capable of laying golden eggs than the average barnyard fowl, is it any wonder that the programs that these people inflict on the rest of us seem so completely out of touch with the working world? They want those geese to keep on laying, they know that saving "oceans in crisis," regardless of how real the crises actually were, has worked admirably up until now, so why should they stop?

And with salaries (and perks) ranging up into seven figures, is it any wonder that these people exhibit such a lack of empathy for people with real jobs - you know, the kind of jobs that depend on actually producing something tangible to justify a paycheck? (And no, putting people out of work isn't producing something tangible.)

Anyone who has built a successful career - that is, successful as far as the size of their paycheck and their ability to climb the (ENGO) corporate ladder is concerned - by spending money earned by someone else isn't likely to have much of an idea of what it would be like to be out of work or, it appears, to be particularly concerned when their actions have that consequence on others. If they think about it at all, these "marine conservationists" must be convinced that if the welfare of fishermen or fishing communities were that important, those uber-rich foundations wouldn't be giving them all those bucks to save all of the fish that they can regardless of the human consequences. And their self-serving argument that it will be good for the fishermen - and the fishing communities - at some point in the future conveniently ignores the fact that the profusion of ex-fishermen and bankrupt fishing dependent businesses make abundantly clear; that the path out of fishing is almost always one way.

But those grants keep rolling in.

Rightly or wrongly, environmentalists used to be stereotyped either as little old ladies wearing tennis sneakers while clutching a Peterson's Field Guide to the Birds of North America, as superannuated versions of Pee Wee Harris complete with thick glasses and knee pants, or as bearded, bedraggled, beplaided rugged individualists. What they all had in common was a dedication to the environment, a realization that grass roots movements were the only acceptable way to get things done, and a severe aversion to corporate life and all its trimmings. They've come a long way, haven't they?

(For those of you who are interested in delving into the IRS Form 990s of your favorite ENGOs, they are available on the Guidestar website (<http://www2.guidestar.org/>).

Words of wisdom on a Pew/Seaweb website?

Going back to its very beginning, I haven't been much of a fan of Seaweb, another product of The Pew Charitable Trusts' \$billions. However, shark researcher Shelley Clarke's "Ocean Voices" article, **Examining Scientific Integrity In the Global Shark Fin Trade**, on the Seaweb website should be taken to heart by anyone who spends any time reading - and being influenced by - second, third or later-hand reports on ocean-related research. I'd draw particular attention to the second and last bulleted sentences in the final part of her article, which I've highlighted below:

What can we do to become better science consumers? My advice is to apply the following tests to the science on your daily menu:

- *Is the name and affiliation of the original research team mentioned? If not, the opportunity to verify the information is more limited, thereby opening the door for misrepresentation.*
- ***Was the research team independent? If not, the study may have been conducted to support a particular conclusion.***
- *Did the researchers invest time in gathering new data from a reliable source themselves? If not, there may be a greater chance that they have misinterpreted signals in the data.*
- *Does the article mention whether the study was published in a peer-reviewed journal? If not, there may not have been sufficient independent checking of the results.*
- ***Does the article present any shortcomings or weaknesses in the study? If not, it may be a press release from a proponent organization rather than an objective summary of the findings.***

Choose carefully, and bon appétit!

The URL is <http://www.seaweb.org/getinvolved/oceanvoices/ShellyClarke.php>.

In the Belly of the Big Green Beast

11/02/11

When I was invited to be a participant in a panel discussion on fisheries at the Society of Environmental Journalists (SEJ) annual meeting in Miami Beach in October, I had serious misgivings. Those misgivings mostly focused on what the likely reception of a representative of commercial fishing and fishermen would be by a roomful of granola munching, Birkenstock wearing, tie-died zealots who either never got their heads out of the 60s or were frustrated because they missed them completely. Up front I have to admit how off-target I was. There was very little tie-die in evidence.

Still operating under the naive belief that the people who arranged conferences for professions like journalism were as much committed to objectivity as I used to assume scientists were, I certainly wasn't concerned about being a participant in a hatchet job, particularly with being on the wrong side of the hatchet.

I thought "the organizers are professional journalists and therefore committed to balance," so I accepted.

So what had I bought into? As an augury, I had been listed in the program posted on the SEJ website as a commercial fisherman. I was asked to provide a short biography, which I did. Needless to say, I did not claim in it that I was or had ever been a commercial fisherman, primarily because I'm not and have never been one. The biog was linked to my name on the website, but apparently no one responsible for organizing the SEJ conference or the session in it that I was to participate in thought it was particularly important to check on the accuracy or the consistency of their information. So I remained a commercial fisherman on the program page and what I really was on the page linked to it.

Jeff Burnside from NBC Miami was the co-chairman of the conference. Mr. Burnside has taught Aldo Leopold Leadership Program fellows (see the following paragraph) for 10 years. This is a program started by my co-panelist Jane Lubchenco that is designed to provide "*academic researchers with the skills and connections needed to be effective leaders and communicators.*" Mr. Burnside has also served on the Advisory Council for the Pew Institute for Ocean Science.

The conference was hosted by the University of Miami, which has received over \$13 million dollars from the Pew Charitable Trusts for fisheries and fisheries-related research.

The first panel discussion on Friday, **Communicating Science: Reporters Go Head to Head with Top Ocean Scientists**, was moderated by Nancy Baron. Ms. Baron is the Ocean Science Outreach Director for the Communication Partnership for Science and the Sea (COMPASS - \$3.5 million from the Pew Charitable Trusts, the David and Lucile Packard Foundation and the Gordon and Betty Moore Foundation). She is also the lead communications trainer for the Aldo Leopold Leadership Program (funded in part by a \$32.5 million grant from Packard). Her book was published by Pew/Moore grantee Island Press (*Escape from the Ivory Tower: A Guide to Making Your Science Matter*), which also published my co-panelist Daniel Pauly's book, *5 Easy Pieces: the impact of fisheries on marine ecosystems*.

The scientists on this panel were:

- Dee Boersma - Faculty of University of Washington, She is a Pew Marine Conservation Fellow.
- Rebecca Goldberg - Director, Ocean Science Division, Pew Environment Group.
- Jane Lubchenco - As below.
- Marcia McNutt, Director of the U.S. Geological Survey, former president and chief executive officer of the Monterey Bay Aquarium Research Institute (funded by the David and Lucile Packard Foundation).

Need I mention that Ms. Baron's book deals, as does COMPASS and the Aldo Leopold program, with showing researchers how to manipulate - or perhaps "handle" is a more gentle term - the media, politicians and policy makers?

When I checked in with the moderator of the panel I was on, environmental reporter Juliet Eilperin of the Washington Post, I had to explain to her that I wasn't and had never been a fisherman. Apparently she had failed to familiarize herself with any of the particulars of at least one of her panelists. A quick glance at the biography I had submitted, which was only a mouse click away, would have told her all she needed to know about me. I've organized a number of conferences and workshops in the past, and from that perspective I found her failure to do this to be somewhat puzzling.

And then to the panel discussion itself. First off, it was titled "**Fish Fight**," and I and my two fishing colleagues were to sit on one side of the moderator, Ms. Eilperin, and the three scientists were to sit on her other. Jerry Springer, here we come?

The lineup to Ms. Eilperin's right:

- Steven Gaines - Organizations and institutions he has been or is associated with have received well over \$30 million from the Pew Charitable Trusts, the David and Lucile Packard Foundation and the Walton Family Foundation. He is a Pew Marine Conservation Fellow and is a Managing Principal of COMPASS.
- Daniel Pauly - Organizations and institutions he has been or is associated with have received over \$17 million from the Pew Charitable Trusts. He is a Science Advisor for COMPASS.
- Jane Lubchenco - Organizations and institutions she has been associated with have received over tens of millions of dollars from the Pew Charitable Trusts, the David and Lucile Packard Foundation and the Gordon and Betty Moore Foundation. These include COMPASS and the Aldo Leopold Leadership Program. She is a Pew Marine Conservation Fellow and was a Board Member of the Monterey Bay Research Institute (funded by Packard).

And then there is Ms. Eilperin herself, who while not in the Gaines/Pauly/Lubchenco/Baron tier of "connectedness" to the Pew/Packard/Moore/Walton multi-million dollar gravy train, has managed a few dribs and drabs herself. She writes in the acknowledgements section of her recently published book on sharks "*more than any other single group, the Pew Marine Fellows have helped educate me about the ocean.... I would like to single out (among others) Jane Lubchenco, Daniel Pauly... Nancy Baron deserves the credit for introducing me to these scientists.*" Ms. Eilperin also acknowledges the American Littoral Society as one of the two sources of "travel grants" for the book. The American Littoral Society has received almost \$6 million from the Pew Charitable Trusts. Ms. Eilperin has also been a participant in COMPASS media/scientist confabs.

As far as the discussion and the accompanying Q&A session was concerned, Ms. Eilperin did a good job of moderating. All six panelists were given about equal time and equal treatment.

Not too surprisingly, I took exception to some of the comments made, particularly by the scientists on the panel.

Panel member Jim Donofrio (whose remarks I took no exception to), the Executive Director of the Recreational Fishing Alliance, was voicing the RFA's objections to NOAA/NMFS forcing catch shares management on fisheries. This is an objection that is shared by many other recreational, party/charter and commercial fishermen and organizations.

Ms. Lubchenco responded that NOAA/NMFS doesn't implement catch shares programs, the regional fisheries management councils do. While this might be the way it works "on paper," it's not the way it actually works in the real world. As Jim brought out, if you aren't a strong supporter of catch shares, your chances of getting appointed or reappointed to a regional management council seat are remote at best. Additionally, NOAA/NMFS is and has been offering substantial monetary incentives to regional councils to invest in catch shares management. While the

NOAA/NMFS push for catch shares might not be a "forcing" de jure, de facto it surely is. (For more on this issue, see **Who needs research? We're going to have catch shares** at <http://tinyurl.com/bkj7eqm> and **Is this the future of fishing?** at <http://tinyurl.com/anehx4j>).

Ms. Lubchenco also stated that catch shares end "the race to fish," a situation also called "derby fishing" in which the annual harvest in a particular fishery is taken in a minimum amount of time, leading to potentially dangerous conditions for the fishermen and less than optimal marketing opportunities for the fish. While it's true that catch shares tend to eliminate such derby fisheries, so do other management mechanisms that are far less disruptive to the fisheries. It seemed that Ms. Lubchenco was strongly implying that the only way to avoid derbies was with catch shares. This is far from the truth.

Finally, in "explaining" catch shares, she used the trivial example of children and slurpees, likening traditionally managed fisheries to two children fighting over a single slurpee and catch shares management as two children, each with his or her own slurpee. While I certainly hope it isn't the case, perhaps Ms. Lubchenco can most easily grasp fisheries management when it's reduced to such an absurdly simplistic level. If that's the case, then I guess it's worth me writing that there are fisheries management systems in which the fishermen - her "children" - can successfully, peacefully and equitably share the fish - her "slurpee." In fact, the vast majority of the U.S. fisheries are currently being successfully managed without any fisheries equivalent of the slurpee brain freeze induced by her catch-shares revolution.

(And I'll reiterate here that I'm neither for nor against catch shares in particular fisheries if, as Congress intended, the participants in that fishery give their informed assent to catch shares management by a convincing majority. What I oppose is the arbitrary imposition of catch shares on fisheries by the bureaucratic sleight of hand, administrative strong arm tactics or intellectually repugnant PR techniques that are presently being employed by NOAA/NMFS and a small handful of ENGOs to do so.)

As an example of successful cooperative research, I mentioned an ongoing program that I have been involved in with an industry group, the Monkfish Defense Fund, and NOAA/NMFS and academic researchers. Dr. Pauly followed this up - and also derailed what could have been a significant discussion on the current "catch shares revolution" mandated changes to the NOAA/NMFS research budget - with his "ugly fish" theory of commercial fishing. His theory, if I can grasp its complexities, is that fishermen have reduced the abundance of all of the "not ugly" fish in the seas to such an extent that they're now being forced to catch the remainder - which are ugly. To wit, monkfish are one of his "ugly fish" that are being caught because, as a result of too much fishing, there are no longer enough pretty (beautiful? attractive? comely? buff?) fish to be caught.

Perhaps that actually is the case in Dr. Pauly's home waters of the Pacific Northwest. Perhaps all of the finny denizens of the deep out there are either gone due to rapacious fishing or are preternaturally ugly. However, that isn't nor has it been the case with monkfish - which I will freely admit are of an appearance that even a mother monkfish might have trouble loving.

Monkfish have long been a bycatch species in the Northeastern/Mid-Atlantic sea scallop fishery. They were a prized component of the "shack," that part of the catch that rather than being sold was given to the crew. Then in 1979 the first celebrity chef, Julia Child, featured a quite large - and Dr. Pauly got at least one point right - quite ugly monkfish on a segment of her classic cooking show "Julia Child and Company" (<http://www.nefsc.noaa.gov/read/popdy/monkfish/>). At least outside the halls of the University of British Columbia, it's generally agreed that its TV debut costarring with Julia Child and some helpful "tastes like lobster" word-of-mouth marketing is what got the monkfish culinary ball rolling in the U.S., not anything that was going on in other fisheries. And as far as I've been able to discover, monkfish (*lotte* in French, a requirement for an authentic *Bouillabaisse*) has been a staple in Mediterranean and Asian cuisine for as long as there have been fishermen plying coastal waters, and long before "overfishing" was turned into an eco-disaster by seemingly unlimited dollars from billion dollar foundations.

And then we have sea cucumbers (*bêche-de-mer* in French, *trepan* in Indonesian). While it's difficult to conjure up a less appealing looking critter, they have been a popular seafood product in Asian and Mediterranean countries since way before Dr. Pauly's amusing but somewhat less than compelling theory. Eels? Wolffish? Oysters? Conchs? Palolol worms? Geoducks? For centuries and across all of the cultures with any access to the seas, we've been eating and enjoying finfish and shellfish that it's hard to imagine would meet anyone's conception of attractiveness - except, of course, for Dr. Pauly.

But one has to give credit where credit is due, and coming up with something as entertaining as an "ugly fish" index to prove a questionable theory, even if it sounds about as unscientific as a prominent scientist can make it sound, should be recognized as such. It's ideal "arm-chair" science for all of those researchers out there that have such an aversion to actually getting on boats and going offshore. All that you need is an active imagination, a fish market and a calibrated ugly meter. The environmental journalists in attendance at the SEJ conference seemed most appreciative of this grossly unscientific theory.

As far as consistency is concerned, at least Dr. Pauly's "ugly fish" theory is right in line with his controversial "Fishing Down the Food Web" concept, another of his constructs developed to demonstrate the fishing-induced decline in the health of the world's ocean's ecosystems (see <http://blog.nature.org/2011/03/mean-trophic-level-trevor-branch-daniel-pauly-fish-catch-fisheries/>).

As we saw in Miami, hitching fish beauty to overfishing definitely makes a riveting story for those who have little or no understanding of fish, fishing or objective science. Is it going to sell in any market where the readers have anything approaching a meaningful grasp of our commercial fisheries and how they've developed? I doubt it.

Finally, we had Steven Gaines once again flogging the idea that there were nowhere nearly enough Marine Protected Areas (MPAs - where, not so incidentally, the primary thing that anything is protected from is fishing) by comparing the percentage of the total area of the oceans composed of MPAs to the percentage of similarly protected areas on land - ranging from ten to fifteen percent, if I'm not mistaken.

Like Dr. Pauly's ugly fish index and Ms. Lubchenco's catch shares omissions and slurpees simile, this probably makes sense to the uninitiated. To most of the rest of us, not so much.

First off, fish aren't evenly distributed over the ocean bottom. In fact, most species are generally concentrated in areas where their food is concentrated, where the composition and the configuration of the bottom, the existence of currents and other physical factors are optimal for them. Hence, when a knowledgeable fisherman leaves port at the start of a trip, he doesn't just run in a random direction for a random time, set his gear, catch a bunch of fish and then return to port. In fact, he or she is going to go to a particular spot which is determined by the target species, the presence or absence of other species (a horde of spiny dogfish can easily destroy a net full of fish, and the net itself, and turn what should have been a money trip into a broker), the season, the tide, the wind, the weather and a host of other factors, and based on knowledge gained in a lifetime on the water and handed down by generations of fishermen who worked those waters before.

While I've never seen any serious research on the subject, conversations I've had with fishermen and my own observations lead me to believe that 90% of the fish are caught on 10% of the bottom.

Now here's the question of the day. If MPAs - in actuality no fishing zones - are going to be established, where will they go? The logical answer seems to be "where the fish are," so if you turn 5% of our coastal waters into MPAs, you're closing off half of the fishing grounds. Dr. Gaines' Pew Marine Fellowship was "to help implement California's Marine Life Protection Act (MLPA)." Implementation of the MLPA is resulting in the establishment of a series of no fishing zones from one end of California's coastline to the other as well as in a whole lot of misplaced fishermen. The lobbying campaign to pass the MLPA was, according to the Laguna Independent, funded with \$20 million from a handful of foundations, including \$8.2 million from Packard, \$7.4 million from Moore and \$3 million from the Marislaw Foundation (founded by Getty Oil heiress Anne Getty Earhart).

Dr. Gaines is Jane Lubchenco's brother in law.

The pro-MPA argument seems to be that all the fish that are protected from fishing will be reproducing so bountifully that fish will be spilling out of the MPAs to be caught by all of the commercial and recreational fishermen now excluded from their traditional fishing grounds. This is another of those theories that is pretty far from accepted science. Sort of like catch shares being a requirement of sustainable fisheries, fishing down the food web, and they've caught all the attractive fish so now they're catching all the ugly ones.

But who needs accepted science when you've got tens of millions of foundation dollars and the Society of Environmental Journalists in your pocket?

Was I disappointed by the SEJ conference? Definitely not. It lived down to my expectations and then some. It provided a convincing demonstration of how, with the right backing and infrastructure, a handful of researchers can present what is nothing more than an extreme view of what is going on in the oceans and why and how it can be "fixed," and how this can be made to look mainstream. As I'll be discussing on my next installment on the SEJ conference, it also demonstrates how the new journalism - tweets and blogs and such - is being used to further "manage" public perceptions in an effort to continue influencing domestic fishing policies.

Will I be participating next year? Somehow I doubt that I'll be invited back. I also doubt that anyone else will be invited who doesn't share the Pew/Packard/Moore/Walton Foundations' overly pessimistic view of the impacts of fishing on the health of our oceans - and who wasn't a continuing part of their multi-million dollar program to convince anyone who will listen that that's the common view of the scientific establishment.

And why would a society of professional journalists be interested in hearing both sides of any story?

If you are interested in several other examples of how extreme and overly simplistic views can be made to appear mainstream by getting the right people together, I'd strongly suggest that you look at President Obama's effort to set his Administration's "ocean priorities" (at <http://www.fishtruth.net/ObamaPriorities.htm>), and follow to the linked table) as well as an analysis of a report of the Pew Oceans Commission that I did after it was released (<http://www.fishingnj.org/netusa23.htm>). The Pew Oceans Commission - and the people who were on it and the "analyses" that informed it - did have and continue to have a strong influence on our national ocean policies.

Who really "destroyed a decade of law enforcement?"

12/28/11

In the last week of November Bloomberg Businessweek on the MSNBC website posted an article titled **The Gloucester Fish War – How a small town in Massachusetts destroyed a decade of law enforcement**, by Brendan Borrell.

Mr. Borrell's point seemed to be that something approaching a conspiracy by Gloucester fishing interests, local, state and federal politicians, the Gloucester Daily Times and the Inspector General's office in the US Department of Commerce victimized the entire federal fisheries enforcement process in the Northeast. Reminiscent of the horse operas of yesteryear, National Oceanic and Atmospheric Administration enforcement personnel, wearing the white hats à la such stalwarts as John Wayne and Jimmy Stewart, gave their all to fighting the good fight; but rather than rustlers or bandits they were fighting fishermen from a community where cheating was an accepted way of life.

Given the title of his article, it will come as no surprise to anyone that Mr. Borrell painted the hats that the fishermen – and their supporters – wear a pretty unequivocal black.

Did Mr. Borrell get the right hats on the right heads? Having been a fairly close observer of the situation as it unfolded, I would have to answer that he wasn't even close. And putting together the observations of a number of eminently qualified people and organizations who were directly involved in several connected investigations, people with no particular axe to grind, I'd suggest that they would agree with me. My purpose here is to lay out all of the information that seems to have escaped Mr. Borrell's notice and let the folks who read this decide for themselves.

But before getting into that, let's take a look at some of Mr. Borrell's factual content, the kind of stuff that, particularly with today's access to the internet, is so easy to get right.

Georges Bank? The Grand Banks? Newfoundland? Massachusetts? Collapsing stocks? Record recruitment? Haddock? Cod? They're kind of all the same, aren't they?

The story starts out with a "raid" on the Gloucester Seafood Display Auction on December 6, 2006. Wearing bullet proof vests instead of buckskin and armed with Glock semi-automatic pistols instead of six shooters, 16 federal agents descended on the auction with a U-Haul to cart off three years of business records in an attempt to prove wrongdoing on the part of "mustached" (I'll get back to this later) Larry Ciulla, the founder and CEO of the auction.

Mr. Borrell wrote "at the time of the raid (December 7, 2006), cod, haddock, flounder, and other groundfish, which are all caught by dragging a net along the ocean bed, were being harvested so heavily that the stock was in danger of collapsing, as it seems to have in the much larger Georges Bank off Newfoundland."

Considering that Georges Bank is off Cape Cod, and has been since it was deposited there by a withdrawing glacier at the end of the last ice age, I'll have to assume that Mr. Borrell really meant to write "...in the much larger Grand Banks off Newfoundland." Considering that most of the groundfish landed in Gloucester are caught on Georges Bank, he must have been referring to the "cod, haddock, flounder, and other groundfish" there.

Figure 2.12 on the National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS) Northeast Fisheries Center's website - <http://www.nefsc.noaa.gov/sos/spsyn/pg/haddock> - shows that recruitment of Georges Bank haddock was at the highest point ever measured in 2003, and that in 2006 the biomass of haddock on Georges Bank was approaching a corresponding record level. Acadian redfish - another groundfish - were mostly unfished in 2006. Landings were over 100,000 metric tons in the early 1950s but had plummeted to less than 500 mt in 2006. According to trawl surveys their abundance, like haddock, was approaching record levels. Cod and (yellowtail and winter) flounder stocks weren't in as good shape as haddock or redfish, but to write that the entire groundfish stock on Georges Bank was in danger of collapsing is stretching the truth to epic proportions.

Unfortunately, we've become used to such "inaccuracies" in reporting on the condition of our fisheries. Why, after all, should something like accuracy intrude on a good story line or a particular agenda?

According to the author, the intent of this NOAA "raid" was to send the "overfishing doesn't pay" message to the fishermen of Gloucester.

That it was necessary to get this message to Gloucester's fishermen was required because, according to Mr. Borrell, University of Maryland economist Dennis King "estimated that 12 percent to 24 percent of the total trawl catch in the Northeast was illegal."

The Pew Trusts - what are the odds?

This probably won't come as a surprise to my regular readers, but Dennis King's work was funded by the Lenfest Ocean Program, which is administered by the Pew Charitable Trusts.

I wrote a critique of Dr. King's illegal fishing research, which he accomplished with John Sutinen at the University of Rhode Island (it's available at <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Law%20enforcement>). In a footnote, Drs. King and Sutinen wrote "interviews with NOAA enforcement staff and others familiar with this database indicate that in many cases enforcement officers have probable cause to inspect for a violation and, if after inspecting they decide to report a violation, it probably is a violation even though it may not be prosecuted or have a resolution that results in a penalty." Then "based on this criterion, 1,614 of the 1,689 incidents (95.6%) reported during this period probably are actual violations and, for purposes of this analysis, will be treated as actual violations." Applying this "you're guilty because we suspect you're guilty, regardless of whether you're charged or convicted" attitude seems to be a pretty shaky reason to indict an entire fishing community, but that surely didn't interfere with Mr. Borrell's story.

"Enrichment" is a subjective kind of thing

Underlying Mr. Borrell's "Fish War" and his destruction of "a decade of law enforcement," is an investigation of federal fisheries enforcement in the Northeast and nationally by the U.S. Department of Commerce Office of Inspector General (OIG). This investigation, which was called for by Members of Congress, local and state government officials and seafood industry members alike, brought to light significant problems

that were endemic to the way that Administrative Law Judges, NOAA administrators, enforcement agents and attorneys had been persecuting (note that I didn't use "prosecuting") fishermen and people in related businesses who they felt were violators (as did Drs. King and Sutinen above), and benefitting from that persecution in the process.

Mr. Borrell wrote of the investigation "no agents were enriched, and the most significant problems that the Inspector General's report identified were with the regulations themselves." Much of the OIG investigation focused on the NOAA Asset Forfeiture Fund (AFF), which was composed of fines either paid by people/businesses that violated federal fisheries laws or funds that resulted from the sale of assets – mostly fish and other seafood - that were forfeited by those people/businesses. How those funds can be used was specified by Congress in the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA).

But a financial audit isn't

The OIG brought in the international accounting firm KPMG to perform a forensic audit of the AFF. Though the funds available wouldn't cover a full audit, among KPMG's findings were:

- AFF's current balance likely falls within a broader range. Based on complicated definitional, data analysis, and reconciliation efforts, KPMG found that during the period of its forensic review (January 1, 2005, through June 30, 2009), the AFF received approximately \$96 million (including interest on prior balances), while expending about \$49 million through over 82,000 transactions. This analysis suggests that the balance could be much higher than \$8.4 million; however, NOAA must review KPMG's analysis and determine what a more accurate figure may be. NOAA should work with the Department to better define the fund and determine its balance.
- KPMG's findings show that NOAA has administered the AFF in a manner that is neither transparent nor conducive to accountability, thus rendering it susceptible to both error and abuse.
- Regarding purchase cards issued to nearly all OLE special agents and enforcement officers, KPMG tested all purchase card transactions where the monthly total value purchased from any single vendor had a value above \$3,000. KPMG selected 394 for further review, of which 54 percent (totaling approximately \$204,000) did not have required supporting documentation.
- KPMG found that 62 percent of 604 transactions it selected for further analysis (i.e., document review) did not have required supporting documentation, and 27 percent did not have required approvals.
- OLE policy authorizes AFF expenditures for vehicle leasing and rentals, but does not include authorization of AFF expenditures for vehicle purchases. OLE's vehicle inventory as of June 1, 2010, lists 202 vehicles, only two of which are leased. According to OLE, the other 200 were purchased at a cost of about \$4.6 million, predominantly with AFF monies. OLE's 202 vehicles exceed by a substantial margin its staffing of approximately 172 enforcement personnel.
- Between January 2005 and June 2009, OLE and GCEL charged nearly \$580,000 to the AFF for international travel to over 40 destinations. However, only about 17 percent of the cost for this travel was directly related to specific investigations or enforcement proceedings (the only MSFCMA authorized expenditures for these funds), according to NOAA records. The remaining 83 percent of the cost for such travel was for the purpose of training or attending meetings. For example, in 2008, 15 OLE and GCEL employees traveled to Norway to attend the week-long Global Fisheries Enforcement Training Workshop, at a cost of \$109,000.

Mr. Borrell writes that an almost \$100 million unaudited "slush fund" provided by fines levied on fishermen in the government agency charged with enforcing federal fishing regulations and having no effective limits on how the money was spent was not among the most significant problems identified in the Inspector General's report. And he continues "no agents were enriched," in spite of the fact that government agents and attorneys benefitted from foreign travel for professional development, had lax (or no) "bothersome" controls on spending a whole bunch of money, and had what appears to be unlimited access to government vehicles bought with those funds. I've worked as a government bureaucrat and at the time, if I were offered the chance to be freed of purchasing controls, to have a vehicle permanently assigned to me and to be offered foreign travel for training and professional development, I would have certainly considered myself enriched.

And neither is having a workforce that is overqualified (and overpaid) for the work it's performing.

In addition to the Department of Commerce Inspector General's office problems with the Asset Forfeiture Fund, the report also noted that "NOAA needs to reassess its OLE (Office of Law Enforcement) workforce composition (presently 90 percent criminal investigators), to determine if this criminal-enforcement-oriented structure is the most effective for accomplishing its primarily regulatory mission. Based on OLE's data, its caseload from January 1, 2007 through June 30, 2009, was about 98 percent noncriminal.... There are also indications in the record that this workforce composition was driven by considerations of the better pay and benefits that apply to federal criminal investigators, rather than by strict mission requirements."

Perhaps Mr. Borrell doesn't consider that better pay and benefits for a workforce that is almost completely out of balance with the work it is required to do amounts to personal enrichment either.

NOAA enforcement was "dismantled" by one man?

In his zeal to implicate anyone or anything in wrongdoing other than NOAA, Mr. Borrell wrote "(Larry) Ciulla's success in dismantling NOAA's enforcement helped other fishermen." While Mr. Borrell wants his readers to believe that the fisheries enforcement problems were limited to the Gloucester Seafood Display Auction and the fishermen of Gloucester, the Inspector General's report stated "in short, we found sys-

temic, nationwide issues adversely affecting NOAA's ability to effectively carry out its mission of regulating the fishing industry. These issues have contributed significantly to a highly-charged regulatory climate and dysfunctional relationship between NOAA and the fishing industry—particularly in the Northeast Region (the Northeast Region extends from Cape Hatteras in North Carolina to the Gulf of Maine).” He also implies that a demonstration that was held in the parking lot of the NOAA/NMFS administrative headquarters building in Gloucester was a “local” effort focusing on local problems. To the contrary, there were fishermen there and participating from fishing ports extending from Maine to New Jersey.

As the statements that were the results of all of the investigations make abundantly clear, neither Mr. Ciulla, the fishermen of Gloucester, nor other fishermen anywhere else were responsible for anything other than drawing national attention to problems that NOAA enforcement personnel and their higher-ups in the agency brought upon themselves. That's what accounted for the “dismantling,” not Mr. Ciulla's nor any other private citizen's actions.

And that diminished “NOAA's will to regulate?”

Mr. Borrell also wrote “as seems to have been the intention, the called-for investigation successfully diminished NOAA's will to regulate.”

In his own words “...Ciulla no longer has to pay an \$85,000 agreement he made to settle a trio of cases that dated back a decade. The ‘auction was clearly the target of selective enforcement and subject to excessive fines,’ the judge (appointed Special Master and retired federal judge Charles B. Swartwood, III) wrote.” Here a federal enforcement agency and its personnel were caught with their hands in the symbolic cookie jar up to their symbolic elbows and he describes the agency's reaction as a diminished will to regulate? And that this was the intention of the citizens and their elected officials in clamoring for the investigation? And that those carrying out the investigations were somehow manipulated into enabling this bizarre campaign?

How about, much more simply, that people in the seafood industry nationally, but most particularly from Maine to North Carolina, were tired of being pushed around and manipulated by an out-of-control bureaucracy that benefitted from the inflated fines that it's conflicted, inadequately controlled personnel forced on them, went to their elected officials and finally got some high level attention focused on what had become a festering problem?

We're from the government and we're here to destroy your life.

Mr. Borrell wrote of “a precedent-setting case against a scalloper named Larry Yacubian, who was accused of fishing in closed waters. The case was the first to use satellite technology to track the position of fishing boats. Yacubian settled with the agency for \$430,000, a loss that forced him to sell his boat and home. It was a major coup for NOAA and was supposed to mark the beginning of a new, more accountable fishing industry.” He then quoted an attorney in the Justice Department's environmental crimes section “they (NOAA) have gotten some of the most sophisticated cases with some of the highest sentences I have seen in wildlife crime cases.” What he neglected to mention was that the “home” Mr. Yacubian was forced to sell – to pay for his fine and his legal fees - was the Quansett Farm in Westport, Massachusetts. This farm had been in his wife's family since her ancestor Job Almy built it in 1742. Mr. Yacubian, a lifelong fisherman, also lost his fishing permits. He and his family relocated to Florida.

While he did note that “scallop fisherman Yacubian is slated to get back \$400,000 he paid in 2005,” Mr. Borrell also neglected to mention that the Honorable Charles B. Swartwood, III, the Special Master who was appointed to review a number of cases prosecuted by NOAA, determined that “the timing and circumstances of ALJ (U.S. Coastguard Administrative Law Judge) McKenna's involvement in this (Larry Yacubian's persecution/prosecution) case gives credence to the perception that, in general, the Coast Guard Administrative Law Judges are biased in favor of NOAA and in particular, that ALJ McKenna was biased in this case which, in turn, allowed EA (NOAA Enforcement Attorney) Juliano and EA MacDonald to extract an excessive settlement from Mr. Yacubian.” He recommended that “Mr. Yacubian be reimbursed the total sum of \$330,000 as follows: \$210,000, which was coerced in return for permission to sell the Independence (Mr. Yacubian's scallop vessel), with its permit and \$110,000 representing the excessive monetary penalty paid.” Of course that didn't get the Quansett Farm back, but apparently in Mr. Borrell's view, mentioning such “minor” points isn't as important as keeping his good guy/bad guy fantasy intact.

The Special Master reviewed 31 cases that had been handled by NOAA Enforcement Agent Andrew Cohen, and ordered that \$650,000 be returned to 11 fishermen.

Perhaps NOAA enforcement personnel didn't all deserve Brendan Borrell's white hats.

Below are some quotes concerning what it seems impossible to think of as anything less than endemic and wide-spread problems in NOAA enforcement:

- *“Of the 27 complaints we examined, we confirmed 9—including cases involving false information in an affidavit for an inspection warrant; entry into a facility for other than authorized purposes; excessive fines, including for first-time violators; and comparatively steep assessed penalties in the Northeast Region which leverage settlement while deterring respondents from taking their cases to hearing.”* (USDOC, Report No. OIG-19887-2, 09/2010).

- “The AFF (Asset Forfeiture Fund) has not functioned as a coherent program, despite being a substantial source of agency operational funding—outside and supplemental to annual appropriations—drawn solely from the proceeds of NOAA enforcement actions against industry parties. Rather, as KPMG found, the AFF has operated through poorly defined, disjointed, and inconsistent processes that lack effective internal controls, and for which no single NOAA office appears to be in charge or accountable because it is so decentralized.” Memo from USDOC Inspector General Todd Zinser to NOAA Chief Jane Lubchenco, 07/01/2010).
- “As a result of my investigation, I have found conduct... which amounted to overzealous, abusive or arbitrary conduct by NOAA personnel which unfairly impacted the outcome of several of the reviewed cases. Some of the inappropriate conduct which I have uncovered during my investigation was not known to the OIG when it concluded its investigation.” (Report And Recommendation Of The Special Master Concerning NOAA Enforcement Action Of Certain Designated Cases, 04/2011).
- “As the top cop at NOAA and a longtime investigator himself, Dale Jones must be acutely aware that shredding documents during a federal investigation raises serious questions about his commitment to a full and fair look at all the facts,” (House Oceans and Wildlife Subcommittee Chairwoman) Madeleine Bordallo (D-Guam) said at a subcommittee hearing on the issue yesterday.” NY Times, 03/04/2010).
- (Congressman Walter B.) “Jones (R-NC) Praises Dismissal Of Fisheries' Top Cop-Says Much More Needs To Be Done.” (headline of press release from Congressman Jones, 04/09/2010).
- “(NOAA Enforcement Agent Andrew) Cohen's June 19, 2009, press release (that was provided to the Boston Globe four hours before anyone at the auction was notified) stated that ‘NOAA is now notifying the auction it must comply with the 2003 agreement's terms and serve the 10-day sanction, effectively shutting down the auction to federally managed fish for 10 days.’ The auction at the time had filed a federal court appeal of NOAA's sanction decision, which precluded Cohen's enforcement of the appealed order — and brought the matter to (U.S. District Court Judge Douglas) Woodlock's courtroom. Woodlock chastised Cohen and NOAA for the tactics. NOAA never followed with news releases that reported the judge's repudiation of Cohen's efforts, or the settlement on terms favorable to the auction.” (R. Gaines, The Gloucester Daily Times, 09/21/2010)
- “U.S. Commerce Secretary Gary Locke announced today that \$649,527 in fisheries enforcement penalties will be returned to 11 individuals or businesses after an independent review of their cases concluded the NOAA enforcement program had in some instances “overstepped the bounds of propriety and fairness.” In his decision memo issued today, Secretary Locke acted on 30 cases reviewed by the Special Master, Judge Charles Swartwood III, accepting all of his recommendations that the law allows and taking additional actions in several cases. Secretary Locke appointed Judge Swartwood to conduct the independent review of cases identified by the Department of Commerce's Inspector General as problematic. The individuals and businesses will receive their remittances within 30 days of receipt of payment information.” (From a Department of Commerce Press release on May 17, 2011)
- “Federal law enforcement officials buy a \$300,000 luxury boat and can't document that it's used for work.” From the website of Iowa Senator Chuck Grassley)

The Secretary of Commerce, a retired federal judge, a sitting federal judge, the head of the Department of Commerce's internal watchdog agency, an official report of an investigation by that agency, participants in a Congressional hearing and Members of Congress from both sides of the aisle representing constituencies far from Gloucester are on the record with thousands of words which can't be looked at as anything less than a scathing indictment of NOAA enforcement's operations and attitudes going back for years, and Mr. Borrell actually tries to convince his readers that this was all part and parcel of an effort to undermine NOAA's enforcement capabilities in Gloucester.

But then again... and here we hear from some more Pew folks.

In his effort to minimize the significance of the results of an OIG investigation, an audit by an international accounting firm, a review of the most obviously questionable NOAA Enforcement prosecutions and a Congressional hearing or two, Mr. Borrell wrote that the Executive Director of the Marine Fish Conservation Network pointed out “that the number of complaints from fishermen that had any merit was “comparatively small.” The Marine Fish Conservation Network has received almost \$5 million from the Pew Trusts. He continued “King, the (Pew/Lenfest funded) economist, says the findings of the Inspector General were misconstrued and blown out of proportion, and he says the industry needs more, not less, enforcement. ‘This was political theater driven by a handful of fishermen.’”

I have to emphasize that it wasn't a fisherman, or a handful of fishermen, who carried out the file-shredding extravaganza in the midst of an investigation by the Department of Commerce Inspector General's office, it was Dale Jones, the head of NOAA enforcement. That's not political theater, it's *Cinéma vérité* at its most real, and the people doing the driving weren't a handful of fishermen, they were the people in charge at NOAA.

To really separate the good guys from the bad guys....

Mr. Borrell appears to go to significant lengths to draw as stark a contrast as possible between members of the fishing industry and the NOAA enforcement machine. He starts out with “mustached” Larry Ciulla, who he also describes as “the former bad boy,” a “thrill seeker” who bought a Corvette, took flying lessons, risked life and limb in the greasy pole competition each June at the St. Peter's Fiesta in Gloucester and “married the former Ms. Massachusetts Petite America.”

He also refers to the auction's “curly-haired bookkeeper,” who when questioned by the bulletproof vest wearing, Glock brandishing NOAA enforcement agents about the location of records, responded “I'm not saying anything.” He later mentions that she “recently answered the

phone at the Exchange” (that’s the Cape Cod Seafood Exchange, which took over the Gloucester auction site after it filed for bankruptcy) and said “she does not have current contact information for Ciulla.”

Levels of complexity and more Pew Trusts \$millions

And then he writes “if politicians and the local media painted Ciulla as the face of an honest businessman battered by overzealous regulators, the situation behind the scenes was more complex.” *The complexity is a suit filed by Eric Hesse and another fisherman against Ciulla in federal court, demanding \$1 million for breach of contract and deceptive business practices over six years.*” Eric Hesse is the Chairman of the Board of the Cape Cod Commercial Hook Fishermen’s Association (CCCHFA). The CCCHFA has received over one and a half million dollars from the Pew Trusts. Then, “on Oct. 4, Hesse’s lawyer—a partner in the firm that once represented Ciulla—brought a class action against the auction, adding two named defendants and alleging the auction violated the Racketeer Influenced and Corrupt Organizations (RICO) Act.” “More complex” might be a world-class understatement.

Fancy cars, fast living, beautiful women, curly hair, mustaches and a lawsuit based on the violation of the Racketeer Influenced and Corrupt Organizations Act; what kind of Hollywood inspired connections come to mind?

Contrast this with Mr. Borrell’s treatment of the NOAA enforcement people as victims of their war with what he wants us to think of as the illegal fishermen of Gloucester and their supporters. Compare his treatment of Larry Ciulla to that of Enforcement Agent Andy Cohen. While Mr. Borrell had Mr. Ciulla, the “former bad boy” driving flashy cars, flying airplanes, marrying beauty/talent contest winners and recklessly risking life and limb, Agent Cohen was fishing from a kayak or spending time in Haiti “with an aid organization.” There’s not much of a question of who Mr. Borrell wants us to think should be wearing the white hats, is there?

Last but certainly not least

In the program of 2nd International Marine Conservation Congress held in Victoria, BC, Canada in May of 2011, Brendan Borrell is listed as a grantee of the Communication Partnership for Science and the Sea (COMPASS) Journalist Fellowship Program (along with fellow Society of Environmental Journalists members Juliet Eilperin and Jeff Burnside – see my In the Belly of the Big Green Beast at [http://www.fishnet-usa.com/In the belly of the beast.pdf](http://www.fishnet-usa.com/In%20the%20belly%20of%20the%20beast.pdf)). COMPASS has received over \$2.6 million from SeaWeb, which was created by the Pew Trusts and has received over \$17 million from the Pew Trusts and the Packard Foundation.

So....

From the title of his article onward, at the most superficial level it’s impossible to come away from Mr. Borrell’s over 3,000 words without the feeling that NOAA enforcement, whose agents and attorneys were the only things protecting the Northeast groundfish fishery, was victimized by the Gloucester fishing industry and its allies. Only by being familiar with an admittedly complicated situation or by doing significant background research does it become evident how much he downplayed the degree to which members of Gloucester’s and much of the rest of U.S.’s fishing industry had been “victimized” by NOAA enforcement, and he totally missed the connections of so many of his sources to the Pew Trusts, a multi-billion dollar foundation that has spent hundreds of millions of dollars in furthering what many people consider an anti-fishing agenda. This, the rest of the story, should shed some much needed light on what it’s difficult to see as anything less than a major blot on the history of fisheries enforcement – and fisheries management - in the U.S. (For the broader implications of the NOAA fisheries enforcement scandal on federal fisheries management, see When it comes to the NOAA Law Enforcement scandal, “we’re sorry” doesn’t cut it at <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#Sorry%20not%20enough>.)

Malfeasance at NOAA – The Never ending Story

02/28/12

Thanks to the **Inspector General** in the **U.S. Department of Commerce** we have yet another chapter in what is on the verge of becoming a full length novel which might well be titled NOAA Enforcement – who’s policing the police? This time the Inspector General regaled us with the adventures of NOAA Enforcement Agents on the bounding main, or at least on the waters adjacent to Seattle, Washington. While no shipwrecks were involved, there were boardings and breakdowns. No rum was swilled – or at least that wasn’t reported, but beer certainly was. And the only damsel in distress was the wife of the captain who was stranded in the shipping lanes due to the aforementioned breakdown.

Not much of a chapter, you might say. But consider this. The vessel in question has been described as a “luxury yacht,” a thirty five foot Boston Whaler with all of the “high life on the water” accoutrements and a price tag on the other side of \$300,000. And making it even compelling, this NOAA Navy vessel, let’s call it the “Party Hearty,” was paid for by the NOAA Asset Forfeiture Fund – a bank account accumulated by NOAA Enforcement Agents from fines paid by fishermen for alleged* infractions.

Dealing as it does with NOAA, of course there's a bit more to the story. The original purchase request was for a vessel costing only half as much, but evidently the procurement system in place was manipulated to such an extent that the much plusher, larger, faster "Party Hearty" was purchased to allow the stalwart NOAA agents to carry out their hazardous duties with much more speed, style and comfort.

What exactly were those duties? Drug interdiction? Apprehending terrorists? Rescuing heroines from pirates? Not hardly. The boat was bought to allow our intrepid agents to sneak up on whale watching boats in Puget Sound. You know, those boats filled with little kids on class trips, tourists out to appreciate a day of nature and fans of Willy (of Free Willy fame). The agents felt that not only was it necessary to carry out this hazardous undertaking under cover, but under cover in a boat that probably 99% of us regular folks – and probably 100% of the NOAA agents who work "by the book" – could never afford.

Now there's something that should make every NOAA bureaucrat swell with pride to something approaching the bursting point.

And, of course, the "Party Hearty" allowed the same speed, style and comfort to the agents, their friends, families and acquaintances when they were joyriding on the local waters, cruising to waterfront watering holes or just chilling with a barbecue at the marina. Who'd want to hang out with their pals in a measly \$150,000 boat when you can get so much more for double the money? Especially if it wasn't double your money but money that you and your fellow agents got for fining fishermen.

While it makes for ponderous reading because of all of the names that have been blanked out – not, I presume, to protect the innocent - I strongly recommend that anyone with an interest in government gone wildly awry read the Inspector General's report (available at http://www.scottbrown.senate.gov/public/index.cfm/files/serve?File_id=ece7f72b-bd25-4340-8fcb-49ab1714effa). You'll find that the excesses weren't limited to the use, or perhaps misuse is a better fit, of the "Party Hearty," but extended to a marked NOAA Enforcement vessel being used to provide some on-the-water entertainment to the parents of an NOAA agent. You'll also get an insider's appreciation for the administrative shenanigans that apparently becoming the rule rather than the exception at NOAA.

How did this all come to light? Not, as it would be comforting to believe, through the rigorous vetting of third of a million dollar expenditures by a federal agency. Rather, a "whistle blower" reported the sordid affair.

One might argue that the purchase and operation of this vessel, which went back to 2008, predated the Inspector General's investigation of the Asset Forfeiture Fund and other operations by NOAA Enforcement, the disclosure of myriad "irregularities" by that agency and the bureaucrats who were supposed to be overseeing its operations, the unprecedented public apology by Secretary of Commerce Gary Locke to some members of the fishing industry who were victimized by what I can only describe as government thugs, and a long list of recommendations by the Inspector General on how to put things back to right is kind of irrelevant at this point. Unfortunately, thanks to some kind of amazing inaction at NOAA, it's all about as relevant today as it was when it was all happening.

Only after pressure from a handful of coastal Legislators did Ms. Lubchenco, Under Secretary of Commerce and head of NOAA, request that the Inspector General of Commerce commence an investigation of NOAA's **Office of Law Enforcement** and **Office of General Counsel for Enforcement and Litigation**. This investigation resulted in the **Review of NOAA Fisheries Enforcement Programs and Operations**, which was reported to Ms. Lubchenco in a memorandum dated January 21, 2010.

Over two years later, on January 31, 2012, the Inspector General transmitted to Under Secretary Lubchenco the **Follow-up Review of NOAA Fisheries Enforcement Programs and Operations**.

From this review:

"This is our final report detailing the results of our follow-up review of NOAA fisheries enforcement programs and operations. In response to our January 21, 2010, report, Review of NOAA Fisheries Enforcement Programs and Operations, NOAA identified activities planned or already taken to improve its Office of Law Enforcement within the National Marine Fisheries Service (NMFS), along with NOAA's Office of General Counsel, Enforcement Section. In NOAA's response, public announcements, and press releases, we identified 47 action items. We conducted a follow-up review to (1) provide an interim assessment of NOAA's corrective actions, (2) determine the effectiveness of actions already taken, and (3) identify constructive measures NOAA should consider going forward. We targeted the scope of our review to NOAA's submitted action plan. This report presents the findings of our review.... We found that NOAA has taken some positive steps in addressing challenges identified in our reviews. As identified in appendix C, during the past two years NOAA has com-

pleted or implemented a majority of the action items. NOAA has decided not to implement 2 action items, leaving 13 of the action items to be completed.”

The first “official” document Based on the results of investigations into NOAA Enforcement, Todd Zinser, the USDOC Inspector General made recommendations to Ms. Lubchenco, Under Secretary of Commerce and the head of NOAA, in the Review of NOAA Fisheries Enforcement Asset Forfeiture Fund, on July 1, 2010.

Their master’s voice?

04/30/12

Measured by any meaningful criteria the Keep Fishermen Fishing rally held on the steps of the Capitol on March 21 was a stunning success. It was attended by thousands of fishermen from as far away as Alaska, twenty one Senators and Members of the House of Representatives, and at least a half a dozen other VIPs made room in their busy schedules to come out and address the people who attended. From the most conservative of the conservatives to the most liberal of the liberals, these politically divergent speakers had one message; fix the Magnuson Act and bring back the balance between conservation and harvest.

For the second time at the national level recreational and commercial fishermen - no matter what fisheries they participated in, no matter what their disagreements on allocation or lesser issues were, and no matter where they were from – were standing together and demanding a return to the original intent of the Magnuson Act; that independent fishermen regain the significant role they once played in Magnuson management which has been pre-empted by environmental extremists, the bureaucrats who seem to be at their beck and call, and their pet “fishermen.”

But, and this will come as no surprise to anyone with a knowledge of the hundreds of millions of dollars that a handful of charitable foundations have been shoveling into the coffers of what can only be described as anti-fishing ENGOs (for an idea of their contributions, visit **The Big Green Money Machine** at <http://www.fishtruth.net>), there were isolated voices raised both pre- and post-rally distorting the purpose of the rally and the single unifying message of Keep Fishermen Fishing. There was also a paucity of coverage in the main stream media, which might be understandable considering there were no crises involved (other than the manufactured world crisis in fishing), no angry confrontations and no civil or uncivil disobedience. Just a bunch of hard working people who invested their own time and money into trekking to Washington to voice their dissatisfaction with job-killing federal fisheries policies and their elected officials who have taken their dissatisfaction seriously and intend to do something about it.

Who were these people who objected to the rally?

Seafood.com

Let’s start out with John Sackton, editor and publisher at Seafood.com. In a video posted on March 19 on his website titled **Recreational Fishing Alliance not a suitable partner for fisheries reform** he states “*recreational fishermen are not really a reliable ally when we think about sustainable fisheries or about reforming commercial fisheries laws. Too often the message of the Recreational Fishing Alliance is simply no regulation at all for recreational fishermen.*” In this clumsy attempt at marginalizing the Recreational Fishing Alliance, it’s almost impossible to conclude that Mr. Sackton isn’t also attempting to marginalize all of the rally’s organizers and all of its participants.

In the first place, his “*commercial fisheries laws*” don’t need reforming because in the U.S. we don’t have commercial fisheries laws. We have The Magnuson-Stevens Fisheries Conservation and Management Act (for convenience The Magnuson Act), which applies to everyone who fishes in federal waters, and the probability of getting it changed in any way favorable to domestic fishermen or the businesses that depend on them without the support of recreational fishermen is remote at best.

As far as his alleged message of the Recreational Fishing Alliance, “*no regulation at all for recreational fishermen,*” I’ve followed the RFA for many years, have written about the RFA in not too complimentary terms for much of that time and for the last several years have gotten to know the people there fairly well. I can state unequivocally that nothing that I’ve heard or read from the RFA and the people who run it would make me leap to such a wild-eyed conclusion.

Mr. Sackton followed this up on March 21 with a column which was as about as far removed from factual reporting as anything from a commercial fishing/seafood industry source that I’ve ever read. He started out with a discussion of Pacific halibut management. Pacific halibut, because they are managed internationally, are exempt from Magnuson rebuilding requirements, but the fact dramatic challenges sure makes it a good example for anyone

Then he states the obvious “*fishery regulations*”
lutely nothing wrong with that statement,



are too important to be left to politics.” While there’s absomen all too often find themselves in untenable situations be-

cause of the success of the anti-fishing ENGOs in radically distorting the original intent of The Magnuson Act. And they have done that with the political (and public relations power) that their multi-billion dollar foundation backers allow them.

Finally, he focuses on a supposed estrangement of East coast fishermen, who he would have his readers believe were in charge of the commercial fishing part of the rally, and seafood processors. According to Mr. Sackton, “because over 80% of most US commercially sold seafood products are imported, there is often a disconnect along most of the East Coast between the major seafood sellers and local production. The exception are those companies that specialize in local fresh distribution to supermarkets, like North Coast. But on the Gulf, the West Coast and Alaska, a much higher proportion of sales comes from US harvested fish. Yet this is not where we have seen the main push for these rallies and the reform of Magnuson. Non-East Coast US seafood companies like Trident, Icicle, Pacific Seafood, Bornstein and others have a huge stake in successful US harvesting. Yet their issues - access to resources, fair treatment for processing investment, the ability to do their sales and marketing free of interference, are not part of the push to reform Magnuson.”

Rod Moore, Executive Director of the West Coast Seafood Processor’s Association, took him to task for this (reproduced courtesy of Saving Seafood - see <http://tinyurl.com/7cqrqog>). The West Coast Seafood Processors Association was one of the sponsors of the rally and Mr. Moore served on the rally steering committee.

For the second non-surprise of the day, John Sackton has worked for the Environmental Defense Fund – though he responded to an inquiry that he hadn’t done so for two years. The Environmental Defense Fund is a strong ENGO supporter of catch shares, as is Mr. Sackton, and has received millions of foundation dollars to “revamp” U.S. fisheries policies.

Environmental Defense Fund

Then we have The Environmental Defense Fund itself. In a blog (EDF *Statement in Response to Today's "Keep Fishermen Fishing" Rally*), Associate VP John Minimakis wrote in his condemnation of the rally “the focus should not be on gutting the law.” Of course the focus of the rally wasn’t on gutting the law, but why should that constrain what Mr. Minimakis was willing to imply?

He continued “we need to use the flexibility in the law and innovative management approaches to address the challenges we face. For example, NOAA is using this flexibility to address the looming crisis with Gulf of Maine cod, using the law’s emergency provisions to allow higher levels of fishing while open scientific questions are investigated further.” What do you think the probability of NOAA using “existing flexibility” in Magnuson would be were it not for a rally at which a bunch of Senators, Congresswomen and Congressmen (with a large proportion from New England) were supporting the amendment of the Magnuson Act to make that flexibility dependent on the law rather than on the whims of whoever is in charge at NOAA?

He then wrote “we can’t go back to overfishing....” No one associated with Keep Fishermen Fishing, none of the legislators or other folks who spoke at the rally, and no responsible fisherman did or would suggest that we should, but the implication is surely there, isn’t it?

Finally, “while many speakers at today’s rally pushed various bills that would impose top-down mandates from Washington, we believe fishery management is best decided at the council level where fishermen can directly influence how the resource they depend on is managed.” Right on, Mr. Minimakis. But the codfish “solution” that you were so intent on praising above isn’t going to be coming from the New England Council and it isn’t going to come from the affected fishermen. It’s going to come from NOAA in the form of an approved Emergency Action for year one and it’s going to come from Congress – if it comes – in year two and subsequently. Not much “top-down” at all in that, is there?

The Marine Fish Conservation Network

And when it comes to ENGOs, I can’t leave out the Marine Fish Conservation Network. The MFCN goes to heroic lengths to present itself as a group of fishing and associated organizations that are banded together to save the U.S. fisheries from the uncaring and short-sighted fishermen who don’t really know what’s best for the fish and, by implication, for themselves – or at least for some of them. They are part of a grass roots organization of the greenest sort, they would have you believe.

While their roots are surely green, in truth they are the green of the Big Green Money Machine (linked above). In fact, if you follow the “Marine Fish Con Network” link on the “Connections” page, you will find that the Network has taken in almost five million foundation dollars. I suspect that doesn’t classify them as a grass roots organization in anybody’s book but their own. (For more insight into the Network, see a column I wrote for National Fisherman in 2007 at <http://www.fishnetusa.com/All%20Stolpe%20Columns.htm#Here%20Again>.)

In an opinion piece dated march 20 and titled somewhat cryptically *Fishing against the fringe*, Network Executive Director Matt Tinning starts out on the right track, writing “fishermen are conservationists. They cherish the resource that defines their lifestyle, and they are willing to do the hard work it takes to sustain it. Many of the most significant marine conservation advances are driven by commercial fishermen concerned by what they see on the water, and by recreational anglers whose love of the ocean fuels their sporting passion. Their interest in securing healthy oceans and productive fisheries isn’t abstract or merely intellectual. For fishermen, it’s personal.” Mr. Tinning couldn’t be any more on target than that.

However, he proceeds to crash and burn in the subsequent several hundred word rant. He begins by faulting the Recreational Fishing Alliance with the words “*in contrast with myriad other recreational fishing groups that have been built from the ground up through the shared commitment of individual anglers and small businesses, RFA was established by a big dollar investment from Viking Yachts.*” Let me remind you here that these are the words of the Executive Director of an organization that has gotten well upwards of four million dollars from a small handful of huge foundations.

And he goes on, and on, and on... in a similar vein. But he gets it right again in writing “*RFA will be joined at this week’s rally by a number of well-meaning and hard-working commercial fishermen and recreational anglers. Some will come to voice legitimate grievances, others to convey directly to lawmakers the economic challenges they face. Rebuilding and sustainably managing federal fisheries—while weighing individuals’ immediate economic needs, providing for access, and securing the long-term prosperity of coastal communities—involves inherently contentious policy choices.*” Again, not too bad, but then “*certain Members and Senators who take their representation of fishermen seriously will be tempted to grace the RFA with their presence and weigh in on these complex issues with an easy applause line.*” He was right about certain Members and Senators. They weren’t only tempted to do so, they actually did grace the RFA and a whole lot of other fishermen – far more than the 300 that Mr. Tinning estimated to be there post-rally – with their presence, with their words and with their commitments to fix the mess that the Network and its foundation-funded partner ENGOs have made of federal fisheries management and of independent fishermen’s ability to effectively participate in it.

But Mr. Tinning didn’t stop there. One of the ground rules of the Keep Fishermen Fishing rally was that it was open to any fishermen, anyone in fishing dependent businesses, and in fact anyone who wanted to show their support for fishermen and fishing in general.

In a press release for the Marine Fish Conservation Network dated March 26 Mr. Tinning wrote “*on Friday, a photo came to light confirming that Omega Protein was a central participant in the March 21 rally.*” Omega Protein is a large corporation that catches and processes menhaden, a small forage fish common on the East coast and in the Gulf of Mexico, into fish meal and fish oil (for those of you who are interested in cardio-vascular and neurological health, oil from menhaden is one of the few sources of the most desirable form of omega 3s). He continued ranting “*for our nation’s anglers to have to learn that a group who falsely claims to represent them (the Recreational Fishing Alliance) is teaming up with ‘public enemy number one’ is a disgrace.*” Now I might have missed the point of his earlier screed, but he did devote considerable words to what he perceived as the RFA’s propensity to produce “bile.” Considering that the Omega Protein fishermen who attended the rally have been employed in a legal fishery and have been fishing in compliance with very rigorous regulations for at least two generations, I can’t help thinking that Mr. Tinning is far ahead of the RFA in raw biliousness.

I couldn’t do any better than to reproduce the RFA’s Managing Director Jim Hutchinson’s words responding to the Network’s other charges:

In response to recent criticisms leveled against the Recreational Fishing Alliance (RFA) by the Marine Fish Conservation Network’s executive director Matt Tinning on behalf of his members, RFA will offer no such apologies for its participation in the Keep Fishermen Fishing rally in Washington DC on March 21, 2012. Mr. Tinning’s outlandish claim that the Recreational Fishing Alliance “teamed up” with Omega Protein to convene the Keep Fishermen Fishing simply because representatives of Omega Protein attended the rally is completely absurd. Given that the People for the Ethical Treatment of Animals (PETA) and Marine Fish Conservation Network’s own executive director, and their own individual members, also attended the rally, by Mr. Tinning’s logic it must therefore be determined that both PETA and the Marine Fish Conservation Network also officially “teamed up” with RFA and the Keep Fishermen Fishing rally. The Keep Fishermen Fishing rally was a public event held on U.S. Capitol grounds, meaning that neither RFA nor official rally organizers were able to physically remove from the grounds any of those who would peaceably assemble to provide a counter-point to our reform Magnuson message. RFA supports efforts to reform the federal fisheries law, we do not however support any efforts to trample upon any American’s First Amendment rights, specifically “the freedom of speech, or of the press; or the right of the people peaceably to assemble.” RFA will never apologize for defending our members’ right to fish on healthy fish stocks, nor will we ever apologize for upholding the values of the First Amendment. Asking us to do either is un-American and a clear violation of our mission.

(Note – for a picture of Mr. Tinning’s “public enemies” at the rally that illustrates both the “central role” they played and the open derision that other participating fishermen greeted them with, see the pictures accompanying Julia Edwards’ article on the National Journal website at <http://www.nationaljournal.com/pictures-video/fishermen-rally-on-capitol-hill-20120321>.)

Natural Resources Defense Council

In his blog, David Newman, NRDC’s Oceans Program Attorney in New York, wrote that the Magnuson-Stevens Fisheries Conservation and Management Act “*...the law that’s helped to bring America’s marine fish populations back from the brink of collapse.... is under attack right now by fishing lobbying groups that have organized a rally in Washington, D.C. today. Preserving the Magnuson-Stevens Act (MSA) is the most effective way to keep fishermen fishing by ensuring that enough fish remain in the sea to spawn the next generation. Our work toward sustainable fisheries is not finished and challenges remain. But Magnuson-Stevens is proven to save fish species in danger, while keeping fishermen fishing at the same time, so our children can do the same. We need to keep what’s working in place and roll up our sleeves to improve what we have, rather than tearing it all down.*”

In spite of Mr. Newman's assertion, the goal of the Keep Fishermen Fishing rally wasn't to do away with the Magnuson Act, and in fact wasn't to do away with any major parts of it – which I assume he meant in writing “tearing it all down.” It wasn't aimed at tearing down anything – other than, perhaps, a federal fisheries management bureaucracy that has become far too cozy with ENGOs like EDF, far too concerned with the welfare of fish and far too estranged from independent fishermen and what it takes to keep them working and to keep their businesses solvent.

Needless to say, the NRDC is well into the million dollars plus club of Pew and other megafoundation recipients.

Pacific Coast Federation of Fishermen's Associations

The PCFFA stated in a press release on March 21 “*the root of the problem confronting the nation's fishing industry is not the nation's primary fishery statute – the Magnuson-Stevens Fishery Conservation & Management Act (MSA), which requires 'science-based' fishery management. The problem, rather, is flawed policies that fail to adequately fund critical fishery science, along with schemes to privatize public fish resources, and promote dangerous forms of fish farming.*” PCFFA President David Bitts was quoted in the release that the problem “*is not with a law that requires management to be science-based, but with policies that underfund or fail to fund the necessary science, along with policies that take money from scientific needs and apply it to political desires.*”

Perhaps the PCFFA represents mostly small boat salmon fishermen, and if it does, then it's possible that from their perspective the only problems with fisheries management are at the policy rather than the legislative level. However, and though inadequately funded – and interpreted – science is a problem, I'd venture to say that their narrow view is not shared by most fishermen.

The original intent of the Magnuson Act, to allow independent fishermen significant input into the federal fisheries management process, has been distorted by megafoundation-funded lobbying in recent years. The assumption today is that the science underlying management decisions is adequate and forces complete reliance on that science, allowing for no deviations regardless of the human impacts of an ever-increasing degree of easily demonstrated inadequacy (as discussed in the final section here on NOAA/NMFS, assessment science in the New England groundfish fishery – historically one of our most important fisheries and inarguably the recipient of more NOAA/NMFS attention than any other in recent years – has the Gulf of Maine cod stock going from good shape to wretched in three years, and the only thing that changed was how the assessment was done). Whether the science underlying a fishery management plan is good, bad or totally irrelevant, as long as it is judged “the best available,” it will be the sole determinant of what regulations are put in place and of what damage is inflicted on the fishermen and fishing dependent businesses in the name of “conservation.”

This is something that can only be changed by amending the Act.

The PCFFA, and the associated Institute for Fisheries Resources, has received well over a million dollars from the Packard Foundation.

The main stream media

There was an almost total lack of interest in the Keep Fishermen Fishing rally by the mainstream media. To set the stage, here we had a whole bunch of fishermen and a whole bunch of elected officials together, all on the same page, all concerned primarily about jobs and the economy (and their place in it), all being civil and with common sense suggestions for change. The speakers ranged from the most conservative of the conservatives to the most liberal of the liberals, and they were sharing the same platform and supporting the same legislative reforms.

What are the chances of that in Washington, DC in 2012? Yet it happened on the Capitol steps on March 21, but where were the reporters? Where were the camera crews?

Let's take the Washington Post as an example. It would take a Post reporter and photographer perhaps 15 minutes to make the trek to the Capitol. They wouldn't have to pack a lunch or a toothbrush, make reservations or anything much more complicated than going out the front door and walking towards the big golden dome well under 3 miles to the southeast.

Did anyone bother? If they did, nothing they wrote and no pictures they took turned up anywhere that I could find.

But like many stories, this one is kind of meaningless without context, and the unfortunate context of this one is that the people at the Post appear to be interested in fisheries issues only if they are a reflection of what the foundation folks think are important, in fisheries perspectives only if they are held by the foundation folks and only in fisheries experts only if they have financial connections to these few foundations. There sure weren't any foundation folks participating at the Keep Fishermen Fishing rally.

Since the rally the Post has carried three fisheries articles. In *Shark kills diver off southwest Australia* on March 31. Reporter Juliet Eilperin quoted 3 shark “experts:” Sonja Fordham, President of Shark Advocates International (a “project” of The Ocean Foundation which has received over a million dollars in funding from Pew and Packard); Matt Rand, who directs the Pew Environment Group's global shark conservation program; and Rebecca Regnery, deputy director of wildlife for Humane Society International which partners with the Pew Environment Group on various issues. The article had little to do with the circumstances of the tragic death of the diver, Peter Kurmann, but focused on a

recent international agreement to protect oceanic white tip sharks in the Western and Central Pacific. (Confusingly, Ms. Eilperin quoted Pew's Rand as saying "of course it's tragic every time there's an accident with a shark. It is very rare" just three hundred words after her lead sentence "a diver was killed by a 13-foot shark Saturday off a beach in southwestern Australia, in the region's fourth shark-related fatality since September.")

In *Little fish are most valuable when left in the sea, researchers say* (April 1), Ms. Eilperin reports on an analysis by The Lenfest Forage Fish Task Force. Pew administers the Lenfest Ocean Program. In it she quotes Edward Houde, Ellen Pikitch and Dee Boersma. Pikitch and Boersma are both Pew Marine Conservation Fellows. Pikitch is the Executive Director of the Pew/Lenfest funded Institute for Ocean Conservation Science at Stonybrook University.

And in *Some question whether sustainable seafood delivers on its promise* Ms. Eilperin quotes Carl Safina (founder of Blue Ocean Institute and Pew Scholar), Daniel Pauly (one of the authors of the Lenfest/Pew sponsored report on "little fish" referenced above and recipient of multiple millions of Pew dollars through his fiefdom at the University of British Columbia), Rainer Froese, another Pew Scholar, and Michael Sutton, Vice President of the lavishly Packard funded Monterey Bay Aquarium who had previously worked for World Wildlife Fund, recipient of other multiple millions of dollars from the Pew, Packard and Walton foundations. She also included several quotes by a Florida fisherman who operates a small seafood business.

In these three articles, all of which dealt with controversial (in the fisheries science world) topics, Ms. Eilperin consulted with and quoted nine experts who had direct and significant ties to the Pew Trusts, and one who didn't.

Ms. Eilperin's focus on (mainly) Pew- and other megafoundation funded researchers is quite a bit more profound than even her coverage of sharks, forage fish and "sustainable" seafood indicate. As I wrote in *In the belly of the big green beast* while detailing my singular experience on a Society of Environmental Journalists panel that she chaired (<http://tinyurl.com/7ovs35o>), "and then there is Ms. Eilperin herself, who while not in the Gaines/Pauly/Lubchenco/Baron tier of 'connectedness' to the Pew/Packard/Moore/Walton multi-million dollar gravy train, has managed a few dribs and drabs herself. She writes in the acknowledgements section of her recently published book on sharks 'more than any other single group, the Pew Marine Fellows have helped educate me about the ocean.... I would like to single out (among others) Jane Lubchenco, Daniel Pauly... Nancy Baron deserves the credit for introducing me to these scientists.' Ms. Eilperin also acknowledges the American Littoral Society as one of the two sources of "travel grants" for the book. The American Littoral Society has received almost \$6 million from the Pew Charitable Trusts. Ms. Eilperin has also been a participant in COMPASS media/scientist confabs."

Is this reporting or is it cheerleading?

It strains the bounds of credulity to think that Ms. Eilperin and the Washington Post are the sole beneficiaries of the Pew Trusts and other megafoundation efforts to convince environmental journalists to adopt their equivalent of tunnel vision when it comes to fisheries and oceans issues, and the lack of coverage in the other major newspapers (NY Times, LA Times, Miami Herald, Boston Globe, and on and on...) would seem to bear this out.

(I'll note here that last Saturday at 8:30 pm Ms. Eilperin contacted me for information on who she could talk to in New England ref her article on seafood sustainability. When I saw her message just before 4:00 on Sunday afternoon I provided her the email addresses of two well respected individuals. They both responded to her. She didn't use any of the information they provided in her article.)

And finally, we have NOAA/NMFS

As has been widely discussed in the media, a recent stock assessment has called into question the recovery of Gulf of Maine codfish from prior overfishing. In a few short years, the NOAA/NMFS scientists would have us believe, their ability to assess the strength of this particular stock has improved to such an extent that what was previously recognized as a healthy population growth trajectory is now recognized to be a precipitous decline into, once again, a severely overfished condition.

Naturally, this precipitous decline in the health of the stock would demand immediate (starting with the next fishing year) measures to meet the arbitrary rebuilding schedule for Gulf of Maine cod. These measures would in all probability include either drastic cutbacks in or complete closures of the cod fishery and of all of the other groundfish fisheries in the Gulf of Maine that take cod as bycatch. While difficult to imagine, these cutbacks would inflict even more pain on the New England groundfish fishery than our federal fisheries managers have been able to inflict on them up until now.

And lest there are any misapprehensions floating around out there, for the last several years the groundfish fishermen have been admirably toeing the line. They have been fishing exactly as they have been told to fish by the federal fisheries managers and the perceived lack of fish is the result of nothing more than the managers figuring out another way – they insist a more accurate way - to estimate the condition of the cod stock.

But NOAA/NMFS announced, days before the Keep Fishermen Fishing rally, that it wouldn't have to impose those drastic restrictions on the groundfish fleet (and the onshore businesses and the fishing communities and etc.) that the Magnuson Act seemed to require because, *mirabile*

dictu, the Act already allowed the flexibility that we were in Washington rallying for. Is that a coincidence or what? We don't need to fix Magnuson, because it can already allow what we are asking for.

Or perhaps, stated a bit more accurately, the Magnuson Act can allow whatever NOAA/NMFS decides it can allow if doing so will keep the Act intact.

Of course, that new found "flexibility" still demands a 22% reduction in codfish mortality in the next fishing year, and even with that 22% reduction, the Magnuson mandates are going to demand even more drastic reductions for the following fishing year.

It appears as if the only thing that's going to keep the groundfish fishery alive the year after next – unless NOAA/NMFS can figure out yet another way to count codfish in the interim – will be an act of Congress.

So does Magnuson actually permit enough flexibility so that when NOAA/NMFS commits another massive assessment blunder, a blunder which in no way can be blamed on the fishermen, the fallout of that blunder can be made manageable for the fishermen? If that's what NOAA/NMFS decides to do, apparently it does. But only for a year. That's all the leeway that NOAA/NMFS can allow under Magnuson. And NOAA/NMFS is in no way bound to do it for that first year and Congress is not bound to do it subsequently. That isn't quite good enough for the fishermen, that isn't quite good enough for all of the people who depend on those fishermen, and that shouldn't be good enough for all of those seafood consumers who are being told that the catch of the day is now imported basa, imported tilapia or imported shrimp.

(Note that NOAA/NMFS seems to be in the midst of another New England groundfish fisheries "crisis." In this one the stock of Georges Bank yellowtail flounder seems to have mysteriously plummeted precipitously. This is going to place yet another burden on the people, businesses and communities that depend on the New England fisheries.)

All that the Keep Fishermen Fishing participants and organizers were and are asking for

In spite of all of the apparently megafoundation spawned – or at least subsidized – hyperbole to the contrary, Keep Fishermen Fishing was (and is – go to <http://www.keepfishermenfishing.com> to remain up to date) not on a one way mission to make overfishing a way of life. Keep Fishermen Fishing was, is and will be committed to sustainable fisheries now and into the future And all of the Members of Congress who addressed the Keep Fishermen Fishing rally were and are committed to sustainable fisheries as well.

As I see it, underlying the Keep Fishermen Fishing campaign is one very simple question. As long as a fish stock is increasing, is it worth forcing fishermen out of it so that it reaches an arbitrary level of abundance next year rather than reaching that level two or three years later would allow the businesses that depend on that fishery to remain viable?

Recent events in New England point to another question that everyone who fishes – and anyone with an interest in our U.S. fisheries – should be asking (particularly in view of the growing New England groundfish crisis). Shouldn't we be seriously reassessing the adequacy of the philosophic and scientific underpinnings of our entire fisheries management system? Obviously it isn't just fishing mortality that's impacting our fisheries, yet we're still managing as if it were. Just as obviously, the science that our fisheries management system depends on, supposedly world class science, has proven woefully inadequate time after time. How many billions of dollars is this costing us? How much human suffering?

And finally, for how much longer are we going to be shouldered with a federal fisheries management bureaucracy that acts as if its marching orders originate not on the docks or in the Halls of Congress but rather in the board rooms of a handful of multi-billion dollar "charitable" foundations?

Why we need Magnuson flexibility now – a real-world example

03/17/12

On March 21st thousands of recreational and commercial fishermen, their families, and people in fishing dependent jobs are going to gather at the U.S. Capitol to ask Congress to put the regulatory flexibility back into the Magnuson-Stevens Fisheries Conservation and Management Act that was intended to be there when the Act was written.

This flexibility wasn't there as a way to allow fishermen to get around effective management measures; it was there because the original authors realized that at the time neither the scientists nor the bureaucrats who were "in charge" possessed all of the knowledge necessary to manage the fish and the fisheries effectively. Hence they made allowances for participation in the decision making process they designed by fishermen whose on-the-water experience would help to fill in the management voids left by imperfect and/or inadequate science. They recognized at the time that informed judgment had a definite place in the fisheries management process and made provisions for it.

Since then that informed judgment has been replaced by arbitrary and often (usually?) unrealistic performance measures that the scientists and bureaucrats have neither the ability to effectively determine nor whose outcome they can reliably predict.

Ostensibly acting for the long term good of the fishermen and the fisheries, a handful of multi-billion dollar foundations and the ENGOS and fishermen's organizations that they have used their power and their influence to co-opt have been responsible for this. Their argument is that just about every fisherman – other than those few who they are now subsidizing - has been and still is too mired in the day-to-day realities of making a living on the water to be really committed to sustainability. Accordingly they are going to force them to fish sustainably by getting rid of all of that “unnecessary” legislative flexibility, regardless of the short-term impact on jobs and investments in the fisheries.

According to them, comes the future when all of those inflexible management measures start to pay off, it will all be better. Of course, when that day gets here, if it ever does, those fishermen, their boats, the support businesses and the fishing communities will be long gone.

Switch your focus now to the Gulf of Maine codfish fishery. A couple of years ago an assessment of the fishery, which is inarguably the oldest and one of the most important in the country, revealed that after years of sacrifice by fishermen the cod stock was increasing nicely, and that the fishery it supported had a rosy outlook. Then last year another assessment revealed that the same stock was in grim shape and that, to meet the completely arbitrary Congressional mandates for rebuilding, stringent cutbacks in harvesting had to be instituted. Needless to say, these cutbacks weren't going to be instituted just in the codfish fishery, but in every fishery that interacted with codfish and/or codfish habitat. That would include just about all of them.

How did this happen? The consensus seems to be that in the first assessment the scientists ignored the effects on the Gulf of Maine codfish stock of the mortality of the fish that were caught and subsequently released. This has been coupled with speculation that recreational fishing mortality was underestimated. Another possibility is that the Gulf of Maine stock is actually part of a much larger stock, and the fish just moved. There hasn't been a suggestion that commercial overharvesting was in any way responsible.

The fishermen were fishing the way the NOAA/NMFS told them to fish. The problem of not enough codfish in the Gulf of Maine (if that is actually the problem) lies completely with NOAA/NMFS and how the fishery has been managed (of course another problem is determining how accurate the last assessment was, considering the supposed inaccuracy of the one prior to it. Or maybe vice versa?)

So the New England Fishery Management Council has recommended to NOAA/NMFS that an “emergency action,” which is allowed under Magnuson - but only for 1 year - be put in place that will reduce next year's cod harvest by only 22%, with a bigger reduction, ranging up to a full closure, on the way the following year to meet the Act's rigid requirements. The assumption is that in the interim Congress will pass a special law that will allow the Magnuson rigidity to be waived for this one particular fishery in this one particular instance.

To recap, the fishermen fished as they were told to fish, NOAA/NMFS screwed up big time, and it's going to take an Act of Congress to help at least some of the fishermen survive this debacle.

Without Congressional intervention, the Gulf of Maine groundfishing fleet and a bunch of others and all of the businesses that depend on them have one year to struggle at a reduced level of production and then the smart money says they will be shut down. All because the people at NOAA/NMFS can't manage fisheries as well as the Magnuson Act now assumes they can.

I'll add here that the political attention that has been focused on New England groundfish in recent years all but guarantees that NOAA/NMFS has had their best and their brightest assigned to this fishery – and this is the result.

Who needs flexibility in Magnuson? Obviously anyone who fishes, anyone who lives in a fishing community, anyone who works in a business that depends on fishing, anyone who realizes the impact on our economy of importing over eighty percent of the seafood we consume in the U.S., and anyone who knows the difference between fresh, locally caught seafood and fish and shellfish caught, grown, processed, frozen and transported thousands of miles and then sold as a substitute for the catch-of-the day that our waters are producing in abundance.

Who does that leave out? Try the people who run that handful of mega-foundations, the people in the ENGOS that they control, the fishermen who want to be at the top of the fishing heap no matter what it takes for them to get there, and the elected officials who buy into their arguments instead of talking with and listening to working fishermen who are devoted far more to preserving a way of life than to lining their own pockets. And don't forget the people who are inordinately fond of tilapia, basa and bland, tasteless shrimp. If you are in the former group, you should be in Washington on the 21st (see the media release below) and if you can't be there you should still do as much as you can to support Keep Fishermen Fishing.

“It's all about jobs” will be the message of thousands of fishermen in Washington on March 21.

Keep Fishermen Fishing

New Gretna, New Jersey - With just three days to go until the Keep Fishermen Fishing Rally near the U.S. Capitol on March 21, organizers expect thousands of recreational and commercial fishermen - and their families – to be in Washington this week in support of coastal fishing-related jobs.

Coastal fishermen last assembled in organized protest in February of 2010 to show their dissatisfaction with federal fisheries management, though organizers say that Congress has been slow to react to their concerns.

Despite previous congressional mandates, there has been no improvement in the science underlying federal fisheries management and no adherence by the federal agency to the statutory requirements that federal fisheries data collection be improved. Instead, NOAA Fisheries enforcement is in a shambles, as are the assurances of transparency and rebuilt relationships that Dr. Jane Lubchenco promised Congress when she took over at NOAA in 2009.

According to the thousands of fishermen set to peacefully assemble at Upper Senate Park on March 21st, changes implemented under the reauthorized 2006 Magnuson Stevens Fishery Conservation and Management Act have improved the health of U.S. coastal fish stocks primarily by kicking fishermen off the water and putting thousands of Americans out of work. Recreational and commercial fishermen alike, supported by a core group of bipartisan coastal legislators, believe that proper balance of commerce and conservation is possible through simple amendments to the federal fisheries law.

“We aren’t going to Washington because we object to effective fisheries management; we are going because we object to overly restrictive management measures,” said Nils Stolpe, one of the rally organizers and a representative of the commercial fishing industry. *“We are going because we object to a federal law that puts all of the emphasis on protecting the fish and none whatsoever on protecting the jobs of those that sustainably harvest those fish.”*

Approximately 5,000 coastal fishermen attended the 2010 rally in support of federal fisheries reform, a number that organizers believe will be met or exceeded on Wednesday. *“The nation’s coastal anglers are coming to Washington again on Wednesday because they object to a federal fisheries law that keeps them from accessing healthy fish stocks, reduces participation in the fishery, and hurts jobs in our coastal communities,”* said Jim Donofrio, executive director of the Recreational Fishing Alliance. *“Our federal fisheries law is broken and has been used by several mega-foundations as a weapon to beat back our coastal fishermen while destroying jobs in this country,”* he added.

Keep Fishermen Fishing organizers are inviting members of the public as well as Members of Congress to join them at Upper Senate Park in Washington DC on Wednesday, March 21, 2012 starting at noon, to hear from real working fishermen and anglers alike whose sacrifices have made our domestic fisheries the envy of every other nation on earth.

“They’ll be there on their time and on their dime,” Stolpe said, adding *“How many of the people who will be flocking to Washington to counter the Keep Fishermen Fishing Rally can make the same claim?”*

For list of supporters and attendees, and more information about the rally, visit www.keepfishermenfishing.com. Also visit “Keep Fishermen Fishing” on Facebook.

Commercial sector contact: Nils Stolpe at 386-409-0675 or nilsstolpe@cfl.r.com
Recreational sector contact: Jim Donofrio at 888-564-6732 or Jimdrfa@aol.com

The New England groundfish debacle (Part III): who or what is at fault?

03/22/12

“We received a letter last month from 173 fishermen across New England who were pleading for help,” (Massachusetts Congressman Stephen, who is now running for Secretary John Kerry’s Senate seat) *Lynch said. “These are hard-working people and their industry is being pushed to the brink by an overzealous environmental agenda that too often ignores the human cost of its actions.”* (R. Gaines, **Senate candidate Lynch backs fish law 'flexibility'**, Gloucester Daily Times, 03/15/2013, <http://tinyurl.com/cno4dn4>).

It took me a while to decide how to most accurately describe the situation that has been visited upon the New England fishing communities that are and since colonial times have been dependent on the groundfish fisheries. I finally settled on “debacle” because it means about the same thing as “fiasco” but with a heap more gravitas. And I can only think of what’s going on, and what has been allowed to go on, in that fishery as a fiasco on steroids.

An awful lot has been written – and said – recently about New England groundfish but no one appears to have tied it all up into a neat and coherent package. Not being directly involved in the fishery or its management, and being at least twelve hundred miles removed from it, I’m going to try to do that from the position of semi-objectivity that separation allows.

First off, no analysis would be complete without recognition of the role that now departed NOAA head Jane Lubchenco and her minions played in worsening an already dismal situation. Her self-congratulatory going away present to us all was a listing of the notable triumphs in her almost four year reign in which several fisheries “successes” were detailed yet the New England groundfish fishery got nary a mention. She was

on the record numerous times stating that one of her goals was to reduce the size of the New England groundfish fleet. So far it appears as if she's succeeding spectacularly. From her and her anti-fishing ENGO colleagues' perspective that would seem to be a major success, but probably one that not even they would be willing to brag about.

Given this, what were the chances that her agency would have initiated any actions resulting in more fish for the fishermen, keeping more boats fishing and more fishermen employed? That surely didn't and doesn't fit into her master plan (see my 2009 Fishnet **Chronic underfishing – the real New England groundfish crisis** at <http://tinyurl.com/a7t2grc>).

As demonstrated in her going away missive, faulty information seemed to be a mainstay of her tenure at NOAA. Below are excerpts from testimony she presented to a U.S. Senate Committee in Boston on October 3, 2011 on the New England groundfish fishery – see <http://tinyurl.com/bo37hre>. Bear in mind that she was speaking then of a fishery that at this point appears as if it will be virtually shut down less than two years later. Among her almost six thousand words were these gems:

- We are making gains across the country as individual fisheries have recovered, which will increase as we finally bring an end to over-fishing.
- We are seeing benefits from the transition to sector management as catches do not exceed the annual catch limits, and fishing becomes more efficient and flexible, all of which contribute to the common goal of ecological and economic sustainability of groundfish stocks.
- Decades of overfishing, failing fish stocks and punishing regulations interacted to threaten the region's most iconic industry. That system was not working for fishermen. It was driving them out of business and the stocks were not re-building to a point where they could sustain a profitable industry.
- The adoption of this new management system and the lower catch limits happened early in my tenure as Administrator. Indeed, sustaining the groundfish fishery and the economic health of the industry has been of paramount importance to me since my first day in office.
- Our goals are clear: to be a partner in the success of fishermen, to sustain fishing jobs, to create a profitable and healthy future for fishing communities, and to maintain marine fisheries.
- How are we doing after one year with new catch limits and with the expanded sector management program? We see both signs of progress and continued room for improvement.
- Stocks are being rebuilt and therefore catch limits are up. Due to the rebuilding progress already underway, in the 2011 fishing year, catch levels have gone up for 12 of the 20 groundfish stocks, which is another indication the Magnuson-Stevens Act and associated management measures are working to improve the status of the stocks and the economics of the fishery.

But the full blame for the deplorable situation that now exists in New England's fishing communities can't be laid entirely at her feet, though she unnecessarily exacerbated it. The blame belongs to the engineered interplay of just about everything that's wrong with the way our federal fisheries are managed. Take the above statements. Assuming that they accurately represented the "best available science" at the time, an understandable assumption considering that they were delivered to a Senate Committee by an Undersecretary of the U.S. Department of Commerce, the people who ran the businesses that caught, processed, bought and sold those fish, and the people who ran the businesses that allowed them to do that, made plans based on what Ms. Lubchenco said – and what she didn't say. She definitely didn't say or intimate that the groundfish fishery would be closed down in a year and a half. She didn't say or intimate that it might be closed down in a year and a half. She didn't even say or intimate that it could be closed down in a year and a half. With businesses depending in whole or in part on the New England groundfish fishery, a lot of people planned accordingly.

"This lack of adequate progress was not due to any failure on the part of the New England Fishery Management Council to take necessary action to meet the requirements of the Magnuson-Stevens Act, nor was it due to any failure on the part of fishery participants to act in compliance with applicable regulatory measures. Rather, the lack of adequate progress is due to a new and significantly revised understanding of the condition of the stock since the 2008 assessment was completed." Sam Rauch, NOAA/NMFS Acting Assistant Administrator for Fisheries, in a January 26, 2012 letter to the New England Fisheries Management Council (<http://tinyurl.com/brswkvz>).

A year and a half later... oops! NOAA/NMFS now has "better" information, and your plans are all out the window. So are your customers, your income and a large part of your life.

The NOAA/NMFS response has been that, in spite of the fact that the fishery, the businesses that depend on it and the traditional character of New England's fishing communities are to be the victims of scientific shortcomings and bureaucratic ineptitude, nothing can be done about the pending closure of the fishery – or the reductions in harvest that will close most of the fishermen out of the fishery – because it is what the federal law demands.

Ignoring the argument that NOAA/NMFS is interpreting the provisions of the Magnuson Act in far too restrictive a manner, how did this unacceptable situation develop, or more exactly, how was it made to develop? Like so many other fisheries issues, there isn't one simple answer but rather a complex of overlapping legislative and bureaucratic factors that seem to have been designed to destroy our traditional domestic fisheries in general and the traditional New England groundfish fishery in particular.

How did we get here?

Have no doubts about where the blame for this unnecessary debacle lies. In 2006 a mostly clueless and misled U.S. Congress ignored the advice of large segments of the domestic recreational and commercial fishing industries and passed, and President Bush subsequently signed into law, the so-called Sustainable Fisheries Act. This package of amendments to the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA) was designed by a handful of mega-foundation supported ENGOs (and a few “fishing” associations that appeared to have been co-opted with those foundation \$millions) to remove the flexibility from the Act that was such an important part of the federal fisheries management process it established in 1976.

What was the purpose of this flexibility? At the time, Members of Congress realized that the fisheries scientists didn’t have all of the answers, that fishermen had acquired a wealth of so-called anecdotal information about marine fish and the ocean environment that could and should supplement what the scientists understood, and that a truly effective fisheries management process would require input from both scientists and fishermen. What was considered one of the most significant portions of the Act, the role in management given to fishermen, was designed expressly to avoid situations such as the one that is now threatening New England’s fishing communities.

Decades later, when a handful of mega-foundations led by the Pew Charitable Trusts decided that they were going to save the world’s – or at least the United States’ – oceans from the threats of fishing (and apparently decided to ignore, and convince the public and the pols to also ignore, any other impacts), the fishermen and their “subjective” input had to be removed from the process because collectively they were the only people who had a fairly accurate idea of what was going on in the waters they fished. Of course this would leave the scientists with their inadequate science in charge, and conveniently there was a concurrent drying up of government research money, making a bunch of marine scientists who were so predisposed that much easier for the ENGOs to buy.

The Sustainable Fisheries Act in 2006 was the culmination of this campaign. It established hard and fast requirements for fisheries management that relied on science, statistics and computer models – and on scientists, statisticians and computer modelers – that were in no ways equal to the task. It also made the precautionary principle (see NOAA Inaction in the Gulf of Mexico at http://www.fishnet-usa.com/NOAA_Inaction.htm) the bedrock of the fishery management process and at the same time established “rebuilding schedules” for fish stocks to reach a level where they weren’t overfished of definite duration regardless of the impacts of those schedules on the fishermen and on the businesses that depended on them.

So, as a result of an extended campaign by these multi-billion dollar foundations and the ENGOs and fishing groups in their thrall, we now have a management system which is based entirely on what the science and the statistics, as imprecise as they are, dictate, where a wealth of fishermen’s hard earned on-the-water knowledge has been made completely irrelevant to the process, and where the supposed welfare of the fish counts for infinitely more than the welfare of the fishermen.

Needless to say we still have nowhere near the knowledge necessary for a rational decision making process (see <http://tinyurl.com/bq6apcd>).

In New England if the groundfish fleet were given another year or two of continued harvesting at levels low enough to allow for stock rebuilding – if that is even possible (this question will be explored in depth in the next FishNet) – the critical questions regarding the science underlying the assumed well-being of the groundfish stocks could be answered, the affected businesses could make whatever adjustments were possible, and the looming crisis could be either avoided or its impacts could be significantly lessened. That’s the upside.

The downside? The time it took a few fish stocks to reach an arbitrarily determined population level would be extended by a year or two.

This is in fact what the New England Council recommended be done in requesting that a soon to expire Emergency Action declared by the Secretary of Commerce be extended for another year. On the advice of NOAA General Council Lois Schiffer, John Bullard, the NMFS Northeast Regional Administrator, refused, claiming that the Magnuson Act as amended in 2006 precluded doing that.

Because of this, because of overly rigid Magnuson requirements that are opposed by a large number of fishermen and other businessmen dependent on them and a growing number of Congressmen, Congresswomen and Senators from coastal states, and because of the lobbying ability and the PR expenditures of a handful of “charitable” foundations and the ENGOs they control, the New England groundfish fishery is teetering on the edge of disaster.

In summation, the fishing industry was fishing as it was told to fish by the New England Fishery Management Council and NOAA/NMFS. This was based on the “best scientific information” available at the time and according to that information the stocks were well on their way to recovery. All of the businesses dependent on the fishery planned accordingly.

Subsequently NOAA/NMFS decided that what was at the time the best scientific information wasn’t the best any longer because there was better information available and that, according to that better information, fishing effort had to be reduced to such an extent that large parts of the groundfish industry would be put out of business. The Council sought to lessen the damage by extending “emergency” mitigation measures for a year. NOAA/NMFS, with the enthusiastic encouragement of the ENGOs, refused. Based on extensive analyses – easily “the best available” – the Council is also seeking to reopen areas which had been previously closed to fishing. This would also lessen the impacts somewhat. The ENGOs are mounting an all-out PR campaign to prevent this. Predictably, the ENGOs who are always willing to use the best available science when it advances their anti-fishing agenda, are more than willing to bypass it when it doesn’t, falling back on lobbying and misleading PR.*

The people in Washington knew what they were doing back in 1976 when the Magnuson Act became law. It's unfortunate but understandable that back then they had no idea that so-called environmentalists with the backing of multi-billion dollar foundations would be more of a threat to domestic fishermen than the foreign fishing fleets ever were.

*In the latest display of their antipathy towards fishermen and fishing – which is unconvincingly camouflaged as concern for the long-term health of the fisheries and the oceans – the anti-fishing clique has also taken head-on the New England Fisheries Management Council's proposal to open areas that it had closed to fishermen. Their opening would aid the beleaguered New England fishing industry. Rigorous analyses of these closures have demonstrated that they are no longer serving any "conservation" benefit, if there ever were, but a major public relations effort led by the Pew Trusts is ongoing in spite of this. (For more on this latest initiative in the campaign of these "caring" ENGOs to destroy the traditional groundfish fishery see the Saving Seafood (<http://www://savingseafood.com/>) analysis **Pew Environment targets John Bullard in online petition drive against NEFMC proposed changes to closed areas** at <http://tinyurl.com/d5ef2bb> and Pew Environment Group Misleads Public on Habitat Closed Area Changes at <http://tinyurl.com/d4etqkt>.

The New England groundfish debacle (Part IV): Is cutting back harvest really the answer?

04/03/12

Because of the stringent interpretation of the law that controls fishing in the U.S. Exclusive Economic Zone (EEZ), NOAA/NMFS is enforcing overly rigid requirements that are opposed by a large number of fishermen and a growing number of elected and appointed officials from coastal states. In spite of this and because of the lobbying ability and the PR expenditures of a handful of "charitable" foundations and the ENGOs that they control, the New England groundfish fishery is teetering on the edge of disaster.

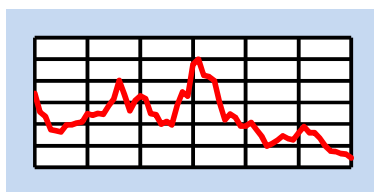
If this is allowed to happen, what specific factors – which the anti-fishing groups tend to stay far away from - will be the cause of this collapse?

The "blame it all on fishing" management philosophy

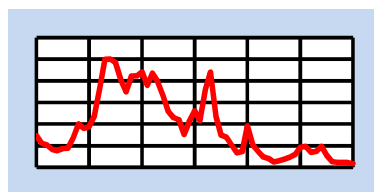
"I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail." (A. Maslow, 1966, The Psychology of Science)

While it's a fact that's hardly ever acknowledged, the assumption in fisheries management is that if the population of a stock of fish isn't at some arbitrary level, it's because of too much fishing. Hence the term "overfished." Hence the mandated knee jerk reaction of the fisheries managers to not enough fish; cut back on fishing. What of other factors? They don't count. It's all about fishing, because fishing is all that the managers can control; it's their Maslow's Hammer. When it comes to the oceans it seems as if it's about all that the industry connected mega-foundations that support the anti-fishing ENGOs with tens of millions of dollars a year are interested in controlling.

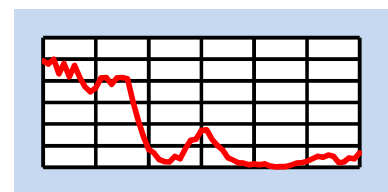
Below are graphs of landings of New England groundfish species from 1950 to 2010 relative to the highest landings over that time period. As they plainly show, landings have been declining steadily for just about all groundfish species from 1980 or before. How much more can fishing mortality be decreased (from http://www.fishnet-usa.com/Research_funding_A_win-win.pdf)?



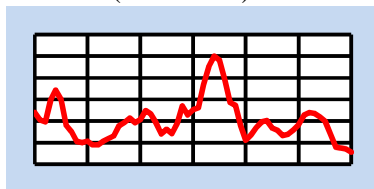
Winter (Blackback) Flounder



Yellowtail Flounder



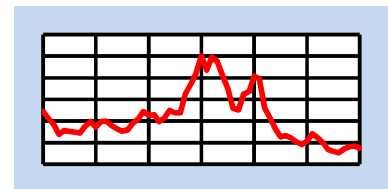
Haddock



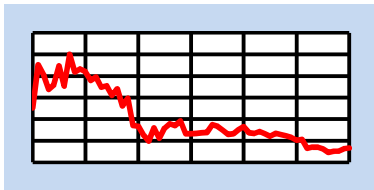
Witch Flounder



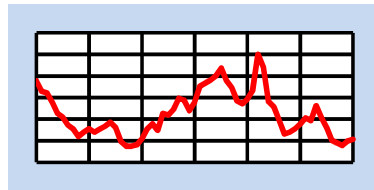
Acadian Redfish



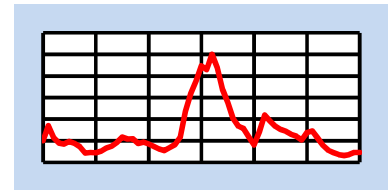
Cod



Silver Hake



White Hake



Plaice

But the managers, crippled by the constraints that have been placed on them by the Amendments to the Magnuson Act, have to either pack up and go home or keep swinging that “hammer.”

Symptomatic of this “blame it all on fishing” diversion is a recent press release from the Natural Resources Defense Council on in-house research titled Two-Thirds of Depleted Fish Stocks Rebound Under Federal Fisheries Law (<http://tinyurl.com/cy9vjeh>). From the release:

Of the 44 stocks analyzed in this report, nearly half—21 stocks—were from New England. Indeed, it was the collapse of this region’s groundfish populations in the 1990s, which was estimated at the time to have cost the region \$350 million annually, that largely spurred the SFA’s passage. Today, 12 of these stocks are rebuilt or making significant rebuilding progress, including Acadian redfish, American plaice, barndoor skate, Georges Bank haddock, monkfish, red hake, sea scallops, scup, silver hake, spiny dogfish, windowpane flounder and yellowtail flounder (southern New England). The remaining nine stocks are still struggling to rebuild. These stocks include the region’s two iconic cod stocks (Georges Bank and Gulf of Maine), two yellowtail flounder stocks (Cape Cod/Gulf of Maine and Georges Bank), Gulf of Maine haddock, Southern New England/Mid-Atlantic winter flounder, and white hake. Continued overfishing is a key culprit of rebuilding shortfalls in most instances. Recently implemented annual catch limits in the region should allow these stocks to turn the corner.

The report is an attempt to prevent the reintroduction of much needed flexibility into the Magnuson Act by the current Congress (the Act is due to be reauthorized again this year). In it the claim is made that cutting back on fishing was responsible for “sixty-four percent of once-overfished, monitored (by NOAA/NMFS) fish stocks nationwide” being rebuilt or making significant progress in that direction. Think about that. To be monitored a fish stock must support a significant fishery. Therefore fishing more than likely will be a significant source of mortality.

With any population, if you reduce a major source of mortality and everything else remains equal the population is going to grow. Less fishing mortality means more fish, as long as fishing mortality is significant and all other mortality sources remain about constant.

But what about the thirty-six percent of the fish stocks that haven’t rebounded? The landings for cod, yellowtail flounder, haddock, white hake and winter flounder up above plainly show that these fisheries can’t be reduced much farther than they have been, but they are still declining. Can any conclusion be drawn from this other than that there are other sources of mortality for thirty-six percent of the fisheries that NRDC examined that far outweigh fishing mortality?

And also, in the sixty-four percent of the fisheries that are “rebuilding,” there is nothing that indicates that fishing is the major source of mortality, only that it is a significant source.

But why should such subtleties matter to the folks at NRDC or any of the other ENGOs who have built multi-million dollar bureaucracies with inflated salary structures based on “blaming it all on fishing?”

Competition and predation

As I wrote last September in **Fishing isn’t a four letter word** (http://www.fishnet-usa.com/Fishing_not_four_letter_word.pdf), there are over a billion pounds – 557 thousand metric tons - of spiny dogfish available to the out-of-work groundfish fleet. They are catchable and, perhaps with a little more market development, could be salable. Instead this huge biomass of dogfish is either out there competing with the more desirable groundfish species for food and space or is eating them.

In 2004 B.M. Weatherbee and E. Cortes estimated that spiny dogfish consumed between 0.4% and 2.6% of their total body weight every day. If we assume a median level of 1.5% per day, each dogfish consumes its own weight every 60 days, or six times its body weight every year. The million metric tons of dogfish alone are consuming on the order of 6 million metric tons of prey species every year (in 2011 total U.S. groundfish landings in the Northeast were 28,000 metric tons). In 2008 researcher James Sulikowski reported that the stomach contents of spiny dogfish sampled off New England were 87% by weight from bony fish, with cod, herring, and sand lance being the top three species. Sand lance and herring make up a large part of the diets of cod and other groundfish.

For the next three years the proposed spiny dogfish allowable commercial catch will be under 20,000 metric tons per year. This will allow the population to continue to exponentially increase

Then, thanks to the overall success of the **Marine Mammal Protection Act**, the populations of seals, sea lions, dolphins, porpoises and small whales are burgeoning. Among the few critters out there that are better at eating commercially valuable fish, or the fish and shellfish that they feed on, are these seals, sea lions, dolphins, porpoises and small whales. In fact, using various population estimates and food requirements, using 2006 data I estimated that collectively these protected marine mammals in the Western North Atlantic – that’s off the United States’ and Maritime Canada’s Atlantic coast – were eating 20 million metric tons of food each year. That’s well over ten times what U.S. and Canadian fishermen were taking from those waters. The rule of thumb is that these marine mammal populations are increasing at a rate of 3% a year (see **Getting real about ecosystem based management** at http://www.fishnet-usa.com/ecosystem_management.htm).

So a very large proportion of the groundfish remaining in New England waters are being eaten by or are having their food eaten by a whole bunch of very prolific predators.

A management regime that demands the simultaneous Maximum Sustainable Yield (MSY) from all stocks being managed As interpreted by NOAA/NMFS in **National Standard #1**, “*the Magnuson-Stevens Act establishes MSY as the basis for fishery management and requires that: The fishing mortality rate does not jeopardize the capacity of a stock or stock complex to produce MSY.*” (see NMFS’s National Standards Guidelines/50 C.F.R. 600.310 et seq. at <http://tinyurl.com/chvreb>). This assumes that all stocks of managed fish in a given area are capable of being and should be at the MSY level simultaneously. Anyone with even a beginners’ grasp of ecological principles will realize that this is not possible in complex ecosystems where various species compete with each other for limited resources. Rather, it hearkens back to the days centuries back when there was a belief that there was a balance in the natural world that would only be upset by some unnatural disturbance (think Edward Hicks and Henri Rousseau).

It doesn’t work like this in the real world. To some degree cod compete with haddock, haddock compete with yellowtail flounder, yellowtail flounder compete with blackback flounder, and on and on and on. If they don’t compete for food, they compete for space. When the population of one species is up, because these species inhabit identical or similar niches and their numbers are determined by the availability of identical or similar resources, the population of another is going to be down. Yet the federal fisheries management regime demands that they all be up at the same time and if they’re not, guess what? They’re determined to be “overfished” and, the fishermen are held responsible and fishing has to be cut back.

In the New England groundfish fishery there are a handful of species that are known as “choke” species. These species are less valuable than the other species that they are inextricably mixed with, but the harvesting of the more valuable species will be - and has been - curtailed because there aren’t maximum levels of the “choke” species which are taken with the far more valuable fish as unavoidable bycatch. You can only appreciate the ridiculousness of this when you consider that the sea scallop fishery (2011 landings valued at \$580 million) could be closed with tens or hundreds of millions of dollars worth of sea scallops uncaught because the sea scallop fleet had reached their bycatch limit of yellowtail flounder (valued at < \$1 million).

This is also the reason for the spiny dogfish TAC of 20,000 metric tons. This is a rate that is guaranteed to keep the dogfish population at or near record levels – at the same time keeping dogfish predation on and competition with much more valuable fish stocks at record levels as well.

What about warmer water?

In 2005, Institute of Marine Research (Bergen, Norway) scientist Kenneth Drinkwater wrote in the International Council for the Exploration of the Sea (ICES) Journal of Marine Science that a temperature increase of 4 degrees celsius would lead to collapse of the cod fishery off Georges Bank and a sharp decline in the Gulf of Maine as the cod migrated north. “*It is quite clear that, with future warming, there will be a northward migration of cod,*” he wrote (<http://icesjms.oxfordjournals.org/content/62/7/1327.full.pdf>).

In the past year, the temperature in the Gulf of Maine reached record highs. “*At some point, (the gulf) is going to be inhospitable to cod. We’re getting close to that now,*” said Jeffrey Runge, biological oceanographer at the University of Maine. In the past four years, the surface temperature in the gulf has risen between 2 and 3.5 degrees fahrenheit a year, more than enough to cause the near-collapse due to migration that Drinkwater predicted in 2005. (<http://bangordailynews.com/slideshow/alarmpingly-warm-water-in-gulf-of-maine-bringing-changes/>)

Considering all of the effort that the eco-alarmists are putting into convincing the world that we are on the brink of a climatological Armageddon because of man-made climate change, you would think that those of them who are fishing-focused would be doing their best to bring this to the public’s attention. Not so. In fact, Peter Shelley, a lawyer with the Conservation Law Foundation (for more on Mr. Shelley and the CLF see my column Flotsam and Jetsam at http://www.fishnet-usa.com/Flotsam_Jetsam_2012.pdf) suggested that the New England cod fishery be shut down.

Now it should be apparent to anyone who isn’t dead set on destroying the remaining vestiges of our traditional New England fisheries that fishing on the remnants of a stock of any fish that has been displaced by a shifting temperature regime, something that I’ll remind you happens periodically and more or less regularly in the North Atlantic, isn’t going to have any effect on that stock. When the ocean temperatures go back

to where they were – when the regime shifts again – the fish will come back. Until that point fishing or not fishing will have no significant impact.

To his limited credit, limited because he was easily five years late with his suggestion (see A plague of dogfish at <http://www.fishnet-usa.com/dogforum1.htm>), in the same blog post where he pushed for the closure of the cod fishery Mr. Shelley did write “and you should be focusing on increasing harvests on skates and dogfish and some of the other predators that you have an ability to manage and reducing the mortality associated with some of them.”

And then there’s not sampling where the fish are

A particular managerial shortcoming is the belief that a fish stock only extends as far as the area in which that stock is sampled, which is generally the jurisdiction in which the fishery is accomplished. With New England groundfish, that means out to the limits of the various bottom trawl surveys – generally a bit past the outside edge of the EEZ. So what happens if, perhaps because of too warm water or too much competition/predation, most of the fish pack up and move to the East beyond where the trawl surveys sample? According to the stock assessments, those fish no longer exist. Management restrictions are put in place accordingly.

Then what happens when/if the fish come back? Not much until the next assessment, which could be three or four (or more) years down the line. This might well be the situation that is presently occurring with inshore yellowtail flounder and cod off New England (see R. Gaines **Auctions confirm renewed 'uptick' in cod** in the 03/25/13 Gloucester Times at <http://tinyurl.com/cjujwkj>). This is exactly the behavior that fishermen were predicting in spite of the “doom and gloom” predictions of the scientists.

It’s a big ocean out there, with a lot of room for the fish to move around, and possibly with an increasingly lot of reasons for them to move. We can’t expect the government to have the resources to chart the full geographic extent of every stock that’s being managed, but we should expect a management system that recognizes that fishermen have been observing how fish stocks behave for decades - and in many instances for generations and that they have knowledge that is, or that should be, extremely relevant to effective fisheries management. That was the management system that Congress designed for us in 1976, but it’s definitely not the one that we have today. This one was designed by the anti-fishing ENGOs and because of it our fishermen, our fisheries and our fishing communities and our seafood consumers are suffering. But for the last two Magnuson reauthorizations these ENGOs have been laboring – and spending – mightily to keep things the way they are, and they have already started their foundation-funded campaigns to insure that real on-the-water knowledge is kept away from what they now consider their and their scientists’ management system. Tilapia, anyone?

Last but definitely not least

The people at NOAA/NMFS were apparently convinced that the groundfish assessment preceding the one that has precipitated the current “crisis” represented the best available science, as the Magnuson Act requires. Hence the rosy picture of the condition of those stocks and their progress towards being rebuilt that Ms. Lubchenco painted before the Senate committee.

Things were thought to be so good then that the Conservation Law Foundation’s Peter Shelley wrote on the CLF blog in arguing against federal disaster aid for the Massachusetts groundfish industry “*contrary to the local headlines and talking points from Massachusetts politicians rushing to align themselves with ‘the working man,’ there is no evidence of a disaster in the Massachusetts groundfishing industry* (my emphasis). *In fact, the Massachusetts groundfish fleet netted \$3 million more under the new program than the previous year, even though fuel costs soared some 30%.*” (<http://tinyurl.com/bpyxv7>)

Mr. Shelley testified to the New England Fishery Management Council on February 6 of this year that “*there’s no biological wiggle room left. This is your best available science and this is what these motions have to be based on.... You should be talking about closing it* (the groundfish fishery) *to everybody. You are in a crisis (ditto).*” (<http://tinyurl.com/bqdu8n8>)

The current NOAA/NMFS claim - that’s the same people in the same offices using the same computers running the same software and utilizing the same data sources - is that they were wrong then but they are right now. They “fixed” the system, the data, the assessment or something or other else.

These are the people, the computers, the software and the data that Mr. Shelley and his ENGO/foundation cronies have decided should be in complete and unrelenting control of fisheries management in the U.S. It seems that he and they are still of that opinion even after this 180 degree flip. And there’s nothing to make anybody think that there won’t be another flip in the near future, because the scientists, the bureaucrats and the modelers don’t have all of the answers. In fact the only answer they seem to be in agreement on, and we can include their ENGO buds in there with them, is that it’s the fishermen’s fault.

That’s accepting on faith that the same system that was so wrong then is so right now, and the social and economic consequences of that acceptance are going to be staggering. But not, and you probably won’t find this at all surprising, for the ENGO/foundation people who are ultimately responsible for this. They aren’t going to feel any of those consequences, except for shedding a crocodile tear or two. Mr. Shelley and his ENGO/foundation cronies

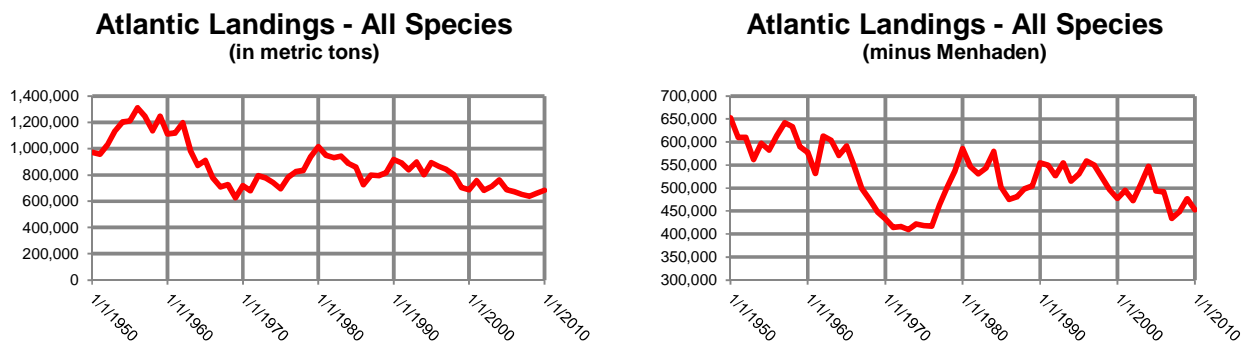
The Magnuson management inflexibility, which is the result of successfully putting the scientists with their grossly inadequate science “in charge” of the management process and of doing away with any real input from fishermen

Commercial landings on the East coast for 1950 to 2010 – Why are they so dismal and why are all of the bureaucrats so happy?

07/27/12

Three weeks ago we took a look at the inflation-corrected values of the total landings from the various coastal regions of the United States from 1950 to 2010. This week we’ll be looking at the landed weight of the 48 major commercial species on the Atlantic coast of the U.S. for the same period. First, however, I thought it would be instructive to look at the total weight of all species commercially landed on the East coast (note that this includes species that didn’t make it into the “top 48,” but the total weight of these other species was/is negligible and omitting them isn’t going to have any appreciable effect on the charts below).

All of these data were taken from the NOAA/NMFS Fisheries Statistics – Commercial Fisheries website at http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html.



In terms of tonnage the menhaden fishery is easily the largest commercial fishery in the U.S., with annual landings that have ranged from just under two hundred thousand to well over a half a million metric tons a year. It is also a very old fishery – at least by new world standards – and was well established in 1950.

If they include menhaden, commercial landings on the East coast dropped by over 50%, or, exclusive of menhaden, over 30% in the 1950 to 2010 period.

In particular fisheries, the decrease in landings has been much more dramatic. In fact, in 2010 the landings in a surprising number of our important fisheries – winter flounder, yellowtail flounder, weakfish, soft clams, oysters, butterfish, etc. - were less than a tenth of their highest levels.

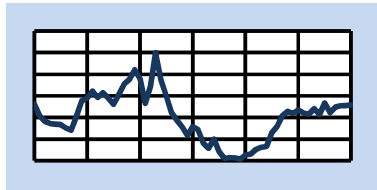
In the last twenty years, more than three quarters of these fisheries (38 of 48) exhibit what can only be described as plummeting landings, though a few of those have exhibited slight upswings recently. The landings of these fisheries are in red. Of the remainder, five – striped bass, American lobster, Atlantic mackerel, sea scallops and skates – have been increasing significantly. They are in dark blue (based on the past 20 years, haddock might have been in this category, but compared to past performance of the fishery it’s difficult to consider that it has improved “significantly.” Five – blue crab, herring, pollock, Spanish and king/cero mackerel - though fluctuating widely, seem to be either reasonably steady or trending up slightly. They are green.

Unfortunately, as a measure of anything beyond the level of economic damage that has been and continues to be inflicted on the commercial fishing industry and those parts of our coastal communities that depend on it by (primarily) the federal fisheries management regime, these charts and data on their own aren’t particularly useful. Without having a fairly accurate idea of the condition of the fish stocks being managed, it’s impossible to put landings data into any useful context.

However, one thing is abundantly obvious; when it comes to managing commercial fisheries on the Atlantic coast, if one of the criteria for measuring success is stable landings at or approaching the maximum sustainable yield, our fisheries management institutions at the federal, state and regional levels have been dismal – and expensive – failures.

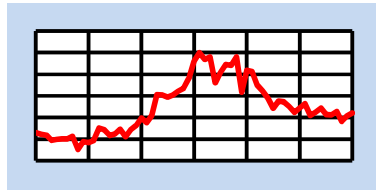
East coast commercial landings from 1950 to 2010 (as a % of the highest landings during that period)

Red indicates decreasing recent landings, blue indicates increasing recent landings and green indicates relatively constant landings. Landings from shrimp, tuna, snapper and grouper fisheries were combined.



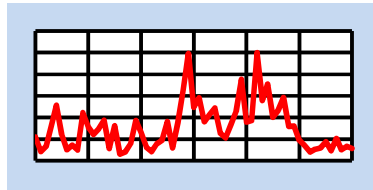
Striped Bass

High: 6,686 mt (1973) - Low: 100 mt (1989) - 2010: 3,444 mt - Average: 2,729 mt



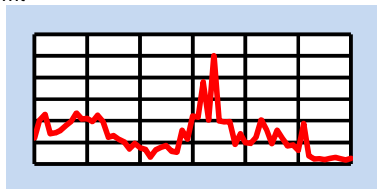
Bluefish

High: 7,466 mt (1981) - Low: 771 mt (1958) - 2010: 3,302 mt - Average: 3,669 mt



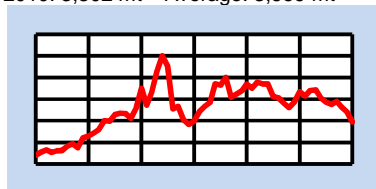
Atlantic Bonito

High: 254.9 mt (1992) - Low: 15.9 mt (1966) - 2010: 28.6 mt - Average: 79 mt



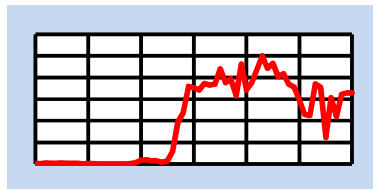
Butterfish

High: 11,794 mt (1984) - Low: 476 mt (2005) - 2010: 6,09 mt - Average: 3,142 mt



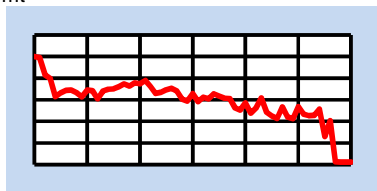
Surf Clam

High: 43,596 mt (1974) - Low: 3,511 mt (1950) - 2010: 16,994 mt - Average: 22,951 mt



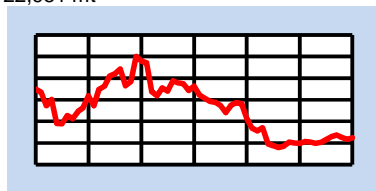
Ocean Quahog

High: 21,870 mt (1993) - Low: 93 mt (1951) - 2010: 14,380 mt - Average: 8,598 mt



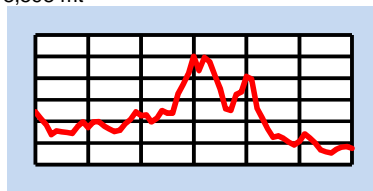
Hardshell Clam

High: 9,425 mt (1950) - Low: 215 mt (2010) - 2010: 215 mt - Average: 5,498 mt



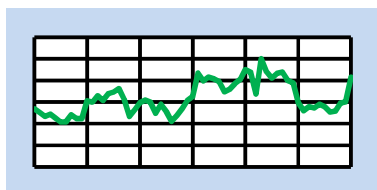
Soft Shell Clam

High: 6,115 mt (1969) - Low: 967 mt (1996) - 2010: 1,524 - Average: 3,136 mt



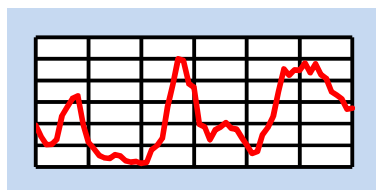
Cod

High: 53,422 mt (1980) - Low: 5,722 mt (2006) - 2010: 17,723 mt - Average: 23,043 mt



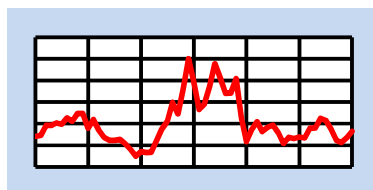
Blue Crab

High: 73,715 mt (1981) - Low: 35,369 mt (1956) - 2010: 70,701 mt - Av: 54,263 mt



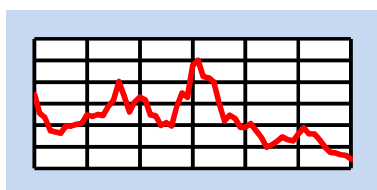
Croaker

High: 13,532 mt (1977) - Low: 459 mt (1970) - 2010: 7,324 - Average: 6,004 mt



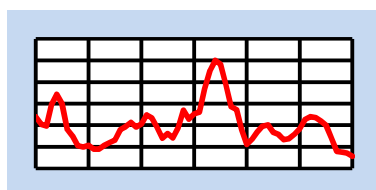
Summer Flounder

High: 18,007 mt (1979) - Low: 1,782 mt (1969) - 2010: 5,971 mt - Average: 7,308 mt



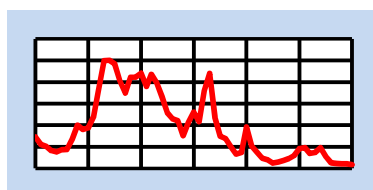
Winter Flounder

High: 18,292 mt (1981) - Low: 1,586 mt (2010) - 2010: 1,586 mt - Average 8,300 mt



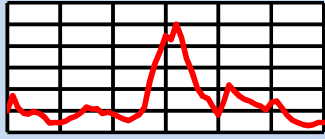
Witch Flounder

High: 6,652 mt (1984) - Low: 759 (2010) - 2010: 759 - Average: 2,679 mt



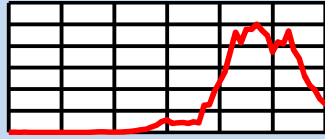
Yellowtail Flounder

High: 37,581 mt (1964) - Low: 2,905 mt (2010) - 2010: 2,905 mt - Average: 14,097 mt



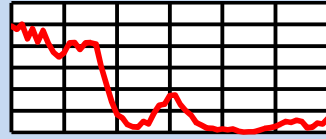
Plaice

High: 15,132 mt (1982) – Low: 989 mt (2007) – 2010: 1,412 mt – Average: 4,328 mt



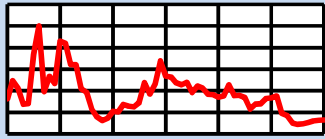
Monkfish

High: 27,811 mt (1997) – Low: 36 mt (1950) – 2010: 7,292 mt – Average: 7,702 mt



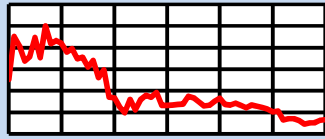
Haddock

High: 71,921 mt (1950) – Low: 328 mt (1994) – 2010: 9,811 mt – Average: 23,833 mt



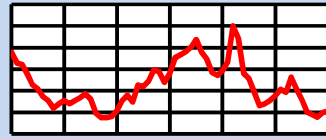
Red Hake

High: 4,746 mt (1956) – Low: 429 mt (2004) – 2010: 616 mt – Average: 1,746 mt



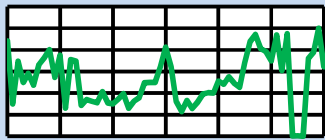
Silver Hake

High: 60,346 mt (1957) – Low: 5,59 mt (2006) – 2010: 8,078 mt – Average: 24,299 mt



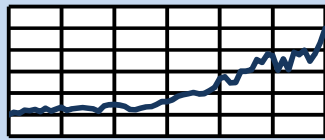
White Hake

High: 7,371 mt (1985) – Low: 1,274 mt (1968) – 2010: 1,807 mt – Average: 3,772 mt



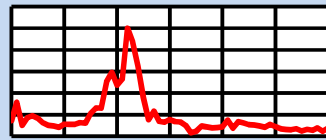
Atlantic Herring

High: 101,171 mt (2009) – Low: 454 mt (2004) – 2010: 65,200 mt – Average: 52,641 mt



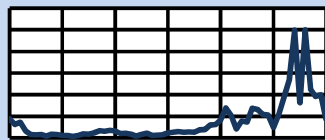
American Lobster

High: 52,729 mt (2010) – Low: 10,522 mt (1950) – 2010: 52,719 MT – Av: 22,452 mt



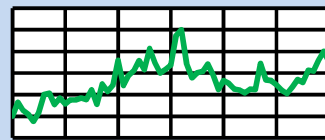
Caribbean Lobster

High: 2,917 mt (1972) – Low: 93 mt (1984) – 2010: 218 mt – Average: 536 mt



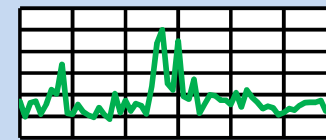
Atlantic Mackerel

High: 56,639 mt (2006) – Low: 942 mt (1962) – 2010: 9876 mt – Average: 8,514 mt



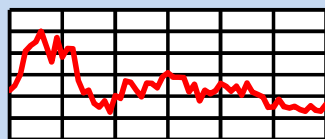
King & Cero Mackerel

High: 2,747 mt (1982) – Low: 418 mt (1954) – 2010: 1,926 mt – Average: 1,415 mt



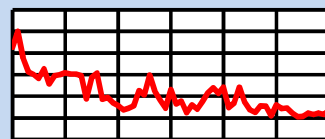
Spanish Mackerel

High: 5,015 mt (1977) – Low: 865 mt (1967) – 2010: 2,045 mt – Average: 1,770 mt



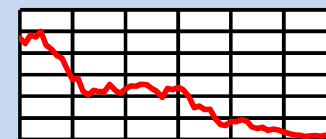
Menhaden

High: 697,362 mt (1956) – Low: 177,051 mt (1969) – 2010: 229,658 mt – Av: 346,829 mt



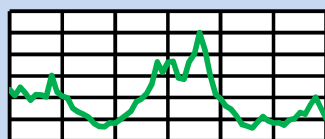
Striped Mullet

High: 5,794 mt (1951) – Low: 1,230 mt (2004) – 2010: 1,573 mt – Average: 2,412 mt



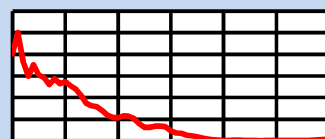
Eastern Oyster

High: 26,692 mt (1954) – Low: 826 mt (2004) – 2010: 1,4309 mt – Average: 10,084 mt



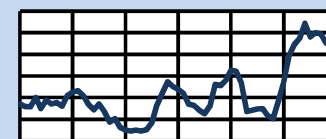
Pollock

High: 24,635 mt (1986) – Low: 2,961 mt (1996) – 2010: 5,157 mt – Average: 9,196 mt



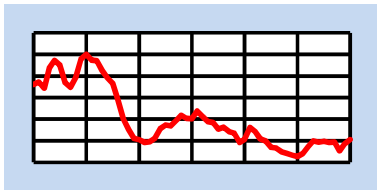
Acadian Redfish

High: 117,173 mt (1951) – Low: 251 mt (1997) – 2010: 1,645 mt – Average: 24,125 mt



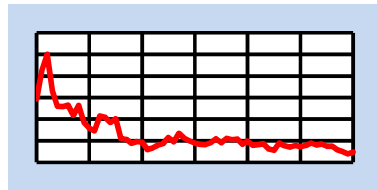
Sea Scallop

High: 27,768 mt (2006) – Low: 2,399 mt (1973) – 2010: 25,876 mt – Average: 11,802 mt



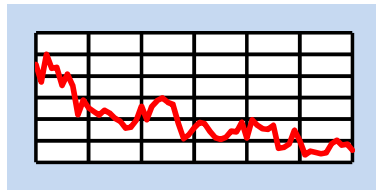
Scup

High: 22,298 mt (1960) – Low: 1,211 mt (2000) – 2010: 4,714 mt – Average: 6,654 mt



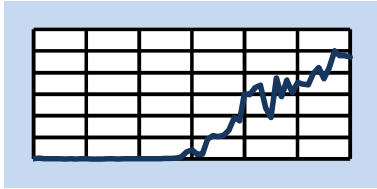
Black Sea Bass

High: 9,978 mt (1952) – Low: 793 mt (2009) – 2010: 948 mt – Average: 2,607 mt



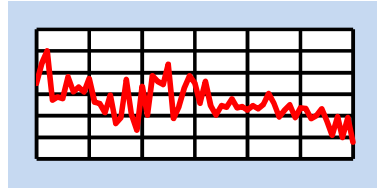
Spotted Sea Trout

High: 1,049 mt (1952) – Low: 85.2 mt (2004) – 2010: 119 mt – Average: 403 mt



Skates

High: 18,945 mt (2007) – Low: 36 mt (1961) – 2010: 17,881 mt – Average: 5,420 mt



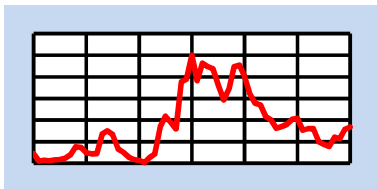
Spot

High: 6,586 mt (1952) – Low: 1,032 mt (2010) – 2010: 1,032 mt – Average: 3,483 mt



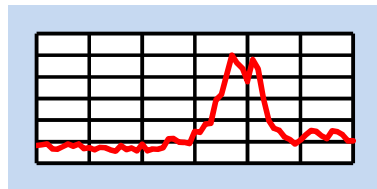
Squid

High: 42,737 mt (1998) – Low: 1,067 mt (1950) – 2010: 22,582 mt – Average: 12,599 mt



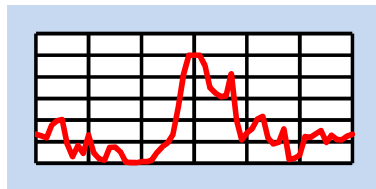
Swordfish

High: 4,625 mt – Low: 35 mt (1971) – 2010: 1,547 mt – Average: 1,618 mt



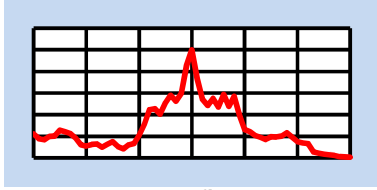
Tautog

High: 527 mt (1987) – Low: 60 mt (1965) – 2010: 110 mt – Average: 159 mt



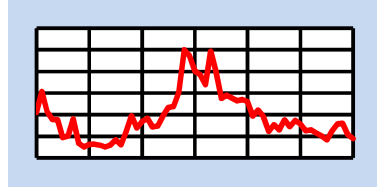
Tilefish

High: 4,042 mt (1980) – Low: 32 mt (1968) – 2010: 1,090 mt – Average: 1,215 mt



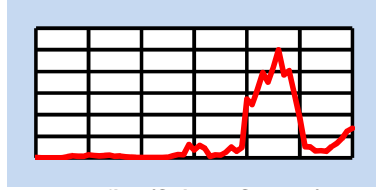
Weakfish

High: 16,312 mt (1980) – Low: 93 mt (2010) – 2010: 93 mt – Average: 4,451 mt



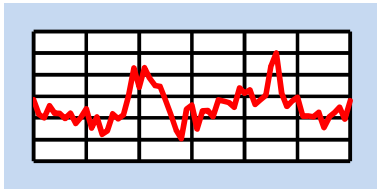
Groupers

High: 1,000 mt (1978) – Low: 91 mt (1963) – 2010: 184 mt – Average: 386 mt



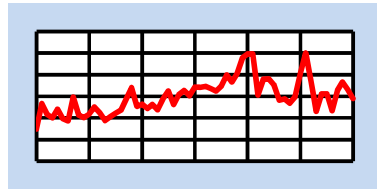
Dogfish (Spiny & Smooth)

High: 27,255 mt (1996) – Low: 24 mt (1952) – 2010: 7,510 mt – Average: 4,474 mt



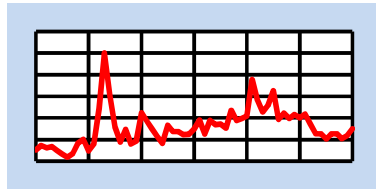
Shrimp

High: 29,277 mt (1996) – Low: 7,301 mt (1963) – 2010: 16,350 mt – Average: 14,887 mt



Snappers

High: 937 mt (2001) – Low: 279 mt (1950) – 2010: 542 mt – Average: 563 mt



Tunas

High: 4,541 mt (1963) – Low: 208 mt (1956) – 2010: 2,002 mt – Average: 2,112 mt

You can be sure that the people in the ENGOs and their foundation funding sources who are the bottom-line cause of these plummeting catch levels will assure anyone willing to listen that all of those fisheries with landings that continue to decrease year-by-year aren't demonstrably "rebuilt" and are thereby still in need of rigorous protection from fishermen and fishing, and that when they are, quotas should be allowed to inch up.

Unfortunately but predictably, that's nowhere near the whole story. By way of example, let's look at monkfish – officially known as "goosefish" by NOAA/NMFS.

Monkfish first

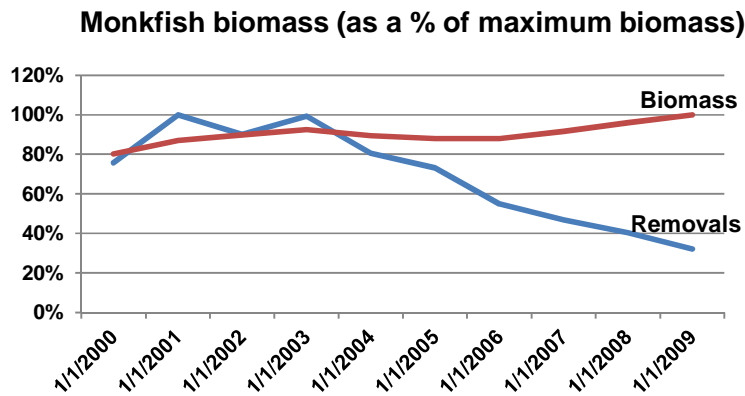
There wasn't a significant directed fishery for monkfish up until the late 1970s, but when Julia Child, one of the earliest celebrity chefs, featured a large and impressive (and ugly) specimen on her television show in 1979, it's generally agreed that she spurred domestic consumer interest in the fish and the subsequent development of the fishery. This culminated in a maximum harvest of almost 28,000 metric tons in 1997. Since this peak the domestic harvest has been "managed" to today's level of well under 10,000 mt.

As the chart above indicates, the harvest has declined steadily and precipitously since 2002.

All things being equal, you would probably say that the monkfish stock had been severely overfished, was on the road to recovery but not there yet, so the declining harvest was a good thing.

As can be said of so many situations in our domestic fisheries, all things aren't anywhere near equal. On page 16 of the report of the most recent monkfish stock assessment is a table listing, among other things, monkfish landings, monkfish bycatch and monkfish biomass for the years from 2000 to 2009 (<http://www.nefsc.noaa.gov/publications/crd/crd1009/pdfs/monkfish.pdf>). They are reported separately for the Northern and Southern Management Areas – for simplicity I combined them.

The table shows that from 2000 to 2009 the combined monkfish biomass went from 158 thousand metric tons to 197 thousand metric tons, an increase of 25%. In the same period the monkfish removals (landings and bycatch mortality) went from 31 thousand metric tons to 10 thousand metric tons, a decrease of 66%.



To make perfectly clear what's happening in this fishery, in 2000 the monkfish fishery was the most valuable finfish fishery on the East coast. Since then, as the biomass of monkfish was increasing by 25%, total removals were reduced by 66%, all in a fishery that hasn't been overfished since 2007.

Then Summer Flounder

Summer flounder – also known as fluke - was the fourth most valuable East coast fishery in 2000 (after monkfish, cod and menhaden).

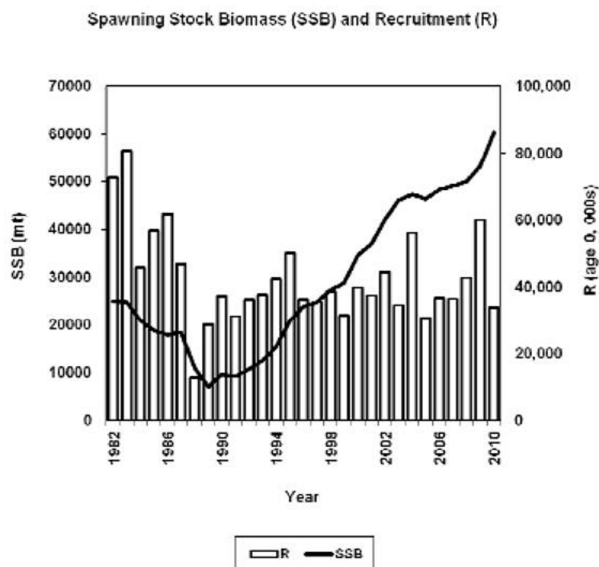
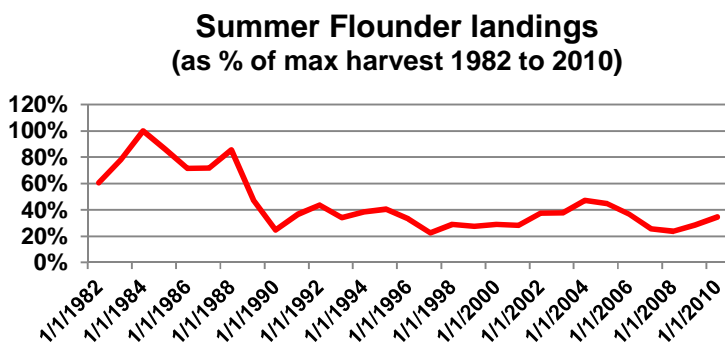


Figure 18. Spawning Stock Biomass (SSB) and Recruitment (R, age 0) by calendar year.

The above is from the report of the 2011 Summer Flounder Stock Assessment Workshop.

As the chart below indicates, as the (spawning stock) biomass has been increasing steadily since 1990, from a low of under 10,000 metric tons to almost 90,000 mt, landings have hovered around 40% of their maximum for the period.



Just over a decade ago summer flounder and monkfish, among the most valuable East coast finfish fisheries, generated \$75 million in landings. In 2010 their combined landings were \$48 million, a decrease of almost 40%. This decrease was in spite of dramatic increases in the biomass of both species. And these two fisheries aren't the only ones which exhibit increasing natural production coupled with declining landings.

A rational person might ask how this can be possible. As we've been told by any number of self-congratulating NOAA/NMFS leaders, we've turned the corner on overfishing. If so many of our fish stocks are thriving, if there are more fish in our coastal waters, why aren't our fishermen thriving as well?

A great deal of the blame lies with the overenthusiastic application of the "precautionary principle" by our fisheries managers, with the overenthusiastic support of the ENGOs and of the Members of Congress who accept whatever they say as gospel. The precautionary principle as applied to fisheries management means that the less sure you are about the conditions of a fishery, the fewer fish you can let the fishermen catch. Of course about the only conditions of any fishery that we're anywhere near sure about is the commercial harvest. We don't have a clue about the recreational harvest. We don't have a clue about natural – that would be non-fishing – mortality. We don't have a clue about the impacts of rising ocean temperatures on various fish stocks. We don't have a clue about the impacts of millions of gallons of oil or oil dispersants or household chemicals or recycled – from us to our estuaries – pharmaceuticals. We don't have a clue about the impacts of interspecific predation. In fact we don't have much of a clue about just about anything that impacts fish stocks – except for commercial fishing.

More and better research is needed, but that costs money, and research money seems to be in short supply at NOAA/NMFS. In part that's due to declining budgets, but it's also due to the funds NOAA/NMFS has to commit to defending against a seemingly endless stream of lawsuits and petitions and other bureaucratic roadblocks by the foundation-funded ENGOs because fishermen are allowed to catch too much – in essence the fish aren't being managed with enough precaution - and at a much lower level by fishing-funded fishermen because they aren't allowed to catch enough – the fish are being managed with too much precaution.

Now floating around in there seems to be an obvious solution, though it's apparently not obvious enough to whoever decides what the various "save the fish and save the fishermen" foundation's funds will be spent on every year, and these funds must be approaching a billion dollars by now (two years ago a partial listing of fishing oriented grants by a handful of the largest foundations totaled almost two thirds of a billion dollars – see <http://www.fishtruth.net> and follow the first link on the intro page).

Why wouldn't whoever runs this handful of foundations mandate that a significant part of the funding that they are ostensibly devoting to "saving fish and fishermen" (as the latest Pew promo on National Public Radio states) be used to improve the level of knowledge we have of the actual condition of our fish stocks? The surer we are of how many of a particular species are swimming around out there, the more precise our catch setting mechanisms for that species can be – and that would generally boil down to increased landings. The foundations – and the ENGOs they control - would be much surer that the managers were setting accurate catch quotas, as would the fishermen.

Up and down all of our coasts commercial fishermen have already made commitments to cooperative research – real fishing boats operated by real fishermen with real scientists and technicians on board doing the sampling and providing the data that is acceptable to everyone. But available funds are severely limited. Why won't the Pew, Packard, Moore or Walton foundations spend some of their \$billions on extending cooperative research, getting more and more reliable data on more of our fisheries?

If these foundations were really intent on saving the fish and saving the fishermen, this would be a no brainer. And it would be the most effective way of getting the harvest levels of our various fisheries more in line with the abundance levels of the fish. If they continue to ignore the tremendous benefits that their supporting real fisheries research could provide to the fish and the to the fishermen – and to the businesses and the communities that depend on them – I'd think it would be impossible not to suspect their motives for making so many hundreds of millions of dollars of fisheries related grants.

The groundfish debacle – and business as usual at NOAA/NMFS

08/06/12

After years of cutbacks in groundfish landings, of economic chaos for New England fishing businesses and the people and communities dependent on those businesses, and of assurances by the managers that there was light at the end of the tunnel, it was announced this week that the most important groundfish stocks weren't near where they were supposed to be. Naturally, this means that further and more drastic cuts are imminent. And this in spite of the imposition of a catch shares program in the fishery, something that NOAA head Jane Lubchenco still seems convinced is the answer to any fisheries problem.

But fear not. According to NMFS head Samuel Rauch and New England Council Chairman "Rip" Cunningham, "we are committed to this fishery, to this industry, and to the people in this community; preserving the groundfish industry is of the utmost importance to us and we'll put forward our unwavering support." What have they and their predecessors at NMFS and the Council been doing up until now, as this latest "crisis" has been developing? Should we believe that they're finally going to get really serious about groundfish management and its potential impacts on fisheries from Cape Hatteras to the Gulf of Maine?

And what of the so-called fish conservationists, members of foundation-funded ENGOs who have used tens of millions of tax free dollars to design a system that forces fishermen and fishing dependent businesses down a one-way street leading inexorably towards extinction? Pew's latest adverts on NPR talk about helping the fish and helping the fisherman. Some help!

A popular definition of insanity is doing the same thing over and over and expecting different results. If that's true, what does it say about fisheries managers or the people that the managers work for? Or about the people in Congress who make up the fisheries management rules? If there aren't enough fish, cut back on fishing. If there still aren't enough fish, cut back on fishing even more. But what else might be impacting groundfish stocks?

What about the burgeoning spiny dogfish population, which is estimated to be growing at 3% a year. Among the "preliminary" data made available to the Mid-Atlantic Fisheries Management Council for last year's stock status update, the total biomass of spiny dogfish was 557,059 metric tons (1.22 billion pounds - for a sense of scale, if the average weight of New Jerseyites was 120 pounds, New Jersey's total population would weigh just over a billion pounds).

Assuming that dogfish consume six times their body weight each year², the total annual consumption by dogfish off the Northeast states is 7 billion pounds or so (to the same scale, the combined weight of everyone living in the coastal states from Maryland to Maine). Much of that is composed of groundfish and other valuable species, or the forage that those species could be, and minus spiny dogfish, would be eating.

In 1992, Steve Murawski, recently retired Director of Scientific Programs and Chief Science Advisor at NOAA's National Marine Fisheries Service, wrote in *Multi species size composition: A conservative property of exploited fishery systems*³ "given the current high abundance of skates and dogfish, it may not be possible to increase gadoid (cod and haddock) and flounder abundance without 'extracting' some of the current standing stock." In 1992 the spiny dogfish biomass was estimated to be 553 thousand metric tons. Among the groundfish stocks that are supposedly in such great trouble— and the harvests of which will be even further reduced – are cod and yellowtail flounder.

The commercial quota for spiny dogfish for this fishing year is 16,191 metric tons, not even 3% of the total biomass and just a bit under the predicted biomass increase for the year. Why not raise it to a reasonable level? That would certainly help fishermen – and not just the fishermen in the expanded dogfish fishery. It would help those fishermen in every other fishery – both commercial and recreational – that this huge biomass of ravenous sharks is already impacting, and that's most of them.

Is there a downside? Our existing infrastructure would have a hard time processing and handling and our existing markets would have a hard time absorbing a large and abrupt increase in supply, but a government supported development program could surely provide a significant level of support.

How about doing irreparable damage to the spiny dogfish stock? While that would garner a lot of support in fishing circles, it isn't likely to happen. As the chart below (from the above mentioned Stock Status Update) indicates, the population of spiny dogfish is capable of rebounding in a surprisingly short time, increasing by almost 60% from 2005 to 2008.

In addition, even if, as many in the New England fisheries are saying, the NOAA/NMFS surveys that are the foundation of the groundfish stock assessments are shown to be totally off base, fewer spiny dogfish is going to mean more of the more valuable species.

Isn't this what "ecosystem management" is about? It's always used as an excuse to reduce fishing, as in "we've got to cut back severely on herring harvesting because it might be having a detrimental effect on the species that eat, among other things, herring," but why shouldn't it also be used as a reason to increase the availability of other species?

This wouldn't be doable under the constraints that the ENGOs have forced into the Magnuson Act, effectively tying the hands of the managers. That could be fixed. That's what Congress does. And the bottom line could be something that really helps the fish (except for spiny dogfish) and really helps the fishermen.

So now I guess all we have to do is stand back so we don't get crushed by the stampede of Pew people and their minions in their zeal to begin to fix a system that they have so thoroughly messed up and a fishing tradition in New England that is about to be destroyed. (For more on spiny dogfish, see <http://www.fishnet-usa.com/dogforum1.htm>.)

“Fishing” isn't a four letter word

09/03/12

Please excuse this intrusion on a national holiday. However, considering that Labor Day was designed to recognize the contributions and achievements of American workers, that fishermen are and since colonial times have been among the hardest working of those workers, and that the Congress and the current Administration are about to embark on an prohibitively expensive and totally unnecessary program to put many of those fishermen – fishermen in our most historic fishery - out of work without giving any consideration to alternatives that could keep them fishing, this seems a particularly appropriate time for it.

Two weeks ago I referred to the situation in the New England groundfish fishery as a debacle. I should have ended with "*but you ain't seen nothing yet.*" According to Richard Gaines in the Gloucester Daily Times, a proposal is circulating in New England's Congressional delegation that would make available several hundreds of millions of federal dollars which would do little more than reduce the size – and the political and economic clout - of the New England commercial fishery yet again (**Fishing aid plan: \$100M in buyouts**, 08/30/2012). With a combination of vessel/permit buyouts, retraining programs and increased subsidies for groundfish sectors, this federal funding will exacerbate all of the problems that have been visited on the fishery by a federal administration that professes to value fishermen and fishing communities. It all boils down to fewer fishing jobs, fishing boats, fishing support jobs on shore and fishing generated dollars for New England along, of course, with even more imports of tilapia, pangasius and swai.

Is there an alternative? In The groundfish debacle I wrote about the well over a billion pounds (557 thousand metric tons) of spiny dogfish swimming around off our coast in the Northeast (<http://www.fishnet-usa.com/Debate.pdf>). A large portion of these fish are – or would be –

catchable and salable with the right kind of government support (in fact, the Northeastern spiny dogfish fishery was just certified as sustainable by the Marine Stewardship Council – see <http://www.savingseafood.org/conservation-environment/atlantic-dogfish-fishery-certified-as-sustainable-by-marine-stewardship-c-3.html>).

But the uncaught fish available to New England fishermen don't end with spiny dogfish. In 2010 it was estimated that the spawning stock of haddock on Georges Bank was 167 thousand metric tons and that Acadian redfish biomass was over 300 thousand metric tons.

In 2010 the coastwide domestic landings of spiny dogfish, Acadian redfish and haddock was 12 thousand metric tons. Haddock have a ready market in the U.S., and the Acadian redfish fishery was one of the mainstays of the New England groundfish fleet starting in the 1930s.

All together that's just over a million metric tons – or two and a quarter billion pounds – of fish, with not a penny of the so-called bailout money going towards helping fishermen to catch them, processors to process them or dealers to sell them.

If only 20% of that biomass, 200 thousand metric tons, was harvested by our fishermen every year and those harvested fish returned twenty cents per pound to the fishermen, they would be worth \$90 million. By the time they were processed and sold they could easily contribute a half a billion dollars to the coastal economy. To put this into perspective, in 2010 the total weight of finfish landed in New England was approximately 200 thousand metric tons. This could be doubled, and any reduction in the biomass of spiny dogfish is going to result in an increase in the other, higher-demand species. (Note that some of this biomass might have to be shared with the Canadians.)

It's easy to understand why the people at NOAA/NMFS wouldn't be interested in anything that would have anything to do with forcing fewer fishermen out of fishing. Their boss, NOAA head Jane Lubchenco, has been on the record since she took over at that agency that, in spite of the professed priority on job creation by the Obama administration, her goal is fewer fishermen, fewer boats and less fishing. Considering her background in and continuing close ties with the anti-fishing ENGOs and the foundations that support them, what else could anyone expect? But has the New England Congressional delegation been convinced that that's the way to go as well? It surely seems so.

The National Marine Fisheries Service used to know how to do fisheries development. Several decades ago the agency had a "let's utilize underutilized species" program that was a screaming success with some species (in fact, with some of those species it was arguably too successful). From a U.S. Seafood pavilion at international food shows to Saltonstall-Kennedy grants to develop catching/handling/processing technologies, a large part of the agency was devoted to developing and supplying markets for domestically produced seafood. Back then catching fish, and profiting from doing it, wasn't considered one of the cardinal sins.

Because the New England groundfish fishermen and the people and the communities that they support are approaching the bitter end of the dead end street that the federal fisheries managers and the ENGOs that are so obviously in charge have forced them down, they can't be faulted for grasping at whatever straws Congress throws their way. Nor can the Members of the New England delegation, who are trying to help their constituents. But is yet another reduction in the groundfish fleet size, in total landings and in income generated the only option? Over two billion pounds of dogfish, redfish and haddock and a potential market of over seven billion consumers argue obviously not, but before any of the other options are seriously considered, the people on Capitol Hill and in the White House are going to have to decide that the fishing industry shouldn't be kicked under the bureaucratic rug to hide years of grossly inadequate management (or to advance mega-foundation agendas).

There's Wrong, There's Really Wrong And Then There's Being A Volunteer Internet "Journalist"

10/09/12

"New Jersey Newsroom" website gets it all wrong on East Coast scallop fishery.

The New Jersey Newsroom website was formed by journalists and ex-journalists, primarily from the Newark (New Jersey) Star Ledger, with collective experience adding up to "over 1,000 years." On their site those journalists wrote "our contributing writers, driven by passion and purpose, contribute as volunteers who believe in the cause.... NewJerseyNewsroom.com's goal is to provide high-quality news for New Jerseyans and not just about New Jerseyans. We will do our best to gather all the stories you want, regardless of the original sources."

Impressive sounding, isn't it?

Unfortunately, at least judging by a recent article on the scallop fishery off the East coast, the content on the site doesn't come close to living up to its billing. With particular reference to the "contribute as volunteers" quote, an article posted on their website on September 27 is about as good a demonstration I've seen of the old adage "you get what you pay for."

In Jaws for hire: Fewer sharks mean fewer scallops at the Jersey Shore, Robert Kinkead came to some startling conclusions and yet another undeserved and inaccurate indictment of commercial fishing based on 1) a graphical depiction of a marine foodweb from an article referenced in the current edition of Scientific American, **Ecosystems on the brink**, and 2) his wife not being able to order scallops at Poor Henry's restaurant (in Montvale, NJ) because, as related by the server, they didn't have any that day.

From this beginning he crafted an article in just under 800 words that laid out a plausible sounding argument for the fact that an increase in the price and a decrease in the supply of scallops, as so convincingly demonstrated by his wife's failure to have her first choice entrée at Poor Henry's, was due to the unregulated slaughter of oceanic sharks.

Citing the Star Ledger He writes "*it's a near-innocuous business story. Good news about fishing off Cape May, wherein that port has been named the second most prosperous on the East Coast because rising scallop prices have offset diminishing catches of shellfish.*"

But, he continues "*increased revenues are due to the growing scarcity of scallops, in turn attributable to a complex change in the predatory food chain off the coast of New Jersey.*" The argument is so plausible, in fact, that as of this writing it has accumulated 153 Facebook "likes."

Starting out with Scientific American, the foodweb that impressed Mr. Kinkead was derived from research reported in 2007 and 2009 that purportedly showed that a decline in scallop stocks was attributable to a decline in large sharks due to overfishing. (What else would we expect from Scientific American?)

When this research was first published in 2007, there were a few problems with it (see my 2007 National Fisherman column Of sharks and scallops and questionable science at http://www.fishnet-usa.com/natfish_sharks_rays.htm). Regardless of the validity of the conclusions reached by the team of researchers, however, the research very clearly dealt with East coast bay scallops, *Argopecten irradians*. These are small scallops that, as their common name clearly indicates, live in estuaries.

Getting back to Poor Henry's and poor Mrs. Kinkead, who had to settle for her second choice for dinner, a visit to the restaurant's website shows that the scallops served there are "Bedford scallops."

As Mr. Kinkead accurately relates in his article, the value of landings by commercial fishermen in New Bedford, Massachusetts has led all other commercial fishing ports in the U.S. for quite a few years, and the reason for this is because of the concentration of scallop vessels there. Hence, I assume, Poor Henry's geographically focused menu item.

Mr. Kinkead informs us that "*according to Wikipedia, by far the largest wild scallop fishery in the world is the Atlantic sea scallop (Placopecten magellanicus) found off the northeastern United States and eastern Canada.*"

The scallops landed in New Bedford, Cape May, Barnegat Light and other fishing ports on the East coast, the scallops that make up the most valuable fishery in the U.S., are those very same sea scallops.

Not surprisingly, sea scallops spend all of their time – from egg to adult – in the ocean.

Then he writes "*according to the (National) Marine Fisheries Service, this wonderful resource is in sad decline.*"

Just how much of a decline is the sea scallop fishery experiencing? The below chart, taken from the National Marine Fisheries Service commercial landings online database, shows that landings have been remarkably stable for the last decade. Reductions in allowable landings are currently being considered for fishing years 2013 and 2014, but the fishery is not overfished and overfishing is not occurring.

East Coast Sea Scallop Landings		
Year	Metric tons	Value
2001	21,053.10	\$172,582,812
2002	23,891.70	\$202,092,361
2003	25,386.80	\$229,096,518
2004	29,079.30	\$320,038,726
2005	25,685.20	\$432,514,317
2006	26,768.20	\$384,758,496
2007	26,512.80	\$386,044,356
2008	24,215.30	\$370,057,384
2009	26,178.90	\$374,022,276
2010	25,876.90	\$450,965,800
2011	26,618.00	\$580,907,132

In fact, the most recent surveys (see **New Survey of Ocean Floor Finds Juvenile Scallops are Abundant in Mid-Atlantic** at http://www.nefsc.noaa.gov/press_release/2012/SciSpot/SS1208/) have shown that sea scallop recruitment this year was at or near the maximum recorded off the Mid-Atlantic States.

The northeast sea scallop population, at least in terms of large, marketable scallops, appears to be lower that it has been, but measures will be put in place to protect the recruits in the mid-Atlantic, the opening of scallop-rich areas off New England that have been closed to scalloping is being considered, and any reduction in scallop landings will be of a temporary nature.

While Mr. Kinkead did manage to get the part about rising scallop prices right, they are higher than they have been because, most knowledgeable people agree, of the rapidly developing middle class in China and the corresponding worldwide increase in the demand for high quality seafood. Their prices have been elevated for the last several years, and as the above chart shows, there has been no decline in the harvest up until 2011. This is a definite contradiction of his "*increased (scallop) revenues are due to the growing scarcity of scallops.*"

The Scientific American food web that Mr. Kinkead based his argument about Atlantic sea scallops on dealt with bay scallops and the supposed impact that shark overfishing had on their abundance. Confusedly, Mr. Kinkead supports his thesis that shark overfishing has brought about his “*sad decline*” of sea scallops, not bay scallops. There is no relationship between the abundance of bay scallops and the abundance of sea scallops. There is no relationship between the price of bay scallops and the price of sea scallops. There is no relationship between the abundance – or lack thereof – of large sharks and the abundance of sea scallops, and there is no relationship between the abundance of cownose rays – the assumed predators on bay scallops and the assumed prey of the supposedly missing large sharks – and the abundance of sea scallops.

As a relevant aside, the fisheries for large sharks in U.S. waters has been so stringently over-regulated that the commercial fishery has all but disappeared. This is one of those bothersome facts that Mr. Kinkead neglected to mention. Another is that the practice of finning sharks, which he certainly didn’t neglect, has been illegal in U.S. fisheries since the passage of the Shark Finning Prohibition Act in 2000.

But he has provided one of the best illustrations I’ve come across of a little knowledge going a long way. Unfortunately it’s going in a host of completely wrong directions.

Other than as a prime example of inadequate research and even more inadequate fact checking, what’s the big deal about this article and the dozens of others of similar slant that get “published” on the web each year? Do a Google search on “sharks scallops” and on the first page of results is a link to this article. It’s on the first page for “scallop New Jersey” as well. Search on “Poor Henry’s scallops” and it’s the second listed link. How far and wide will the misinformation in this article spread, and for how many years?

To give you an idea, there is an article on summer flounder (aka fluke) that I posted on the New Jersey Fishing website (<http://www.fishingnj.org>) in 1999. I haven’t done a thing with the page in the intervening 13 years. That page was visited 1586 times in June of this year. The search strings that got these visitors there was some variation of “fluke fishing.” Assuming that the number of visitors has increased steadily over 13 years, the average per month would be around 700 people. In the years that page has been up on the order of 120,000 people have visited it – a page on a website that has not been promoted for over a decade. That’s the curse, of the internet. Once it’s posted it’s there forever, regardless of how close to reality it actually is.

Needless to say, as soon as I read Mr. Kinkead’s article I posted a comment on the New Jersey Newsroom web page and sent a message to him via the “contact us” page there. In my message to him I invited him to call me. He hasn’t, and the article is still on the New Jersey Newsroom website as it was written, blemishes and all.

I’ll let you know if that changes. But in the meantime, it’s incumbent on everyone in or connected to the commercial and recreational fishing industries to let the publishers, editors, producers, webmasters, writers, bloggers, journalists, etc. know when anything is broadcast, printed or posted that unfairly and inaccurately faults fishing. Fishermen have been the victims of this undeserved assault for over a decade, and it’s well past time that we started to collectively do something about it.

Federal fisheries enforcement and the 2012 election – a purposeful cover-up?

10/29/12

Fact: Senator Scott Brown (Republican) and candidate Elizabeth Warren (Democrat) are in a close race for one of the two Massachusetts seats in the United States Senate.

Fact: A majority in the United States Senate, which is now in the hands of the Democratic Party, is considered by many pundits to be “up for grabs” in the rapidly approaching election, and the outcome in Massachusetts will be critical in determining which party controls the Senate – and the United States Congress – starting in 2013.

Fact: Senator Scott Brown has been an ardent supporter of the commercial fishing industry and has been particularly outspoken about an ongoing investigation of corruption at the highest levels of the enforcement branch of the U.S. Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA).

Fact: New Englanders in general and residents of Massachusetts in particular tend to be extremely supportive of their fishing communities and of the fishing heritage that has played such a significant role in shaping the character of their coastline.

Fact: A 514 page report on the follow-up investigation by Special Master Charles Swartwood of NOAA enforcement abuses of fishermen and fishing associated businesses centered in New England and primarily in Massachusetts was completed and delivered to the Secretary of the U.S. Department of Commerce in March of 2012.

Fact: In spite of strong bipartisan Congressional prodding to make the report public, prodding in which Senator Scott Brown has assumed a leadership role, (Acting) Secretary of Commerce Rebecca Blank has refused to do so. To her credit Elizabeth Warren, his opponent, has been seeking the release of the report as well.

Fact: Massachusetts Senator John Kerry’s brother, Cameron Kerry, is general counsel of the Department of Commerce.

Suppose the follow-up report of Special Master Swartwood had been made public by the Secretary of Commerce in a timely fashion and suppose it to be at least as damaging to the reputation and to the credibility of the Department and of NOAA as was the original investigation – necessitating that the Department pay \$650,000 in “reparations” to fishing industry members who were victimized by NOAA, a supposed reworking of how NOAA enforcement operated, and a public apology by then Secretary of Commerce Gary Locke and NOAA head Jane Lub

chenco to the victims of an out-of-control federal agency? There would have been a clamor in the media, the issue would have been front and center for a few days, and by now it would have been forgotten.

That didn't happen and, at least initially, it's easy to understand why it didn't. John Bryson, who had replaced Gary Locke as Secretary of Commerce, resigned in June of this year after an episode of automobile accidents and seemingly strange behavior, and Ms. Blank took over as Acting Secretary. It's hard to imagine that this rapid and perhaps somewhat strained turn-around in leadership didn't have a profound temporary effect on business as usual in the USDOC.

The extended delay since then in making the report public, even in a severely redacted form, has been explained by a Department of Commerce spokesperson as necessitated by Secretary Blank's request "to gather more information regarding issues identified in the second Swartwood report."

That's almost half a year of gathering "more information."

In the meantime the race for the Massachusetts Senate seat between Senator Brown and Ms. Warren was heating up. So, if you were at a policy level in NOAA, the Department of Commerce, the Democratic Party or the Obama Administration, what would you do? Would you release the report, possibly focusing on even more enforcement abuses against independent fishermen and small fishing related businesses by NOAA law enforcement (the follow-up report is reportedly twice the length of the initial report), making it appear as if they were victims of an Obama Administration that has been campaigning on the idea that it is pro-small business and pro-middle class and were likewise entitled to another embarrassing public apology from the Secretary of Commerce and the head of NOAA, or would you sit on the report until after the election?

I think it's safe to assume that Senator Scott would do all that he could to insure that the report got all of the attention it deserved, and rightly so. Could it help him to a victory in the election? If it's as close a race as it's reported to be, why wouldn't it? Could that seat determine which party has a majority in the Senate and the entire Congress? You betcha!

But what of the people who have been identified as additional victims of NOAA enforcement (I'm assuming here that Special Master Swartwood didn't put together a 500 page report based on the fact that there were no additional victims)? Like many of the victims identified in the first Swartwood report, their lives have been – at best – on hold since their encounters with an out-of-control federal agency. Several of them have had businesses which it took them a lifetime to build wantonly destroyed. How many of the second round of victims are still in a politically induced economic and personal limbo?

And what of any additional NOAA employees who were found to have engaged in still more egregious abuses of their sworn offices or of those employees who allowed them to engage in those abuses (ditto the 500 pages)? Are they still and will they continue to be employed by the Department of Commerce, collecting their taxpayer-provided paychecks and using their taxpayer provided benefits?

While it's hard to imagine that the future governance of the United States could hinge on the delayed release of a single report, if the delay of the release of that report was due to high-level political interference, it surely should. Politics is politics and justice is justice, and a large part of what has made the United States the country – and the ideal – that it is is the stringent separation of the two. I hate to think that somewhere high up in the Obama Administration a line has been crossed, but it's hard to think that it hasn't and it's even harder to think that it's once again at the expense of hard working and law abiding members of the fishing industry.

(I must note here how greatly I am indebted to the indefatigable reporting on institutionalized corruption in DOC/NOAA Law Enforcement by Richard Gaines at the Gloucester Daily Times since this issue first came to light. His work is available by using the "article search" feature on the GDT website (<http://www.gloucestertimes.com/>). An earlier piece I wrote on the first report by Special Master Swartwood and the DOC/NOAA response to it is at http://www.fishnet-usa.com/Sorry_is_not_enough.pdf.)

Bluefin tuna and Pew, here we go again!

06/24/13

On August 13, 1997 Josh Reichert, then Director of the Pew Trusts Environment Program and now Executive Vice President of the Trusts, in an op-ed column in the Philadelphia Inquirer titled *Swordfish technique depletes the swordfish population* wrote "the root problem is not only the size of the (swordfish) quota, the length of the season, or the number of vessels involved. It is how the fish are caught.... Use of longlines must be barred.... the fishery should be open to all - provided that swordfish are caught with hand gear, including harpoons and rod and reel. No swordfish should be taken until it has a chance to breed at least once, meaning that the minimum allowable catch size should be no less than 100 pounds. Such measures.... would put the Atlantic swordfish population back on the road to recovery." http://articles.philly.com/1997-08-13/news/25567968_1_swordfish-big-fish-commercial-long-liners

In what has become typical Pew style, Mr. Reichert's article was just a small piece of a frightfully well-funded campaign to "save the swordfish" from the depredations of the U.S. pelagic longline fleet. Involving scientists who had been willing riders on the Pew funding gravy train,

enlisting restaurateurs into the campaign who hadn't the foggiest idea what swordfishing or pelagic longlining was all about, and using the formidable Pew media machine which had earned its legitimacy with tens of millions of dollars in grants to journalism schools and broadcast outlets, Mr. Reichert and his minions set out to destroy an entire fishery and the lives of the thousands of hard working Americans who depended on it.

This could have dealt a devastating blow to the U.S. longline fleet. Exacerbating a bad situation, it would have also resulted in the transfer of the uncaught quota from the strictly regulated U.S. boats to other vessels whose regulation was much less rigorous. Without question removal of the U.S. longline fleet would have had a negative impact on swordfish conservation.

Fortunately a swordfish management program to reduce fishing effort to where it was in balance with the resource had been put in place by the International Commission for the Conservation of Atlantic Tunas (ICCAT) years before Mr. Reichert and Pew "discovered" swordfish. By the time the Pew people and the Pew dollars entered the fray this program was already paying obvious conservation dividends. Then a closure of swordfish nursery areas off Florida, a closure which was supported by the U.S. longline fleet, was also put in place. This assured the recovery of the swordfish stock in the Western North Atlantic.

This was a testament to fisheries management based on sound science, not on media hype only affordable by multi-billion dollar corporations and foundations. In spite of self-serving claims to the contrary, the Pew peoples' prodigious yet misguided efforts to scuttle the pelagic longline fleet – and their obvious lack of understanding of swordfish management – changed virtually nothing about the fishery or about how it was being managed.

But what has changed in the intervening years is the way in which the rest of the (non-Pew) world looks at pelagic longlining in general and the U.S. pelagic longline fleet in particular. Thanks to significant efforts by the U.S. participants in this fishery, they have become the undisputed world leaders in developing and implementing fishing gear and fishing techniques to drastically reduce or eliminate the incidence of bycatch in their fishery. And despite Mr. Reichert's dire predictions and those of Pew's stable of scientists, the doom and gloom predicted for swordfish if longlining was allowed to continue never developed. Today, as the pelagic longline fishery continues, the swordfish stock is fully rebuilt. In fact, the fishery is in such good shape that it was recently certified as sustainable by the Marine Stewardship Council.

So now Bluefin tuna

To quote the inimitable Yogi Berra, "*it's déjà vu all over again.*" Fifteen years later the same cast of characters and the same organizations are using the same tired and ineffective strategy funded by the same sources to derail the management of another highly migratory fish species, the Atlantic bluefin tuna (ABT).

The International Commission for the Conservation of Atlantic Tunas (ICCAT), the same body that is responsible for swordfish management in the Atlantic, is holding a meeting of fisheries scientists and managers in Montreal at the end of this month to review the ABT stock assessment. The outcome of this review will have much to do with determining what the total allowable catch (TAC) of these valuable fish will be in the coming years. The TAC is divided between recreational fishermen, rod and reel commercial fishermen, harpooners, purse seiners (currently none are in the U.S. fishery) and pelagic longliners (who don't target ABT but do take some incidentally).

While the public's view of the value of these fish has been purposely distorted – each year one fish, supposedly the first and the best of the year, is sold at a Japanese auction for hundreds of thousands of dollars as a marketing ploy – they are valuable, with a prime fish bringing thousands of dollars (the National Geographic Channel offers a largely accurate portrayal of the rod and reel ABT fishery in its series **Wicked Tuna**).

In what is no surprise to anyone with even a nodding acquaintance with fisheries management issues, the folks at Pew have mounted yet another well-funded campaign to influence the outcome of this ICCAT assessment review. They are using the same flashy and expensive techniques and have enlisted a similar clique of experts to "save the tuna" as they used in the late 90's to save the swordfish.

As was so convincingly demonstrated by the complete recovery of the swordfish stocks in spite of continued harvesting by the longline fleet, Pew science as voiced by Pew scientists was then far from the last word in the world of fisheries management. That hasn't changed. Nor has their strategy. The same hackneyed messages of doom and gloom by the same overwrought scientists are presented as if they represent the main stream of fisheries research.

Rather than being swayed by their efforts to make the playing field at the upcoming meeting in Montreal as uneven as the billions of dollars backing them up will allow, it's crucial that the independent science as espoused by the independent scientists speak for itself. As with swordfish almost a generation ago, we trust that the scientists and managers in Montreal this week will not be swayed by all of the hyperbole that they will find aimed directly at them, will evaluate the existing science for what it is, not for what the Pew people will try to tell them it is, and make decisions that are right for the fish and right for the fishermen.

We should note here that there seems to be no limit to what the people at the Pew Trusts will spend in their attempts to convince anyone who will listen to reduce or eliminate fishing but when it comes to investing even negligible resources into efforts to more accurately and extensively

sample the fish stocks they seem so intent on saving, something that everyone agrees is necessary for more effective management, they seem singularly uninterested.

A staggering loss to U.S. fishermen and U.S. seafood consumers/Hypocrisy at the Conservation Law Foundation

06/28/13

Returning from a business trip last Sunday, Nancy Gaines found her husband, Gloucester Daily Times reporter Richard, dead of an apparent heart attack at their home just outside of Gloucester.

It was back in June of 2008 that I first became aware of Richard's work in the Gloucester Times in a three part series exploring the interplay between fishermen, feds, ENGOs and the mega-foundations that funded them in a controversial move to close Stellwagen Bank to fishing (see <http://tinyurl.com/n8m3voh> for the first installment). A letter about the series I wrote to Times Editor Ray Lamont started "*kudos to Richard Gaines for reporting what is going on behind the smoke and mirrors obscuring the struggle to maintain the historical fisheries that have thrived on Stellwagen Bank for generations. He couldn't be more on-target when writing 'Pew is associated with public information campaigns against fishing and fish consumption.'*"

This kicked off a friendship between Richard and me that, I was amazed to discover, had lasted for less than five years. I know it enriched my life. I can only hope it enriched his writing as well.

Richard was a journalist's journalist. Unlike the average "reporter" covering fisheries/ocean issues today, he gave press releases – and the contacts they provide - the minimal initial credence that they generally deserve. He was always looking for the story behind the press release and with a combination of integrity, skill and tenacity he usually found it. In five years he developed a surprisingly sophisticated understanding of what has become a cumbersome complex federal fisheries management process – and of the political machinations behind it. Whether it was about the multi-billion dollar foundations behind the environmental activist organizations that have become so adept at making life miserable for fishermen, or a federal fisheries enforcement establishment that was allowed to enrich itself with tens of millions of dollars coerced from the fishing industry, Richard was covering it, covering it thoroughly and covering it well.

It's going to be harder on all of us because he's no longer there to do it.

Richard was memorialized fittingly by Ray Lamont in **Community, industry mourn loss of a champion at** <http://preview.tinyurl.com/mmjbuae>, North Carolina Congressman Walter Jones honored him with a statement to the U.S. House of Representatives available in the Congressional Record (<http://thomas.loc.gov/cgi-bin/query/z?r113:E12JN3-0009:/> and I can't add much to what they and dozens of other folks have written in the last week other than offering his wife Nancy, his family and coworkers my deepest sympathy. And I'd suggest that after reading this you spend a few minutes watching an interview of Richard done by Good Morning Gloucester at <http://preview.tinyurl.com/lg8ohll>. If you weren't lucky enough to know him this will tell you much of what you should know about him and his work.

On the subject of press releases and fishing

"The Attorney General is wrong on the law and she is wrong on the facts," said Peter Shelley, senior counsel with CLF, who has been actively engaged in fisheries management for more than 20 years. *"Political interference like this action by Attorney General Coakley has been a leading cause of the destruction of these fisheries over the past twenty years, harassing fishery managers to ignore the best science available.... We need responsible management which includes habitat protection and a suspension of directed commercial and recreational fishing for cod. We also need some serious leadership from our elected officials. Going to court or getting up on a political soapbox will not magically create more fish."* (from a Conservation Law Foundation press release on May 31.

It's kind of hard to believe that just about immediately after this press release went out the Conservation Law Foundation – along with the Pew spawned Earthjustice (recipient of some \$20 million from the Pew Charitable Trusts) – filed suit in federal court to prevent NOAA from cutting the groundfish fishermen the tiniest bit of slack, perhaps allowing more of them to survive a largely management manufactured slump. It seems that in the release Mr. Shelley must have meant *"other people going to court or getting up on a political soapbox will not magically create more fish. However if it's me or my foundation funded buds going to court, watch out 'cause those fish will shortly be on the way."*

I usually stay away from New England issues because my colleagues up there are more than capable – in spite of the gross inequities resulting from the mega-foundation mega-buck funding of organizations like the Conservation Law Foundation and Earthjustice – of representing their own interests. However I couldn't sit back and not comment on the CLF position voiced by Peter Shelley in an article, **Conservation group sues NOAA to block openings**, by Richard Gaines on June 6.

Explaining how the CLF/Earthjustice position wasn't hypocritical, Mr. Shelley explained *"the distinction for me is that I have seen time and time again when politicians — in this case the attorney general — hasn't participated in the (fisheries management) process, and then comes in*

to try to influence the process in litigation. They're not taking a legal position, there's not much there except politics." (<http://preview.tinyurl.com/mnzsnu>).

To suggest that this is a more than slightly puzzling statement for an attorney to make would be an understatement. Mr. Shelley must believe – or must want other people to believe – that Attorney General Coakley was acting on her own, not on behalf of the government and the people of Massachusetts, when filing the suit. Apparently he believes – or wants us to believe – that because she has never personally participated in the fishery management process her suit has no merit. He is and has been, it would seem, in attendance at many meetings in New England at which fish are discussed and it appears as if in his view this makes his suit de facto righteous and hers nothing more than political posturing.

Let's examine his contention that the Massachusetts Attorney General hasn't participated in the (fisheries management) process in a little more depth. First off, I doubt very much that Attorney General Coakley brought the suit on her own behalf. In fact, I'd bet dollars to donuts that she brought it on behalf of the Commonwealth of Massachusetts. Even Mr. Shelley must know that the Commonwealth, via a succession of capable and effective representatives, has for at least the last fifty or so years participated heavily in federal fisheries management via the Magnuson Fisheries Conservation and Management Act. Either Paul Diodati, Director of the Commonwealth's Division of Marine Fisheries or David Pierce, the Deputy Director, are at every meeting of the New England Fishery Management Council and Dr. Pierce is a member of that Council's Groundfish Committee (as well as its Herring, Sea Scallop and ad hoc Sturgeon Committees and the Mid-Atlantic Council's Dogfish and Herring Committees). Mr. Diodati is also the Chairman of the Atlantic States Marine Fisheries Commission and the Co-Director of the Massachusetts Marine Fisheries Institute. They aren't on these bodies on their own behalf either. They are there representing the Commonwealth as well. And before they were there, their predecessors were, and they were just as deeply involved.

This commitment to and participation in the fisheries management process by the various representatives of the Commonwealth of Massachusetts began long before Mr. Shelley, the CLF and the Pew Trusts discovered each other. The Commonwealth, as represented in the current suit by the Attorney General whose participation Mr. Shelley seems so intent in marginalizing, established its bona fides in fisheries management at least a century ago (and will hopefully remain involved far beyond the point when Mr. Shelley, the CLF and Pew move on to "greener" pastures).

In fact the groundfish management measures that Mr. Shelley's justifiable (in his estimation) suit is aimed at were a work product of the New England Fisheries Management Council, an institution which was established by the Magnuson Act in 1976 that has been in continuous operation – with overlapping changes in membership and management - since then. And in spite of Mr. Shelley's so apparent disagreement with this fact, the Council is mandated by the Act to manage for the benefit of the fish, the fishermen and the fishing communities. The Council members voted by an over 75% majority (13 to 3) to support the measures that Mr. Shelley et al are now going to court – of course in a non-political fashion – to prevent. As opposed to Mr. Shelley's "more than twenty years" trumpeted in the CLF press release, how many hundreds of years of collective fisheries science and management experience do the Council members and staff possess?

These are the people, the agencies, the institutions and the actions behind the Commonwealth's lawsuit – the one that Mr. Shelley wants us to believe is based on nothing more than "political posturing."

And what of the constituencies being represented? Attorney General Coakley's constituency is made up in large part of Massachusetts fishermen, all of those people, families and businesses that depend on them, all of the Commonwealth's consumers who, apparently unlike Mr. Shelley and his CLF chums, realize that a seafood dinner should involve something more satisfying and wholesome than a several-times-frozen lump of imported shrimp, tilapia or swai, and all of us who seriously appreciate fishing traditions going back to colonial times.

On the other hand, from what I've been able to discover (see <http://www.fishtruth.net>), Mr. Shelley's, CLF's and Earthjustice's "constituents" are a handful of mega-foundations and well-to-do-donors, and a lot of *internet "click here if you don't like fishermen or fishing"* residents of anywhere (but I'll bet dollars to donuts that very few of them are in coastal Massachusetts).

So few groundfish?

Then Mr. Shelley brings up what he wants us to consider the "fact" that there are so few groundfish available to the fishermen that they are no longer filling their annual quotas. To the uninformed (those "click here" constituents, for example) this probably seems a compelling argument for shutting down the fisheries, Mr. Shelley's often stated goal. It must make sense to many people who are unfamiliar with our modern fisheries "management" regime as it has been distorted by lobbying by environmental activist organizations.

In fact, however, there are other and much more believable causes of uncaught quota than not enough fish.

The first of these would be the existence of so-called "choke" species. Much more valuable fisheries can be shut down because of unavoidable bycatch of other species with much lower quotas. Take the situation in which two species – the targeted species and the "choke" species – are inextricably mixed during part of the fishing year. Fishermen, tending to be rational even when dealing with an irrational system such as the one that Mr. Shelley and his cronies have built, will avoid the target species in spite of its abundance because they know full well that when the catch limit for the "choke" species is reached both fisheries will be shut down. In essence they are leaving the uncaught quota "in the bank" for later harvest. Needless to say, that later harvest isn't guaranteed and it's easy to imagine that in many instances it remains uncaught.

Then there are the meager trip limits for some stocks. Catch shares or not, in instances it just isn't worth it for some fishermen to run their boats offshore for a few hundreds of pounds – or less - of fish. They'll remain tied to the dock or will target other species with quotas that will allow them more income.

And we can't forget low prices at the dock. Fish markets have adjusted to the recent vast swings in supply of some of the traditional species (a testament to the lack of effectiveness of our fisheries management system) by switching to alternative products. With the most productive fishing grounds in the world in our EEZ it's hard to imagine that tilapia is the most heavily consumed finfish in the U.S., but it is. Compensating for these often low prices is a large part of the reason for the development of alternative markets for our domestic fisheries, but it's somewhere between extremely difficult and impossible to move large quantities of fish in small lots.

And last but certainly not least, there's the impact of changing environmental conditions on the traditional availability of species, Said most simply, fish aren't necessarily where they have been found by fishermen for generations. Though Mr. Shelley et al apparently want you to think that means they're not there at all, that's not necessarily so. Fish stocks are dependent on water temperatures, and water temperatures have been changing significantly in recent years. Some areas that used to reliably produce a particular species at a particular time of the year no longer do so. With the meager quotas and the continually increasing costs of running a boat a fisherman isn't as likely to search for where the water temperature changes have driven the fish. Economics won't allow it. Additionally, fish surveys are operated as if our U.S. coastal waters exist in a steady state; that conditions today are as they were when the survey was started. The same spots are sampled at the same time every year, and when a particular species is no longer taken in the sample or is taken in reduced numbers, the automatic assumption is that fishing is the cause of "the problem" and that reducing or curtailing (a la Mr. Shelley) fishing is the solution. Compounding the real problem, the reduced availability of research funds, the probability of extending the scope of the surveys is pretty low.

In a follow-up article on June 10, Shelley elaborated that the suit filed by Attorney General Coakley was "political 'soapbox' posturing" while "our suits are not political... they're strictly based on the facts, and we do it as a last resort" (<http://preview.tinyurl.com/mysrlbz>).

Attorney General Coakley, Governor Patrick et al, please keep on keeping on. Effective fisheries management should involve much more than happy fish and happy NGOs. When Congress passed the Magnuson Act in 1976 the Members realized this and it's about time that the pendulum gets pushed back in the direction that it was intended to swing in. Fish count, but so do fishermen, fishing communities and seafood consumers. If the U.S. fishing industry is to survive, the initial balance that was amended out of the Act by intensive lobbying by foundation funded activists claiming to represent the public must be restored.

Commercial fishing in the Northeast: a decade of change

07/18/13

It's obvious if you spend any time around the docks or shop regularly at a decent fish market that there have been dramatic changes in the domestic commercial fishing industry in the country and in the Northeast over the last ten years.

At the national level

The following chart on tilapia imports from 2003 (from the USDA) says most of what needs to be said. For reference I have also included our average annual per capita consumption of seafood. In the last decade the US population has increased by approximately 8%, per capita seafood consumption has decreased by 8%, and our seafood imports have increased 70%. We are currently importing over 90% of the seafood we consume.

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Tilapia Imports (mt)	241,170	297,489	393,361	482,634	559,893	734,311	696,086	843,088	838,257	969,088
Per capita consumption	16.3 lbs	16.6 lbs	16.2 lbs	16.5 lbs	16.3 lbs	16.0 lbs	16.0 lbs	15.8 lbs	15.0 lbs	-

But on the plus side the inflation corrected value of U.S. seafood landings after a protracted decline starting in the late 70s has been increasing fairly steadily since 2002.

Closer to home

The inflation adjusted value of New England seafood landings in 2011 (the latest year for which commercial data were available) was the second highest since 1950. While good news to some fishermen, over half of that value was due to extraordinarily high production in just two fisheries.

In 2002, Northeast (from New Jersey to Maine) sea scallop landings were worth \$143 million in inflation adjusted dollars. In 2011 they were worth \$495 million. Lobster landings in the Northeast were worth \$293 million in 2002 and \$423 million in 2011. Minus these two fisheries, New England landings are about as low as they have ever been and are about to go lower. Without sea scallops, Mid-Atlantic landings are at their lowest point since 1950 (for more on this see <http://www.aifrb.org/2013/07/fisheries-management-more-than-meets-the-eye/>).

What happened?

A New England Fisheries Management Council press release issued on June 7, 2001 stated “*year 2000 calculations show that estimated biomass levels for 11 important groundfish stocks, collectively, have increased almost 2-1/2 times since 1994.*” The release went on about this good news, rightfully giving credit for it to the fishermen for their sacrifices and their demands for better science.

Referring to that release in the FishNet piece **Of blood and turnips** (<http://www.fishingnj.org/netusa19.htm>), I wrote in 2002 “*unfortunately this state of affairs.... has been anything but that (good news) to the ‘conservationists’.... they were successful in having language included in the Sustainable Fisheries Act that removed much needed flexibility from a fisheries management system that was struggling to maintain the economic viability of the fishing industry at the same time that it was struggling to rebuild and maintain the sustainability of the fish stocks it was managing. Based on the fruits of their successful - and exceedingly well-funded - lobbying efforts, a group of these same not-for-profits have now brought suit in Federal court to needlessly accelerate the groundfish rebuilding process by forcing un-reasonable adherence to these rigid provisions of the Act.*”

Their suit, from their “take care of fish, not fishermen” perspective, was successful and they’ve won similar suits subsequently. In a nutshell, federal policy now demands that if a stock of fish isn’t at a certain population level by a certain time, stringent fishing restrictions must be put in place until it reaches some arbitrary point regardless of its effect on fishermen, their businesses and their communities.

Judging by the results, most of the fish and most of the fishermen lost. The groundfish fleet is a shadow of what it was, economic chaos has become a way of life for fishing families and communities, and in place of cod and haddock and flounder, imported tilapia, basa and swai have made it into restaurants up and down the coast.

It’s obvious that the “blame it all on fishing” management regime, and its corollary “cut back fishing enough and the fish will come back” now in force aren’t doing much for the fish or the fishermen, and considering the radical changes that are now taking place in the marine environment, it’s completely understandable why they aren’t.

Ocean waters are warming so much that some local fish stocks and their prey are relocating. Exacerbating this is a population explosion of the notoriously voracious spiny dogfish. There are over half a billion tons of them out there, eating just about everything that is smaller and slower than they are. This includes the more valuable species that fishermen target and much of what those species feed.

It’s estimated that spiny dogfish consume six times their body weight each year. That’s an annual three billion tons of fish and invertebrates turned into dogfish food. For perspective, in 2011 the total weight of the combined commercial catch of finfish and shellfish in the Virginia to Maine was 375 million pounds, just over a tenth of what it takes to keep all of those dogfish going.

In 1992 Steve Murawski, retired NMFS Director of Scientific Programs and Chief Science Advisor, wrote “*given the current high abundance of skates and dogfish, it may not be possible to increase gadoid (cod and haddock) and flounder abundance without ‘extracting’ some of the current standing stock.*” The spiny dogfish biomass was at about the same level then as it is today.

Why so many dogfish? Because the Magnuson Act demands that fish populations be at the maximum sustainable harvest (msy) level. Rationality seems to demand otherwise.

Predation by seals, while harder to get a handle on, is also huge. Current estimates have 15,000 seals in the waters off Cape Cod, and like spiny dogfish their feeding preferences often directly or indirectly conflict with fishermen’s catching preferences.

The way it’s playing out, without the original flexibility being put back into the Magnuson Act we’re looking at ever declining catches by fewer and fewer fishermen fishing under increasingly stringent restrictions, and these restrictions will continue to be as ineffectual – and as economically damaging - as they have been in the last decade. Arbitrary stock rebuilding schedules and counterintuitive requirements that all fisheries be at maximum sustainable levels regardless of the impacts on more valuable fisheries will continue to rule the day and continue to decimate fishing communities.

And this gets us to one of the most obvious, dramatic and controversial changes in the Northeastern commercial fishing industry. Several years ago the New England groundfish fishery – one of our nation’s oldest and most important – was forced into a form of catch-shares management called sectors. Catch shares/sector management in essence turns fishery resources into private property, whereby the government grants historic participants in a fishery a proportion of each year’s harvest based on their prior performance in that fishery. The government determines how much allocation each permit holder in the fishery is awarded. The allocations, once granted, can be bought, sold, or leased to others.

The allocations of particular species were initially low, and with subsequent cuts are now even lower. Many fishermen couldn’t/can’t afford to keep on fishing, given these abysmally low allocations and the lack of alternative fisheries they are able to participate in,* so are either selling or leasing what quota they were granted to larger operators. This is leading to the consolidation of fishing power among fewer and fewer vessels and fewer and fewer ports. Of course this is a manager’s dream, with fewer fishermen and fewer boats to manage and with the added bonus

of passing much of the monitoring and enforcement responsibility and costs to the fishermen, but a nightmare to too many fishermen and the death knell of too many smaller ports.

Where do we go from here? If we want to bring our vibrant fishing communities back, we have to fix the Magnuson Act and we have to return to a federal fisheries management policy that values the fishermen as much as the fish. This might be anathema to the radical environmentalists who are now calling the shots but it's necessary if we want to keep the fleet diversity that has characterized the Northeast fisheries for generations.

Note: for a fuller exploration of many of the topics addressed above see http://fishnet-usa.com/Groundfish_Debacle_IV.pdf.

*In 2010 the estimated biomass of spiny dogfish, Acadian redfish and haddock was over a million metric tons. These are catchable and sellable species, given some gear and market development. If only 20% of that biomass, 200 thousand metric tons, was harvested annually and the fish returned twenty cents per pound to the fishermen, it would be worth \$90 million at the dock. In 2010 the total weight of finfish landed in New England was approximately 200 thousand metric tons (see http://www.fishnet-usa.com/Fishing_not_four_letter_word.pdf).

Fisheries management – more than meets the eye

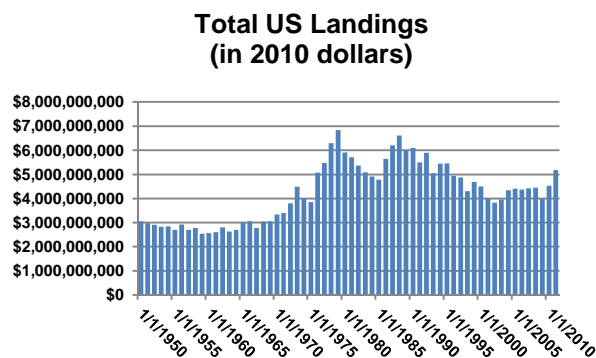
07/08/13

Last year I wrote *After 35 years of NOAA/NMFS fisheries management, how are they doing? How are we doing because of their efforts?* (http://www.fishnet-usa.com/After_35_years_of_NOAA.pdf). I concluded with:

Our collective fisheries were never as badly off as grandstanding ENGOs convinced the public and our lawmakers that they were. Regardless of that, they are unquestionably in great shape now. Are the fishermen - the only people who have paid a price for that recovery - going to profit from it? At this point there aren't a lot of indications that they are going to. Ill-conceived amendments to the Magnuson Act, the ongoing foundation-funded campaign to marginalize fishermen and to hold them victims of inadequate science, and a management regime that is focused solely on the health of the fish stocks and is indifferent to the plight of the fishermen effectively prevent that.

That having been a year ago, and statistics measuring the performance of our commercial fisheries for 2011 being available (http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html), I thought I'd check back to see what, if anything, had changed.

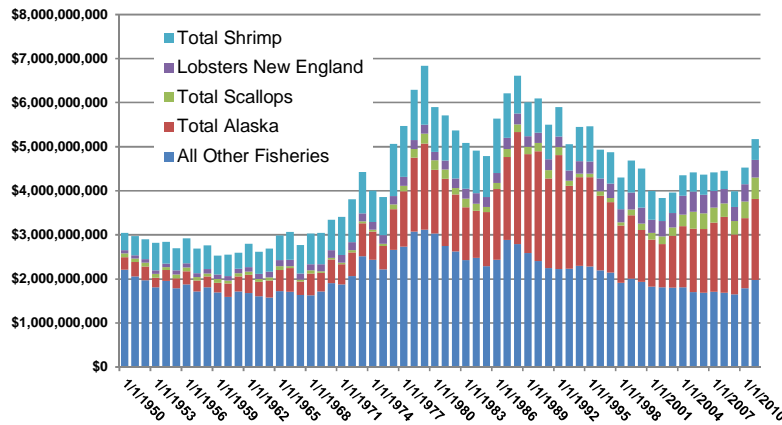
Nationally, the total adjusted (to 2010 dollars) value of landings continued a gradual upswing that's gone on intermittently since 2002/03. The post Magnuson (1976) low point in 2002 was under \$4 billion, and by 2011 it had risen to over \$5 billion, an increase of 35%. The adjusted value of the 2011 catch, \$5.176 billion, was 76% of the highest total catch (in 1979) of \$6.83 billion and 22% above the average landings (from 1950 to 2011) of \$4.25 billion.



All in all, the big picture is mostly positive. Unfortunately, the big picture is made up of a lot of smaller pictures, and some of them aren't so good.

In the following chart I separated the value of the total landings in Alaska and the separate values of landings in American lobster, sea scallops and Southern shrimp (all species combined) from all other species.

Value of national landings (in 2010 dollars)



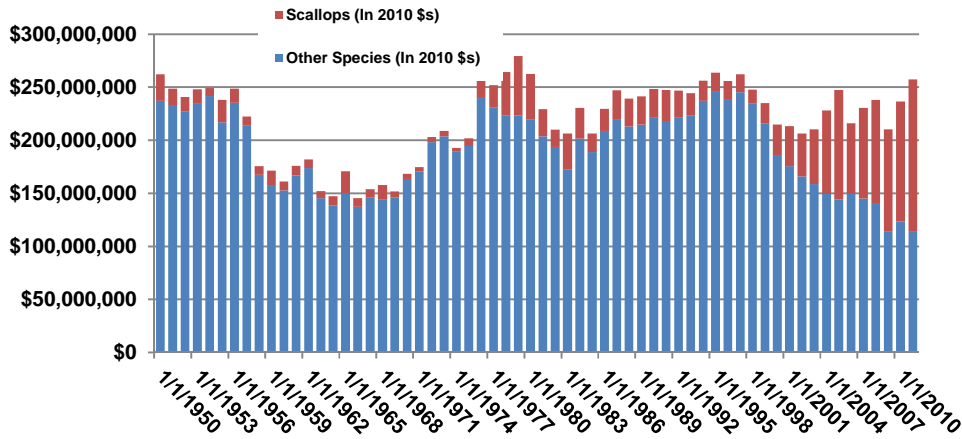
For total value of landings in 2011 Alaska is at about 70% of where it was at its post Magnuson high (\$1.84 billion vs \$2.58 billion). Atlantic sea scallops were at their all-time record value (\$485 million) and American lobster were at 89% of their all-time high (\$405 million vs \$456 million in 2005). Unfortunately the 2011 (Southern) shrimp landings were valued at only 34% of what they were at their highest (\$472 million vs \$1.333 billion in 1979).

In 1950 the Bureau of Commercial Fisheries reported landings of 223 distinct species or species groups (i.e. Shrimp, Dendrobranchiata). In 2011 the National Marine Fisheries Service reported landings of 460 species or species groups. The 20 most valuable fisheries in 1950 and in 2011 and the percentage of their value to the total value of landings for that year are listed below:

1950		2011	
Shrimp	17%	Sea Scallop	14%
Yellowfin Tuna	11%	Shrimp (white & brown)	11%
Eastern Oyster	11%	American Lobster	10%
Skipjack Tuna	7%	Walleye Pollock (AK)	9%
Pacific Sardine	5%	Sockeye Salmon (AK)	7%
Haddock	5%	Pacific Halibut (AK)	5%
Menhaden	5%	Pacific Cod (AK)	5%
Sockeye Salmon (AK)	4%	Dungeness Crab (AK)	5%
Sea Scallop	4%	Sablefish (AK)	5%
Acadian Redfish	4%	Blue Crab	4%
American Lobster	4%	Pink Salmon (AK)	4%
Pacific Halibut (AK)	3%	Menhaden	4%
Chinook Salmon (AK)	3%	Snow Crab (AK)	3%
Quahog Clam	3%	King Crab (AK)	3%
Coho Salmon (AK)	3%	Eastern Oyster	2%
Pink Salmon (AK)	3%	Chum Salmon (AK)	2%
Chum Salmon (AK)	3%	Pacific Geoduck Clam	2%
Blue Crab	2%	California Market Squid	2%
Striped Mullet	2%	Bigeye Tuna	1%
Atlantic Cod	1%	Pacific Hake (AK)	1%

In the Mid-Atlantic in 2011 the total value of landings, \$220 million, were 79% of the highest landings value reported (\$279 million in 1979). However, sea scallops made up more than half of the total landings value (56%, \$143 million v. \$114 million). While the overall picture looks positive, the value of the landings in the Mid-Atlantic minus the sea scallop production have been in a steady decline since the late 90s and are at the lowest point ever.

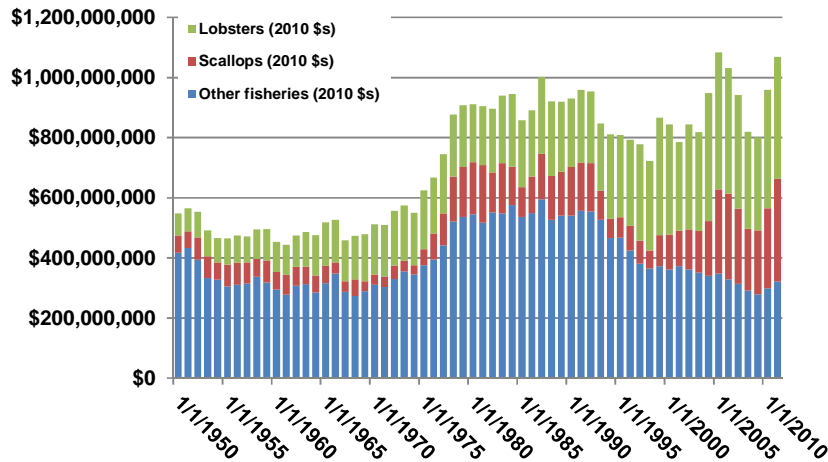
Mid-Atlantic Landings (in 2010 \$s)



In New England the situation is comparable, but both American lobster and sea scallop production are responsible for the overall “healthy” appearance. There was a slight upswing in the value of the other fisheries in recent years but it appears that with the planned – and in part implemented reductions in the groundfish TAC, it seems as if this slight upswing won’t carry over.

Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities. National Standard #8, Magnuson-Steven Fisheries Conservation and Management Act (As amended through October 11, 1996).

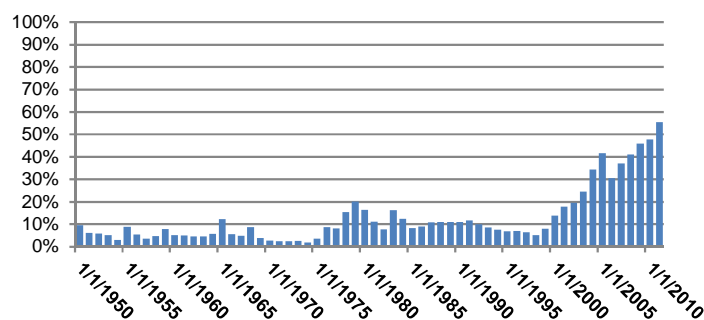
New England landings (in 2010 \$s)



A looming problem in both the Mid-Atlantic and New England is a pending cutback in the sea scallop quota for the next fishing year that at this point is expected to approach 40%. While the effects of a cut of this magnitude will obviously be significant to the scallop fleet, there will be not so obvious but potentially devastating effects on the other fisheries and on fishing communities as well.

A complex of ancillary businesses is required to operate a commercial fishing dock. These include vessel/equipment maintenance and repair facilities, ice plants, chandleries and shippers/truckers. Obviously it requires a certain level of business – a minimum amount of revenue coming “across the dock” – for them to stay open. In the Mid-Atlantic a 40% cut in scallop revenues will be more than a 20% cut in commercial fishing revenues in a single year. In New England it will be somewhat less than that, but it will be combined with whatever additional cuts result from the proposed groundfish cuts.

Scallops as % of total MidAtlantic landings (in 2010 \$s)



I'm not that familiar with all of the fishing ports in the Mid-Atlantic and New England but have a fairly good understanding of those in New Jersey, and in New Jersey there isn't one commercial port that lands fish from the ocean-going fleet that is mostly – or even largely – focused on scallops. They all handle a mix of fish and shellfish. A large part of their longevity is due to the fact that they have maintained a reasonable amount of flexibility thanks to their diverse fleets. But a drastic cutback in scallop revenues, particularly if it is coupled with the continuing decline in the revenues from other fisheries, will threaten that longevity.

The proposed scallop cutback has been presented as a temporary measure, and the Fisheries Survival Fund - representing the majority of limited access scallop fishermen in New England and the Mid-Atlantic and other industry groups are working to ameliorate the proposed cuts, but when it comes to businesses that are waterfront dependent a two year temporary reduction could easily become permanent before the cutbacks are restored. Except for the lull over the past several years there have been intense development pressures at the Jersey Shore and on most of the developable waterfront areas from Cape Hatteras North. It's just about assured that they will be back to their customary levels very shortly.

Originally the Magnuson Act placed much more emphasis on business- and community-supportive aspects of federal fisheries management. Those aspects have been eroded by the lobbying activities of the handful of ENGOs that have come to dominate the world of fisheries/oceans activism. They, and for the most part NOAA/NMFS as well, address fish issues on a case by case, species by species basis. More importantly, the people at NOAA/NMFS tend to shy away from cumulative economic impacts when they have analyses done, and cumulative impacts are what most of the commercial fishermen, the people who depend on them and the businesses they support have to deal with – and in New England and the Mid-Atlantic (at least, and this isn't to slight the industry elsewhere, because I doubt that it's different in many other ports) in spite of increasing total landings value, it could be getting a lot worse really soon.

Flotsam and Jetsam

12/19/12

According to Wikipedia “Flotsam is floating wreckage of a ship or its cargo. Jetsam is part of a ship, its equipment, or its cargo that is purposefully cast overboard or jettisoned to lighten the load in time of distress and that sinks or is washed ashore” (<http://en.wikipedia.org/wiki/Flotsam>). They are used together to indicate potentially valuable materials floating on the seas' surface.

This seems an apt title for periodic FishNets in which I address several issues that should be of value to anyone with an interest in oceans and fisheries in a somewhat abbreviated manner.

The forage fish fake out

In a column urging that menhaden management be overhauled on the Pew Environment Group website, Peter Baker wrote “according to a report issued this year by a panel of 13 eminent ocean scientists, forage fish are twice as valuable left in the water as they are caught in a net.” He is referring to the Lenfest Forage Fish Task Force. Forage fish include menhaden and herring.

The people at the Pew Trusts and more lately the Pew Environment Group don't like menhaden or herring fishing. That's not very startling news. In fact, the people at the Pew Trusts/ Pew Environment Group don't appear to like any kind of fishing, because they've spent hundreds of millions of dollars – of course, that's hundreds of millions of dollars earned by someone else – to curtail fishing in just about any way, shape or form that fishing happens.

The way they're expressing their dislike of forage fishing has become par for their course of expressing dislike of just about every other fishery; what appears to be a loose confederation of independent researchers and stakeholders and grass roots organizations coalesce into some sort of committee or task force or whatever united behind the righteous cause, which invariably involves either stopping or significantly cutting back some form(s) of fishing, supposedly saving some critical part of some ocean ecosystem or other.

But in the case of saving the East coast ecosystem from the depredations of the supposedly ruinous menhaden purse seiners, how independent are these saviors and the people like Peter Baker who are flogging their “cause?”

Peter Baker is the Director of the Northeast Fisheries Program of the Pew Environment Group. Prior to that he worked for the Cape Cod Commercial Hook Fishermen’s Association. Prior to that he was with the Sierra Club’s Environmental Public Education Campaign. Earthjustice, from which Oceana spun off, was spawned by the Sierra Club.

The Pew Trusts have given \$1.5 million to the Cape Cod Commercial Hook Fishermen’s Association, at least \$60 million to Oceana and over \$23 million to Earthjustice.

I’ve written about the Herring Alliance on the FishTruth.net website at <http://www.fishtruth.net/Herring.htm>. The original member organizations had received well over \$100 million from Pew.

Consider the projects funded by the Pew Trusts (available on the FishTruth website database at http://www.fishtruth.net/ENGO_SPENDING.xls or on the Pew Trusts website at http://www.pewtrusts.org/program_investments.aspx) designed to curtail menhaden/herring harvesting listed below. Herring and menhaden are both considered forage fish – fish that serve as food for other fish species – and, though all of the save the menhaden/herring rhetoric studiously ignores it, are also voracious predators of the early life stages of fish and shellfish species that feed on them as adults.

- 1998 - Conservation Law Foundation - \$30,000 – *“To promote responsible herring management.”*
- 2004 - National Coalition for Marine Conservation - \$558,000 – *“To secure an amendment to the Interstate Menhaden Management Plan that would reduce or eliminate fishing of menhaden in the Chesapeake Bay, in order to protect the broader ecosystem of the Bay.”*
- 2004 - Aquatic Farms Limited - \$142,000 – *“To assess the amount of competition between catch of small forage fish for direct human consumption and for reduction into fishmeal and fish oil for use as aquaculture and agriculture feed.”*
- 2004 - Research Foundation of the State University of New York, Stony Brook - \$750,000 – *“To establish the Lenfest Forage Fish Task Force that will develop and recommend ecosystem-based standards for the sustainable management of forage fisheries.”*
- 2004 – Research Foundation of the State University of New York, Stony Brook \$145,000 – *“To advance ecosystem-based fishery management by evaluating the status of understudied fish and other marine species in several regions of the United States that are impacted by the commercial fishing industry.”*
- 2005 - National Coalition for Marine Conservation - \$200,000 – *“To ensure a new regulatory cap on the industrial harvest of Atlantic menhaden is implemented and enforced.”*
- 2006 - National Coalition for Marine Conservation - \$100,000 – *“To support efforts to initiate new regulatory actions that will preserve adequate populations of forage fish which support healthy populations of predators, including numerous species of marine mammals, seabirds and fish.”*
- 2006 - Gulf Restoration Network - \$210,000 – *“To support efforts to stop overfishing, secure conservation-based limits on unintended bycatch of marine life, and to conduct research and prepare a report on management reforms needed in the Gulf of Mexico menhaden fishery to reduce harvests to protect the forage needs of menhaden predators and reduce bycatch of sharks and marine mammals.”*
- 2007 - Cape Cod Commercial Hook Fishermen’s Association - \$180,000 – *“To provide general operating support policy reform campaigns for herring and groundfish.”*
- 2007 - Cape Cod Commercial Hook Fishermen’s Association - \$596,000 – *“To support a New England forage fish campaign to ban or severely restrict destructive trawling, reduce allowable herring catches.”*
- 2008 – Research Foundation of the State University of New York, Stony Brook - \$3,000,000 – *“To conduct scientific research regarding sustainable fisheries management and conservation of threatened and endangered fish.”*
- 2008 - Cape Cod Commercial Hook Fishermen’s Association - \$722,000 – *“To support activities to reform the Atlantic herring fishery.”*
- 2008 - Earthjustice - \$212,000 – *“To reform New England’s Atlantic herring fishery.”*
- 2008 - Marine Fish Conservation Network - \$125,000 – *“For work intended to ensure the full implementation of the Magnuson-Stevens Reauthorization Act and to promote the sustainable management of forage fish species (\$100,000) and for general support (\$25,000)”*
- 2009 - National Coalition for Marine Conservation - \$30,000 – *“To develop guidance for conservation of forage fish through an ecosystem-based approach to fisheries management.”*

That’s just under \$7 million Pew dollars going directly to “save” menhaden and herring.

Of the thirteen “eminent ocean scientists” on the Lenfest Forage Fish Task Force, nine can be directly tied to Pew funding via academic programs that have received well over \$30 million in grants from the Pew Trusts, and four are Pew Marine Conservation Fellows to boot (see <http://www.fishtruth.net/Pauly.htm> and <http://www.fishtruth.net/Pikitch.htm>).

The source of funding for the Lenfest Forage Fish Task Force, the Lenfest Ocean Program, is administered by the Pew Environment Group.

The Project Director of the Lenfest Forage Fish Task Force is Christine Santora She was previously employed for five years as a Senior Research Associate with the Pew Institute for Ocean Science.

So we have two ostensibly “grass roots” initiatives supposedly representing the views of a large group of constituents but which are in reality the handiwork of a handful of activist organizations in large part – to the extent of tens of millions of dollars – supported by the Pew “Charitable” Trusts. The Pew Trusts were founded with dollars from Sun Oil’s Pew family and are still largely under the control of the Pew family.

“Astroturf roots” seems a much more accurate descriptor (and I was pleasantly surprised to see that Wikipedia has an entry for “astroturfing,” which it describes as “political, advertising or public relations campaigns that are designed to mask the sponsors of the message to give the appearance of coming from a disinterested, grassroots participant. Astroturfing is intended to give the statements the credibility of an independent entity by withholding information about the source’s financial connection.”)

Unfortunately, at its regularly scheduled meeting last week the Atlantic States Marine Fisheries Commission in what was an obvious bow to public pressure – pressure driven by mega-bucks foundations and the activist organizations they support – rather than sound science, voted for drastic cuts in the menhaden harvest.

The fishermen, the fish and the consuming public deserve much better.

And the Conservation Law Foundation is always there for the fishermen - just ask ‘em (Or better yet, ask a fisherman.)

In a blog post on the Conservation Law Foundation website, CLF lawyer Peter Shelley did a masterful job of trying to ally himself and the CLF with the New England groundfish fishermen, blaming the ongoing debacle in that fishery on the federal fisheries managers. Towards the end he even touchingly wrote *“this Thanksgiving, I want to give an overdue thanks to the region’s remaining fishermen who brave the elements and bring my family fish and seafood products to eat.”*

Being unaware of anything that the CLF has done that any fishermen who I know would be grateful to that organization for – as far as I know the role has mostly centered on either bringing or supporting court actions to further restrict fishing – I left as a comment *“Mr. Shelley - Re ‘can anyone point to even partial successes in the groundfish fishery in New England?’ there are approximately a million metric tons – that’s 2.2 billion pounds – of three species of catchable and marketable fish ‘available’ of our Northeast (see Fishing isn’t a four letter word at http://www.fishnet-usa.com/Fishing_not_four_letter_word.pdf). These three species – Acadian redfish, spiny dogfish and haddock – could sustainably support the entire out-of-work groundfish industry, and then some. What has the Conservation Law Foundation (or the mega-foundations that support it), with all of your eloquently phrased gratitude for those fishermen, done to help them to harvest any of those fish?”*

Of course spiny dogfish aren’t a part of the New England groundfish complex, though they do infest the east coast waters from North Carolina to Canada and through their predation are in large part responsible for the declines in groundfish stocks. But regardless of which species are considered members of the New England groundfish complex and which aren’t, I would think that shifting some of the fishing effort that Mr. Shelley and his colleagues have been so diligently trying to eliminate in the groundfish fishery to these copious amounts of dogfish would, had it been done, certainly have been deemed at the minimum a “partial success” in the groundfish fishery.

Not, however, in Mr. Shelley’s estimation. In replying to my comment he wrote *“dogfish are not even managed as part of the groundfish fishery in New England (the focus of the blog); everyone supports a significant increased harvest of dogfish but doing so right now would drop the prices because of the oligopoly created by the dogfish MSC certification.”* He continues in a similar vein with redfish and haddock – a listing of the reasons why these three fisheries haven’t expanded in spite of the certain knowledge that they could support a whole bunch of under- or unemployed fishermen.

Acadian redfish and haddock are part of the groundfish complex.

He also refers to me as a “paid fisheries gadfly,” which isn’t all that bad considering that Socrates seems to be considered the first gadfly. This was for being paid as a consultant for my questionable advice. According to Mr. Shelley most of my direct experience was with raising fish in pens, and he suggests that I’m out of touch with the New England fisheries. I’ve probably missed a few of his other displays of grace and wit aimed in my direction, but I’m sure you get the drift.

However, what he doesn’t address is my question, so I’ll repeat it again; what has the Conservation Law Foundation (or the mega-foundations that support it), with all of your eloquently phrased gratitude for those fishermen, done to help them to harvest any of those fish?

Neither commenting on my background, my abilities, my place of residence nor my connections to New England fisheries is anything approaching a semi-adequate answer to that question. I can't help but wonder if perhaps the answer would have been absolutely nothing and Mr. Shelley wasn't up to that level of candor – particularly after he expressed such a heartfelt, though in his estimation overdue, Thanksgiving thanks to New England's "remaining fishermen."

But then hope springs eternal

The first time I wrote about the huge supplies of unharvested and unsold but harvestable and sellable fish in the waters off our coast was back in August of 2009 in **Chronic Underfishing - The Real New England Groundfish Crisis** (http://www.fishnet-usa.com/chronic_underfishing.htm). This was after I had organized a workshop that was well attended by researchers, managers and fishermen – both recreational and commercial – addressing the plague of spiny dogfish which was negatively impacting most of the important fisheries from Cape Hatteras to the Gulf of Maine and beyond (visit the website at <http://www.fishnet-usa.com/dogforum1.htm>).

In spite of my and other writings on the wall in pretty large letters and, as demonstrated in the above, in spite of all of the good intentions of the ENGOs that their minions are so willing to tell us they have for fishermen and fishing (with particular reference to Mr. Shelley's Thanksgiving thanks), nothing had been done for over three years. In **Chronic Underfishing I** do take a stab at estimating what the cost to our coastal economies was but I'll leave it to the folks at NOAA/NMFS to notify us via yet another mysteriously delayed status report how many fishermen and folks in dependent businesses lost their jobs and how much human misery was inflicted on our fishing communities.

However, it appears as if changes are near at hand, and for the first time in quite a while these pending changes are the positive kind. John Bullard, who was recently appointed the Regional Administrator for NMFS for the Northeast Region, has announced that management measures will be put in place that will allow the harvest of significantly greater numbers of spiny dogfish and Acadian redfish. For more information, see Richard Gaines **NOAA eyes easing redfish, dogfish rules** in the December 7 Gloucester Daily.

Jane Lubchenco – soon to be gone but not soon forgotten head of NOAA

"The adoption of this new management system and the lower catch limits happened early in my tenure as Administrator. Indeed, sustaining the groundfish fishery and the economic health of the industry has been of paramount importance to me since my first day in office. I understand how important it is to the region's economy and culture. I also know that implementing tough measures to end overfishing and to rebuild stocks is not easy for fishermen and fishing communities. For those reasons, I have devoted significant energy to take action in three key areas that I will talk about today: 1) our work with fishermen and the New England Fishery Management Council to help get this fishery on a pathway to sustainability and long-term profitability; 2) our top-to-bottom overhaul of NOAA operations in the region, including an independent management review and follow-up actions we have already taken; and 3) advancing concrete proposals that build on your ideas — and those of other partners in New England — to address residual problems faced by fishermen in the region and to build on the progress made. Our goals are clear: to be a partner in the success of fishermen, to sustain fishing jobs, to create a profitable and healthy future for fishing communities, and to maintain marine fisheries. We appreciate your support in getting there" (from Jane Lubchenco's testimony to the U.S. Senate's Committee On Commerce, Science, & Transportation in Boston on 11/03/2011).

Last week Ms. Lubchenco announced that she would soon be leaving her position as the head of the National Oceanic and Atmospheric Administration. She announced her departure in a self-serving missive supposedly directed to her employees that said, among other things, *"we've tackled some big challenges together. Through an emphasis on transparency, integrity, innovation, team work and communication, we have made significant progress on multiple fronts."*

Then, in the first of a listing of what she considers her top 20 triumphs at the NOAA helm, she included: *"ending over-fishing, rebuilding depleted stocks, and returning fishing to profitability."*

She neglected to mention that she also left the New England groundfish fishery, our oldest and historically one of our most valuable fisheries, in far worse shape than it was in when she took over at NOAA. Looking back, one of her first "official" appearances as NOAA head was at a meeting of the New England Fisheries Management Council in April of 2009. In a press release prior to her appearance there she said "we worked hard to find ways to provide quick and meaningful help to the fishing industry through increased cooperative research and assistance in setting up the infrastructure for the new management system based on sectors and catch shares, NOAA is committed to working with fishing communities to find long-term solutions that create sustainable and profitable fisheries." In fact, after three plus years of her "quick and meaningful help" she is leaving the fishery in such poor shape that Congress is providing \$100 million in disaster relief to those in the fishery and those who are dependent on it to survive Ms. Lubchenco's efforts to "save" it. I doubt that anyone would argue that at this point the fishery is anything but a shambles after almost four years of her efforts to fix it.

(For an in-depth examination of how bad conditions in the groundfish fishery have become, see the letter that Jackie Odell, Executive Director of the Northeast Seafood Coalition, sent to Rip Cunningham, Chairman of the New England Fishery Management Council, on December 17. It's at <http://tinyurl.com/byknlj4>. The Northeast Seafood Coalition represents more groundfish fishermen in New England than any other group.)

She also neglected to mention that the Mid-Atlantic/New England sea scallop fishery, the fishery which has been the most valuable in the U.S. in recent years, is facing major reductions in landings over the next several years. Sea scallop landings have been playing a major role in propping up most commercial fishing ports from Maine to North Carolina for at least a decade. I'll refer you here to my June 25, 2012 FishNet After 35 years of NOAA/NMFS fisheries management... at [http://www.fishnet-usa.com/After 35 years of NOAA.pdf](http://www.fishnet-usa.com/After_35_years_of_NOAA.pdf). Pay special attention to New England landings minus sea scallops and lobster, Mid-Atlantic landings minus sea scallops, and South Atlantic landings. While the higher than average sea scallop and lobster landings have been masking it, commercial fish and shellfish landings on the East coast have been plummeting for the last decade.

Missing also was any mention of the fact that, under her regime "in 2011, about 91 percent of seafood consumed in the U.S. was imported, up five percent from 2010" (NOAA Press Release U.S. seafood landings reach 14-year high in 2011 dated 09/11/2012).

While I wouldn't consider disputing Ms. Lubchenco's contention that "through an emphasis on transparency, integrity, innovation, team work and communication, we have made significant progress on multiple fronts," the "we" she is referring to certainly doesn't include most fishermen on the East coast (if it includes any at all), and the "significant progress" doesn't have anything to do with anything other than forcing more fishermen and more fishing boats off the water and more fishing businesses into bankruptcy. That is unquestionably progress from the perspective of the anti-fishing activists but it shouldn't be for someone who is in charge of the federal agency that manages our marine fisheries.

Seafood certification - who's really on first?

07/30/13

"Sustainability certification" has become a watchword of people in the so-called marine conservation community in recent years. However, their interest seems to transcend the determination of the actual sustainability of the methods employed to harvest particular species of finfish and shellfish and to use the certification process and the certifiers to advance either their own particular agendas or perhaps the agendas of those foundations that support them financially.

It doesn't take an awful lot of sophisticated insight to recognize that a "sustainable" fishery is one that has been in operation in the past, is in operation presently, and will be in operation in the future. That's what sustainability is all about – for lobsters, for fluke, for surfclams, for guavas, for hemp, for alpacas, in fact for anything that can be grown and/or harvested.

(Of course "marine conservationists" would have us believe that a fishery that has a noticeable impact on the marine environment isn't really sustainable. Imagine, if you can, a farm that has no environmental impact; in essence producing crops without interfering with the natural flora and fauna that "belong" there. That would get beef, cotton, soybeans, corn, mohair and what have you off the tables or out of the closets of perhaps 6 billion of the people who we share the world with, but if you are a committed marine conservationist, so what? The marine conservation community, and the foundations that support it, has been frighteningly successful in convincing people that "sustainable fishing" is actually "no impact fishing," but as we learned quite a few years ago, even hook and line fishermen catching one fish at a time can have a far from negligible environmental impact.)

Several recent events have increased the focus on sustainability and its use – or misuse – in attempts at influencing the buying habits of the seafood consumers.

In the first of these, Walmart (the world's largest retailer) now requires its fresh and frozen fish/seafood suppliers to "become third-party certified as sustainable using Marine Stewardship Council (MSC), Best Aquaculture Practices (BAP) or equivalent standards. By June 2012, all uncertified fisheries and aquaculture suppliers must be actively working toward certification."

In the second, the National Park Service in the US Department of the Interior announced that all of its culinary operations "where seafood options are offered, provide only those that are 'Best Choices' or 'Good Alternatives' on the Monterey Bay Aquarium Seafood Watch list, certified sustainable by the Marine Stewardship Council, or identified by an equivalent program that has been approved by the NPS." Senator Lisa Murkowski questioned Park Service Director Jonathan Jarvis about this "recommendation" (the term he used) at an Energy and Natural Resources Committee. She asked whether NOAA (the National Oceanographic and Atmospheric Administration) was involved in formulating this recommendation. He responded that he didn't know. Senator Murkowski responded "NOAA is the agency that makes the determination in terms of what's sustainable (as far as fisheries are concerned) within this country"

When considered in a vacuum these are both interesting comments on the importance that is being put on “sustainability” by fish/seafood providers, and is indicative of a positive trend by consumers who are increasingly demanding that the products they buy are produced in an environmentally acceptable manner.

And the fact that a federal agency, the National Park Service, would demand – or as Director Jarvis waffled – would recommend that its vendors provide only seafood certified sustainable by two non-governmental organizations while ignoring the de facto certification that is implicit in federally managed fisheries is not likely to surprise anyone with any familiarity with the morass that the federal bureaucracy has become.

However, neither Walmart nor the US Department of the Interior exists or operates in a vacuum, and it seems as if there is a bit more at work here than is obvious.

The Marine Stewardship Council (MSC) is the largest international organization – headquartered in London – providing fish and seafood sustainability certification. It was started in 1996 as a joint effort of the World Wildlife Fund, a transnational ENGO, and Unilever a transnational provider of consumer goods.

The chart below lists recent grants to the MSC by the Walton Family Foundation and the David and Lucille Packard Foundation in recent years.

Grants to MSC from Walton Family Foundation

2007	\$1,640,000
2007	\$820,000
2008	\$1,675,000
2009	\$1,700,000
2009	\$1,700,000
2010	\$4,622,500
2011	\$3,122,500
2012	\$1,250,000
Total	\$16,530,000

Grants to MSC from David and Lucille Packard Foundation

2005	\$1,750,000
2006	\$1,500,000
2006	\$100,000
2006	\$87,900
2007	\$1,500,000
2008	\$1,506,000
2008	\$250,000
2009	\$4,050,000
2010	\$125,000
2011	\$1,900,000
2012	\$250,000
2012	\$550,000
2013	\$250,000
Total	\$13,818,900

The Monterey Bay Aquarium was established with an initial grant of \$55 million from David and Lucille Packard. Their daughter Julie is Vice Chairman of the Packard Foundation. She is also Executive Director and Vice Chair of the Monterey Bay Aquarium's Board of Trustees.

The MSC also lists the Resources Legacy Foundation as one of its supporters. The Resources Legacy Foundation has received \$99 million from the Packard Foundation. One of its programs is the Sustainable Fisheries Fund, which along with its other activities provides funding “*reducing the financial hurdles confronting fishing interests that wish to adopt sustainable practices and potentially benefit from certification under MSC standards.*”

According to **CampaignMoney.com** Ms. Packard donated \$75,000 to the 2012 Obama Victory Fund.

In both of these initiatives NOAA/NMFS, the organization that provides virtually all of the data and other information that sustainability determinations are based on, that is required by federal law to stop unsustainable fishing in federal waters, and that performs its own sustainability analyses on those fisheries has been completely left out of the picture.

All things being equal, this could just be passed off as business – and government ineptitude – as usual. However, when tens of millions of dollars in donations by mega-foundations with “marine conservation” agendas that are looked at skeptically by so many in the fishing industry are thrown into the mix, should this be considered as just more business as usual or does it warrant a much closer look?

Is this any way to manage a fishery?

11/15/13

The status of river herring and shad has been an ongoing concern of anyone interested in the well-being of the fisheries in the Northeast U.S. From high abundance a few decades back these anadromous fish are presently at low levels.

The Mid-Atlantic Fishery Management Council took up the issue of river herring and shad last year and has been exploring management options which would help in the species building back to previous levels. In particular the most recent amendment to the Atlantic Mackerel, Squid, Butterfish Fishery Management Plan – Amendment 16 – proposed measures in the mackerel fishery which would prevent any further decline in the herring/shad stocks attributable to those fisheries.

In a defining vote at the Council’s meeting last week a motion to more fully bring these fish under the management umbrella of the Council was defeated. According to the Council (in a press release dated October 11, 2013) “*the Council determined that additional management of river herrings and shads under an FMP was neither required nor appropriate at this time.*” In the release the Council went so far as to list the reasons for this determination. They were:

- There are many ongoing river herring and shad conservation efforts at various levels which are already coordinated by the Atlantic States Marine Fisheries Commission (Commission) and NOAA Fisheries; • The Commission and states have recently increased their control of state landings;
- The pending catch caps for river herring and shad in the Atlantic mackerel and Atlantic herring fisheries will control fishing mortality of river herring and shad in Federal waters;
- NOAA Fisheries recently found that river herrings are not endangered or threatened and that coastwide abundances of river herrings appear stable or increasing; • Additional research into stock abundance is needed to establish biological reference points; and
- NOAA Fisheries has recently committed to expanded engagement in river herring conservation.” Yet even in spite of this – and, I’ll be so presumptuous as to add that the Council’s and its staff’s resources appear to be maxed out at this point so any additional tasks would be at the expense of existing efforts – the Council did agree to bring together an inter-agency working group on river herring and shad, the progress of which the Council will periodically review beginning with its June 2014 meeting.

It’s hard to imagine how any additions to the already ongoing management efforts focused on these fish wouldn’t result in redundancy and the squandering of too scarce administrative and scientific resources.

According to the blog written by John McMurray (<http://www.reel-time.com/articles/conservation/river-herring-shad-lose-mid/>), the Council member who made the original motion, none of this was anything near adequate. Perhaps to let his readers more fully appreciate his view of the federal fisheries management process of which he is a participating – and paid – member, Councilman McMurray starts his blog entry with “*regular readers of this blog know that, for better or worse, I’m a member of the Mid Atlantic Fishery Management Council.*”

Then he takes the obligatory cheap – and somewhat cumbersome – shot at commercial fishermen, writing “*despite the traditional default animus against regulation that tends to color commercial fishermen’s perception of regulation...*” After this he goes on to rail against the Council members – or at least the majority of them – who he apparently thinks are possessed of such a lack of judgment, character, background, education or regard for the fisheries (or any combination thereof) as to vote against his motion. This in spite of the above six points – which the majority of the Council members, those who voted against his motion, apparently comprehended. (I’ll add here that as I was skimming over the supposed thousands of comments supporting his motion that Councilman McMurray referred to a number of times – not as daunting task as it would seem, the lion’s share of the comments were from organizations representing their myriad members – it quickly became apparent that few if any of those commenters were

aware of these six points enumerated by the Council. Nor were they apparently aware of the fact that the additional resources that his motion would have required would have of necessity been reallocated from the management of other fisheries and that none of those other fisheries were receiving the administrative or scientific priority that river herring and shad had already been given.)

Mr. McMurray then singled out two of the Council members who voted against his motion, named them, published their email addresses and wrote *“they need to be accountable for those votes, and they need to know who it is they are supposed to be representing. You need to let them know! Here are their email addresses...”*

Mr. McMurray seems to believe that these two Council member, and by implication he himself and all other Council members as well, are on the Council as representatives of and to protect the interests of particular groups of people. From my understanding of the regional councils established by the Magnuson-Stevens Fishery Conservation and Management Act (FCMA), this is far from the actual case. Publicly appointed Council members swear an oath of office on taking their seats on the councils. Nowhere in this oath (available at <http://cfr.vlex.com/vid/600-220-oath-office-19896371>) does it say or imply that members are there to represent any particular group. Nor does it say that in the Act itself.

In fact, in the oath each Council member agrees that it is her or his “responsibility to serve as a knowledgeable and experienced trustee of the Nation’s marine fisheries resources, being careful to balance competing private or regional interests, and always aware and protective of the public interest in those resources.”

Neither Mr. McMurray nor the two Council members he singled out nor any other publicly appointed Council member is representing any particular person or group. They are there to represent everyone, and the oath they swear makes that perfectly clear.

I find this particularly troubling and I’d suggest that anyone with an interest in the equitable and effective functioning of the federal fisheries management system should be troubled by it as well. For our regional councils to operate the way they were designed to the public members can’t be – or can’t appear to be to those of us outside the system – beholden to any individuals or groups when they are doing their Council business. The effectiveness of a Council member has nothing to do with where he or she came from and has everything to do with how well he or she is able to evaluate and assimilate a massive amount of scientific, anecdotal and socioeconomic data and to form opinions and make decisions based on that while, as the oath of office demands, “being careful to balance competing private or regional interests, and always aware and protective of the public interest in those resources.”

The two Council members that Mr. McMurray exhorted his readers to “educate” have brought to the Council years of education and experience that have been focused primarily on recreational and party/charter fishing. Their and their fellow Council members’ education and experience is critical to the effective functioning of the Council process. But equally important – except perhaps in Mr. McMurray’s opinion – is the informed judgment that they bring to the Council table and their adherence to the principles they swore to in the oath they took on joining the Council.

Mr. McMurray seems to think that Council members are there to represent the interests of particular groups or individuals and to advance the agendas of those groups/individuals rather than carefully considering all of the available information and then adopting a well-considered position that is balanced and protective of the public interest. If that were so the federal fisheries management process and the federal government is needlessly squandering an awful lot of our taxpayer dollars and an awful lot of peoples’ time on what he obviously considers to be unnecessary wheel spinning.

I don’t have any idea what Mr. McMurray was trying to accomplish by drawing public attention to two of his fellow Council members who voted against his motion. However, I would be surprised if his doing so hasn’t and won’t have a chilling effect on how Council members vote in the future, no matter how convinced they are that their positions are justified. It’s hard to see how this hasn’t damaged a fishery management system that many of us have been struggling to make as effective as it can possibly be.

(I’ll note here that some of the companies that support FishNet USA are involved in the Mackerel, Squid and Butterfish Fishery and are members of Garden State Seafood Association, which I also work for. But this is an issue that transcends particular fisheries or particular interests.)

“Overfished” or “Depleted?”

12/31/13

(Originally posted on the Fishosophy blog, which is jointly hosted on the American Fisheries Society (<http://www.fisheries.org>) and the American Institute of Fishery Research Biologists (<http://www.aifrb.org>) websites)

“What’s in a name? That which we call a rose by any other name would smell as sweet.”
(William Shakespeare, Romeo and Juliet, Act II, Scene II)

Contrary to what might have been true when Shakespeare had Juliet speak those words in the 1590s, how things are called is far from meaningless today. This is particularly so due to the increasingly pervasive and influential social media driven by sound bite journalism, text messages maxing out at 255 characters and Tweets at 140. When so much of contemporary communication and contemporary thought is dependent on so few words, those words, their exact meaning and their precise use have become critically important.

Thus it was with great relief that I saw that one of the amendments to the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson Act) offered by House Natural Resources Committee Chairman Doc Hastings deals with one of the most prejudicial examples of misnaming that has penalized commercial and recreational fishermen and our fish stocks for years.

This proposed amendment and a handful of others are contained in the draft Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act (available at <http://naturalresources.house.gov/magnusonstevens/>). This draft legislation addresses a number of the concerns that independent fishermen – both recreational and commercial – and the businesses that depend on them have had since the original intent of the Magnuson Act has been so severely distorted by a handful of foundations, the powerful agenda-driven ENGOs that they support and the fishing organizations that have been co-opted by them.

In subsequent blogs I will be addressing some of the other draft changes.

Currently the Magnuson Act defines any stock of fish that is not at a high enough level to produce the maximum sustainable yield (msy) as being “overfished.” This is regardless of whether it is fishing that has reduced the stock to this level, or of whether cutting back on or curtailing fishing will return that stock to a “non-overfished” condition.

This law is without question the most important piece of legislation that deals with domestic fisheries management. Not only is it important because it controls the management of virtually all of the fisheries in our federal waters; it also has an overwhelming influence on the management and the managers of the fisheries in state waters (generally within 3 miles of the coast). Considering the pervasive influence of the Magnuson Act on the management of our domestic fisheries, to suggest that it’s equating “not enough fish” to “overfished” contributes to a blame-it-all-on-fishing mindset is a monumental understatement.

Obviously this is an ongoing public relations nightmare for the domestic fishing industry (and an effective weapon for anti-fishing individuals and organizations). But more than that, the almost completely fishing-centric focus on marine resource management that it is responsible for has had an undue influence on federal fisheries policy for most of two decades.

Not enough fish? No matter what the underlying reason, it must be the fault of the fishermen because that fishery is classified as “overfished.” There’s no need to look any farther than that. What a gift to the anti-fishing activists.

At this point, and without Congressman Hastings’ much needed amendment, neither pollution, degraded habitat, oil well blow outs, overzealous application of Corexit, ocean temperature shifts, low egg/larval/fingerling survival nor any other factors count because the fishery is “overfished.” Obviously fishing must be to blame and just as obviously cutting back on fishing--making the fishermen who must be responsible for the “overfishing” pay for the environmental affronts of others--is the only way to restore the overfished stocks. Just as obviously the activists aren’t the only ones who benefit from this word play.

The tragic situation that the New England groundfish stocks, the New England groundfishermen, the New England fishing communities and a bunch of New England seafood lovers are facing is about as good (difficult as it is for me to use “good” to refer to anything having to do with the current groundfish debacle) an example of how off-target our fishing-centric understanding of “not enough fish” can be. In the groundfish fishery fishing effort has been cut back significantly and repeatedly and the stocks have yet to make a comeback.

Quite simply and accurately, Chairman Hastings’ draft legislation substitutes “depleted” for “overfished” wherever it appears throughout the Magnuson Act.

To what benefit? Most simply, this will take the management focus off fishing where overfishing isn’t a factor, encourage the consideration of other factors in determining why there aren’t enough fish in a particular stock and encourage the adoption when appropriate--when fishing isn’t to blame--of measures other than reducing fishing to return a stock to levels that will produce the maximum sustainable yield.

What’s the downside? If you’re not on a career track that depends on demonizing fishermen and/or fishing or if you aren’t responsible for any of the many other factors that negatively affect our fisheries, there isn’t one. Overfishing will be as unacceptable with this change as it is without it, but it will provide our fisheries managers while attempting to restore stocks to the MSY level the wherewithal to consider and, we should

all hope, deal with other negative factors as well.

It's going to be interesting to examine the "reasons" that the antis come up with for opposing this long overdue and entirely justified change.

Note that the first hearing by Congressman Hastings on his proposed amendments to Magnuson was held on February 4. The video of the hearing and the witness testimony are available at <http://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=367382>.

On a different subject, Sea to Table's Weekly Fish Report dated January 26, 2014 makes the "charge" that "*due to their delicate nature and short shelf life, virtually all scallops are treated with sodium tripolyphosphate which acts as a preservative as well as a water retention agent causing each scallop to weigh more.*" This is a piece promoting Sea to Table scallops and the foregoing is meant to apply to virtually all scallops but theirs, of course.

The fact is that a large proportion of East coast sea scallops are sold "dry" (out of the shell, into a seawater rinse to remove sand and shell residue, into a muslin bag, packed in ice, on to the dock then off to market. With New Jersey producing a fifth of all of the sea scallops landed on the East coast, industry insiders estimate that this is how at least half of the state's sea scallop production is sold. While the folks at From Sea to Table or any other domestic seafood dealer should rightfully tout the quality of the products they offer, that should be based on the most accurate information available.

A must read blog

02/24/14

The title is *Confessions from the Lone Shark Conservationist Who Supports California's Drift Gillnet Fishery* (at <http://organiccreativity.com/eatusseafood/?p=115>) and I've taken the liberty of reproducing the first paragraphs below:

Prej•u•dice

Noun

Preconceived opinion not based on reason or experience.

I admit I used to be prejudiced towards gillnet fisheries. I used to believe that all gillnet fisheries should be shut down, period. In my defense, all I knew of gillnets were the injuries that they can cause. During my time as a volunteer for the Santa Barbara Marine Mammal Center from 2007-2011, I personally rescued over 20 sea lions with gillnet entanglements. Although 100% of these animals were eventually released alive, the sights and smells of those injuries throughout the rehabilitation process still haunt me to this day. I didn't understand why gillnet fisheries still existed and I was hungry to learn more. And thus began my incredibly humbling journey to learn more about California's set and drift gillnet fisheries which target swordfish, thresher sharks, halibut and white seabass.

I'm telling my story for a couple reasons. First because I know a lot of folks share my intense passion and genuine intention to help preserve our world's oceans, but like me are not very sure where and how to start. I want to share some lessons I learned the hard way in an effort to prevent you from wasting your time. I'm also writing this because I think it's scary how easy it is for someone that knows very little about shark fisheries to be considered an "expert" on the subject with the power to influence other like-minded conservationists. And finally, I want to show how it's possible (and quite necessary) for shark conservationists to understand and support responsible shark fishing. This is contrary to popular belief for most so if you disagree I urge you to read on. The only problem is that my story is so complicated that I split it into two parts so please stay with me.

The blogger is Jonathan Gonzalez, a graphic designer with a solid and obvious commitment to ocean conservation. What separates him from the crowd, and what brought his blog to my attention, was his unwillingness to accept at face value the myriad of commonly held "truths" of marine conservation and his willingness to devote himself to researching what's really going on in our oceans and in our fisheries.

Five minutes invested in reading the "about me" page on his website (http://organiccreativity.com/eatusseafood/?page_id=61) will tell you all you need to know about his *bona fides* as a committed marine conservationist, and Part 1 and Part 2 of his Confessions will provide you with an inkling of the research/learning process that he went through when he realized the human dimensions of the "save the sharks" campaign he was involved in. Quoting from his blog once again:

The chef asked me, "So you say I can't serve this thresher shark meat because it's not sustainable, but you say it's OK to serve this halibut that was caught in the same net as the sharks? I don't get it." I didn't get it either. I don't remember what I told the chef after that, but I said enough for him to remove local thresher shark from his menu. What I do remember is walking away feeling very dirty. For the first time I asked myself, "What the hell am I doing?" "How did I get here?" "Am I really doing the right thing?" This gut check was another life-changing moment.

I can't recommend too highly his blog or his personal website, Organic Creativity, at <http://www.organiccreativity.com/html/contact.htm>. His description of the learning process he went through is invaluable and should be mandatory reading for anyone who has bought hook, line and sinker into marine conservation campaigns without considering their human impacts or the degree to which they are based on facts.

So how's that "catch shares" revolution working out for groundfish?

02/26/2014

"Recent scientific analyses show us that fisheries managed with catch share programs perform better than fisheries managed with traditional tools. Even in the first years after implementation, catch share fisheries are stable, and even increase their productivity. The scientific evidence is compelling that catch shares can also help restore the health of ecosystems and get fisheries on a path to profitability and sustainability. These results, ... these scientific analyses, ... are why moving forward to implement more catch share programs is a high priority for me. I see catch shares as the best way for many fisheries to both meet the Magnuson mandates and have healthy, profitable fisheries that are sustainable."

(Former NOAA Administrator Jane Lubchenco to the New England Fishery Management Council pressing for catch share management in the New England groundfish fishery in Boston on May 19, 2009)

Several weeks back NOAA/NMFS released the **2012 Final Report on the Performance of the Northeast Multispecies (Groundfish) Fishery (May 2012 – April 2013)**. The 121 page report is rather formidable, but fortunately for those of us who aren't interested in the minutia of sociology, anthropology and economics as applied to the situation that our nations' oldest and at one time most important commercial fishery has been forced into, its first table (*Summary of major trends (May through April, includes all vessels with a valid limited access multispecies permit)*) says about all that needs to be said concerning the efficacy of federal fisheries management under what the Magnuson Act has been turned into by the mega-foundation supported ENGOs. It's also a fairly good indicator of Ms. Lubchenco's prowess as an analyst/prophets/seer.

I've attached Table 1 from the Report. For purposes of this exercise the most important figures included in the table are those reporting the groundfish revenue for groundfish vessels from 2009 – the year that catch shares were first inflicted on the fishery - to 2012. They were \$82 million, \$83 million, \$90 million and \$70 million respectively. In spite of Ms. Lubchenco's assurances that *"even in the first years after implementation catch share fisheries are stable, and even increase their productivity,"* in the third year of the New England groundfish catch shares program – called a "Sector Program" here – the stability that she had assured everyone was just around the catch shares corner was as dead as a dodo because of a pronounced decrease in productivity. (Note here that the most obvious measure of productivity, the weight of groundfish landings, was not included in the chart. Considering the fact that the average price of New England groundfish in particular and, as evidenced by the non-groundfish prices reported in Table 1, domestic finfish in general have increased significantly in the last four years, the decrease in productivity is even greater than it appears.)

Delving more deeply into the report we find:

- **Executive Summary** - *"Fishermen in the groundfish fleet were unable to offset the declines in groundfish revenues with increases in non-groundfish revenues. In 2012, total landings of all species on all trips taken by the groundfish fleet declined by 5.4% and total all species revenue fell by 7.7% (\$25.3 million) from 2011. Groundfish landings declined 24.9% from 2011, to a four year low of 46.3 million pounds. Although groundfish average price rose by 2.7% from 2011 to 2012, it did not compensate for the drop in groundfish landings, and groundfish nominal revenues fell 22.9% in 2012 to a four year low of \$69.8 million. At the same time, non-groundfish landings remained nearly constant, with a 0.4% increase, and average nongroundfish price fell 2.6%, which led to a 1.9% decrease in non-groundfish revenues in 2012 from 2011."*
- **2.2. Gross Nominal Revenues** – *"Gross nominal revenues for the groundfish fleet further indicate that groundfish fishermen were unable to use non-groundfish revenues to offset their losses in groundfish revenues in 2012. Total gross reve-*

nue in 2012 from all trips was \$305.5 million, a decrease from 2011 (\$330.8 million), but higher than in 2009 (\$262.9 million) and 2010 (\$293.8 million) (Table 2)¹⁵. Groundfish revenue in 2012 decreased to a four-year low of \$69.8 million (22.9% lower than in 2011). Non-groundfish revenue decreased to \$235.7 million (2% lower than in 2011), but was still higher than in 2009 and 2010.

Total nominal revenue from all species on groundfish trips in 2012 was \$95.4 million, a four-year low (Table 3). Groundfish revenue on groundfish trips in 2012 was \$69.7 million, also a four-year low. Non-groundfish revenues on groundfish trips decreased in 2012 to \$25.8 million, from \$31.8 million in 2011. Non-groundfish revenue earned on groundfish trips was higher than it was in 2010 (\$22.3 million), but essentially the same as it was 2009 (\$25.9 million)”

- **2.2.2. Nominal Revenues by Species** – “Revenues from cod, haddock, yellowtail flounder, witch flounder, and pollock all decreased in 2012. Cod and haddock revenues experienced very significant drops, falling to four-year lows (45% reduction for cod; 62% reduction for haddock from 2011) (Table 8). Given higher average prices in 2012 for cod and haddock, these reductions in revenue can be attributed to sharp declines in landings.”
- **Concluding Remarks** – “Our analyses of fishery performance measures of the limited access Northeast Multispecies (Groundfish) Fishery showed marked changes in the fishery during 2011-2012, with many of the positive economic trends observed in last year’s groundfish performance report reversing their course in 2012. After increasing in 2011, landed pounds of groundfish are at their lowest point in 2009-2012 for all vessels. Non-groundfish landings are at a four year high, but grew less than 1% from their 2011 levels. Non-groundfish landings and revenues did not compensate for losses in groundfish landings and revenues.”

Considering the cumulative cuts that have been instituted in the groundfish fisheries it’s safe to assume that the reported 2011 – 2012 trends will extend into the current fishing year, and without major changes in the Magnuson Act and in how NOAA/NMFS and the New England Council are allowed to manage the fisheries they will be extended beyond that.

So what, if anything, can be done?

First off, it’s important to be clear on one point. That is, this debacle can’t be blamed entirely on catch shares in general or the New England groundfish sector system in particular. In spite of Ms. Lubchenco’s inaccurate pronouncements, catch shares are not a guaranteed fix for any ailing fishery. From the perspective of the fish a catch share system is nothing more than a quota system (though from the fishing industry perspective it can be significantly different, depending on who – or what – ends up owning or controlling the quota), and quota systems are only as good as the quota setting and quota enforcing mechanisms behind them.

Unfortunately the quota setting mechanism in the New England groundfish fishery has been grossly ineffective – and this is in large part a function of the science that has supported it (let me stress here that I’m blaming the science, not the scientists, whose science might be skewed by bureaucratic, institutional and budgetary considerations). According to the science, in recent years the groundfish come and the groundfish go – though currently they appear now to be mostly going – with little connection to harvest levels.

Needless to say, when you have a fisheries management system which is predicated almost entirely on controlling fishing mortality, which our fisheries management system is, and there are other factors that impact fish stocks as much as or more than fishing mortality, your management system is going to break down, as it has in New England.

An obvious fix of this dismal situation would involve identifying and measuring these other factors and then adjusting our management systems to allow for them.

Can we do that? Not now, with the Magnuson Act forcing the managers and the fishermen into a straitjacket woven from the inflexible and glaringly ineffective “we have to control fishing because it’s the only thing we can control” fisheries management system.

And why are we stuck with this system? Because a handful of multi-billion dollar foundations, the ENGOs they control and the “fishing” organizations they have co-opted want us to be.

Is there a solution? You betcha!

The National Research Council of the National Academies of Science formed the Committee on Evaluating the Effectiveness of Stock Rebuilding Plans of the 2006 Fishery Conservation and Management Reauthorization Act which prepared a report titled **Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States**. On page 178 of the available (pre-publication) report the Committee concluded “*the tradeoff between flexibility and prescriptiveness within the current legal framework and MFSCMA (Magnuson-Stevens Fishery Conservation and Management Act) guidelines for rebuilding underlies many of the issues discussed in this chapter. The present approach may not be flexible or adaptive enough in the face of complex ecosystem and fishery dynamics when data and knowledge are limiting. The high degree of prescriptiveness (and concomitant low flexibility) may create incompatibilities between single species rebuilding plans and EBFM (Ecosystem Based Fisheries Management). Fixed rules for rebuilding times can result in inefficiencies and discontinuities of harvest-control rules, put unrealistic demands on models and data for stock assessment and forecasting, cause reduction in yield, especially in mixed-stock situations, and de-emphasize socio-economic factors in the formulation of rebuilding plans. The current approach specifies success of individual rebuilding plans in biological terms. It does not address evaluation of the success in socio-economic terms and at broader regional and national scales, and also does not ensure effective flow of information (communication) across regions.*

In fact, Congressman “Doc” Hastings, Chairman of the Committee on Natural Resources in the U.S. House of Representatives has been circulating a draft of amendments to the Magnuson Act that are largely focused on replacing the management flexibility that was intended by the Act’s authors back in 1976 but was subsequently nullified by the prodigious and expensive efforts of the handful of ENGOs whose budgets are and have been in large part dependent on demonizing fishermen and fishing. His legislation is titled the “*Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act*” (available at <http://tinyurl.com/HastingsDraft>).

In spite of what the National Research Council has to say, the ENGOs, their supporters and allies are pulling out all the stops to oppose Congressman Hastings’ attempts to put some rationality back into fisheries management by substituting educated judgment for inadequate science when it is warranted. Some of their spokespeople are referring to it as Rep. Hastings’ Empty Oceans Act, though their frantic reactions make it seem as if *in camera* they might be looking at it as Chairman Hastings’ Empty the ENGO Coffers Act. Their misleading argument is that Magnuson is working now (just ask anyone who is in whole or in part dependent on the New England groundfish fishery about that) and that changing it would transport us back to the bad old days of overfishing. That’s not going to happen. The fishermen wouldn’t accept it and there are still enough safeguards so that the managers couldn’t allow it even if they were so inclined. But, like the misuse of the term “overfished” presently in the Act, that’s where these ENGOs get much of their fishing derived thunder, so right or wrong (and the NAS/NRC, which is among the most unimpeachable and credible scientific bodies in the world, unambiguously says they are wrong) they’re going to do their utmost to scuttle Congressman Hastings’ amendments.

“*Through the Magnuson-Stevens Fishery Conservation and Management Act, the United States has one of the world's strongest statutory frameworks for the management of sustainable fisheries. The Act is highly effective at preventing overfishing and rebuilding overfished stocks. However, in the years since the requirements of the last reauthorization have been implemented, it has become increasingly clear that the councils need more flexibility to make decisions that are tailored to the needs and circumstances of each fishery.*” (Statement of Richard B. Robins Jr., Chairman of the Mid-Atlantic Fishery Management Council at a hearing on the Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act held by the House Resources Committee on 02/04/2014. None of the fisheries managed by the Mid-Atlantic Council are overfished.)

I had the pleasure, both personal and professional, of attending the annual membership meeting of the Blue Water Fishermen's Association (BWFA) in Atlantic City last month. It was pleasurable in large part because I got to catch up with old friends who I haven't seen nearly as much as I would like to in recent years, and that was the personal part. The professional part, however, was my being able to once again experience at firsthand how a fishermen's association that is truly committed to conservation operates internally (this isn't to imply that there aren't a whole slew of fishermen's organizations whose members aren't similarly committed. In 2014 this is the rule, not the exception).

First off, for those readers who aren't familiar with BWFA, next year will be its 25th year of representing members of the pelagic longline fishery on the East and Gulf coasts.

One of the speakers at the meeting was Dr. Mariluz Parga, a veterinarian with Submon (<http://www.submon.org/en/who-are-we-in-submon/>) in Barcelona, Spain. Submon is an organization which "provides environmental services related to the conservation, study and awareness of the marine environment" and Dr. Parga is a sea turtle specialist who was at the meeting as a contractor to the NOAA/NMFS Bycatch Reduction and Engineering Program.

Her presentation immediately followed an update on the sea turtle program by Charles Bergmann from the Harvesting Systems and Engineering Branch at the NMFS Pascagoula, Mississippi lab. In total BWFA dedicated at least twenty percent of their one day annual meeting to sea turtle conservation involving interactions with pelagic longline gear and how they can be mitigated.

Considering that this is probably the only opportunity that many BWFA members have every year to get together minus the constraints of everyday business pressures, as well as the fact that they are facing the same problems that every other US commercial fisherman and those in US fishing-dependent businesses this might be considered excessive. However, and this is something that will probably be understood by anyone in the commercial fisheries, it's a testament to how critical conservation has become to the pelagic longline fishermen in particular and to our domestic seafood harvesters in general. It's safe to say that US fishermen are among the mostly highly regulated in the world, and accordingly they are interested in and to a very large extent focused on the creation, implementation and effectiveness of the regulations that are so important to their businesses.

Dr. Parga discussed her work on sea turtle/fishhook interactions in various several countries. From the start it was obvious that she was as interested in hearing what the fishermen had to say as she was in them hearing her presentation. After many instances of listening to protected resources researchers and bureaucrats talking at, and too often talking down at, fishermen this was like the proverbial breath of springtime. It was obvious that she felt that the only way to be effective in reducing unwelcome interactions is by working with the fishermen. This is something that most of the ENGO "crusaders" who are so busy protecting this, that or the other thing from the depredations of commercial fishermen have yet to learn – or perhaps are disinclined to learn because of all the bucks and publicity that flow from MMPA/ESA lawsuits.

It was obvious that Dr. Parga (and Mr. Bergmann as well, though to anyone who knows Charlie, that goes without saying) was interested in all sides of the sea turtle/fishermen interactions equation and the BWFA members responded to her and her presentation accordingly.

I was impressed. But on looking back at my over twenty-five years of association with BWFA since it began, and of a number of its founders/members before that, it certainly wasn't the first time that I had been impressed by the strides they had made in the conservation of both swordfish/tuna conservation and in the incidental catch of other species as well.

Going back to a Subcommittee on Fisheries Management of the House Committee On Merchant Marine and Fisheries on the Atlantic Tunas Conservation Act reauthorization on October 23, 1993, Nelson Beideman, a founder of BWFA and its Executive Director until his death in 2006, testified "*regulating only the U.S. commercial and recreational fishermen will not conserve these fish which are found in virtually all areas of the Atlantic. How successful can conservation negotiations be if other countries across the table know (before we even sit down to negotiate) that the U.S. will take all necessary steps unilaterally? What incentive do they have to agree to management and conservation measures?*" This testimony set the tone for BWFA's management and research activities early on, a tone which is still influencing the organization, its members and its activities today. Highly Migratory Species management, to be effective, must address every aspect of the various fisheries throughout their range.

In fact, in 2007 Nelson was given a posthumous tribute at NOAA's Sustainable Fisheries Leadership Awards ceremony. From the NOAA/NMFS web page memorializing the ceremony, he "*helped initiate some of the most effective collaborative research projects between commercial fishermen, NOAA scientists and conservation organizations. He was an active fisheries management partner who was instrumental*

in efforts to reduce domestic and international bycatch of sea turtles, and develop domestic and international management programs that led to the rebuilding of north Atlantic swordfish” (<http://www.nmfs.noaa.gov/awards/2007.htm>). For a more extensive review of this work see

Having a guest speaker at the BWFA annual meeting who is a turtle conservation specialist from Spain is a recognition of how truly international HMS management must be to be effective, and of the fact that BWFA’s members and staff have recognized that, and have been working towards that end for more than two decades.

On the other side of the fence

It was back in August 1997 that Pew Environmental Program Director Joshua Reichert wrote in an op-ed article titled **Swordfish technique depletes the swordfish population** printed in the Philadelphia Inquirer *"the root problem is not only the size of the quota, the length of the season, or the number of vessels involved. It is how the fish are caught. Use of longlines must be barred."*

Five years later members of ENGOs established and or supported by the Pew Charitable Trusts went to great lengths to take credit for the recovery of the North Atlantic swordfish stock via their **Give Swordfish A Break** media campaign, which was begun in 1998 by a Pew created ENGO named SeaWeb. Needless to say, their PR blitz made no mention of the fact that BWFA had been championing swordfish conservation in the entire North Atlantic years prior to the Pew campaign.

How legitimate was Mr. Reichert’s and his minions’ commitment to saving swordfish and to ending longlining, the principal method developed for their harvest? Obviously that’s information that I’m not privy to, but consider that in a 1998 article in the St. Petersburg Times (FL), titled **En Garde for Swordfish** (<http://www.fishtruth.net/PDF/SpruillSwordfish.pdf>), reporter Bill Duryea detailed the SeaWeb strategy behind the Give Swordfish A Break campaign. *"The first thing (SeaWeb Executive Director) Vikki Spruill did when she went looking for a fish to save did not have to do with fish at all,"* Duryea wrote. Having decided that the most effective way to *"engage the public interest" in ocean problems was through the food on their plate, Spruill*” Duryea wrote *"needed a certain kind of fish. A poster fish, if you will. Shrimp and salmon rank at the top of the most popular seafoods, but half of the shrimp and salmon sold in the United States are farm-raised, tempering their status as overfished. Besides, shrimp lack a certain weightiness. 'We wanted something majestic,' said Spruill. Number 3 on the popularity list, according to Spruill, was swordfish, whose firm-fleshed steaks had become a mainstay of fashionable restaurants across the country."*

Josh Reichert’s and Pew’s actions to destroy a form of fishing that has been accepted and effective for well over a century (tub trawls, also known as bottom longlines, were employed by the dory fishermen on the Grand Banks off Newfoundland who Rudyard Kipling immortalized in his novel **Captains Courageous**) appeared, at least in Vikki Spruill’s opinion as related to Bill Duryea, have far less to do with saving swordfish than they did to crassly using the “majestic” image of swordfish and their popularity in white tablecloth restaurants to advance their ocean agenda.

But note that BWFA’s efforts to have meaningful international conservation measures for the HMS fisheries adopted in the North Atlantic years started long before any of the people at Pew took any public positions regarding them. The swordfish had gotten their break starting at least in 1993, and that break was because of the efforts of BWFA, not because a handful of chefs who had no idea of what was going on in international swordfish management – the only effective method for managing swordfish or other HMS – were convinced by an expensive foundation supported campaign that the U.S. swordfish fleet should be made accountable and, not coincidentally (if the Pew troops were paying any attention to head man Josh Reichert) driven into economic oblivion. This was one of the first times that domestic commercial fishermen were “collateral damage” in Pew SeaWeb’s (and the Pew Trusts’) campaign to appear to be the oceans’ saviors in the public eye.

But fortunately for the swordfish, for the longliners who catch them, and for seafood consumers who know what a culinary treat ocean fresh swordfish are, the pelagic longliners are still fishing and BWFA is still committed to effective international swordfish conservation.

But BWFA’s conservation interests go far beyond swordfish conservation.

Anyone with anything beyond a nodding acquaintance with open ocean fisheries has probably come upon anti-longlining rants referring to “walls of death” tens of miles long festooned with thousands of hooks and snagging virtually every innocent sea creature unfortunate enough to be swimming anywhere in the neighborhood.

How close to accurate are these “walls of death” claims? A pelagic longline uses floats to keep the baited hooks suspended in the water column. These floats are 1,000 feet apart and support the horizontal main line. Suspended from the main line are vertical lines from 60 to 100 feet long. Each has a circle hook (more on that later) at its end. There are 4 or 5 baited hooks suspended between each buoy – the hooks are 200 to 250 feet apart and hang anywhere from 50 feet to 300 feet below the surface.

In actuality there is a single 4 inch long hook embedded in a foot long dead squid or mackerel hanging every 200 feet along the longline and anywhere from 50 to 300 feet below the sea surface. If we were talking about a brick wall that wall would be .0001% brick and 99.9999% empty space. Some wall!

And then there's the type of hooks that are used in the longlines. Essentially there are two types of hooks in use in recreational and commercial bait fisheries. The first of these are commonly called J hooks, which are constructed so that they will look a fish, or any other creatures that ingests it, anywhere in the digestive tract, depending on how the hook is swallowed. If the hook doesn't lodge in the mouth, other organs are likely to be damaged during hooking or hook removal.

The alternative circle hooks, because of their configuration, tend to lodge in the angle of the jaw, causing minimal damage during hooking and when the hook is removed. Circle hooks are significantly less efficient than J hooks. In fact estimates are that the pelagic longliners can sacrifice up to a third of their targeted catch by switching to circle hooks. But switch they did, in spite of the reduced efficiency, because it cut down significantly on the mortality of fish (and turtles) that they inadvertently caught and subsequently released. BWFA played an essential role in the initial work leading to the adoption of a mandatory circle hook requirement in the domestic pelagic longline fishery and in getting the participants in their fishery to accept the requirement. If the members of BWFA weren't the earliest adopters of circle hooks they were certainly among the earliest (see the NOAA/NMFS fact sheet for the Northeast Distant Fishery Sea Turtle Bycatch Reduction Project: Project Results: Avoiding Interactions & Reducing Harm at http://www.nmfs.noaa.gov/mediacenter/turtles/docs/project_results.pdf which took the circle hook research into international waters. BEWFA boats were the cooperating vessels. For a more comprehensive treatment see Do Circle Hooks Reduce The Mortality Of Sea Turtles In Pelagic Longlines? by A.J. Read at http://www.lenfestocean.org/sites/default/files/circle_hook_report.pdf).

The use of circle hooks by the pelagic longline fleet meant a 30% reduction in the swordfish catch.

This commitment to the use of circle hooks and the "ancillary" benefits to sea turtle conservation led naturally into an ongoing training program sponsored by NOAA/NMFS aimed at the captains, owners and crew of domestic pelagic longliners. The program is still in place and BWFA still plays an active role in organizing the training sessions and in insuring that to the greatest possible extent that the sea turtle handling requirements are both effective from the turtles' perspective and practical for the fishermen. The presentations by Mr. Bergman and Dr. Parga were a part of this process, and the feedback provided by the fishermen has been and will continue to be an integral part of it.

And while on the subject of hooks, BWFA has also been actively engaged in the research leading to the adoption of "weak" hooks in the Gulf of Mexico pelagic longline fishery to reduce the negative impacts of their interactions with bluefin tuna there (see Fish Hooks Designed to Avoid the Wrong Catch in the New York Times at http://www.nytimes.com/2011/05/08/business/08novel.html?_r=0). Is it any surprise that the Pew Environment Group opposed this conservation measure as well, a measure that the scientific experts, as well as NOAA/NMFS and the fishing industry strongly supported (http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Fact_Sheet/A%20Weak%20Solution.pdf)?

BWFA is one of two fishing industry members in the Consortium for Wildlife Bycatch Reduction, a conservation group located at the New England Aquarium, "*a partnership between science and industry to reduce bycatch of threatened marine animals*" (http://www.neaq.org/conservation_and_research/projects/fisheries_bycatch_aquaculture/bycatch/consortium_for_wildlife_bycatch_reduction/index.php).

No discussion of the domestic pelagic longline fishery would be complete without including the latest on bluefin tuna management, which is part of the not yet approved Amendment 7 to the 2006 Consolidated Atlantic Highly Migratory Fishery Management Plan. This amendment introduces the Individual Bluefin Quota program for the PLL fleet. Its main provisions are to issue separate bluefin tuna quotas to each boat in the fleet based upon that vessel's fishing history, making that quota transferable between vessels, and closing down the PLL fishery when (if) the quota is reached.

The stated objectives of the amendment are to:

- Limit bluefin landings and dead discards with a hard cap
- Provide strong incentives to avoid bluefin tuna interactions
- Provide flexibility to enable pelagic longline vessels to lease bluefin quota from other vessels.
- Balance the objectives of IBQ program with other Amendment 7 objectives, (e.g., optimize Fishing opportunities, maintain profitability, minimize impacts on the directed permit categories, and consider the broader objectives of the FMP).

(See Individual Bluefin Quotas (IBQs) from Draft Amendment 7 to the 2006 Highly Migratory Fishery Management Plan at http://www.nmfs.noaa.gov/sfa/hms/advisory_panels/hms_ap/meetings/sept_2013/documents/a7_individual_bluefin_quotas_sept2013_ap.pdf).

The impetus for this program is the fact that the management program now in place requires that after the PLL fleet catches and keeps a specified number of bluefin tuna all of them that are subsequently caught must be “released” regardless of the condition they are in. This leads to the dead discarding of the fish, which is against the intent of national standard 9 of the Magnuson-Stevens Fishery Conservation and Management Act. This program will shift the responsibility for bluefin tuna bycatch away from the fleet to the individual boats/fishermen, will stop the waste of several tons of high quality fish every year and will cap the bycatch of bluefin tuna by the PLL fleet.

The design of this innovative program was a joint effort of BWFA and NOAA/NMFS, and is yet another example of BWFA’s commitment to utilizing and advancing conservation goals both for the species its members target and for those that they unavoidably interact with.

In spite of pelagic longliners being near the top of the Pew Trusts’ hit list, in spite of the unsuccessful Pew Seaweb attempt to throw their fishery to the wolves for the sake of their PR machine, the U.S. pelagic longliners via BWFA – who deploy only 3% of the hooks used in the Atlantic ocean – have carved out a niche as one of the most effective pro-conservation groups in the HMS fisheries and apparently have every intention in remaining there.

Atlantic herring - lots of smoke but where’s the fire?

07/03/14

Peter Shelley is a lawyer who works for the Conservation Law Foundation (CLF). Apparently among his duties is providing entries to the CLF website “Talking Fish.”

For those of you who aren’t familiar with the groundfish debacle in New England, Mr. Shelley and the CLF, utilizing the court system and a whole bunch of money (according to their IRS Form 990 filed in 2011- the last year available on the Guidestar website – total CLF revenue was \$5,800,000, up \$1,250,000 from the year before), have been playing a pivotal role in the groundfish fishery management program via the management process and the courts since before it was a debacle.

Evidently the groundfish fishery wasn’t enough to fill Mr. Shelley’s plate so he has been involved in Atlantic (sea) herring management as well. Part of that involvement was an opinion piece on the CLF website titled **New England’s Fishing Pathology**, referring to the participants in and their participation in the Atlantic herring fishery – or at least those people whose participation involves boats bigger than those that Mr. Shelley has decided are just right.

I’m going to start off with a primer on Atlantic herring management. This should make it easier to put Mr. Shelley’s words in their proper context.

The Atlantic herring fishery in U.S. waters is divided into four distinct management areas designated 1A, 1B, 2 and 3. Each year a quota (actually an Area Annual Catch Limit) is determined for each area. Area 1B has by far the lowest quota of all four areas (Area 1A is 33,031 metric tons, Area 1B is 2,878 metric tons, Area 2 is 28,764 metric tons and Area 3 is 39,415 metric tons). Area 1A, adjacent to Area 1B, is primarily populated by the Gulf of Maine herring stock, Area 3 by the Georges Bank herring stock and Area 1B and Area 2 are populated by a mix of herring from both the Georges Bank and Gulf of Maine stocks.

Reporting requirements for vessels engaged in the Atlantic herring fishery are stringent and strictly enforced:

*Limited access herring vessels **report catch daily** via VMS (Vessel Monitoring System), open access herring vessels report catch weekly via the IVR (Interactive Voice Response) system, and all herring -permitted vessels submit VTRs (Vessel Trip Report) weekly. Failure to submit reports, including the requirement to submit a negative VTR for any week when no catch was made, has resulted in vessels being referred to the NOAA Office of Law enforcement for investigation. – From the NOAA/NMFS Atlantic Herring Weekly Reports.*

The reports are processed by NOAA/NMFS and when 92% of the quota for a particular area is reached the directed fishery in that area is closed. If it is required that an area be “closed” to harvesting (actually the area isn’t closed but the trip limit is reduced to a very low level) it is the responsibility of and is done by NOAA/NMFS. It is intended that this be done in a timely manner to avoid significant overages in harvest. Apparently this is not always possible. If there is an overage in an area in a given year that overage is subtracted from that area’s quota in subsequent years.

The entire directed fishery for herring is closed when 92% of the entire 104,088 mt quota has been harvested, from all areas, collectively.

There is nothing in the Fishery Management Plan requiring – or even suggesting - that it is a responsibility of the vessel owners/operators to do anything more than or to be in any way responsible for more than their own vessels’ reporting. Once a vessel owner/operator meets the daily and/or weekly reporting requirements he or she has met his or her responsibilities until or if fishing in a particular area is shut down by NOAA/NMFS. If a vessel continues to fish in an area that has been closed or has more than the 2,000 pound trip limit aboard that fact will become obvious to NOAA/NMFS through the VMS and appropriate action will be taken.

Mr. Shelley’s column is based on the fact that in one of the four Atlantic herring management areas, Area 1B, the big boats that he somewhat puzzlingly refers to as part of a commodity-style fleet* exceeded their quota by 60%. One of the things that he neglected to mention was that with almost 6 months of the 2014 fishery completed the Atlantic herring harvest from all areas was only 30.5% of the quota.

While an overage of any area is of concern from a management perspective, it’s highly unlikely that the Area 1B overage has significant biological implications. The last Atlantic Herring Stock Assessment, held in January of 2011, estimated the total biomass at 1,322,446 metric tons. The Area 1B overage was between one and two tenths of one percent of that and less than 2% of the total quota for all four areas.

Atlantic Herring Weekly Report

Report Run on: 6/19/2014
 For data reported through: 6/18/2014
 Quota period: 01/01/2014 to 12/31/2014

Management Area	Current Week's Catch (mt) ¹	Reporting Week's Catch (mt) ²	Cumulative Catch (mt)	Quota (mt) ³	Percent of Quota ⁴
1A	316	323	1,270	33,031	3.84%
1B	0	0	4,751	2,878	165.08%
2	0	0	10,401	28,764	36.16%
3	1,105	418	15,346	39,415	38.93%
Total	1,421	741	31,768	104,088	30.52%

¹Herring catch reported for week ending 6/14/2014

²Herring catch reported for week ending 6/21/2014

³Framework 2 imposed seasonal restrictions on Areas 1A and 1B. As a result, Area 1A opened on June 1, 2014, and Area 1B opened on May 1, 2014 and closed on May 24, 2014.

⁴Area 1A percent of quota includes current ME state only vessel herring landings

In a somewhat tortured analogy Mr. Shelley equates the overharvest in Area 1B to “driving 104 mph in a 65 mph speed zone.” From the perspective of the two areas where Georges Bank and Gulf of Maine stocks of Atlantic herring mix, 1B and 2, and using the same analogy, the under-harvest in the two areas combined would be the equivalent of driving 32 mph in a 65 mph speed zone. That’s hardly the potentially catastrophic picture that he was trying to paint. (I’ve always felt that relevant data should be presented in as biologically/oceanographically comprehensive a manner as is possible. While it might not be as dramatic, it allows readers to more fully understand what’s really going on out there.)

On the following page is a table (from data provided by the New England Fishery Management Council staff) which shows the annual maximum catch (quota) allowed for each of the four management areas, the actual catch from each of those areas, and the percentage of the quota taken from each area in each year for the past ten years.

Note that over the past decade the participants in the herring fishery, participants who Peter Shelley and the CLF have termed “bad fishermen” who are in their estimation suffering from some undisclosed pathological condition, and I guess characterized by a lack of regard for either the fish they harvest or of their fellow fishermen, have caught only 70% of the quota from all four areas. Note also that in Area 1B, the area which went from a minor mole hill in any general herring quota analysis to Mr. Shelley’s supposed catastrophic mountain travelling at 104 mph, the percentage of total quota taken each year has ranged from a low of 19% in 2009 to a high of 158% in 2012, with no apparent trend. Two of the three other areas demonstrate similar swings in harvest percentage with no apparent trend. In fact the only area that demonstrates any consistency is Area 1A, and not coincidentally that is the only area in which the average landings have equaled 100% of the quota. In this area the Atlantic States Marine Fisheries Commission’s Atlantic herring plan allows the states of Massachusetts, New Hampshire and Maine to work cooperatively with seiners and trawlers in the Gulf of Maine to tightly manage the 1A quota by limiting fishing days during each week, in order to stretch the quota out through the fishing year and provide a consistent supply of herring to local lobster bait markets.

Year	Area	Catch (metric tons)	Area quota	% of quota
2004	1A	60,095	60,000	100%
2004	1B	9,044	10,000	90%
2004	2	12,992	50,000	26%
2009	1A	44,088	43,650	101%
2009	1B	1,799	9,700	19%
2009	2	28,032	30,000	93%

2004	3	11,074	60,000	18%
2005	1A	61,102	60,000	102%
2005	1B	7,873	10,000	79%
2005	2	14,203	30,000	47%
2005	3	12,938	50,000	26%
2006	1A	59,989	60,000	100%
2006	1B	13,010	10,000	130%
2006	2	21,270	30,000	71%
2006	3	4,445	50,000	9%
2007	1A	49,992	50,000	100%
2007	1B	7,323	10,000	73%
2007	2	17,268	30,000	58%
2007	3	11,236	55,000	20%
2008	1A	42,257	43,650	97%
2008	1B	8,671	9,700	89%
2008	2	20,881	30,000	70%
2008	3	11,431	60,000	19%

2009	3	30,024	60,000	50%
2010	1A	28,424	26,546	107%
2010	1B	6,001	4,362	138%
2010	2	20,831	22,146	94%
2010	3	17,596	38,146	46%
2011	1A	30,676	29,251	105%
2011	1B	3,530	4,362	81%
2011	2	15,001	22,146	68%
2011	3	37,038	38,146	97%
2012	1A	24,302	27,668	88%
2012	1B	4,307	2,723	158%
2012	2	22,482	22,146	102%
2012	3	39,471	38,146	103%
2013	1A	29,820	29,775	100%
2013	1B	2,458	4,600	53%
2013	2	27,569	30,000	92%
2013	3	37,833	42,000	90%
Total		908,376	1,293,863	70%

In Mr. Shelley’s words “*this incident—and particularly the herring fleet’s response to it—are symptomatic of a deeper pathology in some of New England’s fisheries.*”

Of this supposed pathological condition Mr. Shelley wrote “*the herring fleet has blown past the quota in that same area several times before.*” He could as easily, and perhaps more accurately, have written that the herring fleet has significantly underharvested the Area 1B quota in seven of the past ten years (it looks like 90%, 79%, 130%, 73%, 89%, 19%, 138%, 81%, 158% and 53% since 2004).

Some pathology!

In spite of what seems to be from a conservation perspective an overall stellar performance by everyone associated with this fishery, particularly in the face of a resource base that seems to be bouncing all over the Northwest Atlantic from month to month and from year to year, Mr. Shelley picks out the performance in this particular area that contributes less than 3% to the total quota, an area in which the quota had been off in two of the last ten years by at least as much as that which precipitated the current episode of *strum und drang*, and with an overage that will be deducted from the future area quota.

He then takes another stab at the participants in the fishery in general and on Mid-Atlantic and New England Council Members associated with the fishery in particular, writing “*I have yet to come across an ounce of mea culpa or even regret from the herring fleet, its representatives, or any of the seafood industry bloggers.*” Maybe because neither they nor I, being aware of the whole fishery rather than of the cherry-picked bit that he focused on, saw any necessity to publicly gnash our teeth, tear our hair, rend our garments or do anything else that would satisfy his seeming need for some public display of guilt and remorse on our collective and individual parts. The people in the herring industry followed the rules, and followed them in a timely manner. If the management system broke down none of the *culpa* for that belongs with any of us. With only a sixth of the quota being taken from the coastal stock complex of Atlantic herring to date about the only regret I can feel is for the beleaguered fishing communities – beleaguered, I might add, in large part due to the efforts of groups like the CLF and people like Mr. Shelley – that are going to have to forego the income that those uncaught herring would have generated.

I’ll leave it for you to decide whether all of the smoke surrounding the Atlantic herring fishery has been generated by an actual crisis or by the well-oiled, foundation supported smoke machines that have become increasingly prevalent in fisheries/oceans governance for most of the last two decades.

(Note: Some participants in the Atlantic herring fishery are supporters of FishNet-USA.)

*A commodity is defined as anything that is bought or sold. While whether Mr. Shelley thinks that fish and shellfish should not be sold by commercial harvesters is not clear here. I’ll assume that he doesn’t, that he couldn’t find the right word or words that would be suitable so took a wild stab.

Your roots are showing - don't be convinced by seeming grass roots efforts

09/03/14

Particularly now that the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act is at hand, much is being made of the supposed grass roots endorsements that are supposed to benefit all of the fishermen who the endorsers claim to be representing. This being the case, I thought it might be useful to examine what “grass roots” really means and to contrast some bona fide grass roots fishing groups with some that, in spite of their billing, might not live up to such a claim.

I'll start off with the Wikipedia entry for grassroots; "*a grassroots movement (often referenced in the context of a political movement) is driven by a community's politics. The term implies that the creation of the movement and the group supporting it are natural and spontaneous, highlighting the differences between this and a movement that is orchestrated by traditional power structures.*"

This definition is fine as far as it goes, but it doesn't go quite far enough.

The minority staff of the United States Senate Committee on Environment and Public Works recognized in the just released report **The Chain of Environmental Command: How a Club of Billionaires and Their Foundations Control the Environmental Movement and Obama's EPA** what they termed a "Billionaires Club" which has gained access to "*a close knit network of like minded funders, environmental activists, and government bureaucrats who specialize in manufacturing phony 'grassroots' movements and in promoting bogus propaganda disguised as science and news....*" I have been researching and reporting on this network for most of the past two decades. While the report's authors limited their efforts to the Obama Administration, the Democratic Party and the Environmental Protection Agency, their "Billionaires Club" has been exercising its influence since long before the current administration was in charge and its influence seems to be unaffected by party politics. It is not orchestrated by any traditional power structures but rather one that is fairly new, frighteningly effective and in existence only through the approval and encouragement of both the legislative and executives branches, regardless of party affiliations.

I'll get to what real grassroots movements are in fisheries in a little bit, but think it would be most instructive to begin with what aren't. For this I'll go back a couple of years to a supposed "grassroots" movement, this one aimed at saving the world's oceans from harvesting of forage fish. (Note that this movement, though definitely nothing resembling grassroots, is still ongoing – see my last FishNet on sea herring at <http://www.fishnet-usa.com/Herring%20Smoke.pdf>. Those millions of available foundation bucks are more than addicting to some of the ocean-oriented ENGOs.) From Fishing as a management tool, which I wrote in 2007:

The latest assault on the commercial fishing industry is by a recently formed organization called The Herring Alliance. This "alliance" is made up of the Conservation Law Foundation, Earthjustice, Environment Maine, Public Interest Research Group, Greenpeace, National Environmental Trust, Natural Resources Defense Council, National Coalition for Marine Conservation, Oceana and The Pew Charitable Trusts. It is described on its website as "a coalition of environmental and other public interest organizations dedicated to protecting and restoring marine wildlife populations and Northeastern U.S. marine ecosystems by reforming the Atlantic herring fishery." However, there's a bit more – or perhaps that should be a lot less – to this coalition than meets the eye.

All but two of the member organizations are funded by the Pew Charitable Trusts. According to the Pew Trusts website, since 1998 The Conservation Law Foundation has received over 1,000,000 dollars, Earthjustice has received over 20,000,000 dollars, National Environmental Trust has received over 40,000,000 dollars, Natural Resources Defense Council has received almost 5,000,000 million dollars, Public Interest Research Group has received over 18,000,000 dollars, and Oceana has received over 38,000,000 dollars from Pew. Environment Maine acknowledges Pew support, but the Pew Trusts website doesn't detail at what level that support is.

This embarrassment of riches is part and parcel of Pew's strategy. In an article in the New York Times on June 28, 2001, Douglas Jehl wrote "unlike many philanthropies that give to conservationist groups, Pew has been anything but hands-off, serving as the behind-the-scenes architect of highly visible recent campaigns to preserve national forests and combat global warming. Though some of its money goes to long-established groups, Pew has also created its own organizations, with names like the National Environmental Trust and the Heritage Forest Campaign." (Charity Is New Force in Environmental Fight). However, in the case of this "coalition," the impression is that a group of organizations spontaneously came together because of a concern over the management of herring in New England waters. All those zeros in the preceding paragraph show how spontaneous that concern really was.

(Of the two groups apparently not Pew funded, Greenpeace is notoriously opposed to "big businesses" such as those engaged in the herring fisheries, and the National Coalition for Marine Conservation, in spite of its name, is an organization representing recreational fishing interests; interests who see any real form of commercial fishing as undesirable competition.)

Such seeming grassroots organizations might well be termed "Astroturf roots," but they certainly don't identify themselves as such. Since the mega-foundations involved in saving the oceans from fishermen whose style of fishing they don't approve of have made it virtually impossible for the public to track their fisheries- and oceans-oriented activities it takes a prodigious amount of research and insight to identify particular organizations' roots).

Real grass roots

Recently the West coast drift gillnet fishery was being threatened by legislation introduced in the California legislature. The legislation was identified as having originated with Pew Oceana (note that some of the people at Pew Oceana apparently bristle at the association of their organization with the Pew Trusts. Considering the largesse that the Pew Trusts have lavished on Oceana I can't imagine identifying it as anything but that, but remember those exposed roots!) and would have effectively shut down the fishery.

A handful of fishermen and other folks involved in the fishery and one volunteer, a gentleman named Jonathan Gonzalez who started out firmly in favor of "protecting" the oceans from fisherman but after digging into the issues rightfully concluded that these fishermen were the ones who were wearing the white hats and shifted his allegiance, went to Sacramento to attend a hearing on the legislation. They and the facts they pre-

sented were so effective that the legislation died in the Committee – in spite of the attendance at the hearing of Pew Oceana representatives. (For more on Jonathan Gonzalez see **A must read blog** at <http://tinyurl.com/kkj4hag>.)

There was no formal organization, no outside (and undisclosed) financial support, and no “piling on” by other organizations with undisclosed relationships of an Astroturf nature; just threatened businessmen and an interested observer with the facts on their side and a roomful of California Legislators who were willing to listen to them.

On the other end of the grassroots spectrum is Fishermen’s Energy, a corporation envisioned and formed by members of the commercial fishing industry from the mid-Atlantic and New England. Fishermen’s Energy was originally conceived by Dan Cohen at Atlantic Capes Fisheries in Cape May, New Jersey as a way for the fishing industry to have substantive input into offshore energy development in our coastal waters. The partners in Fishermen’s Energy are all established and well-respected members of the commercial fishing industry.

Offshore wind energy development is still a controversial issue that concerns – and justifiably so – fishermen and those in fishing dependent businesses because of the possibility that their interests will be ignored in the rush to put wind turbines in place in our territorial waters. From the Fishermen’s Energy website (<http://www.fishermensenergy.com>): “if the ocean environment is to be developed as a source of electricity, local fishermen and fishing industry companies bound for life to the community and to the sea are the best source of talent and resources to accomplish this.”

Whether at the most informal level as with the West coast gillnetters coming together to keep their sustainable fishery operating or at the highly structured and well-financed corporate level (Fishermen’s Energy recently received a US Department of Energy grant for \$46.7 million - <http://www.fishermensenergy.com/press-releases/2014-08-07.pdf>) or anything in between, the important point is that these are bona fide grass roots initiatives, started and carried out primarily by people who are dependent on sustainably harvesting our rich coastal and offshore waters. That’s important, and they can rightfully claim that they represent working fishermen.

There’s a world of difference between them and fishermen in organizations which are dependent on ENGOs and/or huge foundations who claim to be representing fishermen but are in actuality pushing the agenda of the people who are supplying the dollars. The minority staff of the Senate Committee on Environment and Public Works made that obvious in their report. While it might take a bit of effort, when you are evaluating claims by anyone claiming to speak for commercial fishermen, remember Mark Felt’s advice to Woodward and Bernstein and “follow the money.”

(On the subject of following the money I will disclose here that several of the partners in Fishermen’s Energy support both FishNet USA and Garden State Seafood Association, for which I am the Communications director.)

Monitoring fishermen - Sampling or sentencing?

09/22/14

Observation of (or spying on, depending on your perspective) fishermen, both at work and not, is playing a larger and larger role in managing our commercial fishermen. It seems as if some people – particularly managers of a certain mindset and representatives of anti-fishing ENGOs and the foundations that support them – will be satisfied with nothing less than knowing and having “on the record” what each and every fisherman is doing 24 hours a day, 365 days a year, whether he or she is on the water or off and whether his or her vessel is at sea, at the dock or hauled out of the water. On the other hand, nowhere near the level of scrutiny that these people want to inflict on fishermen is required to make up for the dearth of sound and precise data that is presently crippling the management in too many of our fisheries.

There are reasonable seeming arguments for increased levels of fisheries, or rather fishermen, scrutiny by government. But there are similar, and seemingly more compelling, reasons for increasing government scrutiny of many other professions; reasons that deal directly with far larger amounts of money, far more important matters of public health, and far more critical environmental issues.

As an example, on September 20 the NY Times had an article by Elisabeth Rosenthal titled ***Paying Till It Hurts : Surprise Bills - After Surgery, Surprise \$117,000 Medical Bill From Doctor He Didn’t Know***. The article dealt with medical providers getting around caps on various procedures by calling in other doctors/professionals who they might have financial arrangements with as consultants on even routine procedures. These are called “out of network” charges. The fees that these consultants could successfully charge were not subject to the same strictures as the primary doctor was. Thus, if the primary doctor was in business with the consulting doctor, the business would benefit far more than the primary doctor would have, and of course the consulting doctor would be the primary in other instances, and could call in his business associate as a consultant. But such an arrangement isn’t really necessary. A “you scratch my back and I’ll scratch yours” understanding could be equally as effective – and perhaps appear much less suspicious. As an example Ms. Rosenthal provided:

Before his three-hour neck surgery for herniated disks in December, Peter Drier, 37, signed a pile of consent forms. A bank technology manager who had researched his insurance coverage, Mr. Drier was prepared when the bills started arriving: \$56,000 from Lenox Hill Hospital in Manhattan, \$4,300 from the anesthesiologist and even \$133,000 from his orthopedist, who he knew would accept a

fraction of that fee. He was blindsided, though, by a bill of about \$117,000 from an “assistant surgeon,” a Queens-based neurosurgeon whom Mr. Drier did not recall meeting. The practice increases revenue for physicians and other health care workers at a time when insurers are cutting down reimbursement for many services. The surprise charges can be especially significant because, as in Mr. Drier’s case, they may involve out-of-network providers who bill 20 to 40 times the usual local rates and often collect the full amount, or a substantial portion (my emphasis).

According to Ms. Rosenthal “in recent years, unexpected out-of-network charges have become the top complaint to the New York State agency that regulates insurance companies. Multiple state health insurance commissioners have tried to limit patients’ liability, but lobbying by the health care industry sometimes stymies their efforts.”

While I wasn’t able to find any statistics dealing with the full impacts of overcharging via out-of-network billing, it would be naïve to assume that it wasn’t responsible for a really significant – and unnecessary – part of the United States’ annual \$2.8 trillion annual health costs. What’s the impact of these unintended occupational “benefits” on the affordability of health care in the U.S.?

In spite of this, in spite of what is costing the national economy uncounted, unnecessary – and probably unimaginable – billions of dollars, there is no apparent demand for increased federal oversight of medical billing practices. Nothing comparable to the anti-fishing clique’s demand for ever-increasing monitoring of fishermen, fishing vessels, docks, processing plants and on and on and on all the way down to the retail packaging/restaurant menus.

As far as scrutiny of potential polluters, we have to look no farther than the lax system of oversight that was and apparently still is extended to offshore energy development as exemplified by the BP Deepwater Horizon environmental catastrophe (see **NOAA Inaction in the Gulf of Mexico** which I wrote in June of 2010, available at http://www.fishnet-usa.com/NOAA_Inaction.pdf). The negative impacts are still ongoing in the Gulf and to date the most visible governmental reaction to what was one of the worst environmental assaults on the Gulf of Mexico in history was the renaming of the Minerals Management Service to the Bureau of Ocean Energy Management. Wow!

Did this multi-billion dollar mishap - \$50 billion and still counting, and thanks in part to the use of chemical dispersants we might be counting for years (see *Exxon Valdez Oil Spill: 25 Years Later, Effects Still Linger*, A. Alcántara, 2014, at <http://mashable.com/2014/03/24/exxon-valdez-25-years-later/>) – result in corresponding increased governmental scrutiny? Sure. Does every offshore gas/oil rig in our EEZ have a federal observer on board 24/7? Definitely not! Remember the Exxon Valdez? The Torrey Canyon? The Amoco Cadiz? What’s the federal oversight of oil tankers in U.S. coastal waters? Do they get as much scrutiny as U.S. fishing boats?

And of course these few examples represent the tip of the iceberg when it comes to unsupervised wrongdoing that has staggering impacts on our economy, our environment and our health. Does every investor/financier/broker who is in the position to do what Bernie Madoff did in what was supposedly one of our most scrutinized “industries,” and one with an extremely high potential to do damage to tens of thousands of people, now have a team of federal accountants assigned to overseeing his or her activities 24 hours a day, 7 days a week, 365 days a year? After Fukushima and Chernobyl does every nuclear power plant have federal overseers and observers assigned around the clock to every critical area? How about bus, truck or train drivers or airline pilots or chemical operators?

Without a doubt there are hundreds of thousands of people in thousands of jobs in the U.S. who can do more damage through one intentional or unintentional act than any fisherman (or any fishing fleet) could ever manage to do.

So why have fishermen been singled out?

I’d be the first to admit that fishermen are among the best secondary sources of information – samplers - about the condition of our fish stocks and the impacts of fishing on those stocks. Admittedly they are nowhere near as good a source of information as scientists/technicians actually conducting accurate censuses of those stocks would be, but after well over a century of playing at fisheries science this is something that remains far beyond the capabilities of our fisheries management system to do.

Just how good are the scientists, technicians and managers in the fisheries management system? I’d say that the New England groundfish complex, a group of a dozen or so species that dwell in the bottom or near bottom waters off our northeast coast, over the last decade or so have been among the most intensively studied and managed fish stocks in all of the world’s oceans. Look at the staggering failure that federal groundfish management has been in those years. Cod, the most important stock in the complex, continues to decline in spite of every imaginable fishing restriction outside of a total closure being inflicted on the fishermen – and as recently as last week a total closure of fishing in in-shore waters was being seriously considered.

The most recent cod assessment (or actually an almost-assessment) reports that cod in the Gulf of Maine and on Georges Bank are continuing their precipitous decline.

As their latest groundfish “fix” the federal fisheries managers are now in the process of determining how to better track what the fishermen are doing. They have commissioned an exhaustive series of research projects to determine how to best monitor the fishermen electronically.

From the report on the third phase of this research (done by Archipelago Marine Research Ltd. in Victoria, British Columbia, Canada):

- *For the purpose of program design, we suggest that the monitoring investment be around 5% of the fishery value, or less.*
- *Calculating the total cost of an EM (electronic monitoring) program is difficult as it must take a multitude of operational and program delivery factors into account. However, given the basic design considerations and certain operational assumptions, it is possible to calculate an initial estimation of program core costs. These core costs focus on the effort necessary for collecting, retrieving, processing and reporting the EM data for each of the approaches under consideration. This costing exercise indicates that the annual core costs for the NE groundfish fishery (400 vessels, 15,000 trips and 85,000 hauls per year) would be approximately \$2.5 million for the Audit Approach and around \$1.7 million for the Compliance Approach. This constitutes two to four percent of the fishery landed value (ex-vessel value).*
- *While the core costs should represent the majority of the program costs, there will be additional costs for administration and infrastructure such as program management, outreach, data storage, and travel, amongst others.*
- *The difference in review speed between the two approaches was gear specific. The time to review imagery for day-trawl vessels was much lower in the compliance trial (22 minutes for each hour of video reviewed) compared to the audit trial (1 hour and 40 minutes for every hour of video reviewed). In contrast, the gillnet vessel had similar review times for both trials (29 minutes and 30 minutes for every hour of video reviewed for the compliance and audit trails respectively).*
- *In the NE groundfish fishery, the total monitoring budget must also consider the cost of fishing log, NEFOP, VMS, ASM, and potentially a dockside monitoring program.*
- *The challenge with EM programs is that some key compliance issues (keeping the system powered, clean cameras, etc.) may be difficult to enforce if the violation is deemed slight, yet compliance at this level may be very important. For example, a five-minute data gap may seem insignificant for a three week fishing trip, yet power loss during a high risk capture event could significantly weaken the value of the EM program. An alternative to program controls through regulation would be to provide administrative incentives. For example, charging higher fees for incomplete data sets relative to data sets with no data gaps and good quality imagery. Vessels with historically high levels of compliance might earn lower review rates (assuming a self-reported audit method) as compared to vessels with poor compliance.*
- *Compliance with onboard methods is necessary and often there is a need for ongoing communication to provide feedback and engage industry in developing solutions that balance the operational needs of the vessel and the data collection needs of the EM program.*
- *Unauthorized or inappropriate access to the data can be mitigated by encrypting the data at the time it is created on the vessel and establishing chain of custody procedures. Data protection and chain of custody can be enhanced through a combination of technical (e.g., encryption) and process (e.g., locked cabinets and sign off logs for hard drives) safeguards.*
- *EM will only be one component of an integrated monitoring package in the NE groundfish fishery that will likely include fishing logs, some observer coverage and dockside monitoring.*

As the last bullet point states, this electronic monitoring system is designed not to replace but to supplement the monitoring requirements that are already in place (fishing logs, observer coverage and dockside monitoring).

So we're going to have even more, and even more burdensome (and I'd bet the bank, based on the consultants who I'm familiar with, that while "core" costs are estimated at 2% to 4% of landings, in the real world the total **additional** cost will be in the neighborhood of 10% or above of landings) monitoring of fishermen in the New England groundfish fishery when it seems to have been proven conclusively that it isn't fishing that's driving the system and the fish stocks.

Peter Baker of the Pew Trusts wrote in his recent introduction to the latest chapter of the Chicken Little book of ocean alarmism "*scientists have found that the Gulf of Maine is warming faster than most of the world's oceans and that the rising sea temperatures have negative effects on many fish.*" But then he goes on to imply that had there been more stringent management of fishermen (and with that the implication that more stringent surveillance of them was necessary to make sure that they weren't cheating), the traditional haunts of Atlantic cod off our Northeast coast would no longer be devoid of cod. My understanding of temperature tolerance in living organisms is that when it gets too hot for them in a given location they have two choices; to relocate – to extend their range - or to perish. Fish coming equipped with such mechanisms as swim bladders and fins, when the heat is on they tend to skedaddle, and in the Gulf of Maine, Georges Bank and the other waters off our Northeast they tend to skedaddle to the North and to the East. That's where the cooler water, the water that will allow them to feed and breed and do all those other things that codfish need to do to survive, can be found. But, needless to say, Pew has come out with an "issues brief" blaming the missing cod on irresponsible fishermen and the too lax management of them by irresponsible managers. Who'd of guessed it?

The bottom line is that the waters off New England have become increasingly inhospitable to cod and, if the trend of increasing temperatures continues, that inhospitality will become toxicity. The cod that can't get to water of the appropriate temperatures will go from being uncomfortable to being dead. According to Tom Nies, Executive Director of the New England Fishery Management Council, when speaking last week of the most recently envisioned reductions in cod catches "*all of these catch limits we set in recent years came from the science, and fishermen have caught less than those limits, and we're still in the toilet.*"

Some science!

And then there are the exploding populations of spiny dogfish and gray seals. Dogfish are adept at both feeding on codfish and at outcompeting codfish for prey species (see the two complimentary charts at http://www.fishnet-usa.com/Rationality_1_2.htm for an idea of the interaction between spiny dogfish and cod off our Northeastern coast). Grey seals feed on cod, among other species of fish. Seems like at minimum a triple whammy – of which fishing has no part – but the managers, the people at Pew and half a dozen other foundations and ENGOs whose futures and fortunes are totally focused on blaming fishermen and fishing aren't going to be deterred.

Regardless of the tunnel vision of the anti-fishing activists, you might ask so what? As long as the productivity of the waters off New England remains about the same, the biomass of fish will remain about the same as well. Why don't the fishermen pursue, and if necessary develop markets for, other species that are almost surely going to take the place of cod (if they haven't already)? Because they can't, because the Magnuson Act, as amended via pressure from the "conservationists," requires that every species under federal management be at or approaching maximum sustainable yield (at or approaching historic levels of highest abundance). This means that the managers are going to be forced, by a totally unrealistic federal requirement, to try to rebuild cod stocks to a level that, given the existing high (and very possibly increasing) water temperatures, those stocks will never reach. And to do it by cutting back on fishing.

Even though it will be futile, that will require far more than severely reducing or eliminating the directed catch of cod – something that becomes increasingly irrelevant as the cod stocks continue to decline. It also means making severely reduced bycatch allocations of cod in directed fisheries for other species; species with which cod are often inextricably mixed. And when those reduced bycatch allocations of cod are reached those other fisheries will be closed as well.

It could be that the Magnuson requirement that cod be at a level approaching MSY is a death sentence to every fishery in which they will be or might be caught.

Consider that, in spite of all of the so-called conservationists' (aka anti-fishing activists) claims that the fisheries managers in New England weren't in fact harsh enough in managing the fishermen - it's obvious that they weren't and still aren't managing the fish - the managers were doing their state-of-the-art best. Arguably they are part of a fisheries management system that is ineffective, that has in fact resulted in both fewer fish and fewer fishermen, and that has used many millions of taxpayers' dollars in doing so.

Being educated in that system and having their careers dependent on it, perhaps some of those managers – those at the policy level? – might understandably feel that they are now in need of something to direct scrutiny away from their abject failure in New England. As well might those anti-fishing activists who have been unable or unwilling to consider any actions that didn't result in fewer fishermen and less fishing to "fix the New England groundfish fishery." It's hard to think of a more effective way of doing this than by reinforcing the "blame it all on fishing" philosophy by insisting that the fishermen must be scrutinized to an even greater extent than they have been before to make fishermen management really effective.

Naturally, writing about the so-called conservationists brings up questions about their role in fishing surveillance.

We might consider as typical in her beliefs - but not in her level of outspokenness - Sylvia Earle, former head scientist at the National Oceanic and Atmospheric Administration, a member of Pew/SeaWeb's team of spokespersons and "Explorer in Residence" at the National Geographic Society. It's safe to say that she is one of the most influential people in dealing with ocean issues. In some circles she has been referred to reverentially as "Her Deepness."

From article in the NY Times magazine back in 1991 *"I never eat anyone I know personally," she said at the time. "I wouldn't deliberately eat a grouper any more than I'd eat a cocker spaniel. They're so good-natured, so curious. You know, fish are sensitive, they have personalities, they hurt when they're wounded...I hope," she said, modulating into a sly smile, "you don't get sick of me thinking like a fish."* (P. Orenstein, **Sylvia Earle - Champion of the deep**).

Lest anyone think that the world's burgeoning population and that population's growing reliance on fish and seafood since 1991 might have influenced her bias against eating fish, she said in an interview in September of 2014 *"but for North Americans and frankly for those in most of Europe to rely on fish for a significant part of their diet, they're taking from creatures who have no choices. So, if we want to be not only good for our health but good for the health of the planet, certainly leave those wild fish in the ocean where their role holding the planet steady is much more important than on our plates. We have hundreds of other ways of feeding ourselves.* (Emma Bryce, **Sylvia Earle on eating fish: 'Think of them as wildlife, first and foremost,'** The Guardian, World on a plate, 09/18/ 2014).

She also gave a thumbs down to aquaculture.

She did, I'll note, make allowances for some of us, bestowing an exemption *"for special coastal communities who don't have many choices and do rely on ocean wildlife—island nations in particular."*

Her Deepness was asked *"what's your advice for people who want to continue eating seafood?"* She answered *"well, maybe they'll think about it and choose not to once they understand the real issues. But if even then they still want to take some, then eat it with great respect and make sure that it's once in a great while."*

Meanwhile, back to the real world that most of us live in. According to the United Nations' Food and Agricultural Organization, in 2010 the world's meat production was 285 million tons, egg production was 128 million tons and fish and shellfish production via aquaculture and capture fisheries was 188 million tons. More than half of the world's meat production and more than a third of the world's animal protein comes from fishing or fish farming.

I'll also note that Her Deepness was a director of Kerr-McGee, an energy company involved in the exploration and production of oil and gas resources that was later acquired by Anadarko Petroleum Corporation. It seems she was more concerned with people having enough gas and oil than full bellies. You kind of have to wonder how the impact of Kerr-McGee's contributions to greenhouse gases to the health of the Western Atlantic cod stocks stacks up against the impact of the fishermen who she would like to see unemployed?

One of her more dramatic quotes is "*I hope that someday we will find evidence that there is intelligent life among humans on this planet*" <http://www.ted.com/quotes?q=Sylvia+Earle&cat=quotes&sort=popularity>

If her apparent desire to inflict starvation at worst and diminished health at best (remember those omega 3s) on perhaps a third of the world's population – except, of course, for those fortunate enough to live in island nations – to save her fishy friends doesn't establish her credentials as a fully-fledged misanthrope, it surely seems as if that final quote would do it.

So let's assume that the antipathy Her Deepness holds for fish catching, fish growing and fish consumption has rubbed off on some of her admirers; in particular some of her admirers who have become, depending on your orientation, either marine conservationists or anti-fishing activists. That seems pretty reasonable, considering the anti-progress, anti-technology, anti-corporate, make-things-the-way-they-were-when-I-was-young attitude that seems to typify such activists (though Ms. Earle, at least, appears to be an enthusiastic supporter of technology when it comes to oceanic energy production).

How would they best manifest this antipathy? Working explicitly to put an end to fishing most probably wouldn't do it. Unless you are Sylvia Earle that's a bit too obvious and seafood has become a much too important part of an awful lot of peoples' diets. But making it increasingly difficult for fishermen to profitably fish – which is exactly what's been happening in the New England groundfish fishery for most of the last two decades and is well on its way in an increasing number of other fisheries - could be done under the guise of conservation. Forcing the adoption of ever more rigorous and expensive monitoring systems, coupled with a campaign to convince the public and the pols (and, most unfortunately, other fishermen) that the fishermen can't be trusted without it, could be a large and effective part of such an effort. Skimming a minimum of 4% of the top of a commercial fishing boat's gross production, particularly when coupled with constantly increasing operating expenses and constantly decreasing catches, would be more than likely to push more boats out of any fishery. Tragically that might happen in the not too distant future in New England without some significant changes in how we manage our fisheries – and in the legislation that controls how we do that.

It's about time that an objective group take a close and thorough look at the undue level of scrutiny that fishermen are forced to endure and determine what that scrutiny is actually accomplishing. It doesn't seem to make fisheries management any more effective, though it does make the management of the fishermen who are trying to survive a lot easier – because it's going to guarantee that there will be less fishermen fishing. And the constantly reinforced message that without 24/7 scrutiny the fishermen are going to cheat makes them seem as deserving recipients of whatever the next step is going to be. (And for those fishermen who are supporting other fishermen in other fisheries being subject to increased surveillance, keep in mind that you're probably next in line – and dollars that NOAA/NMFS spends on subsidizing that surveillance are dollars that aren't spent on research.)

Their careers and their futures depend on attacking fishermen and fishing.

What more can we expect from them?

10/09/14

There are people who don't like fishing. There are people who don't like anyone who isn't a vegan. There are people who don't like progress. There are people who don't like efficiency. There are people who don't like to thoroughly research issues. There are people who don't like technology. There are people who don't like competition. There are people who don't like people. There are people who don't like the truth. There are people who don't like whatever they're paid not to like.

Let's say that you shared a number of these traits and you were in search of what would be to you a rewarding career. Could you do much better than becoming an anti-fishing activist?

From the outside it appears as if the anti-fishing world is a world in which you can indulge your dislikes, inadequacies, frustrations, greed and elitism with impunity. And it appears as if the more effectively you do so, the greater your success in climbing the ENGO/foundation bureaucratic ladder.

When I was a lot younger and a lot more naïve I thought that anti-fishing activists were sincerely (though misguidedly) interested in the fish and in the fishermen, and that their goal was healthy fish and healthy fisheries. Their overriding concern with what they termed overfishing and their claimed aim of sustainable fisheries seemed, at least to the average unsophisticated and impressionable folks who are blind to what goes on under the ocean's surface, sensible and to a limited extent defensible.

But, since "overfishing" is no longer considered to be a problem in U.S. waters, some members of the anti-fishing cadre are branching out with their campaigns in every imaginable direction. As long as it has to do with catching fish they are doing whatever they can to maintain and increase the anti-fishing momentum that they have built up, and they are doing so regardless of the cost of their efforts in terms of fishing community survival and personal economic hardship.

Emblematic of this is their purposeful confusion in the public's collective eye of the term "sustainable," a perfectly acceptable – though often unattainable because of anthropogenic or natural environmental perturbations - condition in which a natural harvest can be maintained year by year.

Generally sustainability is a good thing. Barring extenuating economic or social factors it is a goal that our fisheries managers should be and in fact have been striving for. Today, considering the fact that overfishing isn't happening and the stocks aren't being overfished in just about all of our major fisheries, one could term virtually all of our commercial fisheries sustainable (and the few that aren't, exemplified by New England's Atlantic cod, aren't so not because of fishing but because of changing ocean conditions).

So the anti-fishing activists, and in all likelihood the foundations that sustain them, have been at work for years convincing the public and the pols that "sustainable" actually means something more in the neighborhood of "natural" or "undisturbed."

Consider how ridiculous a concept that is. According to these people the world's fisheries, which produce about a fifth of the animal protein that sustains humanity, are supposed to be conducted in a manner that has no impact on the "natural" environment. Consider the other major sources of animal protein: pigs, cattle, chicken and goats. Can you imagine any meaningful production (in terms of a world population of seven billion and still growing) of any of them without severe modifications of the environment? Yet our expectations have been raised to this level in our supposed quest for sustainable fisheries.

Why is this? We inarguably have more fish swimming around in our coastal and offshore waters than we have had in over a generation. We inarguably have a federal regulatory system for our fisheries that guarantees against overfishing and guarantees for sustainability. In spite of this, these activists aren't moving on to other areas in ocean management where they can continue to exercise those abilities that made them – at least in their own minds – effective at solving the overfishing problems.

I certainly wouldn't attempt to estimate how the minds of these people work or to try to suggest why they do what they do, but one of the things that I try to keep in mind is that they are all part of a very successful "save the oceans" bureaucracy, a bureaucracy which works hand in glove with an equally successful federal "manage the oceans" bureaucracy.

The ties joining these two bureaucracies today go back to the very earliest days of the Obama administration. In fact, Obama's first inauguration was on January 20 of 2009 while on January 12-14 the Meridian Institute and the Monterey Bay Aquarium held a workshop titled **Setting Ocean Priorities for the New Administration and Congress**.

From FishTruth.net, one of my websites (<http://www.fishtruth.net/ObamaPriorities.htm>):

"The title says almost all you need to know. The participant list, after a little research, says all of the rest.

The workshop lists sixty-five participants and thirteen staff. Of the participants, at least 75% can be directly tied to at least one of the four mega-foundations that are leading the anti-fishing movement. All four of the participants from the commercial fishing industry are tied to at least one of the four mega-foundations as is the sole participant from the recreational fishing industry. Of the fourteen participants with no discoverable - at this point - ties to the mega-foundations, two are from the offshore energy industry, seven are from research oriented institutions which, if not receiving funding from one of the four mega-foundations at this point, will certainly have their institutional hands out in the future, one is from a California state agency (no one who is familiar with what state government is doing to fishermen in California is going to find any comfort in that - see <http://www.fishtruth.net/MLPA.htm>) and the other is from NOAA (ditto on a national level). Of the remaining three, one is from the travel and tourism industry, one is from the reinsurance industry and one is from the aquaculture industry. Oh yes, two participants are now in high leadership positions at NOAA.

All of the staff for the workshop are directly tied to funding from the four mega-foundations.

Is it any wonder that the Obama administration is completely out of touch with commercial, recreational and party/charter fishermen? All of the fisheries advice its members have been getting is being controlled by hundreds of millions of dollars' worth of funding from four foundations with inarguable track records in putting fishermen of every stripe out of work and off the water.

It's important to note here that Sally Yozell, who was with the Nature Conservancy at the time of the workshop, is now NOAA's Director of Policy and Senior Advisor to the Under Secretary of Commerce for Oceans and Atmosphere (<http://www.gulfbase.org/person/view.php?uid=syozell>) and Monica Medina, then with Pew Environment Group, is now Principal Deputy Undersecretary for Oceans and Atmosphere at NOAA (<http://www.noaa.gov/medina.html>).

What a happy six years for so many of those folks who I characterized in the first paragraph! It doesn't matter that overfishing in U.S. waters is no longer a concern. It doesn't matter that increasing ocean temperatures are affecting the "sustainability" of our fisheries to a much greater extent than overfishing ever has. It doesn't matter that they are increasingly focused on what are nothing more than token fishing issues like saving deepwater corals, saving forage fish, completely eliminating bycatch or protecting huge areas of natural ocean through Marine Protected Areas (which are generally protected only from fishing). The sum total is fewer fish landed and at greater cost to the fishermen every year.

Consider two current campaigns. One is to ban the sale of bluefin tuna in New York City. The activists who are politically pushing this ban know full well that thanks to years of stringent conservation measures by U.S. fishermen the bluefin tuna stock on our side of the Atlantic Ocean has recovered from overfishing and there is a healthy, well regulated and totally legal fishery for them. So their campaign has shifted to ban the sale of these fish in select markets. The other is to ban the possession or sale of shark fins on a state-by-state basis. Ostensibly this is to prevent the removal of fins from sharks at sea and the disposal/waste of the carcass. Again, the activists behind this campaign know that shark fins must be landed with carcasses by U.S. fishermen, that the fins are a part of every permitted shark fishery and that making it illegal to possess or sell the fins will do nothing more than take money out of permitted shark fishermen's pockets. These are legitimate and sustainable fisheries and each is controlled by stringent and effective regulations. Yet this isn't enough for the anti-fishing activists and that's simply because they don't have anything else to do.

The bucks keep rolling in, the misinformation those bucks buy continues to influence the public and the non-coastal politicians, the lawsuits those bucks fund continue to put our fishermen out of business, the anti-fishing bureaucracies continue to grow and the anti-fishing salaries continue to increase.

Is it any wonder that 90% of the seafood consumed in the United States is imported?

The Associated Press just ran a report on a year-long investigation into slavery in foreign fisheries (*Are slaves catching the fish you buy?* by Robin McDowell, Margie Mason and Martha Mendoza at <http://bigstory.ap.org/article/b9e0fc7155014ba78e07f1a022d90389/ap-investigation-are-slaves-catching-fish-you-buy>). It's kind of amazing but sadly understandable that when inhumane treatment of fishermen is taking place in countries that are apparently exporting fish to our domestic markets, and with our fisheries in such good shape, the ENGOS – and the mega foundations that are funding them? - remain so focused on our fisheries and our fishermen. Spending time at regional Fisheries Management Council meetings in places like San Diego, Seattle, New York City and Charlestown, is definitely much more enjoyable – and orders of magnitude safer – than documenting inhumane treatment of fishermen in Benjina, Indonesia. And it seems like it would be infinitely easier to steam roller small domestic fishing companies than to try to deal with major U.S. corporations (from the AP article: "*tainted fish can wind up in the supply chains of some of America's major grocery stores, such as Kroger, Albertsons and Safeway; the nation's largest retailer, Wal-Mart; and the biggest food distributor, Sysco*").

Flotsam and Jetsam

11/11/14

"*Flotsam is floating wreckage of a ship or its cargo. Jetsam is part of a ship, its equipment, or its cargo that is purpose-fully cast overboard or jettisoned to lighten the load in time of distress and that sinks or is washed ashore*" (<http://en.wikipedia.org/wiki/Flotsam>). They are used together to indicate potentially valuable materials floating on the seas' surface.

I use this title for periodic FishNets in which I address several issues that should be of value to anyone with an interest in oceans and fisheries in a somewhat abbreviated manner.

First off, a *mea culpa*

In the last FishNet, which was distributed in early October, I referred to "*the most recent cod assessment (or actually an almost-assessment).*" It was pointed out to me, and rightfully so, that this could have left readers with the impression that this was somewhat less accurate and/or reliable than a "real" assessment of the cod stock. I was assured that this wasn't the case and was provided with a wealth of information demonstrating that it wasn't, so I'll take this opportunity to put things right. I also must point out, however, that there are groups and individuals associated with the New England groundfish fishery who take exception to the results of this assessment.

"Anecdotal Information" is what the professional fisheries people call it, usually dismissively.

“In addition to the economic benefits of an expanded fishery industry, the fisheries science and management culture benefited from the private, public, academic partnership, increasing the level of trust amongst stakeholders and respect for the expertise of partners. Through this approach, the project has demonstrated that taking input from all aspects of the community can leverage scientific capabilities with the applied ecological expertise of the commercial fishing industry.”(IOOS’s - Integrated Ocean Observing System’s - **Modeling Advancing Fisheries Management and Improving Butterfish Population Assessments** at http://www.ioos.noaa.gov/ioos_in_action/stories/maracoos_butterfish.html).

If things were as they should be in fisheries management, there would be no reason for IOOS to include the words underlined above in their announcement of one of the more successful cooperative research programs that has taken place in the mid-Atlantic. Unfortunately, that isn’t the case, and much – though certainly not all – of the reason for that is the fact that fisheries managers and fisheries scientists generally discount most of what working fishermen have to say about the status of particular fisheries, about the ocean ecosystem or anything else that has to do with successfully harvesting fish or shellfish. I suspect that in large part this has to do with fishermen’s paychecks depending on them catching those fish which they are telling the managers and/or scientists about, which is a kind of scary way of looking at things. Consider the many financial transactions, ranging from buying a newspaper to buying a house, that you are regularly a part of. In the majority of these transactions you are dependent on the honesty of the other party or parties in the transactions and more often than not one or all of the parties are in a position to “profit” from acting dishonestly. Does this make them – or what they have to say about the transaction – immediately suspect? If that were the case an awful lot of transactions would never be transacted.

What brought this subject up was the article *A review of the past, the present, and the future of fishers’ knowledge research: a challenge to established fisheries science* by Edward J. Hind at the School of Political Science and Sociology, National University of Ireland, Galway, Ireland that was published in the issue of the ICES (International Council for the Exploration of the Sea) Journal of Marine Science in October, 2104.

According to the author, *“documented to be approaching at least a century old, fishers’ knowledge research is an approach to fisheries science that to date has struggled to take a place at the top table of fisheries science. Its focus is the study of the experiential knowledge of marine and freshwater environments that fish harvesters accumulate while operating in their respective fisheries. Those who seek in different guises to achieve greater consideration for this experiential knowledge in mainstream fisheries science and management can be considered fishers’ knowledge researchers.”* Yet, according to him, and according to many – and I was tempted to say most – of us who observe and/or participate in the fisheries management process from the fishermen’s perspective, after these 100 plus years *“the profile of fishers’ knowledge research compared with established approaches towards conducting fisheries science can currently be described as marginal.”*

Scientists are never going to know for certain how many fish are in a given area, how long those that are in that area are going to remain there, what factors will have an effect on where they are, how successful next year’s spawning will be, what the larval, juvenile and adult mortality rates will be over the life span of the species, or much of anything else above and beyond what the few specimens that they are immediately observing are doing.

It seems like a successful fisherman must have a broader perspective than a fisheries scientists. Fishing success depends on observing what’s going on today and knowing enough history to put today’s observations into their proper context. And successful fishermen generally have a community of fishermen that they share their observations with. It might be done with the precision that a fisheries scientist or manager thinks is necessary for legitimacy, but it’s done precisely enough for the fishermen to put fish in the hold and food, fuel in the boat and food on the table.

Below are a quotes from Hind’s paper that I think are particularly relevant:

“As with any knowledge system, the picture LEK (Local Ecological Knowledge) produces will be partial. However, we have found that LEK can be an invaluable addition to scientific and historical archival resources that are also partial. Harvesters are and were the central human actors in these social ecological systems and their observations and interpretations can contribute significantly to our efforts to understand the interactions in these systems.” (Murray, G., Neis, B., Schneider, D. C., Ings, D., Gosse, K., Whalen, J., and Palmer, C. T. 2008a. Opening the black box: methods, procedures, and challenges in the historical reconstruction of socio-ecological systems. In *Making and Moving Knowledge: Interdisciplinarity and Community-Based Research in a World on the Edge*, pp. 100–120. Ed. by J. S. Lutz, and B. Neis. McGill-Queens University Press, Montreal, Kingston, Canada.)

“Finding ways to make comparisons between fishers’ observations and data drawn from more traditional scientific sources could improve the potential for more informed and more accepted decisions on stock status and management.” (Neis, B., Schneider, D. C., Felt, L. F., Haedrich, R. L., Fischer, J., and Hutchings, J. A. 1999. Fisheries assessment: what can be learned from interviewing resource users? *Canadian Journal of Fisheries and Aquatic Sciences*, 56: 1949–1963.)

“It is suggested that analysis of approximate data, quickly acquired at low cost from fishers through interviews, can be used to supplement other data-recording systems or used independently to document the changes that have occurred in the resource base over a lifetime of fishing. The results can be used to guide the assessment and management of resources to conserve ecosystems and livelihoods.” (Tesfamichael, D., Pitcher, T. J., and Pauly, D. 2014. Assessing changes in fisheries using fishers’ knowledge to generate long

time series of catch rates: a case study from the Red Sea. *Ecology and Society*, 19. Available at: <http://dx.doi.org/10.5751/ES-06151-190118> (last accessed 15 May 2014).

Hind closes by presenting three possible futures for fishers' knowledge research. The first suggests that "*fishers knowledge research could become obsolete.*" The second suggests that "*fishery-dependent data research may be the only approach mainstreamed in fisheries science*" and the third is that "*multiple approaches to fishers' knowledge research may be mainstreamed in fisheries science.*" Considering the wealth of multi-generational knowledge that is resident in our coastal fishing communities, let's hope that the first possible future is unthinkable, that the second is recognized as automatically limiting the value of fishermen's contributions to the management process and that, as suggested in the last approach, Fishermen's input is finally recognized as being a critical part of the management process. He follows this with "*the warning of Robert Johannes' et al. (Johannes, R. E., Freeman, M. M. R., and Hamilton, R. J. 2000. Ignore fishers' knowledge and miss the boat. Fish and Fisheries, 1: 257–271.) to any fisheries scientist who continues to ignore all or some dimensions of fishers' knowledge is still pertinent. The sizeable literature reviewed in this paper includes many examples of where referencing fishers' knowledge did prevent or could have prevented further fish stock declines when mainstream fisheries science had failed to provide answers. It is likely that future fishers' knowledge literature will provide further examples of how the consideration of fishers' knowledge could complement existing biological, ecological, and economic approaches to fisheries science to deliver better management outcomes. With the fisheries paradigm unstable and under increasing criticism, can such information be ignored?*"

We can only hope that the people in the fisheries management process those words to heart.

When you're used to those big bucks you've gotta keep 'em coming in

It's hard to imagine that anyone reading this has managed to avoid one of the anti-fishing claques' most recent declarations of disaster/calls to arms (and for donations) campaigns, the one dealing with the misidentification of various species of fish. According to the usual plethora of reports and press releases and the usual uninformed and extensive media coverage that those reports and releases generated, unscrupulous members of the fish and seafood industry (in the various foundation-funded campaigns are there any other kind?) were mislabeling not-so-valuable ocean critters as much more valuable critters, pricing them accordingly and raking in even more tainted profits.

Needless to say this was reported as a significant and growing threat and needed to be stopped immediately. And the principal way of stopping it was by increasing the administrative burden placed on an already overburdened fish and seafood industry by requiring its members to identify where, when and how their fish and shellfish were caught. Traceability, it was called.

As a result of all of this alarmism the federal Food and Drug Administration completed a study involving the DNA testing of 696 samples at the domestic wholesale distribution chain prior to retail sale. Limited samples were also taken at the point of import. The species sampled were those with a history of being misidentified. Samples were taken in Alabama, California, Connecticut, Florida, Illinois, Louisiana, Massachusetts, Maine, Mississippi (if any FDA people read this, please note that Mississippi has four s's), New Hampshire, Rhode Island, Tennessee, Vermont and Washington. The fish that were sampled were cod, haddock, catfish, basa, swai, snapper and grouper. There were three series of samples.

Imagine my surprise – yea, right! – when I read that "*the three sampling projects found that the fish species was correctly labeled 85% of the time.*" In total 174 lots of samples were tested and 26 were found to be incorrectly labelled, but 25 of those 26 were in the snapper and grouper categories (the remaining sample was *Pangasius hypophthalmus* mislabeled as *Pangasius bocourti*). However, 14 of the 18 mislabeled snapper samples were different species of snapper than what they were identified as, as were 4 of the 7 mislabeled grouper. That's about like the difference between Angus, Hereford and Longhorn beef.

Only 7 out of 174 samples could be said to have been egregiously mislabeled (for those of you who had – a still remember – Biology 101, identified incorrectly at the Family level or above). That's not much of a crisis in seafood labeling, and it surely doesn't require any additional legislation or any additional administrative burdens inflicted on fish and seafood businesses.

What it does require is beefed up seafood inspection at the federal, state and local levels, something that the industry has been seeking for years.

From the breakout of the results of the samples tested by the FDA:

For fish for which 5 or more samples were collected and tested (85% labeled properly)

- 100% (5 out of 5) of the catfish samples were labeled properly
- 100% (15 out of 15) of the cod samples were labeled properly
- 89% (57 out of 64) of the grouper samples were labeled properly
- 100% (11 out of 11) of the haddock samples were labeled properly
- 63% (31 out of 49) of the snapper samples were labeled properly
- 100% (20 out of 20) of the swai samples were labeled correctly

For fish for which fewer than 5 samples were collected and tested (90% labeled properly)

- 0% (0 out of 1) of the basa samples were labeled properly
- 100% (1 out of 1) of the mackerel samples were labeled properly
- 100% (1 out of 1) of the mahi mahi samples were labeled properly
- 100% (1 out of 1) of the monkfish samples were labeled properly
- 100% (3 out of 3) of the orange roughy samples were labeled properly
- 100% (1 out of 1) of the swordfish samples were labeled properly
- 100% (2 out of 2) of the tilapia samples were labeled properly

It sure seems like the foundation-funded ENGOs are beating another empty drum, protecting neither the fish nor the consumers from anything they need protecting from, but keeping that cash flow flowing. Unfortunately, for most of them it appears as if that's what it's all about. And for them the fact that fishermen and fishing dependent businesses are going to pay for it probably makes it that much better.

Great news on Atlantic bluefin tuna

As reported by Rich Ruais, executive director of the American Bluefin Tuna Association, in the November issue of Commercial Fisheries News and distributed as an ABTA press release (available at <http://www.savingseafood.org/management-regulation/new-bluefin-stock-assessment-show-stunning-reversal-in-abun.html>), the Standing Committee on Science and Research of the International Commission for the Conservation of Atlantic Tunas at its meeting on September 29 to October 3 determined that overfishing is not occurring in the bluefin tuna stock in the western Atlantic. This rebuilding has supposedly taken place in four years following an unsuccessful campaign to have Atlantic bluefin tuna listed as endangered through the Convention on International Trade in Endangered Species.

From Rich Ruais' column, "*the really good news from the ICCAT science meetings and new evidence is that the western bluefin biomass is now more than twice the size suggested in previous assessments and a new, higher estimate of maximum sustainable yield (MSY) – 3,050 mt – has been reported. The western Atlantic bluefin stock biomass is more than rebuilt.*" I strongly recommend that for a fuller understanding of the Western Atlantic bluefin tuna situation you follow the link above and read it in its entirety.

I can add, however, that the anti-fishing clique's response to it has proven to be nothing more than even more beating of their fisheries crises drums. They're still so wrapped up in their "fishing is bad" agenda that they've started to argue that even if the new and improved science shows that there are a lot more bluefin tuna in the western Atlantic than was previously believed, precaution demands that the quotas remain where they are, because the scientists might not be right. But why wouldn't they? The future of the foundation-funded clique depends ostensibly on there being crises to fix, and if there aren't any real crises, why not manufacture one or several, 'cause that's what keeps the dollars rolling in.

Of course the drum beating fails to realize that bluefin tuna assessments, or for that matter any fish assessments automatically come with precaution built in. Obviously, assessing fish stocks is a highly inexact science. Fish aren't evenly distributed in the oceans, either horizontally or vertically. Many species are seasonally migratory (in fact bluefin tuna are classified as highly migratory species, ranging entire ocean basins in their annual travels). Their migratory routes can, and do, vary significantly from year to year and over even longer time frames, driven by currents, water temperatures, prey availability, and etc.

Hence estimating populations is a matter of a relatively small amount of sampling coupled with a really large amount of statistical manipulation. After this manipulation a range – in number or weight of fish at particular sizes/or ages – is determined, the uncertainty involved is taken into account, and the quota is set (actually, under Magnuson management the permissible level of removals is determined and then another bunch of fish is subtracted from that "just because"). In recent years I doubt that a fishing quota has ever been set based on the maximum estimated size of the stock. But it seems that quota is always too large for the crisis mongers.

(On the subject of tuna and of manufactured crises, Hawaiian commercial fishermen have negotiated an arrangement with the governments of the Commonwealth of the Northern Mariana Islands, American Samoa and Guam to harvest some of their quota of bigeye tuna. This is with the blessings of the National Marine Fisheries Service, which has issued assurances that everything is in compliance with international tuna management and protected resource regulations. Mike Tosatto, regional administrator for the National Marine Fisheries Service, said "everything we have put in place is consistent with international law." However, Bret Yager at West Hawaii Today (<http://westhawaii.com/news/local-news/environmental-groups-oppose-ahi-increases#sthash.3xOrdGWF.dpuf>) reports that several foundation-funded ENGOs are taking steps – including threatening to go to court - while employing the kind of overblown hyperbole that is now part and parcel of any ENGO dialogue, to keep the fishery from taking place.)

The ENGO/Foundation sustainability shuck and jive

12/11/14

Without question one of the greatest triumphs of the anti-fishing ENGOs and the megafoundations that support them has been to successfully confuse “sustainable” with “environmental impact-free” harvesting in the minds of both consumers and policy makers. This confusion, in fact, is responsible for the success of a subset of the burgeoning “save the oceans from the fishermen” activists, the seafood sustainability arbiters. Playing into this, of course, is the fantastic level of ignorance on the part of just about everyone about what’s going under the surface of the world’s oceans and the inordinate complexity of those goings on.

To review a few basic facts, the world’s population is hovering around 7 billion people, and it’s increasing at what is generally considered to be an uncomfortable rate. All of those 7 billion of us require a certain amount of protein daily and much of that protein is animal -based. According to the FAO (the United Nation’s Food and Agriculture Organization) in 2012 the world’s production of beef was 67 million metric tons (mt), pork was 112 million mt, poultry was 105 million mt and sheep/goats was 14 million mt for a total of 302 million mt (<http://www.fao.org/ag/againfo/themes/en/meat/background.html>).

The world’s annual grain production (wheat, rice and coarse grains) is 2.226 billion mt (<http://apps.fas.usda.gov/psdonline/circulars/production.pdf>).

Is this agricultural production sustainable? Using any accepted definition of the term (try **Merriam Webster’s** “*able to be used without being completely used up or destroyed*”), it definitely is. The world’s production of beef, pork, poultry, sheep, goats and grains has been increasing steadily, as has per capita consumption, as the world’s population has increased.

Does this production come with environmental impacts? Of course it does, but how could it not? Think of hog farms, feed lots, chicken coops, rice paddies and our very own “fruited plains” and “amber waves of grain.” The modifications we have made to our terrestrial environment to keep as many of the earth’s 7 billion inhabitants fed are staggering, but they are necessary.

The estimates of how much land it takes to support each hunter-gatherer, the pre-civilization mode of existence that least impacts the natural environment, vary widely. For the sake of argument, let’s assume that on the average it’s 100 hectares. That being the case, the 52 million square miles of available land (that’s excluding Antarctica) would support about 135 million people fully engaged in preventing themselves from starving, which is another way of describing being engaged in no impact food production. That’s 2% of the world’s population today, slightly more than the present population of Japan (127 million). And we certainly don’t see the Pew Charitable Trusts, the David and Lucille Packard Foundation, the Gordon and Betty Moore Foundation or – Saints preserve us – the Walton Family Foundation shoveling dollars into the coffers of multi-national ENGOs to roadblock the production of protein.

Obviously “sustainable” when used to describe animal protein production doesn’t mean anything that bears the slightest resemblance to being “environmental impact-free.”

Yet these foundations and ENGOs, which are so unconcerned when it comes to the destruction of hundreds of millions of acres of natural land for agricultural production, transforming it in the most radical ways imaginable and often destroying or severely impacting adjoining lands – and waterways – as well, are more than willing to try to force fishermen, who are producing more animal protein than all but poultry and pork producers (82 million mt - <http://www.fao.org/3/a-i3720e.pdf>) to do so while having no impact on the ocean environment.

Is it possible to produce that much fish with no impact? Of course it isn’t – and noted fisheries researcher Ray Hilborn at the University of Washington in Seattle, points out that the environmental degradation that would be accompany the replacement of fish with an equal amount of terrestrial protein would be much greater (see his opinion piece Environmental cost of conservation victories in the June 14, 2013 volume of the Proceedings of the National Academies of Sciences at <http://www.pnas.org/content/110/23/9187.extract>).

And then there are the marine protected areas

Since the mega foundations and their ENGO minions have cured overfishing (of course they have, just ask ‘em) they have been on a marine protected area kick. Of course they know that the only thing that marine areas need protection from is fishing (and if you were getting tens of millions of dollars at second hand from oil and telecom and high tech, you would know it as well). Now it’s fairly obvious that the only way to protect marine areas from fishing is to establish areas where fishing can’t happen, which not too coincidentally are the areas where fish are. There’s not much sense in prohibiting fishing in areas where there aren’t any fish.

So... with overfishing taken care of, the overzealous ocean saviors are in the midst of a campaign to establish huge no fishing zones in the world’s oceans. While there is apparently some disagreement about how much of the oceans should be saved from fishing, it seems to be somewhere in the neighborhood of 10%.

It’s a fairly widely known fact among fishermen that fish aren’t uniformly distributed in the ocean. They tend to clump up in particular areas. This means that fishermen clump up in particular areas as well. Something like 90% of the fishing effort is focused on something like 20% of the available ocean. What would be the result of closing half of the productive fishing grounds? It would more than likely be twice as much fishing in those grounds that remain open, resulting in even more “habitat destruction” by “destructive” fishing gear and increased efforts to make it all zero impact.

If this all sounds like a horror movie for fishermen, it probably is. But it's a horror movie as well for those of us who depend on or enjoy animal protein of any sort.

Dogfish and seals and dolphin, oh my!

01/19/15

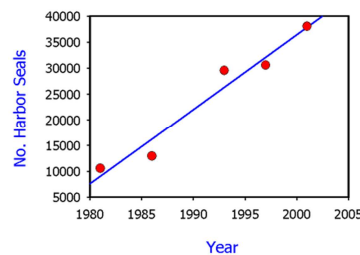
The New York Times on New England groundfish – so seemingly close but so very off target

On December 14 the Times had an article titled *Water warms and cod catch ebbs in Maine* by Michael Wines and Jess Bidgood. Obviously the article focused on the observed water temperature increases in the Gulf of Maine and the impact on local fishermen. After reading it one is left with the feeling that the plight of Gulf of Maine and other New England fishermen is due to some combination of overfishing and increasing water temperatures.

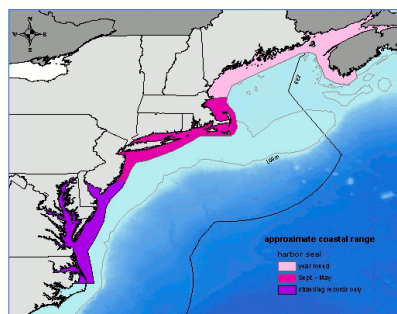
The article wasn't notable for what it contained, but rather for what it ignored, which is the added – and very possibly dominant - impact of predation on our inshore and offshore fisheries.

But the Times isn't alone in ignoring the impacts of predation. Fisheries managers haven't shown much interest in it, possibly because all that they are able to effectively manage is fishing. Why pay any attention to anything that you can't effectively, or for that matter ineffectively, manage? Equally predictably, the anti-fishing ENGOs have shown zero interest, because they seem all too willing to ignore anything above and beyond – or let's make that beneath and below – selling the fallacy that fishermen and fishing are to blame for most of the oceans' ills.

There are many species, primarily marine mammals, that have experienced population “booms” since the passage of the Marine Mammal Protection Act in 1972 and the Endangered Species Act in 1973. Illustrative of this, I've reproduced below a chart (from NOAA's *Ecology of the Northeast U.S. Continental Shelf - Protected Species/seals* at <http://www.nefsc.noaa.gov/ecosys/ecology/ProtectedSpecies/Pinnipeds/>) which shows the dramatic increase in the minimum estimates of the harbor seal population “based on direct counts uncorrected for proportion of seals not hauled out on land.” The same web page reports “A corrected estimate for the 2001 survey based on replicate surveys and radio tagged seals was 99,340 individuals, compared with an estimate of 38,011 individuals based on the unadjusted counts.”



Below is a harbor seal distribution map from the same report. The pink areas represent the seals' year round range, the red their distribution from September to May, and the purple “stranding records only.”



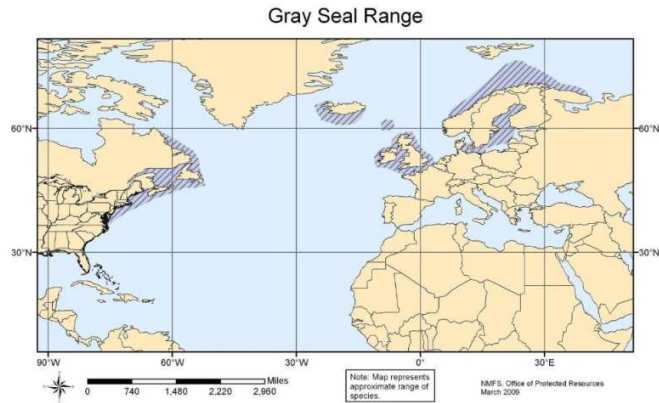
At maturity a male harbor seal can weigh 375 pounds. Assuming an average weight of 250 pounds, the population of harbor seals off our coast has a biomass of perhaps 25 million pounds. They consume 5% of their body weight each day of squid, crustaceans, molluscs, and a variety of fish; including but certainly not limited to rockfish, herring, flounder, salmon, hake, and sand lance (<http://seaworld.org/animal-info/animal-infobooks/harbor-seal/diet-and-eating-habits/>). For the population delineated above that's one and a quarter million pounds of fish and shellfish daily, and much of their food is either commercially valuable species or the fish and shellfish that those species feed on. Annually they will

consume 450 million pounds, about 200,000 metric tons (mt). Total commercial landings of fish and shellfish within their range – from North Carolina to Nova Scotia- are approximately 800,000 mt per year. (Note that the harbor seal population estimate was lowered in a NOAA/NMFS assessment in 2013, but the same report noted “a trend analysis has not been conducted for this stock. The statistical power to detect a trend in abundance for this stock is poor due to the relatively imprecise abundance estimates and long survey interval” - *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments - 2013* - http://www.nmfs.noaa.gov/pr/sars/pdf/ao2013_tm228.pdf).

When it comes to predation, however, harbor seals aren't at anywhere near the top of the list. On our side of the Atlantic gray seals are found in just about the same waters as their smaller relatives, but they are significantly larger and significantly more numerous.

The following points were taken from the gray seal page on the NOAA/NMFS Office of Protected Resources website at <http://www.nmfs.noaa.gov/pr/species/mammals/pinnipeds/grayseal.htm>:

- Gray seals are sexually "dimorphic" with males to 10 ft (3 m) in length and 880 lbs (400 kg) and reaching up to 7.5 ft (2.3 m) in length and 550 lbs
- Gray seals are opportunistic feeders that consume 6% of their body weight per day.
- Food sources include fish, crustaceans, squid, ocean seabirds on occasion.
- Current population numbers for the western North stock are unknown but are estimated at over animals.
- Within U.S. waters, gray seals have been seen increasing numbers on isolated islands off the Nantucket-Vineyard Sound, outer Cape Cod, and Island. In 2002, more than 1,000 pups were born Island.
- Gray seals are legally killed by fishermen and are harvested for subsistence, predator control, and commercial purposes in some areas outside of U.S. waters.



reaching up females (250 kg). between 4-topus, and Atlantic 250,000 pupping in Maine coast, on Muskeget on Muskeget

Assuming an average weight of 600 pounds, the weight of the minimum biomass of Western Atlantic gray seals is 150,000,000 pounds (ca 70,000 metric tons). Assuming that an average gray seal consumes 5% of its body weight per day, the western North Atlantic stock of gray seals consumes 3,500 mt of fish and shellfish (and occasional seabirds) daily, which is approximately one and a third million tons per year. That's between six and seven times the amount of fish and shellfish consumed by harbor seals, whose geographic range is similar. (Remember that the population estimate is a minimum.)

Commercial fish and shellfish landings from North Carolina to Nova Scotia are approximately 800,000 mt per year, 60% of what gray seals consume.

Grey seals/western North Atlantic stock

Minimum population	Average weight	Biomass	Daily predation (at 5%/day)	Annual predation	Commercial harvest
250,000	600 lbs	68,181 mt	3409 mt	1,244,303 mt	800,000 mt

In the waters they inhabit only two species of protected marine mammals consume almost twice as much fish and shellfish as commercial fishermen catch. For the full picture on marine mammal predation I'll refer you to *A Summary of Atlantic Marine Mammal Stock Assessment Reports for Stocks of Marine Mammals Under NMFS Authority that Occupy Waters Under USA Jurisdiction* (at http://www.nmfs.noaa.gov/pr/sars/pdf/atl2013_summary_final.pdf). Two things stand out in this summary. The first is the estimated (known) population sizes of what are for the most part voracious predators on the same fish and shellfish that are either targeted by fishermen or are the prey for those targeted species. The second is the number of marine mammals for which population estimates are unknown (“unk” in the summary table). See the above referenced *Marine Mammal Stock Assessment* for even more information and for even more of a feeling for how little NOAA/NMFS knows about and how little the agency is apparently interested in the status of the marine mammals in our waters.

Back in 2008 in *Getting real about ecosystem based management* (at http://www.fishnet-usa.com/ecosystem_management.htm), using data from the 2006 NMFS marine mammal assessment I put together a chart of predation of the marine mammals found in the Northwest Atlantic ocean. The chart shows estimated predation levels running up to 11 million mt a year (for harp seals, whose annual migrations take them as far south as New Jersey). At the time I estimated that total marine mammal predation in the area was just under 20 million mt a year.

It's kind of difficult to argue with the data that shows that fishermen are competing with marine mammals, particularly when they are considered collectively, and that the fishermen are coming out the losers.

(To show that this isn't a problem limited to the Northwest Atlantic, see the November 2014 article *Salmon Disappearing, Sea Lions Increasing* by John Harrison on the Northwest Power and Conservation website at <http://www.nwcouncil.org/news/blog/research-salmon-disappearing-seal-lions-increasing/>).

But then we can't forget spiny dogfish.

“Voracious almost beyond belief, the dogfish entirely deserves its bad reputation. Not only does it harry and drive off mackerel, herring, and even fish as large as cod and haddock, but it destroys vast numbers of them. Again and again fishermen have described packs of dogs dashing among schools of mackerel, and even attacking them within the seines, biting through the net, and releasing such of the catch as escapes them. At one time or another they prey on practically all species of Gulf of Maine fish smaller than themselves, and squid are also a regular article of diet whenever they are found.” (Fishes of the Gulf of Maine, Bigelow, H.B. and W.C. Schroeder, 1953)

In 2013 the total spiny dogfish biomass off our Northeast coast was estimated to be 766 thousand mt (*Update on the Status of Spiny Dogfish in 2013...*, Rago and Sosebee, 2013, www.mafmc.org/s/2013-Status-Report-and-Projections_final.pdf). That's 1.7 billion pounds of what has been recognized as one of the most voracious predatory fish in the coastal waters from Cape Hatteras to Nova Scotia. Accepting the “official” average of 185 pounds for a U.S. citizen, that's the equivalent weight of 9.1 million of us – the approximate population of New Jersey, North Carolina, Michigan or Georgia).



Researchers Wetherbee and Cortés report that spiny dogfish consume between 0.4% and 2.6% of total body weight per day. If we assume a median level of 1.5% per day, that means each dogfish consumes its own weight every 60 days, or six times its body weight every year. (Wetherbee, B.M. and E. Cortes. 2004. **Food consumption and feeding habits**. Pp. 223-244 in: *Biology of sharks and their relatives*. Musick, J.A., J.C. Carrier and M. Heithaus, eds.)

With the biomass as it was estimated to be in 2013, spiny dogfish were eating 25 million pounds of fish and shellfish every day That's over 9 billion pounds or 4 million mt a year. As with marine mammals, much (most?) of that is either economically important species or the prey species that support those economically important species.

Bowman et al. concluded in 1984 that predation by spiny dogfish is a significant source of mortality on some commercially valuable finfish and squid species. Their calculations indicated that the biomass of the commercially important species consumed by spiny dogfish was comparable to the amount harvested by man and that accordingly, the impact of spiny dogfish consumption on other species should be considered in establishing harvesting polices (Fisheries Research 39 (1998) *Implications of recent increases in catches on the dynamics of Northwest Atlantic spiny dogfish (Squalus acanthias)* P.J. Rago et al, <http://tinyurl.com/RagoEtAl>).

In 1984, when they made their calculations, the total spiny dogfish biomass was estimated to be 260 thousand mt and the commercial landings of all species in New England and the Mid-Atlantic were approximately 400,000 mt (321,795.6 mt and 70,103.1 mt respectively). With the estimated biomass of spiny dogfish in 2013, according to their 1984 estimates, the 2.9 times greater spiny dogfish biomass in 2014 would have accounted for predation of commercially important species of approximately 1.16 million mt. In 2013 New

England and Mid-Atlantic commercial landings were 550 thousand mt. According to the ratio determined in 1984, in 2013 spiny dogfish were eating almost twice as much “commercially valuable finfish and squid species” as commercial fishermen from North Carolina to Maine were harvesting.

“From a practical aspect the spiny dog in the Western Atlantic is chiefly important because it is undoubtedly more destructive to gear and interferes more with fishing operations than does any other fish – shark or teleost.... In the Gulf of Maine, the spiny dogfish feed. On a wide variety of species and at one time or another prey on practically all species smaller than themselves. They are regarded as the chief enemy of the cod, and also feed on mackerel, haddock, herring, squid, worms, shrimps, crabs.” (Jensen, Edwards and Matthiessen, *The Spiny Dogfish – a Review*, 1961, Woods Hole Laboratory Report No. 61- -7 available at <http://www.nefsc.noaa.gov/publications/series/whlrd/whlrd6107.pdf>).

During World War II a large spiny dogfish fishery developed, based on extracting the oil from their livers. After the war the market for the oil dried up and the dogfish population started to rebound in the waters of the Pacific Northwest. This rebound, like the one that the same species is undergoing off our northeast coast today, was having a significant negative impact on the traditional – and far more valuable – fisheries in the region. Starting in 1959, the Canadian government recognized the threat of the vast numbers of dogfish. To bring the population back into balance (and to benefit the affected fisheries) a spiny dogfish “bounty,” in the form of a subsidized price for their livers, was offered. While there was a discussion of this program being extended by the U.S. to our waters, there is no record that it ever was. (Jensen, Edwards and Matthiessen, *Ibid.*) Even with this bounty the dogfish stocks weren't reduced significantly.

Today the total allowable catch (TAC) of spiny dogfish on the East coast is 20,000 mt a year. That's enough to support a reasonable and reasonably developing fishery, but it's definitely not enough to have any impact on the oversupply of spiny dogfish or on their negative impacts on other fisheries.

But of course all of this is irrelevant to the ENGOs. Take, for instance, the spiny dogfish page on the Pew/Oceana website at <http://tinyurl.com/OceanaDogfish>. It's still there in spite of the fact that there hasn't been any serious talk – how could there be? – of an endangered listing for spiny dogfish since the last attempt at the Convention on International Trade in Endangered Species meeting came to naught ten years ago. It's really hard to argue that their stock can't sustain reasonable levels of harvest considering that only ten years after a severely limited East coast fishery was allowed the population has rebounded to the present undesirable level.

So we have a species that has been recognized as a threat to other, much more valuable finfish and shellfish since at least the end of World War II, that is notorious for its voracious and indiscriminate appetite, that at present has a limited and relatively low-value market and that is in the process of “taking over” much of our ocean to the detriment of many of our other species and many of our other fisheries. And yet the New England Fisheries Management Council and NOAA/NMFS can devote seemingly endless days in attempting to “solve” the New England groundfish crisis by considering every possible way to restrict fishing short of nailing the fishermen to the dock without once considering how to reduce the spiny dogfish population to a realistic level that would be less damaging to our other fisheries. Some management, some research and some reporting!

Integral to what should be the problem of how to more effectively manage fisheries is the way that predation is handled, or not, in the fisheries management process. Basic to any fisheries management plan is an estimate of the Total Mortality (Z) of the fish stock being managed. Non-fishing mortality is called Natural Mortality (M), and because it's a bother to try to estimate accurately, it is generally accepted to be 0.2 (see Siegfried and Sansó, *A Review for Estimating Natural Mortality in Fish Populations* at <http://tinyurl.com/MortEstimate>). Fishing Mortality is F and Total Mortality is Z . Total Mortality equals Natural Mortality plus Fishing Mortality ($Z = F + M$).

If the populations of most marine mammals and other highly efficient predators such as spiny dogfish have increased significantly over the past decade or three it's obvious their predation, the largest part of natural mortality, inflicted on their prey species would have increased correspondingly. Yet is this factored into fisheries management programs? It appears not. It appears as if, as is apparently the case in New England, controlling fishing mortality is the only “effective” method (which really means “is the only easily available method”) by which managers assume that they can affect total mortality. Fisheries managers have to do something, because the whole fisheries management system is predicated on managing or on appearing to manage fisheries. So the natural mortality of a stock increases because of increasing predation and at this point, given research funding limits as well as limits on what we know about predation, the only way that the managers can compensate, which they are required to do by federal legislation and forced to do by a handful of mega-foundation funded ENGOs with huge bank accounts and droves of lawyers, is by reducing fishing mortality. What comes immediately to mind is a snake busily at work eating its own tail.

The bottom line is that while commercial fishermen from North Carolina to Maine are at work catching on the order of half a million mt of fish and shellfish a year, it appears as if it takes an annual 20,000,000 tons or more to keep all those marine mammals and low-value spiny dogfish and various other predatory fish going. How much of that 20 million tons is commercially/recreationally valuable species or the forage species that sustain them? No one seems awfully interested in finding that out, but they sure should be.

It's very possible – I'd suggest that it might even be probable – that we are trying to control the populations of tens of millions of tons of fish and shellfish of various species by regulating the harvest of a few percent of them while at the same time totally ignoring what's happening with and to the rest of them. As with the Gulf of Maine cod, is it any wonder that no matter how we limit fishermen's total allowable catch, some stocks don't respond as we think they should?

A cursory survey of the populations of the most prevalent marine mammals indicates that estimates of their population growth rates are hovering around five percent annually. The spiny dogfish are doing a bit better than this. Their biomass having doubled from 2003 to 2013, they are increasing at about ten percent a year (this is in spite of the mythical low fecundity that the anti-fishing groups claim that they are subject to). What this obviously means is that, without some significant changes to how we manage our commercial and recreational fisheries, and how we manage our ocean ecosystems in general, in countries where fishermen are forced to toe the unrealistic line that has been drawn with no attention paid to the future of their fisheries, at some point they are going to be forced off the water by some very prolific and extremely efficient predators that enjoy absolute or virtually absolute governmental protections.

Shouldn't Ecosystem Based Management address issues like this?

For the last several years Ecosystem Based Management (EBM) has been touted as a revolutionary and at-long-last effective way of managing our inshore and offshore waters. For an idea of how this somewhat nebulous yet impressive-sounding concept is supposed to be applied, we have to look no farther than the website of Pew/Seaweb:

Ecosystem Based Management - How does it work?

Ecosystem-based management is a framework for developing effective management plans based on an accepted set of guiding principles. An ecosystem-based management plan should:

- *Emphasize the health of the whole ecosystem ahead of the concerns of special interests;*
- *Be focused on a particular place, with boundaries that are scientifically defined;*
- *Account for the ways in which things or actions in that place affect each other;*
- *Consider the way things or actions in this place can influence or be influenced by things or actions on land (like dams or fertilizers in the watershed), in the air (like air pollution), or in different parts of the ocean (like fishing or oil spills); and*
- *Integrate the concerns of the environment, society, the economy and our institutions.*

*These guiding principles and some of the underlying structure of this Web site are based on the 2005 Scientific Consensus Statement on Marine Ecosystem-based Management and updated peer-reviewed publications (From the Pew/Seaweb website **What is Ecosystem Based Management** <http://www.seaweb.org/resources/ebm/whatisebm.php>).*

It's like a breath of fresh air to read of a brand of environmental management that is supposed to be concerned not just with the environment but with society, with the economy, and with our institutions. And a brand of ocean management that is ostensibly concerned with quite a bit more than limiting fishing.

The developing situation with the proliferation of so many marine mammals as well as a very likely unprecedented population of spiny dogfish should be near the top of the priority list of any practitioners or proponents of EBM. Highly efficient predators of/competitors with our most valuable commercial and recreational fish stocks are straining the economic and institutional underpinnings of coastal communities on the Atlantic, Pacific and Gulf coasts. But the guiding principles of EBM, as related by Pew/Seaweb on their website, have extended the concern above and beyond the ecosystem and the organisms in it well into the human realm.

It's a given that a particular area of ocean is going to have a productive capacity that remains relatively stable from year to year and from decade to decade. Based on temperature, energy and nutrient inputs it is going to support a given amount of primary production in the form of vascular plants in the shallower areas and algae in the deeper. That primary production is going to support a given amount of herbivores, which will support a given amount of carnivores. The species mix will vary from area to area, in a given area will vary with time (or with environmental changes, be they seasonal, yearly, decadal, or of longer duration), and is to a large extent dependent on competition and predation. The population size of a particular species in an area that can be maintained indefinitely is the carrying capacity. Control of the populations of carnivores and herbivores so as to not allow them to exceed their carrying capacity has been a management reality in terrestrial ecosystems for several generations, and woe to the ecosystem, or many of the critters in it, when the carrying capacity of a particular species is allowed to be exceeded by a significant amount for an extended time. This is something that has yet to be applied in fisheries (or fishermen's) management, but it will be impossible to put in place effective EBM without it.

Our marine ecosystems are ripe for truly effective EBM. We are now on the verge of understanding intraspecific interactions to such an extent that we can envision using fishing as a management tool. Not enough of (economically, esthetically or culturally) desirable species "X" and too much of not-so-desirable (or undesirable) competing species "Y"? Design incentives to either accelerate the harvest of species "Y" or to in some other way reduce its population size. The growing human population, our increasing use of the oceans for competing purposes that have nothing to do with and are too often inimical to food production, and our ever-increasing food insecurity (90% of our fish and seafood is now imported) demand it.

Unfortunately neither the provisions of the Marine Mammal Protection Act (MMPA) nor the Magnuson Stevens Fishery Conservation and Management Act (MSFCMA) will allow this to happen. In any conflicts between the well-being of marine mammals, regardless of the health of the particular involved population, and societal, economic, or institutional values, the marine mammals prevail. And the Magnuson Act demands that any fishery be managed to produce the "optimum yield," which by definition can't be greater than the maximum sustainable yield. We are thus held to a requirement to manage for the highest historical abundance of a species, regardless of the impacts that will have on other species. Comprehensive EBM demands that particular species not be given arbitrarily determined favorable treatment. This is something that both the MSFCMA and the MMPA as they are currently written make impossible.

The costs in terms of lost opportunities of local fishermen, of the unavailability of local, fresh caught seafood to consumers (and its replacement with imported shrimp, tilapia, swai and who knows what else), and the strain on fishing communities because of MMPA and MSFCMA restrictions on both the recreational and commercial fisheries are incalculable. The people who participate in these fisheries and the businesses that depend on them are losers in a contest for fish which has been rigged by federal regulation to the point where it's not a contest at all. At this point the only concerns that are being considered are those for "the environment," with the assumption that fishermen in particular and fresh seafood consumers in general are not an important part of it. The continuing and increasing overabundance of non-human predators is guaranteeing that "*society, the economy and our institutions*" all take seats way to the back of the bus (or maybe "all get thrown under the bus") relative to the environment. This isn't comprehensive ecosystem based management, it's management based on focused political pressure and cynically manipulated public sentiment.

The judicious application of real Ecosystem Based Management as proposed (though perhaps not endorsed) by Pew/Seaweb, would inject some reality into these unrealistically written and demonstrably ineffective federal laws.

Who's really in charge of U.S. fisheries?

9/28/15

An Oligarchy is defined as “a country, business, etc., that is controlled by a small group of people”

Ancient City Shrimp is an eight minute YouTube video (<https://www.youtube.com/watch?v=WepRokGO8d8>) produced by the St. Augustine Lighthouse Museum that examines St. Augustine's past as one of several centers of commercial shrimping in Florida.

Unfortunately – or perhaps tragically is a better fit – Florida's shrimp fleet is only a shadow of what it once was. One of the reasons for this is the imposition of unrealistic regulations on U.S. shrimpers that has made the fishery much less profitable than it used to be.

The video's producers don't really focus on this as one of the reasons for this decline, rather emphasizing the impacts of cheaper – and generally inferior – shrimp from abroad. This is understandable. You can only cover so much ground in a short video. Opening the can of worms that fishery regulation in the Southeast has become is a guarantee of complication and controversy, things which few museums would willingly get involved in.

In spite of a really good job overall I found part of the final narration troubling. Almost at the end (7 minutes and 50 seconds or so in) the narrator in his wrap-up states “**while we can't change federal regulations we can change our purchasing habits. Demand local shrimp** (my emphasis added).” He's on target with the “demand local shrimp” but it's hard to imagine anything more antithetical to the principles that our country was founded upon than his acceptance of the idea that we can't, or that we shouldn't, change federal regulations.

While it seems unlikely, apparently he missed out on any exposure to or consideration of the words “*government of the people, by the people, for the people, shall not perish from the Earth.*”

As close to immortal as any words spoken in the last half a millennium, they are from Abraham Lincoln's Gettysburg Address. In a commemoration of the sacrifices of Union soldiers in the battle of Gettysburg, on November 19, 1863, President Lincoln expressed what governance in the United States was all about. To repeat those words, “*government of the people, by the people, for the people.*”

It kind of makes you wonder how the documentarians who put together *Ancient City Shrimp* became convinced that we (the people, I presume, as in the U.S. Citizenry) can't or shouldn't change federal regulations. One possibility is that they weren't aware that George Orwell's *1984* and Aldous Huxley's *Brave New World* were works of fiction. Another would be that they have been exposed to the bottomless morass that federal fisheries management has been turned into.

A history lesson or two

Back in 1976 (this was before the existence of a multi-billion dollar environmental industry so thankfully they weren't there to impede the process) the Magnuson-Stevens Act became law. It brought fishing in the U.S. Exclusive Economic Zone under federal control and established a management regime that would eventually phase out virtually all foreign commercial fishing in U.S. waters.

It was generally agreed that one of the strongest features of the Act was the determination that fishermen were an integral part of the federal fishery management process. This was achieved by mandating that fishermen were voting members on each regional Fishery Management Council.

This was in recognition of a number of factors that the public, or at least the majority of the involved politicians and bureaucrats, have subsequently turned – or been turned - away from. Among these were the relative lack of knowledge of our fisheries and what affects them, the value to fisheries managers of the knowledge that has been accumulated by a multigenerational fishing industry over many years, and the belief in and the commitment of fishermen to the long term sustainability of the fisheries they participate in.

Since then a concerted and successful effort has been mounted to reduce the role that fishermen and other fishing industry members play in federal fisheries management. The role that they once had, and that Congress had intended them to have, has been taken over by fishery scientists. Unfortunately science's understanding of our living marine resources and their all-important relationships with a rapidly and radically changing marine environment has lagged far behind the management authority that scientists have been given. Most simply stated, they are now making multi-million dollar decisions based on woefully inadequate data and the system is bound to this ill-conceived strategy with no recourse when common sense argues compellingly against it.

These changes have been forced by a handful of ENGOs funded by several multi-billion dollar foundations as soon as the public relations, political and financial benefits of “demonizing” fishermen and fishing became apparent to them. This has resulted in many boats being permanently forced off the water, many shore-side support businesses permanently shutting down and a general public impression that most of what's wrong with our fisheries and our oceans is due to uncontrolled and uncaring fishermen. The ongoing and now institutionalized New England groundfish debacle is a sad example of this. These foundations and the ENGOs and academics that they have hired have also paved the way for a “revolution” in fishing, but not in how fish are caught or provided to consumers, but in how fishing businesses are actually structured.

Recognizing that this has been going on and familiar with the significant negative impacts it has been having on traditional fishermen and traditional fisheries, fishing industry supporters in Congress have been and still are committed to restoring the role of fishermen in federal fisheries management. In spite of a seeming avalanche of what can't be seen as anything other than anti-fishing propaganda, they are still intent on incorporating all we have learned about maintaining sustainability in the fisheries management process.

Behind the anti-fishing ENGOs

I've written before about how fisheries management has been distorted by influence brought to bear by a handful of multi-billion dollar foundations, the PR machines they control and the organizations and individuals that they use their wealth to co-opt. Never before, however, have I come across such a clear cut example of how this is done as I did in the ongoing campaign over the past year striving to stop fishing industry supported amendments to the Magnuson-Stevens Fisheries Conservation and Management Act.

Introduced by Alaska Congressman Don Young, who is now the third most senior Member of the House of Representatives, the legislation was named the ***Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act***. In his words it "*aims to improve federal fishery management in order to give Regional Fishery Management Councils the proper tools and flexibility necessary to effectively manage their fisheries.*" The Congressman, along with Congressman Gerry Studds (D, MA) and Senators Warren Magnuson (D, WA) and Ted Stevens (R, AK) played a key role in originally creating the Magnuson-Stevens Act and getting it passed. (While it's not mentioned on Congressman Young's website at <http://donyoung.house.gov/news/documentsingle.aspx?DocumentID=398236>, the problems in the current version of the Act are those that are there thanks to aggressive and expensive campaigns by a handful of foundation funded ENGOs to amend the original Act.)

The Pew Charitable Trusts and individuals and organizations they support have been in large part responsible for this campaign, as they were for the initial amendments that Congressman Young's legislation is attempting to put right.

Back in May I was forwarded an email from a government and business consulting firm with offices in Washington, DC, Newark, NJ, Trenton, NJ, Albany, NY, Columbus, OH, and Harrisburg, Philadelphia and Pittsburgh, PA. The email was a follow-up to a previous message and the subject was "*FISH-Executive Chef Sign on Letter.*"

The author wrote that she was working with the PEW Charitable Trusts to get signatures on a letter asking Members of Congress to, among other things, "*oppose efforts to weaken the conservation provisions of the law....*" The law is the Magnuson-Stevens Act. The efforts to "weaken it" are the ***Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act***. A careful reading of the proposed amendments to the Act would show that this is in no way accurate.

The letter was an attempt to get executive chefs from the food industry, a group which has become increasingly powerful in molding political opinion and public policy since the advent of "celebrity chefs," to "protect" fish and shellfish in U.S. waters from the supposed deprivations of supposed anti-conservation minded U.S. fishermen

This appeal resulted in a letter addressed to Members of Congress dated May 29 that was posted on Congressman Grijalva's House Natural Resources Committee minority website. It cited the opposition of the signatories (executive chefs and others) to the efforts to amend Magnuson; amendments that would once again allow fishermen more of a say in fisheries management and give fisheries managers some flexibility when the existing science isn't adequate to support what are now government mandated management actions. The letter is at <http://tinyurl.com/GrijalvaSiteLetter>. It was identified as "*Chefs Letters Opposing Empty Oceans Act.*"

Congressman Grijalva is the ranking member of the House Resources Committee.

(The U.S. Bureau of Labor Statistics estimates that there were 118,000 chefs and head cooks employed in the U.S. in May of 2014. *Statista* reported the number of restaurants at over 600,000. The letter was signed by 37 chefs.)

Cited along with this were letters from 18 other groups. One was from the Pew Charitable Trusts. The other groups have directly or indirectly received tens of millions of dollars from those "Charitable" trusts. Among them was one from the group identified as the "NGO Community," signed by representatives of The Conservation Law Foundation (received at least \$1 million from Pew), Earthjustice (received at least \$23 million from Pew), Gulf Restoration Network (received almost \$1 million from Pew), Oceana (received at least \$62 million from Pew), Chesapeake Bay Foundation (received \$1/4 million from Pew), Environmental Defense (received at least \$2 million from Pew), Ocean Conservancy (received at least \$1/2 million from Pew), Natural Resources Defense Council (received at least \$1 million from Pew). A letter identified as from the Fishing Community Coalition was signed by the President of The Cape Cod Commercial Fishermen's Alliance (received at least \$1.5 million from Pew while previously known as the Cape Cod Commercial Hook Fishermen's Association). The New England Aquarium (received at least \$11 million from Pew) and The Marine Fish Conservation Network (received at least \$4 million from Pew) sent their own letters.

Fine, you might say, particularly if you've swallowed all of the anti-fishing propaganda directly or indirectly paid for by a small group of huge foundations. Making them especially effective at this, they have pooled their efforts to "revolutionize" fishing (see the addendum about U.S. Agency for International Development creation, the Consultative Group on Biological Diversity), or rather to revolutionize fishing businesses, in our federal waters.

For a bit more insight as to what's going on let's follow some of the money.

The Pew Charitable Trusts were established by the heirs of the founder of Sun Oil (Sunoco). While estimates vary, it seems to be generally accepted that the Trusts have in the neighborhood of \$5,000,000,000 in assets (for an idea of scale, the entire U.S. commercial fishing industry lands about five billion dollars' worth of fish and shellfish each year).

The Pew Trusts are controlled by a Board of Directors. Seven of the Board members are Pews, another, Rebecca Rimel, is the Executive Director of the Trusts. Another, Robert H. Campbell, "...served as Chief Executive Officer of Sunoco Inc., a domestic refiner and marketer of petroleum products from September 1991 to June 2000 and its President from 1991 to 1996." Another, Susan W. Catherwood, is "a Director of The Glenmede Corporation. She is also a Director at The Glenmede Trust Company, N.A. since 1998. She is also a Director of the Glenmede Trust Company of New Jersey.... She serves as a Trustee at The Glenmede Fund, Inc." (from Company Overview of The Glenmede Corporation, Bloomberg Business). Another, Aristides W. Georgantas, is on the Board of Glenmede. Another, Robert G. Williams is Chairman of The Glenmede Corporation and Director of The Glenmede Trust Company, N.A.

And "the Glenmede Trust Company was founded in Philadelphia, Pennsylvania in 1956 by four children of Joseph N. Pew, founder of Sun Oil Company, to serve as the corporate trustee for the trust they had endowed to honor their parents. The Pew Memorial Trust, as it came to be known, was funded with Sun Oil Co. stock..." (https://www.glenmede.com/our_story/history).

It seems inarguable that the Board of the Pew Trusts, with at least twelve members (out of thirteen) having close ties to the Sun Oil fortune and/or its offspring, the Glenmede Trust Company, wanted Congressman Young's proposed fisherman friendly amendments to the Magnuson-Stevens Act to be defeated. These amendments would have instituted some conservation neutral "fixes" to Magnuson provisions which had been added since 1976 and which have been threatening the continued existence of fishermen, fishing families, fishing businesses and fishing communities around our coasts. But with the resources of a huge and powerful organization to draw on, it's pretty easy to get what you want.

If this was an important issue for regular folks – meaning those of us of limited means who either aren't very, very wealthy or don't work for or hang out with those who are - we might call the offices of our reps in Congress. If it were a really important issue we might write them a letter or two. If it were a potentially life-shattering issue we might visit their local or DC offices.

Along with voting every couple of years and staying politically informed I'm pretty sure that's the kind of thing that Lincoln had in mind with his of, by and for the people.

What did the people at Pew do? They spent some of their five billion or so dollars – they used to report relevant information about their grants (*amount, for what, to whom*) on their website but they stopped that several years back so we don't know how much they spent – to hire at least one consulting firm. And the consulting firm set out to get a bunch of chefs to sign on to a letter that while seeming to save these fishermen - and the fish in the EEZ – from their own greed and shortsightedness would in fact continue the campaign of regulating them out of business.

This letter was accompanied by other letters from people and organizations – mostly ENGOs - that had either benefited from Pew funding that ranged from hundreds of thousands to tens of millions of dollars or that were apparently convinced by other means (more consultants?) to sign on.

How much did all of those other letters cost?

Some obvious questions stemming from these manipulations concern what the total cost was to Pew, how actually informed were the signatories that Pew or Pew's grantees or Pew's hirelings on the issues that their letters addressed, and how representative of government of, for and by the people is this?

Is there an oligarchy in fishing's future?

For the past several years, fanned by what's going on in modern Russia, there has been a lot of interest by the media in oligarchs and oligarchies. Defined as "a country, business, etc., that is controlled by a small group of people" (Merriam-Webster Online Dictionary), an oligarchy would seem to be the antithesis of government as Lincoln envisioned it. But along with the foregoing, follow some of the links below and then consider the influence Pew has in or over the domestic fisheries management system (and on fisheries management in other countries as well). And consider as well that thirteen people wield all that power. Of those thirteen people seven are in the founder's family and at least twelve have significant ties to Sun Oil/Sunoco and/or the private bank that was formed to administer the trusts established with Sun Oil/Sunoco stock. You decide!

To the extent that multi-billion dollar foundations such as Pew continue to have their way by mounting campaigns that any of the affected groups can't afford to effectively counter, and by exerting influence in Washington that few in the private sector are capable of, the folks at the St. Augustine Lighthouse Museum who think the people can't change government will be justified. And the rest of us, those of us who know that Lincoln had it right at Gettysburg, will be increasingly marginalized.

To put the potential impact of Pew's billions of dollars into a more comprehensible context, follow the links below:

- **Pew, Academia and ENGOs** - For a listing of projects funded by the Pew Trusts and several other multi-billion dollar foundations intending to fix (in their view) fishing and ocean governance look at the foundations grants database on the <http://www.fishtruth.net> website – on the "Connections" page follow the link at the beginning of the third paragraph. Grants were only listed until 2008. After

that date the foundation folks made it much less convenient to determine who they were paying for what. From 1998 to 2008 Pew provided over \$270 million to Universities, ENGOs and fishermen's Associations for fisheries and related projects.

- **Pew, USAID and other Foundations** - The question of the degree of coordination and cooperation between and among the involved foundations has often arisen. Not too surprisingly, the federal government through the USAID has been fostering such coordination and cooperation through its low profile Consultative Group on Biological Diversity. See a column I wrote for Saving Seafood at <http://www.fishnet-usa.com/All%20Stolpe%20Columns.htm#CGBD> for some background.
- **Pew and federal fisheries governance** - Pew, Much of the existing federal oceans policy was determined by the *Pew Oceans Commission* (and its doppelganger, *The United States Commission on Ocean Policy*) which issued its final report in 2003. In *The Pew Commission – a basis for national ocean policy?* (<http://www.fishingnj.org/netusa23.htm>) I discuss some of the shortcomings of the Pew Commission and its “accomplishments.”
- **Pew and the media** - At least until 2008 Pew's financial support of print and broadcast media was of the same magnitude (or greater) than its support of reconfiguring fisheries management/ocean governance. A synopsis of Pew and the media pre 2008 is available on the FishTruth website at <http://www.fishtruth.net/PDF/PewMedia.pdf>. On a more personal level see *In the Belly of the Big Green Beast* at http://www.fishnet-usa.com/In_Belly_Of_Beast.pdf.
- **Pew and Fishermen** - For a short analysis of Pew's efforts in fisheries/ocean governance from an industry perspective see *The anti-fishing movement; a U.S. perspective* at http://fishtruth.net/PDF/Num1_Antis_Updated.pdf.
- **Pew, Congress and the Magnuson Act** - In spite of the opposition, Congressman Young's amendments to Magnuson embodied in the *Strengthening Fishing Communities and Increasing Flexibility in Fisheries Management Act* passed the House of Representatives and went to the Senate. There has been no subsequent action and President Obama has indicated an unwillingness to sign it if it passes in the Senate.
- **Pew and the Obama Whitehouse** - At the very beginning of President Obama's first term his administration organized the *Setting Ocean Priorities for the New Administration and Congress Workshop*. There were 65 participants and 13 staff listed. Of them over 75% had identifiable ties to funding from either Pew or three other mega-foundations who have been active in fisheries-related funding from about the same perspective as Pew but to a lesser extent. Of the five “fishermen” participants, one who was recreational and four commercial, all have ties to at least one of the foundations. The participants and staff and their connections are listed at <http://www.fishtruth.net/ObamaAdminWorkshop.htm>.
- **Pew and astroturf roots** – The people at Pew are past masters at making campaigns that they originate and in large part operate appear as if they are actually “grass roots” movements. I examined this phenomena in *Your roots are showing* (<http://fishnet-usa.com/RootsAreShowing.pdf>) and *The times they are a'changin* for the Saving Seafood website at <http://www.savingseafood.org/opinion/the-times-they-are-a-changin-by-nils-stolpe>.

Update - So how's that “catch shares” revolution working out for groundfish?

10/23/15

Alternating with original FishNet USA articles I will be going back to pieces I've written (for FishNet and other outlets) over the past 19 years – isn't it amazing how fast time goes when you're having fun? - to see how accurate I was in identifying industry trends and predicting what their impacts were going to be. Rather than redistributing the original articles I'll link to them on the web and try to keep these updates to two pages or under. The original for this update from March, 2014 is at <http://www.aifrb.org/fishosophy/>

Most of you probably remember when newly appointed NOAA head Jane Lubchenco went to New England and announced that she was going to save our nation's oldest fishery. But if it didn't make a lasting impact on you, quoting from the Environmental Defense blog, EDFish by Tesia Love on April 8, 2009, “*Sally McGee, Emilie Litsinger and I got to witness something pretty wonderful today. Jane Lubchenco came to the New England Fishery Management Council meeting to announce the immediate release of \$16 million to the groundfish fishery to help move the fishery to ‘sector’ catch share management by providing funding for cooperative research to help fishermen get through a tough fishing year with very strict limits on fishing effort.*” She went on to quote Dr. Lubchenco “*we need a rapid transition to sectors and catch shares. Catch shares are a powerful tool to getting to sustainable fisheries and profitability. I challenge you to deliver on this in Amendment 16, to include measures to end overfishing. I will commit the resources to my staff to do their part to ensure Amendment 16 is passed in June. We are shining a light on your efforts and we will track your progress. There is too much at stake to allow delay and self-interest to prevent sectors and ultimately catch shares from being implemented.*”

I'm sure that you were there with the rest of us, heaving a huge sigh of relief with visions of Dr. Lubchenco on her shiny white steed, first riding to the rescue of the New England fishery, and then on to all of the rest of our struggling fisheries. "Hyo Silver! Away!"

So how did she do? A couple of years back NOAA/NMFS released the **2012 Final Report on the Performance of the Northeast Multi-species (Groundfish) Fishery (May 2012 – April 2013)**. It's available at <http://www.nefsc.noaa.gov/publications/crd/crd1401/>. The report included a table - available at <http://www.nefsc.noaa.gov/publications/crd/crd1401/tables.pdf> - included a table titled **Summary of major trends (May through April, includes all vessels with a valid limited access multispecies permit)** for the fishing years 2009 to 2012. The table only takes up a single page, is pretty easily understood and is well worth your consideration in its entirety but I'll take the liberty of synthesizing what I think are the major points it illustrates. In each of the four years the groundfish revenues, landed weight, number of active vessels that took a groundfish trip, the total number of groundfish trips, and the total crew days on groundfish trips decreased. The non-groundfish revenues and landed weight increased. The days absent on a non-groundfish trip increased slightly then decreased.

And then we come to 2013 (it seems that according to NOAA/NMFS, 2014 hasn't gotten here yet). Had the myriad benefits of Dr. Lubchenco's and her ENGO/foundation cronies' Catch Share Revolution finally arrived? Apparently, not quite yet. According to the **2013 Final Report on the Performance of the Northeast Multispecies (Groundfish) Fishery (May 2013 – April 2014)**, just about everything that was falling in FY 2009 to 2012 continued to fall in FY 2014. I won't go over any of the details, but the corresponding Table 1 for that year is available at http://www.nefsc.noaa.gov/read/socialsci/pdf/groundfish_report_fy2013.pdf.

Oh well, I guess she deserves a few points for trying – and we shouldn't forget that before she could really focus on fixing groundfish she was distracted by having to dump a couple of millions of gallons of Corexit into the Gulf of Mexico.

Thirteen species are included in the New England Fishery Management Council's multi-species fishery management plan, the "groundfish" FMP. Four of those species support no or minimal directed fisheries. The landings of those that support a significant commercial fishery are in the table below (from the NOAA/NMFS commercial landings database). Looking at these data, it's impossible to suggest that after years of intensive management this management regime is anything that could be considered a success – unless your idea of success is putting a whole bunch of people out of work. In fact only the most charitable among us could term it anything other than disaster – and it's a disaster that has been in the making since long before Dr. Lubchenco so fatuously announced that she was going to fix it.

(I'll add here that catch share management is not a cure-all for all that's wrong with fishery management - though at the time Dr. Lubchenco and her "team" apparently believed it was - nor is it the reason for management failures. It is nothing more than an option for dividing the catch among users. As such it can have profound socioeconomic impacts on participants in the fishery and on fishing communities that depend on it, but not on the fishery resources themselves.)

Species	Year	Metric Tons	Value	Species	Year	Metric Tons	Value
Atlantic	2009	8946	\$25,223,364	Haddock	2009	5,818	\$13,655,842
Cod	2010	8039	\$28,142,681		2010	9,811	\$21,715,488
	2011	7981	\$32,596,942		2011	5,709	\$16,316,219
	2012	4766	\$22,200,043		2012	1,959	\$7,833,001
	2013	2261	\$10,455,352		2013	1,869	\$6,002,480
Plaice	2009	1395	\$3,886,809	White	2009	1,696	\$3,556,719
	2010	1413	\$4,498,591	Hake	2010	1,807	\$4,116,221
	2011	1387	\$4,274,757		2011	2,907	\$5,849,790
	2012	1480	\$5,048,688		2012	2,772	\$6,933,743

	2013	1318	\$4,688,995		2013	2,238	\$6,484,444
Winter	2009	2209	\$8,094,381	Pollock	2009	7,492	\$10,010,039
Flounder	2010	1587	\$6,959,547		2010	5,158	\$9,529,022
	2011	2124	\$8,002,376		2011	7,193	\$12,292,573
	2012	2395	\$10,331,500		2012	6,743	\$13,185,509
	2013	2746	\$9,899,924		2013	5,058	\$11,395,943
Yellowtail	2009	1605	\$4,759,536	Acadian	2009	1,440	\$1,572,292
Flounder	2010	1318	\$4,193,981	Redfish	2010	1,646	\$1,959,681
	2011	1827	\$4,762,969		2011	2,014	\$2,754,692
	2012	1808	\$5,396,502		2012	4,035	\$5,891,429
	2013	1278	\$4,199,927		2013	3,577	\$4,337,163
Witch	2009	949	\$4,036,115				
Flounder	2010	759	\$3,773,526				
	2011	870	\$3,955,053				
	2012	1037	\$4,247,528				
	2013	686	\$3,735,330				

How might it be fixed? In the original FishNet article I quoted a couple of paragraphs from a National Academy of Sciences study **Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States** (available at <http://www.nap.edu/catalog/18488/evaluating-the-effectiveness-of-fish-stock-rebuilding-plans-in-the-united-states>). I can't think of anything more valuable than repeating those words here. On page 178 of the report the authors concluded *“the tradeoff between flexibility and prescriptiveness within the current legal framework and MFSCMA (Magnuson-Stevens Fishery Conservation and Management Act) guidelines for rebuilding underlies many of the issues discussed in this chapter. The present approach may not be flexible or adaptive enough in the face of complex ecosystem and fishery dynamics when data and knowledge are limiting. The high degree of prescriptiveness (and concomitant low flexibility) may create incompatibilities between single species rebuilding plans and EBFM (Ecosystem Based Fisheries Management). Fixed rules for rebuilding times can result in inefficiencies and discontinuities of harvest-control rules, put unrealistic demands on models and data for stock assessment and forecasting, cause reduction in yield, especially in mixed-stock situations, and de-emphasize socio-economic factors in the formulation of rebuilding plans. The current approach specifies success of individual rebuilding plans in biological terms. It does not address evaluation of the success in socio-economic terms and at broader regional and national scales, and also does not ensure effective flow of information (communication) across regions.”*

In other words, the fishery managers need more **informed** flexibility to adequately manage our fisheries. It has been the goal of the fishing industry's friends in Congress to provide this necessary flexibility (with adequate safeguards, of course). Conversely it has been the goal of a handful of foundations and the ENGOs they support and a smaller handful of so-called fishermen's organizations to prevent this, and it seems that they have been willing to resort to just about any tactics to do it. As they have been successful in their efforts the fishing industry has continued to lose infrastructure that will never be replaced and markets that will be next to impossible to recover – and the percentage of imported seafood that we consume will continue to increase in spite of the fact that our fisheries are among the richest in the world.

While it's called fishery management, it's not even close

“At the global scale, probably the one thing currently having the most impact (on the oceans) is overfishing and destructive fishing gear.” (former National Oceanic and Atmospheric Administration head Jane Lubchenco in an interview on the website Takepart.com on April 7, 2010.) The Deepwater Horizon oil spill catastrophe began on April 20, less than two weeks later.

Each year in the U.S. hundreds of millions of tax dollars are spent on what is called fishery management. It’s called fisheries management in the Magnuson-Stevens Fishery Conservation and **Management** Act. The federal administrative entities which implement the mandates of the Magnuson-Stevens Act are designated in the Act as Regional Fishery **Management** Councils, and the bureaucrats and scientists who are involved in those mandated activities are referred to as fishery **managers**.

But all things considered, can what the Magnuson-Stevens Act mandates, what the Regional Councils are charged with and what the managers do be considered fishery management?

Let’s consider what management of either naturally occurring or cultured living organisms (other than fish and shellfish) actually entails. The most obvious requirement of managing them is the provision of something between an adequate and an optimum environment, including both the living and the non-living components of that environment, for the species/species complexes being managed. This is regardless of whether the management process is aimed at optimizing the production of one (or a few) species or at maintaining an area in a so-called “natural” state (though how close any area can be to natural, considering humankind’s pervasive impacts on virtually the entire biosphere, is open to argument).

Whether it’s a herd of dairy cattle, a field of poppies, a national park or an entire watershed, the involved individual or collective managers are charged with maintaining an appropriate environment for the organisms/systems being managed.

How does “fisheries” management fit in with this? Quite obviously and not so surprisingly, not all that well.

When we are considering maintaining (or ideally, increasing, though in the U.S., Canada and the EC in particular we’re far from ready for the “giant step” of increasing the harvest) capture fisheries in natural systems, there is a host of both natural and anthropogenic factors that play a significant role in determining the population levels of particular species. Among them are:

- Water quality
- Water temperature
- Wind direction/duration
- Upwelling
- Food availability
- Predation
- Essential habitat availability
- Fishing
- Entrainment/impingement
- Disease/parasites
- Parasitism
- Turbidity
- Competition
- Cannibalism
- Reproductive success

And there are undoubtedly others.

So what do the people in the ENGOs who, with a bunch of help from their foundation keepers, have become so adept at manipulating the press, the polls and the public do when there aren’t enough fish? They demand that the managers reduce (or eliminate) fishing. This is regardless of the effect of any other factor on the particular fish stock or the effectiveness of reducing or limiting fishing in rebuilding the stock in question (and “rebuilding” the stock almost always means returning it to maximum population levels).

And the managers for the most part go along because they have to do something to justify their positions, and thanks to federal legislation controlling (or eliminating) fishermen is a lot easier than controlling just about anything else. It’s easier politically, it’s easier scientifically, it’s easier economically and it’s easier technologically. So what if it isn’t effective? Thanks to the extensive efforts of anti-fishing activists over the last two decades (see *Pew and the media* at <http://www.fishtruth.net/PDF/PewMedia.pdf>), cutting back or eliminating fishing is just about a guarantee of positive media coverage, and there are few politicians, reporters or members of the public who have enough of a grasp of the involved complexities to know the difference. Besides which there will be enough tilapia and swai and cultured shrimp produced overseas to keep the consumers fed - if not in culinary nirvana.

This has cost and is costing the domestic fish and seafood industry untold millions of dollars every year in uncaught fish that could be sustainably harvested. It is denying U.S. consumers the health benefits and the undeniable pleasures of dining on ocean-fresh, locally produced seafood and it is costing our coastal communities tens of thousands of jobs every year.

With what seems a monomaniacal fixation on the effects of fishing, a fixation which has been successfully – and tragically – spread virtually everywhere in this country, many other factors of equal or greater potential to temporarily or permanently interfere with vital ocean processes or the health of our fish stocks have been largely or completely ignored.

At the time it sounded good, at least to the un- or ill-informed

I started this FishNet with a quote from Jane Lubchenco from less than two weeks before the Deepwater Horizon catastrophe began to unwind in the Gulf of Mexico. At the time she was the newly appointed head of NOAA, the agency in the US Department of Commerce that is in charge of about everything non-military in the US Exclusive Economic Zone. Her academic background was as a tide pool biologist. She was a Pew Ocean Fellow and a member of the Pew Oceans Commission and in keeping with the Pew spin on the oceans and their misuse, appeared to believe that she and her ideas could save the world’s fisheries - from the fishermen.

As the quotation demonstrates, she was so concerned with the supposed evils of fishing that she assumed that everything was more than fine with our federal policies regarding the safety of our offshore energy systems. I won’t rehash it here but I’d strongly recommend that you go over the FishNet on this issue I did while the Deepwater Horizon well was still gushing an eventual 5 million barrels of oil into the Gulf of Mexico, *Fish and Oil: NOAA’s Attitude Gap*, at <http://www.fishnet-usa.com/FishAndOil.pdf>. (and delayed Exxon Valdez impacts were still being revealed by researchers in the agency she now headed – see http://www.nwfsc.noaa.gov/news/features/delayed_effects_oilspill/index.cfm.) Perhaps if Dr. Lubchenco and the people she brought with her from the ENGO world weren’t so myopically focused on overfishing, offshore oil wells would have received some of the governmental scrutiny that was, and still is, so illogically directed at commercial fishermen. What are the chances that doing so would have saved the U.S. taxpayers a few bucks and spared the Gulf of Mexico – and the businesses that are dependent on its ecological integrity –the possibly irreversible damages caused by the huge oil spill?

The situation vis-a-vis on-board observers is the most dramatic indication of how skewed perceptions have become regarding ocean/fishery protections. In just about all federally regulated fisheries there are requirements for on-board federal observers, who are increasingly being paid for by the vessel owners/operators. These observed trips range in frequency from 100% coverage of all of the vessels in a fleet to vessels being assigned to carry an observer on a trip once a month or so, and with charges - often to the vessel – approaching a thousand dollars per day at sea. In fisheries in which landings are severely limited, observer costs can force vessels into bankruptcy.

These observers are there to track the catch and bycatch of the vessel to insure that quotas are not exceeded and that the take of protected species are accurately accounted for. There are also requirements for at-sea and at-the-dock reporting, so the catch of a vessel may be reported three separate times.

Surprisingly, or perhaps not so surprisingly considering the attitude of federal policy-level folks like Dr. Lubchenco, there are no requirement for any official observers on oil tankers, drilling rigs or other offshore vessels or structures that could have a negative environmental impact in our EEZ. As we have seen in a history of maritime accidents extending back for at least a half a century, these disasters can cause hundreds of millions of dollars or more in damages.

The following table is from The International Tanker Owners Pollution Federation Limited website (cached by The Wayback Machine at <http://tinyurl.com/osw5slv>). These were only spills from tankers, not drilling rigs or pipelines. Note that the Exxon Valdez spill, while included, ranked only number 35 in spill size. Note also that the authors assumed that offshore spills “caused little or no environmental damage.” The cached version of the website was from 2007/08.

The table below gives a brief summary of 20 major oil spills since 1967. A number of these incidents, despite their large size, caused little or no environmental damage as the oil did not impact coastlines, which is why some of the names will be unfamiliar to the general public. The Exxon Valdez is included because it is so well known although it is not the twentieth largest spill but rather the 35th.

Position	Shipname	Year	Location	Size (in tonnes)
1	Atlantic Empress	1979	Off Tobago, West Indies	287,000
2	ABT Summer	1991	700 nautical miles off Angola	260,000
3	Castillo de Bellever	1983	Off Saldanha Bay, South Africa	252,000

4	Amoco Cadiz	1978	Off Brittany, France	223,000
5	Haven	1991	Genoa, Italy	144,000
6	Odyssey	1988	700 nautical miles off Nova Scotia	132,000
7	Torrey Canyon	1967	Scilly Isles, UK	119,000
8	Sea Star	1972	Gulf of Oman	115,000
9	Irenes Serenade	1980	Navarino Bay, Greece	100,000
10	Urquiola	1976	La Coruna, Spain	100,000
11	Hawaiian Patriot	1977	300 nautical miles off Honolulu	95,000
12	Independenta	1979	Bosphorus, Turkey	95,000
13	Jakob Maersk	1975	Oporto, Portugal	88,000
14	Btaer	1993	Shetland Islands, UK	85,000
15	Khark 5	1989	120 nautical miles off of Morocco	80,000
16	Aegean Sea	1992	La Coruna, Spain	74,000
17	Sea Empress	1996	Milford Haven, UK	72,000
18	Katina P	1992	Off Maputo, Mozambique	72,000
19	Nova	1985	Off Kharg Island, Gulf of Iran	70,000
20	Prestige	2002	Off Galicia, Spain	63,000
35	Exxon Valdez	1989	Prince William Sound, Alaska	37,000

As we saw in the Deepwater Horizon episode, effective federal oversight was sorely lacking, and I've yet to see much progress there other than some bureaucratic rearranging and changing the name of the agency in charge. Human nature is human nature, whether the human is on an oil tanker, an offshore drilling rig or a commercial fishing vessel. But the potential for damages with the tanker or the drilling rig can range into the many billions of dollars while a fishing boat might kill a couple of thousand dollars' worth of over-quota fish. And the income earned by a drilling rig or tanker every year is many orders of magnitude greater than the fishing vessel. Yet we don't have a federal observer on the bridge of every tanker or on board every rig in the Gulf.

(It's important to note here that the Pew Charitable Trusts, which has been directly responsible for much of the anti-fishing efforts over the last two decades, is largely controlled by heirs of Joseph Pew, the founder of Sun Oil/Sunoco.)

Gulf of Maine cod – again it's not just fishing, and again it's Jane Lubchenco

“We need a rapid transition to sectors and catch shares. Catch shares are a powerful tool to getting to sustainable fisheries and profitability. I challenge you to deliver on this in Amendment 16, to include measures to end overfishing. I will commit the resources to my staff to do their part to ensure Amendment 16 is passed in June. We are shining a light on your efforts and we will track your progress. There is too much at stake to allow delay and self-interest to prevent sectors and ultimately catch shares from being implemented. We are shining a light on your efforts and we will track your progress. There is too much at stake to allow delay and self-interest to prevent sectors and ultimately catch shares from being implemented.” (Ms. Lubchenco on April 8, 2010)

while telling the New England Fisheries Management Council how her policies were going to fix the New England groundfish fishery – by Julie Wormser on the Environmental Defense blog EDFish/.)

What she said the day after her less than prophetic statement that fishing was the biggest threat to the world's oceans was yet another demonstration of Ms. Lubchenco's commitment to the naive idea that just about any problem with the world's oceans could be solved by adequately controlling fishing.

Six and a half years after her "catch shares revolution" that she kicked off by inflicting it on the New England groundfish fishery, the fishery is in a shambles and New England has lost much of its fishing infrastructure. This has all happened as fishing effort has been reduced so many times that far too many fishermen can no longer afford to fish for their own quota or to buy or lease quota from other fishermen in similar straits. So what was wrong with Ms. Lubchenco's foresight this time?

The recent media mini-frenzy brought about by the release of a study relating the decline of codfish in New England to increasing ocean temperatures will give you some idea. The study was titled "*Slow adaptation in the face of rapid warming leads to collapse of the Gulf of Maine (GOM) cod fishery.*" Not incidentally, it was funded by the Lenfest Foundation, the fisheries-related grants of which are "managed" by the Pew Trusts.

For an idea of the misdirected zeal with which the people at Lenfest pursue their "scientific" objectives, in their report on *Subsidies to U.S. Fisheries*, Lenfest researchers R. Sharp and U.R. Sumaila (who was also a Pew Oceans Scholar) list "*Fuel Subsidies*" as the largest category. They describe these as "*exemptions from federal and state fuel taxes and some state fuel sales taxes.*" In reality they are refunds of federal and state highway use taxes available to fishermen or any other commercial/industrial users who are "exempt" from the tax. This is because they do not use the federal/state highway systems (<http://tinyurl.com/RoadUseTax>).

Sharp and Sumaila also include "*sales tax exemptions,*" which also aren't fishing-specific subsidies but exemptions from sales taxes which are provided to any businesses for qualified purchases. The authors apparently believe that having fishermen pay taxes that the federal and state governments don't intend them to pay would eliminate a "*harmful subsidy*" and "*could improve the health of fisheries in the U.S.*"

The following quotes were taken directly from the paper (my emphasis added):

- *Recovery of this fishery (GOM cod) depends on sound management, but the size of the stock depends on future temperature conditions.*
- *Based on this analysis, the Gulf of Maine experienced decadal warming that few marine ecosystems have encountered.*
- *The Gulf of Maine cod stock has been chronically overfished, prompting progressively stronger management, including the implementation of a quota-based management system in 2010. Despite these efforts, including a 73% cut in quotas in 2013, spawning stock biomass (SSB) continued to decline.*
- *The Gulf of Maine is near the southern limit of cod, and previous studies have suggested that warming will lead to lower recruitment, suboptimal growth conditions, and reduced fishery productivity in the future.*
- *Gulf of Maine cod spawn in the winter and spring, so the link with summer temperatures suggests a decrease in the survival of late-stage larvae and settling juveniles. Although the relationship with temperature is statistically robust, the exact mechanism for this is uncertain but may include changes in prey availability and/or predator risk. For example, the abundance of some zooplankton taxa that are prey for larval cod has declined in the Gulf of Maine cod habitat. Warmer temperatures could cause juvenile cod to move away from their preferred shallow habitat into deeper water where risks of predation are higher.*
- *The average weight-at-age of cod in the Gulf of Maine region has been below the long-term mean since 2002, and these poorly conditioned fish will have a lower probability of survival.*
- *Temperature may directly influence mortality in younger fish through metabolic processes described above; however, we hypothesize that predation mortality may also be higher during warm years. Many important cod predators migrate into the Gulf of Maine or have feeding behaviors that are strongly seasonal. During a warm year, spring-like conditions occur earlier in the year, and fall-like conditions occur later. During the 2012 heat wave, the spring warming occurred 21 days ahead of schedule, and fall cooling was delayed by a comparable amount. This change in phenology could result in an increase in natural mortality of 44% on its own, without any increase in predator biomass.*

An article in the Boston Globe about the study reported that "*the authors... say the warmer water coursing into the Gulf of Maine has reduced the number of new cod and led to fewer fish surviving into adulthood. Cod prefer cold water, which is why they have thrived for centuries off New England. The precise causes for the reduced spawning are unclear, the researchers said, but they're likely to include a decline in the*

availability of food for young cod, increased stress, and more hospitable conditions for predators. Cod larvae are eaten by many species, including dogfish and herring; larger cod are preyed upon by seals, whose numbers have increased markedly in the region.” (**Climate change hurting N.E. cod population, study says**, David Abel, October 29, 2015.)

While Mr. Abel neglected to mention it, post-larval cod up to maximum size are also consumed by adult spiny dogfish, as are the fish and shellfish that cod feed on. From Bigelow’s and Schroeder’s classic *Fishes of the Gulf of Maine*, “voracious almost beyond belief, the dogfish entirely deserves its bad reputation. Not only does it harry and drive off mackerel, herring, and even fish as large as cod and haddock, but it destroys vast numbers of them.... At one time or another they prey on practically all species of Gulf of Maine fish smaller than themselves....”

The authors of the report recognized a number of temperature-related factors which might have been contributing to the GOM cod decline and went so far as to state that the earlier warming in GOM surface waters in 2012 “could result in an increase in natural mortality of 44% on its own, without any increase in predator biomass.”

So a group of researchers published a paper in *Science* that showed that it wasn’t just fishing that was responsible for decreasing populations of cod in the GOM. That’s a good thing, right?

But then, according to an article in *The Plate*, National Geographic’s food blog, the study predicted that “if fishing mortality is completely eliminated (that is, a complete closure of the cod fishery, such as took place in Newfoundland), Gulf of Maine cod could rebound in 11 years. If some fishing is allowed, recovery would take longer: from 14 to 19 years, depending on how fast the water warms.”

Hard as it is to credit, in spite of all of the indications of the severity of the effects of warming on the GOM cod that the authors identified, the paper that they published in what is supposed to be one of the most important scientific journals in the world couldn’t get past the “it’s got to be fishing” creed as espoused by Ms. Lubchenco and others that has turned managing fishermen into the only “effective*” tool in the fishery managers’ toolbox. Not only has fishing, according to them, reduced this stock to its current depleted status, reducing fishing even further or eliminating it appears in their collective estimation to be the only way to fix it.

I have to get into some fisheries management basics here before proceeding farther. First off, the goal of fisheries management is to have enough fish in a stock after fishing to be able sustain itself (most simply, removals from the stock = additions to the stock). This amount of fish is represented as B_{msy} , the biomass (B) that is required to produce the maximum sustainable yield (msy).

If we are dealing with a static environment B_{msy} will remain constant. But when the environment changes – as when the temperature changes – with fish that are approaching either end of their comfort range B_{msy} will change as well (the authors of the paper provided us with a number of factors related to water temperature which I reproduced in the bullet list above that would explain at least some of these changes). Thus, as the water temperature in the Gulf of Maine (GOM) increased, the cod B_{msy} decreased. In plain English, the GOM is capable of producing fewer cod today than it was ten years ago.

For another fishery management basic, all of those factors that account for mortality in a fishery are considered either natural and indicated by **M**, or due to fishing, indicated by **F**. For convenience (meaning the scientists don’t have a clue and it’s too much trouble to figure it out what it really is) **M** is usually assumed to be constant.

“However, in most cases, a single value—usually 0.2—for natural mortality is assumed for stock assessments, despite evidence to the contrary (Pope 1979, Quinn and Deriso 1999, Jennings et al. 2001).” From **A Review for Estimating Natural Mortality in Fish Populations**, Kate. I. Siegfried & Bruno Sansó

“The traditional assumption of a constant *M* may be appropriate when only mature fish are of explicit interest in the assessment.” From **Estimating Natural Mortality in Stock Assessment Applications**, edited by Jon Brodziak, Jim Ianelli, Kai Lorenzen and Richard D. Methot Jr., NOAA Technical Memorandum NMFS-F/SPO-119, June 2011. (I have to point out that in a GOM that’s getting hotter a constant *M* isn’t even appropriate when “only mature fish are of explicit interest in the assessment.” - NES).

Because, according to management dogma or due to management convenience, natural mortality remains constant by definition regardless of what it actually is, when a stock decreases it must be due to fishing. Accordingly, in spite of the authors having provided at least seven reasons why natural mortality for GOM cod is increasing as GOM temperatures are increasing, and in the face of the inarguable fact that the amount of cod fishing and the cod fishing mortality have plummeted at the same time, the authors conclude that reducing fishing for cod even further than it has been or eliminating it will “fix” the cod stocks.

Predation has and will continue to increase as the water temperature rises. The condition of the cod has declined and will continue to decline as the water temperature rises. Spawning success ditto. Also the survival of late-stage larvae and settling juveniles. And prey availability. And predation on the cod will increase. An example that the authors note is that seals, which are apparently quite fond of a diet rich in cod “have increased markedly in the region.” (For the significance of seal predation on cod stocks, see *Seals threaten Scottish cod stock recovery* at <http://tinyurl.com/SealPredation-Cod>.) Yet cutting back on fishing effort again and again and again is still the *modus operandi* of choice for recovering the GOM cod stocks, regardless of its impact on New England’s fishermen, fishing communities and fishing traditions and regardless of its lack of impact on the recovery.

That’s about all that needs to be said about the efficacy of fisheries management as espoused by the anti-fishing clique and as embraced by our modern fisheries management regime.

This definitely doesn’t bode well for fishing in any waters that are or will be warming, and that supposedly is or is going to be all of them, but it’s fishing-centric management at the most painfully obvious.

In how many fisheries being “managed” is that the case today? More importantly, in how many of fisheries in which natural mortality has increased due to ocean temperature increase has the permitted fishing mortality been correspondingly adjusted downward? As ocean temperatures continue to increase, how long will it take the fisheries management establishment – at least that part of it that doesn’t depend on foundation funding for hundreds of millions of dollars of “lets keep on beating the overfishing drums” funding, many of them provided by Pew - to admit that the whole idea of “overfishing” and its actual causes needs to be reconsidered.

* “Effective” from the managers’ perspective because it’s all they are allowed to do to manage fisheries.

When the commercial fishing industry didn’t agree with NOAA/NMFS on the status of the monkfish stocks

(Part of the ongoing controversy with New England/Gulf of Maine cod is centered on the difference in opinion between members of the fishing industry and the management establishment about the health of the stocks. I thought it might be instructive to review how a similar disagreement, only this time dealing with monkfish, was resolved fifteen years ago.)

In Framework Adjustment #1 to the Goosefish (monkfish) Fishery Management Plan published in 2001 it was announced that the directed monkfish fishery off the Northeast states would be permanently closed in 2002 due to the low number of fish that were being captured in the annual Northeast Science Center’s bottom trawl surveys (<http://www.nefmc.org/library/framework-1-2>). The participants in the directed fishery disagreed with the survey results and objected strenuously to the proposed closure, reporting that there were plenty of fish available, and for whatever reason(s) the NOAA R/V Albatross was not capable of catching them. Participants in the fishery – primarily in the Mid-Atlantic – formed the Monkfish Defense Fund (MDF) which convinced NMFS leadership that the fish were there but were not being taken by the researchers. A collaborative industry/NMFS pilot survey validated the industry’s claims that the stock was more plentiful. As a result, Congress provided funding for a collaborative, comprehensive NOAA/NMFS/MDF monkfish survey, again using commercial vessels with a history of successful participation in the monkfish trawl fishery and using their experienced captains and crews and their own gear to conduct the survey. On board the commercial vessels would also be NMFS and state personnel and academic researchers.

The first large scale cooperative monkfish survey took place in early 2001 with two modern trawlers, *F/V Drake* (out of Portland, ME) and *F/V Mary K* (out of New Bedford, MA). The commercial vessels did catch the monkfish that the Albatross couldn’t and provided a more accurate biomass estimate. The difference in the monkfish catch between the commercial vessels and the NOAA/NMFS vessel was significant enough that the managers reversed their decision to permanently close the directed fishery. Subsequent cooperative monkfish surveys on commercial vessels were held in 2004 and 2009. The series stopped after the 2009 survey because NOAA/NMFS personnel decided that their new survey vessel, *R/V Bigelow*, would adequately sample the monkfish stock.

And for an update on spiny dogfish....

(If you missed it, in *Dolphins and seals and dolphin, oh my!* from this past January I wrote about the almost totally ignored impacts of predation on commercial and recreational fish stocks in New England and the Mid-Atlantic (<http://www.fishnet-usa.com/Dogfish%20and%20seals%20and%20dolphin.pdf>). Since then the Mid-Atlantic Fishery Management Council has recommended that the spiny dogfish Total Allowable Catch be reduced significantly, based on the results of an assessment update which evidently couldn’t find a whole bunch of these highly efficient predators that were there until a few years back (for a discussion of how efficient they are follow the previous link). Last July Dr. James Sulikowski’s research group at the University of New England in Biddeford, Maine published *The Use of Satellite Tags to Redefine Movement Patterns of Spiny Dogfish (Squalus acanthias) along the U.S. East Coast: Implications for Fisheries Management* which reported the results of their work to more accurately describe the spiny dogfish stock(s) of the Northeast U.S. (<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0103384>),

But before getting into their research I’m going to take a slight detour to discuss the Northeast Fisheries Science Center’s two annual bottom trawl surveys, the primary data source for the assessments of commercially and recreationally important fish species from Cape Hatteras to Maine. These surveys are so influential in assessments because they collectively comprise a time series going back to the early 1960s. In that time NOAA vessels have made approximately the same number of tows of approximately the same nets of approximately the same duration over approximately the same pieces of bottom on approximately the same dates every year. The annual variations in the numbers/weights of the various species being sampled are assumed to be an (approximate) indication of the variations of the total populations of those species. The nets that are used fish on the bottom and don’t sample the entire water column.

The total area sampled is identical from year to year, and the area sampled does not necessarily represent the full range of the species (or stock) being sampled.

The assumption is that the catch of particular species each year is going to be proportional to the total population of that species. Hence, if the trawl survey took 5,000 pounds of scup, for example, in one year and 3,000 pounds of scup the following year, in year two the biomass of scup would be estimated to be 60% of what it was the previous year (the weight used is often the average of several recent years – as specified in the FMP).

This seems to be reasonable if the distribution of the species (or stock) doesn't change significantly from year to year. But what if it does? What if, for example, the population shifts to the north and to the east, which would be one of the expected reactions to warming ocean temperatures? It seems obvious that the part of the population sampled by the trawl survey(s) will no longer be representative of the total population as it is today, only as it was. And considering that not all of the species sampled are restricted to living in close association with the bottom but at times might move up and down in the water column, it might well be that with a changing temperature regime some species will not be equally susceptible to capture by the bottom tending gear utilized in the trawl surveys.

Getting back to the University of New England spiny dogfish work, from the abstract of the report, "*vertical utilization also suggests distinct diel patterns and that this species may not utilize the benthos as previously thought, potentially decreasing availability to benthic (bottom tending gear as used in the NMFS bottom trawl surveys) gear.*" In Conclusions the authors write "*the results suggest that the estimated spiny dogfish movement patterns calculated from satellite tag data are possibly spatiotemporally asynchronous with the NEFSC bottom-trawl surveys, thus a potentially large percentage (horizontal and vertical "availability") of these sharks may be unaccounted for in this survey.*"

What would be a consequence of underestimating the total biomass of spiny dogfish off the Mid-Atlantic and Northeast states? Obviously one would be underestimating what they were eating, which includes both codfish and the species that codfish eat. But as fishing management is accomplished today, spiny dogfish predation is irrelevant, because even if it were known, nothing could be done about it. The spiny dogfish fishery must be managed like all of our other fisheries, with a harvest limited to what would yield MSY every year. This is in spite of the fact that spiny dogfish are worth pennies a pound to the fishermen while the other commercial species like cod whose populations spiny dogfish are significantly impacting are worth at least an order of magnitude more.

While the Magnuson-Stevens Act, the federal legislation that controls fishing in the U.S. Exclusive Economic Zone, pays lip service to the Optimum Yield in a fishery, something which should allow fisheries to be fished to below the MSY level if that is economically or socially warranted, the Act actually precludes that. As I wrote in 2009:

"One of the requirements of the Magnuson Stevens Act, the federal legislation that controls fishing in the US Exclusive Economic Zone, or more accurately one of the implied requirements of the Act, is that all fisheries be at the level that will produce MSY.

The first of the 10 National Standards that are applied to Fishery Management Plans put in place through the provisions of the Act is "conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the OY (Optimal Yield) from each fishery for the U.S. fishing industry."

From the Act (16 U.S.C. 1802, MSA § 3): 104-297

(33) The term "optimum", with respect to the yield from a fishery, means the amount of fish which—

(A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;

(B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and

(C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

(34) The terms "overfishing" and "overfished" mean a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.

The definition of OY supposedly allows for departures from the MSY. However, as even the casual consideration of the above section of Magnuson indicates, that is not the case, or more accurately, that is only the case when a stock isn't at the MSY level. In that case the stock is considered to be overfished, and if it is considered to be overfished, it must be "rebuilt" to the MSY level by having the harvest level reduced.

*But will having every stock of fish in the U.S. Exclusive Economic Zone being managed at the MSY level be economically, socially or ecologically "optimum?" Will it automatically provide "the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities?" Economically and socially, emphatically no. Is it even possible? Ecologically a not so emphatic "maybe." Considering all of the good intentions, all of the effort, all of the pain and suffering and all of the money – both from the public and the private sectors – that is being expended in efforts to reach what are perhaps undesirable and unattainable goals, the results of being tied to the Magnuson concept of OY can be and in demonstrable instances are far from optimum. (from **MSY and effective fisheries management**, http://www.fishnet-usa.com/maximum_sustainable_yield.htm).*

One of the demonstrable instances in which the results are far from optimum is having spiny dogfish at the MSY level in waters off the Mid-Atlantic and New England.

So why is it important to call it fishing management or fishermen management or something similar?

Because no one has much of a clue of the effects of water quality or water temperature or wind direction/duration or upwelling or food availability or of much of anything else on fish stocks. As a matter of fact they lump all forms of non-fishing mortality together, call it Natural Mortality – as opposed to Fishing Mortality – and assume that it is a constant. Natural Mortality plus Fishing Mortality is by definition equal to total mortality. So obviously the authors at the Gulf of Maine Research Institute can report that fishing mortality is what's driving the Gulf of Maine cod population, because that's what fisheries science and their models demand. It doesn't matter how many codfish the burgeoning stocks of spiny dogfish eat nor does it matter how much of the prey species that codfish depend on is left after the dogfish get done with them, because codfish mortality that isn't due to fishing doesn't vary. All that varies is fishing, and the only way to have more fish is by reducing fishing. And if it can't be reduced enough, then stop it.

The only way real fishery management has a chance of working will be by identifying and quantifying all of the major forms of mortality on each fish stock being managed, and by either controlling at best or at least allowing for all of those other sources of mortality – which in no way in the natural world can add up to a constant year after year.

Once we're at that point we'll never have to look at a fishery that continues to decline, regardless of how much we cut back on fishing mortality, and force the fishermen to continue to pay the price for other factors that we either can't or that we feel that it's too inconvenient to control.

As I concluded in **MSY and effective fisheries management** six years ago (cited above):

“The so-called conservationists involved in fisheries would have us believe that there's some sort of “natural balance” possible in our inshore and offshore waters and that, if fishing is reduced adequately across the board, this mythical balance can be reestablished. That is far from the case.

In their Rousseau-inspired misconception of what the oceans should be, they look at anthropogenic effects as categorically bad, with fishing in general and not harvesting every stock at the MSY level in particular among the worst. This is not necessarily the case. Fishing can be an effective management tool. In the case of species like herring, menhaden and dogfish, allowing – or encouraging – harvest levels above what would be considered “sustainable,” and then maintaining the populations at lower than maximum levels by carefully regulating harvest might be all that is necessary to return “overfished” stocks of much more valuable species back to their OY levels.

Take, for example, the current situation regarding the New England groundfish complex. Fishermen have been hit with a seemingly interminable series of harvesting reductions extending back well over a decade. These cutbacks have been so severe that, if the most recent “management” proposal by NMFS is instituted, boats will be allowed to fish only 20 days a year.

This is due to the fact that several of the groundfish stocks haven't been recovering as they were expected to (at least by the managers) following previous drastic reductions in fishing effort. At the same time, as we've seen above, the stock of spiny dogfish, notoriously voracious predators on groundfish and their prey species, have been allowed to increase unrestrictedly. And the even larger Atlantic herring stock could be impeding the groundfish recovery as well.

Reduce the number of spiny dogfish? Of course not. The Magnuson Act won't permit it. Reduce the number of herring? Ditto, but for political rather than biological reasons.

But what if we could? Using such an approach, the economy will benefit, the ecosystem will benefit (through increased biodiversity), and the fishing communities that are dependent on “balanced” fisheries will benefit as well.

And there are other fisheries that are facing ever more stringent harvesting restrictions each year because they aren't performing as the fishing-centric computer models predict that they should. The summer flounder fishery in the mid-Atlantic is one. What's the impact of spiny dogfish on the summer flounder stock?

An EEZ that is being managed to provide the optimal harvest from a complex of interacting species would seem to be preferable to what we have today. The way we're doing it today, our most valuable fisheries are increasingly subject to the depredations of other, less valuable species that enjoy the protection of a management regime that is totally stacked against rational management. If fewer spiny dogfish, fewer Atlantic herring or fewer menhaden will mean an increase in more valuable, more desirable or more threatened species, then why shouldn't the people responsible for fisheries management be provided with the administrative wherewithal to allow this? Legislation mandating that they can't isn't benefitting anyone beyond the few anti-fishing activists who have built careers on saving fish stocks that clearly don't need saving, and it's certainly not benefitting the ecosystem. So why do we have it?”

After 39 years of NOAA/NMFS fisheries management, how are they doing? How are we doing because of their efforts?

01/27/16

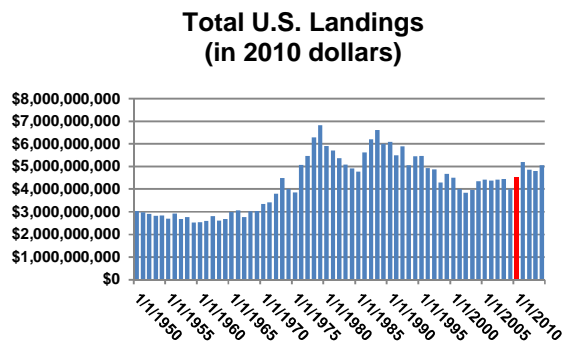
Back in June of 2012 I wrote **After 35 years of NOAA/NMFS fisheries management, how are they doing? How are we doing because of their efforts?** (http://www.fishnet-usa.com/After_35_Years.pdf) in which I looked at U.S. commercial landings on a regional basis. While there were some bright spots, overall the picture was somewhat dismal, with total landings minus Alaska's swinging up slightly after a trending downward over the previous 5 years and being only 60% of what they were in 1979, the year that inflation corrected landings were at their highest value. Regionally, landings (minus scallops and lobster) in New England, in the Mid-Atlantic (minus scallops), in the Southeast and in the Gulf of Mexico were trending downwards with only Pacific landings heading up.

The latest available data from the NOAA/NMFS Commercial Landings website, for the years 2011 to 2014 (http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html) tell a different, and much more optimistic, story (But please bear in mind that any indicated "trends" since 2010 are for four years at most and at this point aren't necessarily anything that people should hang their hats on).

(Note that in all of the following charts 2010, the last year in the original FishNet article for which data was available, is indicated by a red bar. The most current data are for 2014. Also note that all values reported were corrected for inflation, using federal government conversion tables and 2010 as the base year.)

Value of Total U.S. landings

Total U.S. landings reached a maximum of \$6.8 billion in 1979. From a recent low of \$3.9 billion in 2009 they increased to \$5.2 billion in 2011 and are currently (as of 2014) at \$5.0 billion.



The value of total U.S. landings has been increasing fairly steadily since 2002.

A number of people had commented on the original article that it would have been interesting to see a listing of all of the commercial species and their individual contributions to the total value of domestic landings. With landings of 485 species reported in 2014, that would take up a prohibitive amount of space here, but on the following page is a chart listing the top 50 fisheries in terms of value. At the bottom of the list were frigate mackerel (\$39), shortbelly rockfish (\$22), Chubs (\$12), redstripe rockfish (\$10) and spider crab (42 lbs landed, no value listed). The values are in 2014 dollars. For reference I've also included a chart of the top 50 species in 2005 (the values here are listed in 2004 dollars).

It shouldn't surprise anyone at all familiar with our commercial fisheries that American lobster, sea scallops and walleye pollock are the three most valuable U.S. fisheries. But that seven of the ten most valuable species being shellfish might be.

At this point NOAA/NMFS doesn't differentiate between capture fisheries and aquaculture production in the commercial landings database. Tracking the growth – or not – of aquaculture through actual production would be an effective way of determining how realistic the pronouncements of the "future of aquaculture" which have been periodically resurfacing for almost 50 years actually are and it would be most useful.

2005 - SPECIES	2005 - VALUE
SCALLOP, SEA	\$432,514,317
LOBSTER, AMERICAN	\$415,414,861
POLLOCK, WALLEYE	\$306,971,755
SHRIMP, WHITE	\$192,608,512
SALMON, SOCKEYE	\$187,210,745
HALIBUT, PACIFIC	\$177,483,005
SHRIMP, BROWN	\$156,025,654
COD, PACIFIC	\$150,738,379
SABLEFISH	\$136,239,864
CRAB, BLUE	\$124,340,159
CRAB, DUNGENESS	\$101,842,970
CRAB, KING	\$91,042,174
OYSTER, EASTERN	\$71,212,540
MENHADEN	\$62,519,721
SALMON, PINK	\$49,040,872
SALMON, CHINOOK	\$48,698,577
CRAB, SNOW	\$42,760,967
GOOSEFISH	\$42,252,278
OYSTER, PACIFIC	\$41,350,392
TUNA, BIGEYE	\$37,930,751
CLAM, QUAHOG	\$33,041,357
SQUID, CALIFORNIA MARKET	\$31,472,519
CLAM, PACIFIC GEODUCK	\$30,984,490
FLOUNDER, SUMMER	\$30,118,259
CLAM, ATLANTIC SURF	\$30,009,192
CLAMS OR BIVALVES	\$29,146,535
HAKE, PACIFIC (WHITING)	\$29,139,283
SQUID, LONGFIN	\$28,766,828
SHRIMP, PINK	\$27,904,789
SALMON, COHO	\$25,966,781
SOLE, YELLOWFIN	\$23,485,027
CLAM, SOFTSHELL	\$22,822,603
TUNA, ALBACORE	\$22,186,435
CRAB, FLORIDA STONE CLAWS	\$21,640,750
COD, ATLANTIC	\$20,847,327
HERRING, SEA	\$20,220,979
SALMON, CHUM	\$19,895,101
HADDOCK	\$19,044,869
CLAM, MANILA	\$18,722,472
TUNA, YELLOWFIN	\$18,308,832
SHELLFISH	\$16,885,378
LOBSTER, CARIBBEAN SPINY	\$16,680,080
SWORDFISH	\$16,365,384
BASS, STRIPED	\$15,916,616
SOLE, ROCK	\$15,438,840
ATKA MACKEREL	\$14,892,866
SHRIMP, MARINE, OTHER	\$14,079,811
HERRING, PACIFIC	\$13,801,755
GROUPEL, RED	\$13,752,899
SEA URCHINS	\$11,805,155

The fifty highest value fisheries in the U.S. in 2005 (in 2005 dollars) and 2014 (in 2014 dollars)

2014 - SPECIES	2014 - VALUE
LOBSTER, AMERICAN	\$567,319,010
SCALLOP, SEA	\$424,479,428
POLLOCK, WALLEYE	\$399,883,397
SALMON, SOCKEYE	\$349,452,970
SHRIMP, BROWN	\$305,768,676
SHRIMP, WHITE	\$270,062,710
CRAB, DUNGENESS	\$211,087,010
CRAB, BLUE	\$202,203,607
OYSTER, EASTERN	\$174,966,991
COD, PACIFIC	\$153,724,018
CRAB, SNOW	\$115,365,728
HALIBUT, PACIFIC	\$114,806,893
SABLEFISH	\$110,771,164
MENHADEN	\$104,548,627
SALMON, PINK	\$86,068,322
CRAB, KING	\$85,586,833
SQUID, CALIFORNIA MARKET	\$72,382,494
SALMON, CHINOOK	\$71,001,708
TUNA, BIGEYE	\$67,602,472
OYSTER, PACIFIC	\$62,802,352
CLAM, PACIFIC GEODUCK	\$61,858,701
HAKE, PACIFIC (WHITING)	\$58,629,718
SALMON, CHUM	\$55,339,282
LOBSTER, CARIBBEAN SPINY	\$55,231,871
SALMON, COHO	\$54,865,837
SOLE, YELLOWFIN	\$52,030,008
SHRIMP, OCEAN	\$50,132,328
CLAM, NORTHERN QUAHOG	\$46,072,038
TUNA, ALBACORE	\$35,469,942
FLOUNDER, SUMMER	\$32,299,399
SHRIMP, PINK	\$30,921,070
CLAM, ATLANTIC SURF	\$29,614,951
HERRING, ATLANTIC	\$28,788,974
CRAB, FLORIDA STONE CLAWS	\$28,080,135
SQUID, LONGFIN	\$25,935,113
CLAM, SOFTSHELL	\$25,818,268
TUNA, YELLOWFIN	\$23,695,492
SNAPPER, RED	\$23,372,284
SHRIMP, MARINE, OTHER	\$23,019,037
ATKA MACKEREL	\$22,493,575
BASS, STRIPED	\$21,748,439
ROCKFISH, PACIFIC OCEAN PERCH	\$21,303,546
GROUPE, RED	\$21,222,995
CLAM, MANILA	\$20,934,830
CRAB, SOUTHERN TANNER	\$20,874,508
GOOSEFISH	\$18,693,766
LOBSTER, CALIFORNIA SPINY	\$18,239,087
SOLE, ROCK	\$18,236,151
SWORDFISH	\$18,031,708
SEA URCHINS	\$15,182,837

Forty-five fisheries that were in the fifty most valuable in 2005 were still in the top fifty in 2014. When adjusted for inflation, in 2010 dollars, landings in the top 50 fisheries were valued at \$3.9 billion in 2005 and at \$4.5 billion in 2014.

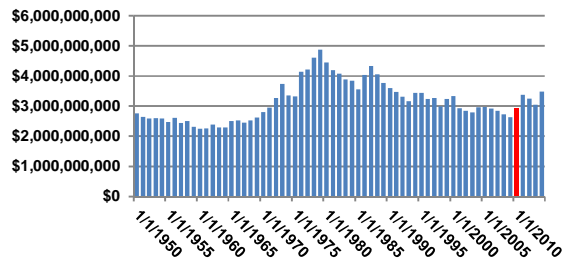
Other facts that you might find interesting – or that in emergencies can serve as conversation starters:

- Of the top fifty species, twenty-three were shellfish.
- In spite of all of the associated hand-wringing, Atlantic cod were #69 (\$9.4 million).
- Ditto for American eels at #66 (\$9.8 million).
- Ditto for swordfish at #51 (\$18 million).
- Bloodworms were #86 (\$6.0 million).
- Florida stone crab claws – the fishermen keep one, the crabs keep one – were #35 (\$28 million).

(For anyone who is interested in exploring the reported landings of any species in any regions or states on a year-by-year basis, the above linked NOAA/NMFS database provides a wealth of information. With a basic knowledge of spreadsheets you can get an accurate picture of any commercial species (with limited exceptions) for the last 75 years, or for as long as that species supported a fishery. I've made one of my worksheets for this FishNet available at http://www.fishnet-usa.com/HowWeDoing_Update.xlsx to give you an idea of what's possible. If you have any questions, feel free to contact me by replying to this email.)

Ignoring Alaska, the value of U.S. landings appear to be increasing after a decline that began in 1979.

**Total U.S. landings minus Alaska
(in 2010 dollars)**

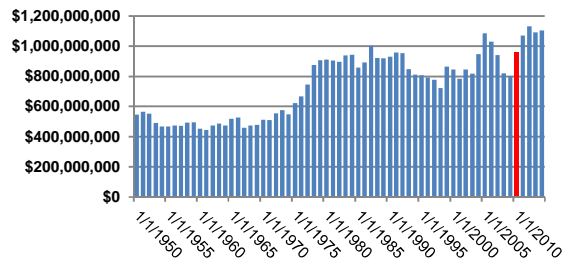


Correcting for inflation, total U.S. landings in 2014 were 74% of what they were at their highest point (1979). Minus Alaska, total U.S. landings were 71% of what they were in 1979.

The story region by region – New England first

Starting out in New England, home of our oldest and not so long ago some of our most valuable “traditional” fisheries, at first glance things appear to be rosy. Reaching a post-Magnuson plateau of just over \$1 billion in 1987, the value of total landings declined from then until 2001, from there increasing until almost \$1 billion in 2005 and then falling again. But in 2011 they topped \$1 billion again, and have remained there ever since.

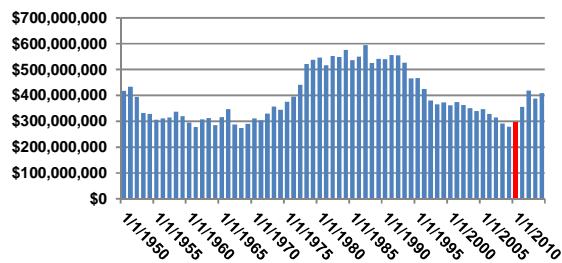
**New England Landings
(in 2010 dollars)**



Unfortunately, the reality in many New England fisheries is not what is indicated by the total landings. Since 1950 about half of the value of New England landings (converted to 2010 dollars) has been in the lobster and sea scallop fisheries. In 2010 these two fisheries accounted for 41% of the value of New England’s total landings (in the previous FishNet I had erroneously reported “over 69%”). In 2014, driven by a large increase in lobster landings which wasn’t offset by smaller decrease in scallop landings, that increased to 47%.

Subtracting the value of sea scallop and lobster landings from the total New England landings, there was a decline in value extending from the early 90s to 2009. This was offset by an increase beginning in 2010 that increased the value to levels last seen in 1995.

**New England minus scallops & lobster
(in 2010 dollars)**

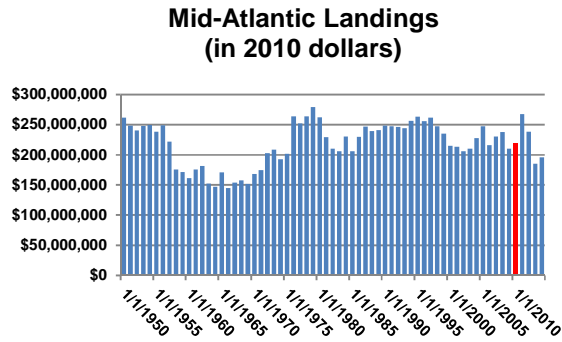


In 2010 dollars, the New England lobster fishery has increased in value from \$73 million in 1950 to \$518 million in 2014. That’s an increase of 700%. The sea scallop fishery has increased from \$57 million to \$273 million, an increase of 480% (“record” scallop landings were \$370 million in 2012).

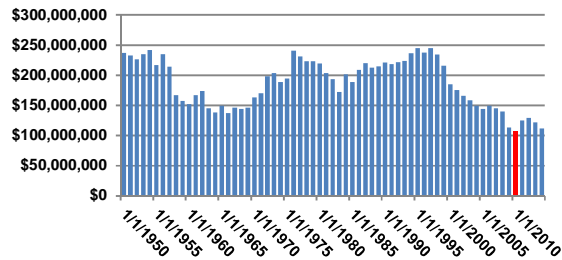
In 2014 the next three most valuable fisheries were oysters, soft clams and Atlantic herring. Together with sea scallops and lobsters, landings in these 5 most valuable fisheries were \$941 million. This represented 85% of the total New England landings in 2014. In 2000, 2005 and 2010 the 5 most valuable New England fisheries represented respectively 57%, 68% and 77% of the total value of New England landings.

The Mid-Atlantic

With the exception of 2013-14 the total value of Mid-Atlantic landings appear to have been fluctuating pretty widely but staying mostly between \$200,000 and \$250,000 since the early 1980s. However, the dramatic increase in the value of sea scallop landings have been compensating for a pronounced and prolonged decrease in the value total of landings of the other fisheries.

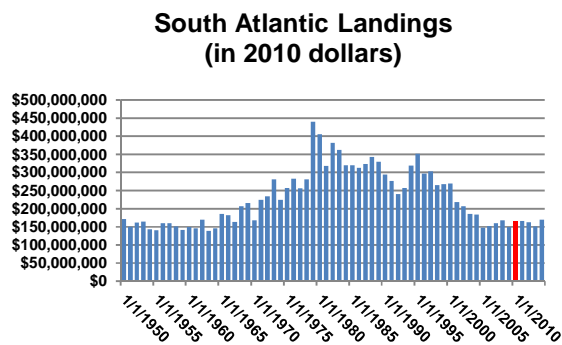


**Mid-Atlantic Landings minus scallops
(in 2010 dollars)**



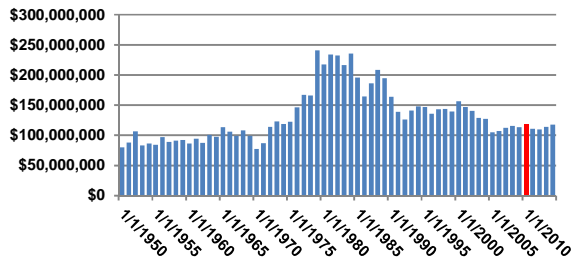
The South Atlantic

The value of South Atlantic landings declined almost steadily from a peak at in 1979 to 2005 or so and has been fairly constant since then.



Commercial landings in the South Atlantic in 2014 were 38% of what they were at their highest point (1979).

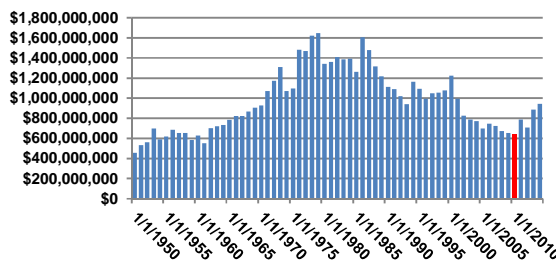
**South Atlantic Landings Minus Shrimp
(in 2010 dollars)**



The Gulf of Mexico

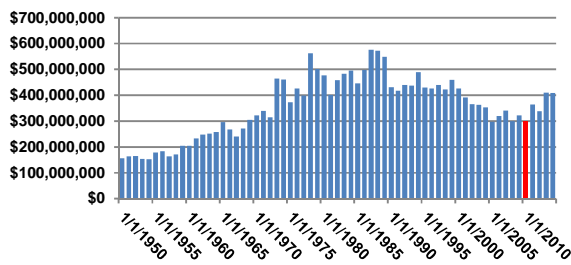
The value of commercial landings in the Gulf of Mexico declined until 2010, when it reached the level that it hadn't been at since 1960. Since then the total value has increased significantly, in 2014 being at 67% of what it was in 1979, when they were at their highest value.

**Gulf of Mexico Landings
(in 2010 dollars)**



As in the South Atlantic, the value of shrimp landings has varied much as the value of the other species has.

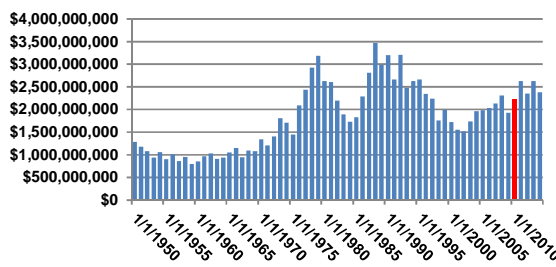
**Gulf of Mexico landings minus- Shrimp
(In 2010 dollars)**

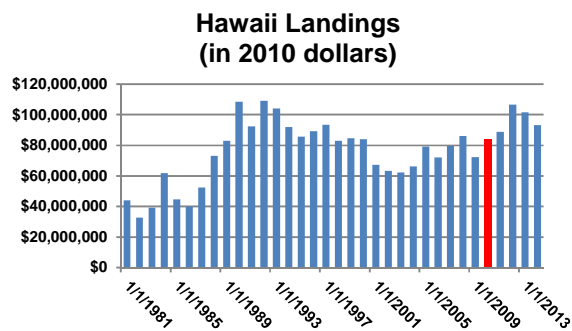


West Coast

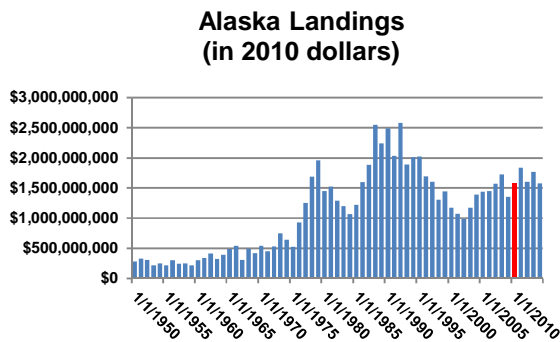
The value of total West Coast landings appears to be continuing a 10+ year upward trend which had been interrupted by a drop in 2009/10. The total value of West Coast landings in 2014 was 69% of the highest value, which was in 1988.

**West Coast Landings
(in 2010 dollars)**





The value of Hawaii landings in 2012 almost equaled the highest level reported, which was in 1992 (Hawaii landings were only reported in the NMFS/NOAA commercial landings database beginning in 1981). The value of landings has dropped in the subsequent two years.



The total value of Alaska’s landings appears to have resumed the upward trend that had begun in 1985

What’s it all mean?

Looking at the biggest picture – and accepting the NOAA/NMFS figures – the domestic commercial fishing industry is doing quite well, having been just under \$4 billion in 2009 and in 2014 having topped \$5 billion. Adjusted for inflation, landings of the most valuable 50 fisheries were worth \$3.9 billion on 2005. The value of the top 50 species had increased to \$4.5 billion in 2014.

However, as is almost always the case, the devil is in the details, and some of those details clearly demonstrate that all is not well in every pilot house of every boat fishing in our EEZ.

One of the clearest examples of that is seen in the traditional fisheries of the Mid-Atlantic. While the value of total landings were valued at \$195 million in the Mid-Atlantic, 44% was from one fishery (sea scallops). When the value of total landings minus the sea scallops shows that a decline that started in 1997 in the Mid-Atlantic is still continuing.

New England is slightly more complicated. In 2014 the value of landings if two fisheries (lobster and sea scallops) made up 73% of the value of New England’s total landings. In 2000 they accounted for 53% of the total. While the value of landings minus lobster and scallops has increased over \$100 million since 2010, the four species - herring, soft shelled clams, oysters and American eels – that have accounted for most of the increase are either caught by very large vessels, are mostly from a limited and highly regulated river fishery for elvers, or are harvested from either inshore fisheries or aquaculture operations.

The bright spot on the East coast is the South Atlantic region, if you consider having stable landings a bright spot.

The value of total U.S. landings in the Gulf of Mexico has increased dramatically since a post-Magnuson low point, not coincidentally the year when BP released 5 million barrels or so of oil and almost 2 million gallons of corexit (an oil dispersant) into the Gulf.

After a gradual increase from the early 90s, the value of West Coast landings (minus Hawaii and Alaska) has been fairly steady since 2010 with an upswing in 2014. The value of Alaska landings increased significantly post 2010 but in 2014 had fell back to the same level it was at then. The value of Hawaiian landings increased steadily from 2009 to 2012, when it reached a level it hadn’t been at since 1993, but it has decreased since then.

Obviously it’s impossible to generalize at the national level much more than that significantly more dollar’s worth of fish and shellfish crossed U.S. docks in 2014 than did in 2010, and that’s definitely a good thing. However, the benefits haven’t been spread out evenly. There are disparities from region to region, from state to state, from port to port and from dock to dock. But what I can’t emphasize too much is that in far too many instances fishing revenues are being increasingly concentrated in a decreasing number of fisheries. In the long term this could prove disastrous, not to the participants in the fisheries in which the landings are declining, but to the participants in the other fisheries as well. This is

because it takes a certain minimum level of presence to maintain necessary infrastructure (docks, gear suppliers, ice houses, marine railways, etc.) as well as necessary political support.

Are you getting the idea that if you're a fisherman Daniel Pauly isn't on your side?

02/18/16

"... The crisis in the world's fisheries is less about scientific proof than about attitude and political will. And the world's fish need a dynamic, high-profile political champion like a Bono or Mandela to give finned creatures the public profile of cute and furry ones."
(Daniel Pauly in **Hooked on fishing, and we're heading for the bottom, says scientist**, a 02/17/06 press release by the Natural Sciences and Engineering Research Council.

This quote by the Pew Charitable Trusts' premier fisheries researcher says just about all that needs to be said about the ongoing anti-fishing campaign that they have been financing, along with a handful of other mega-foundations, to convince anyone who is willing to listen that, in spite of a dearth of compelling scientific evidence supporting this *strum und drang*, the world's oceans are – and have been – facing a crisis brought about because of the depredations of commercial fishermen.

Where are the Kardashians when Pauly really needs them?

Just imagine a scientist, any scientist, willing to publicly discount scientific proof and instead embrace the cachet of celebrity to sell his message of doom and gloom in the oceans. And then imagine multi-billion dollar "charitable" foundations eager to support him in these efforts, all in the face of rigorous opposition from well-established scientists who dismiss this rabble rousing for what it is; full of sound and fury but signifying not very much at all.

To help in putting his most recent round of doom and gloom pronouncements on how bad fishing is supposed to be in the proper perspective, I've highlighted – because "lowlighted" isn't yet an accepted term, but there's always hope – a number of his pronouncements that I'd consider on a par with his "we don't need sound science, we need high profile personages" plea up above.

The attack of the mud trails!

Back in 2007 Pauly and another researcher generated an inordinate amount of publicity by releasing some satellite images of "mud trails" caused by shrimp trawlers fishing over the Yangtze River delta off China's coast. Said Pauly of these images *"think of the story about China's Great Wall being the only human artefacts visible from space. Now we can add the mudtrails of trawlers. But not only trawlers from China - from all over the world."* Note that in 2007 Google Earth had been available for several years. Contrary to Pauly's contention, Google Earth made available via satellite imagery many millions of "human artefacts," including the four skylights on my house and the Volvo parked in the driveway. But we wouldn't want anything like accuracy interfering with a good story, would we?

As far as Pauly's supposed damage by these mud trails, ten minutes of "research" with Google revealed that the Yangtze River delta contained 500 billion tons of sediment that ranges from three to one hundred and thirty feet deep. Obviously any critters living over or in this sediment are evolutionarily equipped to handle suspended – or resuspended – sediment, and the little bit extra that is kicked up by trawlers isn't going to amount to a tinker's damn to any of them. But then again, how effective would this level of crisis mongering be if it was constrained by reality?

And we can't forget Pauly's theory of ugly fish

In his article **Aquacalypse Now** (**New Republic**, 09/28/09) Pauly wrote that when the oceans had been stripped of the larger, more visually appealing fish, *"boats began to catch fish that were smaller and uglier."* While, given any familiarity with the history of seafood consumption at all, I couldn't imagine his "Bono" or "Mandela" buying into this one, it appears as if nothing like reality is going to stand in the way of a tale Pauly is set on telling. Picture sea cucumbers, oysters, monkfish, sardine, whitebait, eels, lobsters, clams, crabs, palolo worms, etc. All of these, and many other small or "ugly" fish and shellfish have been consumed by hungry humans for generations, and I doubt that anyone – other than Daniel Pauly and perhaps his close personal friends – have ever decided not to eat any of them because they're too small or not pretty enough.

Fishing down the food chain? Fishing up the food chain? How about fishing it sideways?

In 1998 Pauly made his first, and probably his most controversial, pronouncement of imminent ocean doom due to fishing. To wit, fishermen had caught too many of the top predators in the world's oceans and as a consequence were catching fish and shellfish lower down on the food chain, and that without more controls on fishermen we were destined to a future with oceans inhabited by nothing but jellyfish. In **Issues For Debate in Environmental Management** he is quoted *"we are eating bait and moving on to plankton and jellyfish.... My kids will tell their children "'eat your jellyfish.'"* The truth of the matter is that if his children lived in Japan or China or in a bunch of other places in Asia they might be telling their kids to *"eat your jellyfish"* at this very moment.

Needless to say, Pauly is once again attempting to make the commonplace a harbinger of his supposed imminent “oceans crisis.” In fact, dried jellyfish have been a staple of Asian cuisines for millennia. According to **Jellyfish fisheries in Southeast Asia** by M. Omori and E. Nakano (*Hydrobiologia* 451: 19-26, 2001) “*a few large jellyfish in the order Rhizostemaeae constitute an important food in Chinese cooking. For more than 1700 years they have been exploited along the coasts of China.*” This would appear to make Pauly’s belief in the evils of modern fishing somewhat untenable. It’s highly unlikely that commercial fishermen – or whatever they might have been called back in 200 Anno Domini or thereabouts – had fished down their food chain, so that sort of leaves out jellyfish consumption as an indicator of much of anything other than a desire to eat jellyfish. But it appears as if something as ancient and as culturally acceptable as eating jellyfish can be distorted to reinforce his crisis mongering, he’s going to use it.

(see Ray Hilborn’s **Myths – Fishing down food webs** at <https://rayhblog.wordpress.com/myths/>.)

Shifting baselines?

In 1995 Pauly wrote “*each generation of fisheries scientists accepts as a baseline the stock size and species composition that occurred at the beginning of their careers, and uses this to evaluate changes. When the next generation starts its career, the stocks have further declined, but it is the stocks at that time that serve as a new baseline. The result obviously is a gradual shift of the baseline, a gradual accommodation of the creeping disappearance of resource species, and inappropriate reference points for evaluating economic losses resulting from overfishing, or for identifying targets for rehabilitation measures.*” (**Anecdotes and the shifting baseline syndrome of fisheries**, Postscript in TREE vol 10, no. 10, October 1995.)

It appears that – at least at the time and perhaps still – he believed that fisheries scientists arrived on the scientific scene in discrete generations, once every 25 years, to replace the previous generation, and that the new generation discounted everything that the previous generation observed and recorded. As compelling as others of his fables are, on the face of it this seems to make sense. But does it really?

I strongly suspect that if you visit a college/university fisheries department (perhaps the University of British Columbia’s) or a government research facility (perhaps the NOAA/NMFS Northeast Fisheries Science Center in Woods Hole, MA) you won’t find a bunch of scientists of similar or identical age, none younger and none older. You’ll find scientists and technicians beginning their careers, ending them, and at every stage in between. And those scientists and technicians don’t start from some particular point in, amassing new data and coming up with new theories. In spite of Pauly’s contention – because it makes his story seem more believable - they build on what’s been done before. For example, the bottom trawl surveys performed annually by the Northeast Fisheries Science Center go back to 1950, spanning most of three generations. But, with apologies to Pauly, they were certainly not performed and analyzed by three separate and distinct cohorts of scientists and technicians who paid no attention to the survey results obtained prior to when their “generation” took over. Among other things, science – at least science as performed by most scientists that I am aware of but perhaps not by Pauly and his “generation” at UBC - is a continuous process, scientists building on, adding to or subtracting from the work of their predecessors.

But Pauly’s shifting baselines construct demands that this not be the case, so like all of us who at some point in childhood believed that by wishing we could bring Tinker Bell back from wherever fairies went to after exiting in Wonderland, he apparently believes – or wants us to believe - that reality actually mirrors the world he has imagined to support his pronouncements.

And as far as his “*creeping disappearance of resource species*” is concerned, I have yet to learn of any species that has been driven into oblivion by fishing. By creeping development, damming of rivers, habitat degradation and pollution? Yup, but by fishing? The only reasonable response to that would be “show me.” Of course it could be argued that because of fishing the populations of all targeted species are reduced. That’s axiomatic – fishing kills fish. But to refer to that as “*creeping disappearance*” is just more of the same old same old.

There are, however and unfortunately, some actual, real-life shifting baselines that have nothing to do with fishing that do have a significant impact on finfish and shellfish resources. Primary among them would be those involving the quantity and quality of both inshore and offshore waters and habitat. Think disappearing wetlands, think household chemicals pollution, think oceans permeated with plastics, think the continuing mass migration of us humans to the coasts. In any instances that are characterized by not enough fish, that lack of fish is far more likely to be a result of these real shifting baselines that it is of too much fishing.

This brings us to Pauly’s most recent exercise in his “blame it all on fishing” campaign

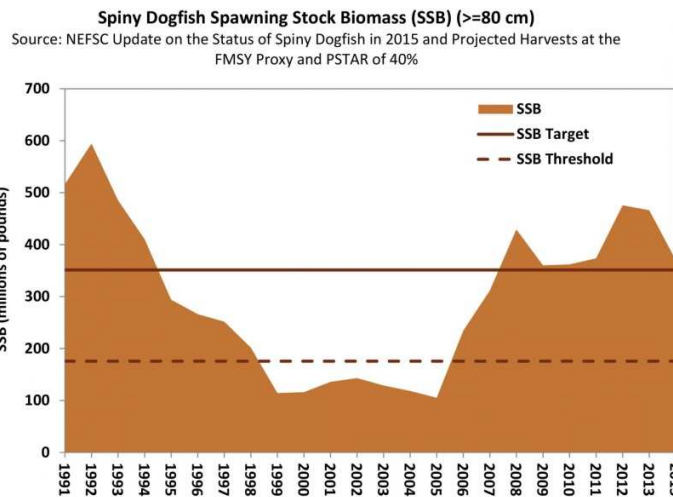
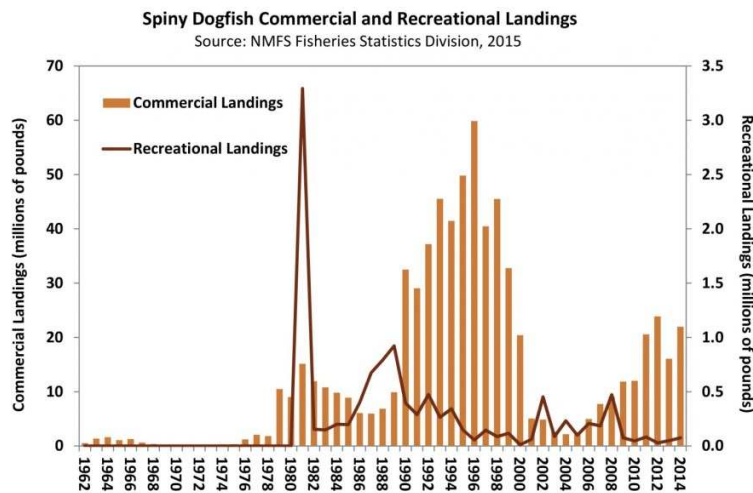
In a short paper in **Nature Communications** titled **Catch reconstructions reveal that global marine fisheries catches are higher than reported and declining** Pauly and co-author Dirk Zellar conclude that the world’s fisheries are in even worse shape than had been previously thought because, for a number of plausible seeming reasons the **Food and Agriculture Organization** of the **United Nations (FAO)** has been miscalculating the world’s fish/seafood catch at an increasing rate for the last 30 or so years.

The primary problem with the approach that they used in their analysis is that the harvest of a particular fish stock often has nothing to do with the health of that stock. Take, for example, the spiny dogfish fishery of the northeast U.S. The domestic spiny dogfish market is extremely limited and the majority of the annual harvest is exported. The fish bring a very small return to the fishermen and are often considered a “last re-

sort” by them (i.e. if there is anything that is easier to catch and/or provides a greater return to the fishermen, they’re going to fish for it). The Atlantic States Mariner Fisheries Commission, which co-manages spiny dogfish with the Mid-Atlantic Fishery Management Council) reported in 2015 (<http://www.asmfmc.org/species/spiny-dogfish>):

*Landings were approximately 37.2 million pounds in 1992, gradually increasing to a peak of about 60 million pounds in 1996. In the late 1990s, landings declined to an average of around 40 million. After federal and state regulations were implemented in the early 2000s, landings declined to less than five million pounds in 2001 and 2002. **They then ranged between two and eight million pounds between 2003 and 2009.** As the stock began to improve, landings were increased to 21 million pounds in 2011. Commercial landings continue to be mostly female dogfish, with female landings comprising about 98% of the total commercial catch. Commercial landings totaled 21 million pounds in 2014. Discards have remained fairly stable, around 11 million pounds over the past decade and are expected to remain near that level in the future. Canadian and foreign landings have also decreased significantly in recent years. **It is anticipated the Canadian dogfish harvest will not increase in the near future given the lack of demand for the product and the subsequent closure of Canadian spiny dogfish processors.** (my emphasis)*

As the following graphs show, there is nothing approaching a discernable relationship between the spiny dogfish harvest and the spawning stock biomass (an acceptable indicator of the health of a stock).



Note: 2014 data unavailable due to incomplete survey.

Pauly and Zellar have fallen into a trap that many people with little or no familiarity with commercial fisheries do. Their methodology assumes that the only thing that drives commercial harvesting is the availability of the particular fish or shellfish being harvested. Nothing could be further from the truth. Fuel costs, foreign exchanges rates, bycatch avoidance, import/export requirements, management measures, competing products, the El Niño/La Niña cycle or the North Atlantic Oscillation (or other decadel or longer duration climatic or oceanic events), natural or man-made catastrophes, other easier/closer/more rewarding alternative fisheries, supply and demand and other factors can and often do impact the level of harvest more than the availability of the particular fish or shellfish.

The authors acknowledge, and it will probably come as no surprise to most readers, “that *The Pew Charitable Trusts, Philadelphia, funded the Sea Around Us from 1999 to 2014, during which the bulk of the catch reconstruction work was performed.*” However, it might be news that “since mid-2014, the *Sea Around Us* has been funded mainly by *The Paul G. Allen Family Foundation.*” If anyone wonders why one of the founders of Microsoft might be interested in supporting research by Daniel Pauly, from an article in the NY Times last week - **Microsoft Plumbs Ocean’s Depths to Test Underwater Data Center** (at <http://www.nytimes.com/2016/02/01/technology/microsoft-plumbs-oceans-depths-to-test-underwater-data-center.html>):

“REDMOND, Wash. — Taking a page from Jules Verne, researchers at [Microsoft](#) believe the future of data centers may be under the sea. Microsoft has tested a prototype of a self-contained data center that can operate hundreds of feet below the surface of the ocean, eliminating one of the technology industry’s most expensive problems: the air-conditioning bill. Today’s data centers, which power everything from streaming video to social networking and email, contain thousands of computer servers generating lots of heat. When there is too much heat, the servers crash. Putting the gear under cold ocean water could fix the problem. It may also answer the exponentially growing energy demands of the computing world because Microsoft is considering pairing the system either with a turbine or a tidal energy system to generate electricity. The effort, code-named Project Natick, might lead to strands of giant steel tubes linked by fiber optic cables placed on the seafloor. Another possibility would suspend containers shaped like jelly beans beneath the surface to capture the ocean current with turbines that generate electricity.”

Of course this needs to be coupled with Microsoft’s commitment to the future of “cloud computing” (for those readers who have successfully avoided advanced Nerdhood up until now, the “cloud” is just a whole bunch of web-connected servers housed in what are called server farms, which are becoming increasingly expensive to operate shoreside – see the NY Times article linked above). Do a Google search on “*microsoft cloud future*” to see where that stands.

For more background on Daniel Pauly’s science:

<http://blog.nature.org/conservancy/2010/11/29/fisheries-apocalypse-ocean-fish-stock-peter-kareiva-ray-hilborn/>

<http://www.atsea.org/doc/Hilborn%202010%20Science%20Chronicles%202010-11-1.pdf>

<https://www.sciencedaily.com/releases/2013/02/130221192734.htm>

<http://cfooduw.org/do-catch-reconstructions-really-implicate-overfishing/>

Another push for catch shares

05/11/16

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(Don’t get the idea from this that I oppose any fisheries management regime. What I do oppose is having the future of particular fisheries determined by people and/or organizations and/or corporations with no meaningful ties to and no concern about the existing industry and the people in it. Irrespective of whether the decisions have their roots in corporate, ENGO or foundation board rooms, the halls of academe or “investment” seminars, as the ongoing debacle in the New England groundfish fishery so clearly and tragically demonstrates, if the fishing industry doesn’t have final say in the imposition of measures that its members will be working with, the affected communities will suffer.)

With talk in the air of an upcoming Magnuson Act reauthorization which is coincident with the 40th anniversary of its passage, the proponents of catch shares in general and individual transferable quotas in particular, are mounting a public relations barrage in a continuation of their efforts to “privatize” our fisheries.

Most recently, the April 19 New York Times Opiniator column **How Dwindling Fish Stocks Got a Reprieve** by freelance journalist Sylvia Rowley, touted the benefits of catch shares by citing the example of the West coast groundfish fishery. It also quoted catch shares proselytizer and NOAA ex-head Jane Lubchenco, back on the Environmental Defense board after her brief sojourn in the almost-real world of the federal bureaucracy, on catch shares: “*If you have 5 percent of the pie, you’d like to see the pie grow.*”

Implicit in all of the pro-catch shares rhetoric, as Ms. Lubchenco's quote above amply demonstrates, is the idea that this particular form of fisheries management is necessary for healthy fisheries. She apparently believes, or wants us to believe, that fishermen who don't own a part of a fishery aren't interested in having a larger part of that particular pie. In fact nothing could be further from the truth. "Successful" fisheries management requires only three things. The first is an accurate determination of the significant sources of mortality on a fish or shellfish stock and the relative magnitude of those sources. The second is ensuring that all of those sources of mortality that can be controlled are controlled. The third is determining on an ongoing basis what the acceptable (sustainable?) levels of harvest are and assuring that those levels are maintained.

Of course this is hardly possible in the context of so-called fisheries management today, which is in reality fishing management. In that context, which we seem to be stuck with, the three requirements are a bit different. The first would be an accurate determination of what the sustainable level of harvest is (i.e. the quota). The second would be the design management measures that insure that the quota is caught but not exceeded. The third would be the enforcement of those management measures.

As far as the fish or shellfish are concerned, how the quota is divided up is irrelevant.

In fact, Ms. Rowley's words reflect this. She writes that in the years from 2000 to 2015 "*the tally of federally managed fish populations that have been rebuilt went from zero to 39*" and then a few paragraphs later "*the total number of federal fisheries using catch shares rose from five in 2000 to 16 in 2015.*" In its annual **Status of the (fish and shellfish) Stocks** report to Congress for 2015, NOAA Fisheries reports on the overfishing status of fish and shellfish stocks. From 2000 to 2015 the stocks managed via catch shares increased from .5% to 5% but the number of stocks where overfishing was not taking place remained at 91%. The proportion of fisheries managed by catch shares went from an insignificant level to a minimally significant level, yet the overall health of the stocks, as measured by the proportion of them in which overfishing was occurring, didn't change at all. Could it be that Ms. Lubchenco's "catch shares revolution" is, to quote Shakespeare in *The Merchant of Venice*, "*full of sound and fury. Signifying nothing?*" (Note that NOAA Fisheries recognized 905 stocks in 2000 and 313 stocks in 2015.)

So why are the people at EDF, including Ms. Lubchenco both while she was there, when she was in charge of NOAA and now that she's back at EDF, so bullish on catch shares if it makes no difference to the critters in question? Perhaps because it allows them to use their tax exempt millions to finance fishing operations and dictate how the fishermen they are financing have to fish, sort of like having fishermen owe their souls to the company store (See **The California Fisheries Fund**, EDF's unique way of controlling fishermen and fishing, at http://californiafisheriesfund.org/pdf/CFE_paper_May_2015.pdf).

Or perhaps it's to fatten the bank accounts of EDF and/or its friends, directors, members, etc. From the transcript of a talk by then EDF West Coast Vice President David Festa to the Miliken Institute Global Conference in 2009:

"You know, so how do I – you know, but I know that if I fix all that, I can be profitable in the future. So I pull together investors and I buy the factory and I sink a whole bunch of money into it and, you know, retrain workers and then get paid back on the profits on the other end.

Well, why can't we do that with fisheries? Well, first – and I hope David will address some of this – first, we have to have commitment from the government to the regulatory change.

And then, second, we have to have capital. And that's where I think public-private partnerships come in because the government has the mandate and the authority to change the rules, but it doesn't have as much capital as it once had.

The private sector has the capital but, of course, doesn't have the responsibility of defending the public trust way the government does. So it's a perfect partnership.

So that's the second thing that I think needs to happen.

How much money is to be made out there, and how do we think about the risks associated with this? You know, that's where we need your help.

Just one statistic, in all of the catch-share fisheries that have transitioned over, the value of that fishery tends to increase by – or the shares in that fishery tend to increase by a factor of four. That's an average. The current U.S. industry is a \$5 billion industry.

So, you know, it's not – it's not telecommunications-size money, but it's real money."

(In http://www.opc.ca.gov/webmaster/ftp/pdf/public_comment/20110830_Helliwell_email_2_attachment_1_of_2.pdf on page 11.)

Now there's a novel idea – turning over the ownership of a heretofore public resource to private sector investors so they can profit from the harvest and sale of that resource. Of course Mr. Festa didn't mention that the world's seafood supply has become so large and that the transportation of seafood from anywhere to here has become so cheap that the U.S. fishing industry has little or nothing to do with setting prices anymore. So where's Mr. Festa's investor's profits likely to come from? Out of the holds of the fishing boats and out of the pockets of the fishermen, it would seem.

But even more troubling is the control that "outside" groups would gain over fishing – or not fishing.

As EDF's **California Fishing Fund** does such a good job of demonstrating, it's not who owns the fishing permits, it's who – or what – controls them that matters. Suppose that an ENGO serving as the "company store" for a large number of permit holders in a particular fishery decides that boats should not be fishing in a particular area. If the agreements that the permit holders had with the ENGO allowed it, the ENGO could simply dictate that the boats could no longer fish there. Bye, bye fishing community (or communities)! To suggest that this wouldn't happen would be to ignore the devastation that various ENGOs have, with no qualms or compunctions, inflicted on logging communities in the Northwest for almost three decades.

Catch shares schemes are supposed to be designed so that no person or other entity can own over a certain number of permits in a particular fishery. In the first place, over several hundreds of years, corporate law has been evolving more and better ways of protecting the privacy of corporate owners. Piercing the corporate veil isn't a trivial legal exercise, nor is the ability of a federal agency to do it successfully a foregone conclusion.

But that's not the worst case scenario. We're all far too familiar with the apparently unbridled thirst for power and profit that afflicts many of our largest corporations, as we are familiar with the increasing competition for ocean access by a host of industrial interests for mineral extraction, energy development, transmission cables/pipelines, offshore aquaculture, transportation and who knows what else. Many of these corporate interests could afford to acquire – then shut down – fishing rights in large areas, perhaps allowing them to dispense with what to some corporate leaders must be those annoying distractions, fishermen.

As a purely speculative what if, what if the people at Microsoft decided that a large part of their business in the future was going to be in offshore, submerged data centers (see Microsoft Plumbs Ocean's Depths to Test Underwater Data Center (see <http://www.nytimes.com/2016/02/01/technology/microsoft-plumbs-oceans-depths-to-test-underwater-data-center.html>). Obviously such data centers would benefit from being close to the demand for them – users of the so called "cloud." And what if the optimum locations for some of these data centers, the wave/tide generators that powered them, and the cables that connected them to onshore internet hubs were in prime fishing areas? What would it take for Microsoft – or a foundation with close ties to Microsoft – to gain control of the permits of those bothersome fishermen who wanted to continue fishing where they had for generations and to have them fish elsewhere, or to have them ride off into the sunset with their saddlebags stuffed with Microsoft dollars? How divorced is this scenario from what Mr. Festa and EDF, ex NOAA Head Jane Lubchenco and, perhaps inadvertently, Sylvia Rowley and the New York Times are pushing.

And what's to stop them?

(2015 revenues for some larger corporations: Walmart - \$482 billion, Samsung - \$305 billion, Exxon-Mobile - \$268 billion, Apple - \$233 billion, Amazon - \$107 billion, Hewlett Packard - \$111 billion, Microsoft - \$93 billion, Google - \$74 billion, Dell - \$59 billion, Intel - \$55 billion, Sunoco - \$44 billion. The across the dock value of U.S. commercial landings in 2014 were \$5.5 billion.)

It's interesting to note that Ms. Rowley saw fit to include W.F. Lloyd's **tragedy of the commons**, which was popularized by ecologist Garrett Hardin in 1968, as a pro-catch shares argument, though she made it by using what it would be difficult to classify as anything but weasel words, Ms. Rowley wrote '*overfishing is often seen as a classic case of what economists call the "tragedy of the commons."*' What Lolyd and Hardin were describing could only be considered unregulated commons, with no limits in place to control their use. Such is hardly the case in U.S. fisheries (or in many other fisheries around the world).

Our domestic fishermen and our domestic fisheries are among the most regulated in the world, and anyone who thinks he or she can draw parallels between any of our federal fisheries and Lloyd's/Hardin's unregulated commons should spend an half an hour

or so doing some rudimentary background research.* Even the Wikipedia entry for “**tragedy of the commons**” states in the second paragraph “*commons is taken to mean any shared and **unregulated** resource....*” (my emphasis).

Jim Ruttenberg, media columnist for the NY Times wrote in his 05/05/16 column that political journalism had lost sight of its “*primary directives in this election season.*” One of his three directives was “*to resist the urge to put ratings, clicks and ad sales above the imperative of getting it right.*” While he was writing about coverage of national electoral politics, this directive should apply to every kind of journalism, and it should apply every day. I hope that Ms. Rowley was paying attention.

**Background research is something that print and broadcast journalists used to do, or used to have done, in those olden times when “getting it right” was as important as Jim Ruttenberg still thinks it is.*

Cape Cod Commercial Hook Fishermen’s Association/Cape Cod Commercial Fishermen’s Alliance/Cape Cod Fisheries Trust: A Grants Activity Chronology

Nils E. Stolpe
05/24/2016

2014	<p>“Occasionally employees of the Cape Cod Commercial Fishermen's Alliance, Inc. travel to Washington DC to meet with both elected and non-elected federal government officials (Congressman, Senators and non-elected government officials) to discuss proposed or existing legislation in certain circumstances, the employees of the Cape Cod Commercial Fishermen's Alliance, Inc. are merely proving (sic) information on aspects of the proposed legislation or existing legislation that is within the expertise of the organization and, in other circumstances, the employees of the Cape Cod Commercial Fishermen's Alliance, Inc are expressing their opinion or providing support for either enacting, modifying or supporting particular legislation which would have (or does have) an impact on the environment or industries the Cape Cod Commercial Fishermen's Alliance, Inc supports.” (Part I-A Political Expenditures: \$54,929, Part IIA-Lobbying nontaxable amount 2013/2014: \$472,086, Total lobbying expenditures 2013/2014: \$118,022, Grassroots nontaxable amount 2013/2014: \$118,022).</p> <p>(Source: CCCFA IRS Form 990 for 2014)</p>
2014	<p>“Best Practices in Permit Bank Management Grantee: Community Development Partnership, Eastham, MA Fisheries Innovation Fund Award: \$75,000 Matching Funds: \$73,859 Total Project: \$148,859 The Community Development Partnership will expand its work developing best practices in permit bank management and providing technical assistance to fishermen, to be shared with a national fisheries network via the Fish Hub. Project objectives include but are not limited to strengthening fishing businesses, deepening current work with the Cape Cod Fisheries Trust, recruiting additional fishermen to utilize the Fish Hub to strengthen their businesses, providing innovative financing options, enhancing the aggregate data capability of the Fish Hub and developing resource tools for business advisers to utilize the Fish Hub.”</p> <p>(Source: National Fish and Wildlife Foundation, 2014 Fisheries Innovation Fund Grants by region - http://www.nfwf.org/fisheriesfund/documents/2014-fif-grants.pdf)</p>
2014	In 2014 John Pappalardo’s compensation from Cape Cod Commercial Fishermen’s Alliance and related organizations was \$166,739. Paul Parker’s was \$142,526 (Source CCCFA Form 990).
2014	\$225,000 from the Walton Family Foundation to the Cape Cod Commercial Fishermen’s Alliance (in the “Catch Shares” category but details not disclosed)
2014	From 2010 to 2014 the Cape Cod Commercial Fishermen’s Alliance received \$6,775,012 in “Gifts, grants, contributions and membership fees.” (CCCFA 2014 form 990)
2013	Northeast Regional Office of the NOAA Fisheries Service has just granted an Exempted Fishing Permit to the Cape Cod Fisheries Trust, which will allow the use of alternative landing containers and tag protocols to support a high-quality, niche market for Atlantic surfclams (<i>Spisula solidissima</i>) harvested by day-boat vessels on Cape Cod. Source: Cape Cod Commercial Fishermen’s Alliance press release, 08/15/2013
2013	“Depending on the size of your community and how many members you’d like to invite to your Fish Hub, we offer a variety of pricing levels to help you meet your needs. Fish Hub was built by the Cape Cod Fisheries Trust, the Pacific IFQ Risk Pool communities with support from The Nature Conservan-

	<p>cy, and the Community Development Partnership through generous grants made by the Walton Family Foundation, Gordon and Betty Moore Foundation, National Fish and Wildlife Federation and Erol Foundation. Pricing packages are set to cover maintenance and ongoing enhancements to the platform. Ask about pricing.”</p> <p>Source: Fish Hub website at https://fishhub.org/how / web page first posted on internet in 2013 – Way Back Machine)</p>
2013	<p>(Available at Guidestar.com)</p> <p><i>Statement of Activities For the Year Ended December 31, 2013</i></p> <p><i>Revenues and Support:</i></p> <p><i>Grants \$ 1,330,416</i></p> <p><i>Membership dues and contributions \$58,700</i></p> <p><i>Fundraising and special events 292,761</i></p> <p><i>Merchandise sales \$5,335</i></p> <p><i>Permit leasing \$340,785</i></p> <p><i>Miscellaneous \$875</i></p> <p><i>Investment income \$19,239</i></p> <p><i>Loss on exchange of permits and disposition of assets (\$10,165)</i></p> <p><i>Total Revenues and Support \$2,037,946</i></p> <p>Note Payable - The Ford Foundation: The Organization received a program related investment loan dated September 17, 2009 from the Ford Foundation for \$1,000,000 to fund the Cape Cod Fisheries Trust. The Trust will acquire fishing permits, licenses and fishing rights which will then be leased to local fishermen who agree to adopt sustainable fishing practices. The interest rate for this loan is 1% payable quarterly, principal payable in three equal installments due on the eighth, ninth, and tenth anniversary. This note contains financial and operating covenants including maintaining the funds in a segregated account.</p> <p>Note Payable - Calvert Social Investment Foundation: The Organization received a \$100,000 loan in 2009 to fund the Cape Cod Fisheries Trust for the purpose of purchasing fishing rights to be leased to local fishermen and to make loans to qualified fishermen for their direct purchase of fishing rights. Interest is payable semi annually at 4.25%. In 2010 the Calvert Social Investment Foundation increased the loan to \$350,000. In 2012 the Calvert Social Investment Foundation increased the loan to \$600,000. The principal sum is due in full May 31, 2015.</p> <p>Note Payable - Keith Campbell Foundation. The Organization received a loan in 2011 to fund its activities to promote fisheries' conservation and increase local control over natural resources. Interest is payable semi annually at 2%, payable in arrears on each June 30th and December 31st. The principal sum is due in full October 21, 2016.</p> <p>(Source: Cape Cod Commercial Fishermen's Alliance, Inc. Independent Auditor's Report 2013)</p>
2013	\$220,000 from the Walton Family Foundation to the Cape Cod Commercial Fishermen's Alliance (in the "Catch Shares" category but details not disclosed)
2012	"The CHOIR Coalition was formed in 2002 by commercial and recreational fishermen to advocate for the responsible development of the Atlantic Herring Fishery in the face of a growing fleet of midwater single and pair trawlers."
2012	<p>Choir Coalition website (http://www.choircoalition.org/)</p> <p>"Commercial fishermen, recreational fishermen, ecotourism businesses, researchers and concerned citizens throughout New England and the Mid-Atlantic have united with one voice to protect Atlantic Herring stocks."</p> <p>Note that on the CHOIR website there is a picture captioned "pair trawlers towing through tuna fleet on Georges." However there is no indication that there are any tuna boats beyond the herring boats. That would make it "pair trawlers towing past the tuna fleet," wouldn't it?</p> <p>As an irrelevant aside, on the third photo down the caption is "pair trawlers, seperating, one boat will know pump the fish aboard." It's pretty amazing to have two mistakes in an eleven word sentence, isn't it?</p>
2012	<p>"Calvert Foundation – Calvert Notes</p> <p><i>Organization Description: The Calvert Foundation launched a community investment initiative with Calvert Notes, formally known as Community Investment Notes, which allows individuals to invest small sums of money in funds that are specifically chosen for their social and environmental impact. The full value of the investment is lent to underserved communities. As the loans are repaid, they are</i></p>

	<p>lent out again, multiplying the impact. At maturity, the loan is repaid to the investor.</p> <p><i>Fisheries Work: As of October 2012, the Calvert Foundation had one fisheries project that accepts investments, the Cape Cod Fisheries Trust. The Cape Cod Fisheries Trust was created in 2000 when a fisheries quota system was established to ease the pressure on ecosystems that had been overfished. The trust has attracted investments and loans, building its capital and allowing the trust to lease quotas to commercial fishermen. This capital has allowed fishermen to retain their jobs as the fishing community transitions toward sustainability.</i></p> <p><i>Ways to Invest: Calvert Notes accepts cash investments beginning at \$20, with rates of return up to 2 percent. The Calvert Foundation also accepts grants and program-related investments."</i></p> <p>(Source: Doubling Philanthropic Impact: Using Below Market Rate Investments to Advance Sustainable Fisheries. https://c.ymcdn.com/sites/www.confluencephilanthropy.org/resource/resmgr/docs/confluence_below_mrkt_fisher.pdf)</p>
2012	<p><i>"Since 2005, the (Cape Cod Fisheries) Trust has raised a diverse, multi-million dollar portfolio of debt and grant capital from a number of philanthropic and private sources to lease quotas to local small-scale fishermen in Cape Cod communities. Similar to a carbon credit, which "allows" the owner to emit a certain amount of carbon, a quota is an allowance to catch a certain amount of fish or other seafood. Quotas are assets that can be bought, sold and leased."</i></p> <p><i>"Calvert Foundation is a pioneer investor in the Trust through our Green Strategies Initiative, and along with the Ford Foundation has continued to support its mission since it was founded. Working with the Trust has been exciting as we build knowledge in the sector and challenging as we learn what role socially motivated investors like Calvert Foundation can play in financing fisheries worldwide. As with other green sectors, investable deals in sustainable fisheries are sparse and require extensive technical assistance and philanthropic subsidy. Regulatory risk also makes it difficult for businesses and investors to take long-term positions in these types of projects."</i></p> <p>(Source: Calvert Foundation website - http://www.calvertfoundation.org/blog/354-luring-capital-towards-sustainable-fishing-our-work-with-the-cape-cod-fisheries-trust)</p>
2011	<p><i>"The National Fish and Wildlife Foundation (NFWF), a federal quasi-agency, just announced that it will fund 18 new projects totaling over \$2 million that "will engage fishermen around the country in the design and implementation of effective catch-share fisheries." The funds for this were provided by the Walton and Moore Foundations, two of NFWF's "foundation partners," which are described as "supporting NFWF's National Fisheries Innovation Fund, which will assist the transition of United States fisheries to catch share programs by encouraging fishermen to pursue innovative management strategies through a competitive grant award process.... The NFWF lists among its corporate partners Exxon/Mobil, Shell, Chevron, BP, Conoco Phillips and Walmart."</i></p> <p>(Source: Call it conspiracy, cooperation or coincidence, but no matter what you call it, the public record isn't going to change. N. Stolpe, FishNet USA - http://www.fishnet-usa.com/Black%20helicopters%20in%20Boston.pdf)</p>
2011	<p>04/05/2011 letter from Brady Schofield, President, NORPEL (New Bedford, MA)</p> <p><i>"We can demonstrate these management actions are the direct result of the "Atlantic Herring Campaign" conceived, coordinated and funded by the nonprofit/non-taxpaying Pew Environment Group and their proxies at Chatham-based Cape Cod Commercial Hook Fishermen's Association (CCCHFA), Chatham-based Pew Herring Alliance and Chatham-based CHOIR Coalition. These are all related Chatham-based NGOs with a combined payroll in excess of \$1.5 million but accounting for less than 2% of the groundfish landings in the Northeast.</i></p> <p><i>Since 2003, according to the public record, CCCHFA has received millions of dollars from Pew Charitable Trusts (and other Foundations) to conduct the "Atlantic Herring Campaign", designed, according to the Pew and CCCHFA websites to: "Eliminate, or severely restrict the Midwater trawl fishery for Atlantic herring". This is part of a larger "Forage Fish Campaign" coordinated and funded by Pew Environment Group which includes direct payments to Universities, SSC members and other newly conceived NGOs. It Is critical to understand that ecosystem "forage" needs are considered in the federal herring and mackerel fishery FMPs and are deducted "off the top" before any allocations to the domestic commercial fishery are made.</i></p>

	<i>Nonetheless, with this funding and resulting media machine, CCCHFA secured voting positions and a hugely disproportionate political influence in the region's fisheries management arena, given their paltry landings and minimal economic contribution to the Commonwealth.”</i>						
2011	\$75,000 from the Walton Family Foundation to the Cape Cod Commercial Hook Fishermen's Association (in the “Marine Conservation” category but details not disclosed)						
2011	<p><i>The Trust leases quota and provides business development services to local fishermen. In 2010, we leased nearly 700,000 quota pounds at below-market rates to Cape Cod fishermen, enabling 112 captains and crew working aboard 36 fishing vessels to catch seafood worth \$2.1 million. In 2011, leasing grew to over one million pounds, enabling 124 fishermen on 33 vessels to catch \$3.6 million worth of seafood.</i></p> <p><i>Through it all we've enjoyed close and productive working relationships with our core collaborators, the Community Development Partnership, the Fixed Gear Sector and Amplifier Strategies. We learned that working with likeminded groups expanded our capacity in important ways and helped us do more with less.</i></p> <p><i>The Trust couldn't do what it does without the contributions of our donors, the Cape Cod Commercial Hook Fishermen's Association board, our partners and especially the fishermen of Cape Cod. We look forward to continuing this work together in 2012 and beyond.</i></p> <p>REVENUES</p> <table> <tr> <td><i>Net Lease Income</i></td> <td>\$321,969</td> </tr> <tr> <td><i>Grants & Gifts</i></td> <td>\$283,770</td> </tr> <tr> <td><i>Other Revenue</i></td> <td>\$54,603</td> </tr> </table> <p>(Source: Cape Cod Fisheries Trust Annual Report – 2011)</p>	<i>Net Lease Income</i>	\$321,969	<i>Grants & Gifts</i>	\$283,770	<i>Other Revenue</i>	\$54,603
<i>Net Lease Income</i>	\$321,969						
<i>Grants & Gifts</i>	\$283,770						
<i>Other Revenue</i>	\$54,603						
2010	\$75,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association “ <i>for the creation of Sustainable Fisheries Trusts in Alaska and Cape Cod that will finance community-based fishermen, employing conservation practices vital to ocean health and whose access to fisheries is critical to local economic and social vitality.</i> ”						
2010	\$15,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association “ <i>for a comprehensive assessment of the organization as it enters its second decade as a professionally staffed nonprofit.</i> ”						
2010	\$150,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association “ <i>to grow the Cape Cod Fisheries Trust into a nationally significant model for preserving marine ecosystems and ensuring the environmental, economic, and cultural sustainability of the communities on which they depend.</i> ”						
2010	\$538,821 from the Gordon and Betty Moore Foundation to the Cape Cod Commercial Hook Fishermen's Association “ <i>to provide expertise and support to ensure appropriate and durable implementation of sectors for groundfish, expansion of catch shares into other bottom-dwelling fisheries, and regulations and design elements for sectors that address sustainable fishing communities.</i> ”						
2010	\$175,000 from the Walton Family Foundation to the Cape Cod Commercial Hook Fishermen's Association (in the “Marine Conservation” category but details not disclosed)						
2010	<p><i>“A small but influential association of Cape Cod commercial fishermen, granted access to a disputed, oversized portion of the harvest when the New England groundfishery was converted to a catch shares system last year, has been leasing out much of its allocation for profit, according to a market report posted by the government.</i></p> <p><i>During roughly the first six months of the fishing season that began on May 1 — the start of the catch share system — the Cape Cod Commercial Hook Fishermen's Association leased the rights to catch close to 2 million pounds of mixed groundfish from its allocation, according to the report of transactions.</i></p> <p><i>The environmental group Oceana issued a statement Wednesday, calling the transactions "disappointing."</i></p> <p><i>Oceana asserted that the "Hookers," which practice lower impact fishing with hook and line or fixed gillnets, were profiting by selling to mainstream fishermen who worked with trawl gear that disrupts the ocean bottom.”</i></p>						

	(Source: Report: Cape group profiting off disputed catch shares, R. Gaines, Gloucester Times, 11/10/2010)
2009	<i>In September 2009, the Hook Association committed to purchasing the Captain Nathan Harding House property from the Oppenheim family, and launched a \$1.3 million capital campaign for the purchase of the house and other associated expenses. The renovated historic sea captain’s home, to serve as the Hook Association’s new headquarters, will reinvigorate our commitment to preserving the local fishing community and provide much-needed space to support programming. (CCCHFA 2009 Annual Report)</i>
2009	John Pappalardo was on the Obama Administration’s Setting Ocean Priorities for the New Administration and Congress Workshop
2009	\$250,000 from the Walton Family Foundation to the Cape Cod Commercial Hook Fishermen's Association (project details not disclosed)
2008	\$722,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “to support activities to reform the Atlantic herring fishery by (1) establishing protocols to set science-based fishery catch limits that specifically account for the changing needs of marine predators; (2) implementing a comprehensive monitoring and observer program that measures all catch, bycatch, and discards in a real-time manner; and (3) implementing improved time and area conservation and management measures to regulate when and where herring trawling is allowed.”
2007	<i>In 2007, CLF (Conservation Law Foundation) Ventures collaborated with the Cape Cod Commercial Hook Fishermen’s Association (CCCHFA) to design and launch the Cape Cod Fisheries Trust (CCFT). The trust’s aim is to obtain fishing licenses and other “fishing rights” from the open market and lease these permits back to local fishermen to access fishery resources off of Cape Cod. In return for a permit, fishermen are required to follow predetermined sustainable fishing guidelines. The CCFT protects fisheries and improves marine management. In addition, it guarantees continued access to this resource by local commercial fishermen and preserves an important way of life for Cape Cod communities.</i> <i>Specifically, CLF Ventures developed a business plan and fundraising strategy to attract institutional capital, identified and engaged capital resources, and structured a trust to hold the permits and lease-proceeds. Through development of the CCFT, CLF Ventures’ expertise in designing innovative market mechanisms will significantly advance the goals of CCCHFA, those of the local commercial fishing industry, and the environment of the Cape.</i>
2007	\$912,953 from the Gordon and Betty Moore Foundation to the Cape Cod Commercial Hook Fishermen's Association to “support implementation of DAPs in New England through promoting regulatory reform and leading the region in sector governance and monitoring.”
2007	\$180,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association “to provide general operating support policy reform campaigns for herring and groundfish, and to implement the nation's first Sustainable Fisheries Trust.”
2007	\$596,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “to support a New England forage fish campaign to ban or severely restrict destructive trawling, reduce allowable herring catches to leave sufficient herring in the ecosystem as forage, and establish new bycatch limits and reforms.”
2005	\$491,744 from the Gordon and Betty Moore Foundation to the Cape Cod Commercial Hook Fishermen's Association “to align economic incentives with conservation in the Georges Bank Fixed Gear Sector for gillnet fishermen and to implement a video-based electronic monitoring system for bycatch and catch of groundfish and other species. Outcomes for this grant include verification of video-based electronic monitoring for hook & line gear, analysis of video-based electronic monitoring for gillnet and small-mesh gear, and implementation and increased stakeholder awareness of Georges Bank dedicated access privilege (DAP) programs.”
2005	John Pappalardo member Joint Oceans Commission
2004	John Pappalardo member Pew Oceans Commission
2002	John Pappalardo was a member of the New England Fishery Management Council from 2002-2011. He was chairman for five of those years (2016 federal hourly rate for Council members is \$59.02). Source http://www.federaljobs.net/salarybase.htm
2001	\$150,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “to promote sustainable management of marine fish populations in New England through public education and administrative advocacy.”
1999	\$100,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “for support of the Fisheries Reform Campaign: Fishermen Paving the Road to Ecosystem Management.”

Magnuson Management: How well is it working?

06/27/16

“Through investment and sacrifice on the part of our commercial and recreational fishermen, today, landings by U.S. commercial fishermen—and the value they get for those landings—are near all-time highs” **The Governance of Fish: Forty Years under the Magnuson-Stevens Act**, 04/11/2016, Sam Rauch (Deputy Assistant Administrator for Regulatory Programs, NOAA Fisheries)

Periodically I like to do an overview of U.S. fisheries to give readers the opportunity to evaluate how their fisheries are doing relative to other domestic fisheries. This seems particularly relevant today, particularly considering Sam Rauch’s “happy birthday to us” anniversary statement up above.

Considering that the NOAA/NMFS commercial landings database (http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html) lists over 480 fisheries, how to approach this task has always been a challenge. Considering each one would be extremely cumbersome and time consuming and would cover a lot of fisheries that are of interest to only a very small part of the industry. For example, there are 300+ fisheries that had less than \$1,000,000 worth of landed value in 2014 and 100+ fisheries with a landed value less than \$20,000. This isn’t to imply that these smaller fisheries aren’t important. To the fishermen, other businessmen and consumers who count of them, every fishery is important. But as a practical matter they can’t all be addressed here.

(I have appended a few paragraphs at the end of this FishNet that will walk you through the process for any of the fisheries that NOAA/NMFS monitors).

How are the twenty-five most valuable commercial fisheries doing?

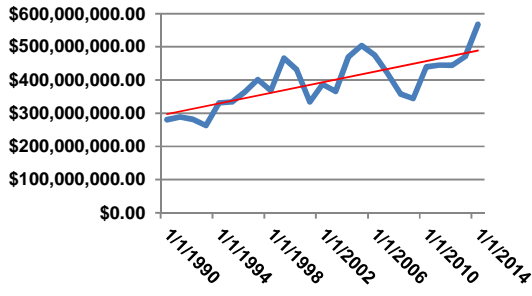
The U.S. commercial fishing fleet landed five and a half billion dollars’ worth of finfish and shellfish in 2014, and about 80% of that – four and a quarter billion dollars’ worth – was landed in the 25 most “valuable” fisheries. In fact, the New England/mid-Atlantic lobster and sea scallop fisheries together landed over a billion dollars’ worth of product.

Thus, to avoid the appearance of “cherry picking” the fisheries to include, I decided that I would look at the top 25 fisheries in terms of landed value. These are divided between finfish and shellfish, are well spread geographically, utilize each of the major gear types, and the vessels that participate range from the smallest to the largest commercially fishing. The 25 fisheries take place in the estuaries and in inshore and offshore waters, and are managed by the states, by the federal government through the regional management councils, by the interjurisdictional Commissions or jointly by the latter two.

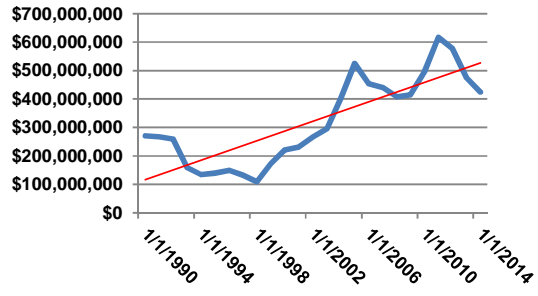
I initially choose a twenty-five year time frame – 1990 to 2014 – because it is generally accepted as the length of a human generation and is long enough to even out a lot of the normal highs and lows in annual landings (more on this later). It also avoids the spikes in landings that were associated with what can best be described as post-Magnuson euphoria.

The values reported in the NOAA/NMFS Landings Database are the nominal values (the values of the annual landings in that year’s dollars). Using these values would ignore the effects of inflation, which becomes quite significant over time. As an example, the 40 million pounds of coho salmon landed in 1950 returned only \$7 million dollars to the fishermen at the time, yet what that \$7 million would buy in 1950 would cost \$70 million in 2015. Thus the blue lines represent the value of the landings of the listed species in 2015 dollars, converted using the Consumer Price Index (CPI).

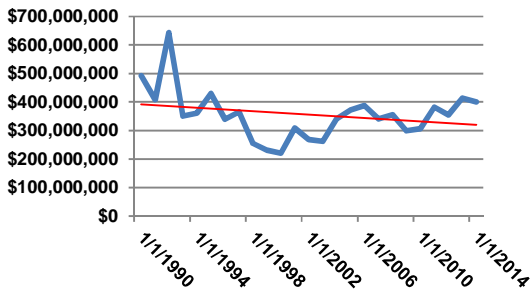
American Lobster In 2015 \$s



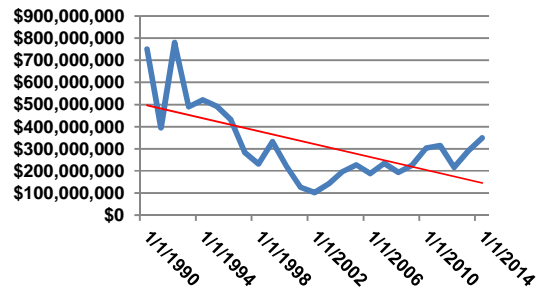
Sea Scallops In 2015 \$s



Alaskan Pollock In 2015 \$s

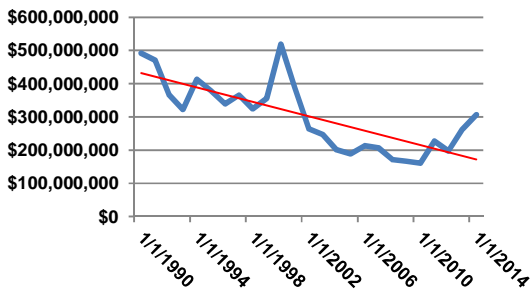


Sockeye Salmon In 2015 \$s

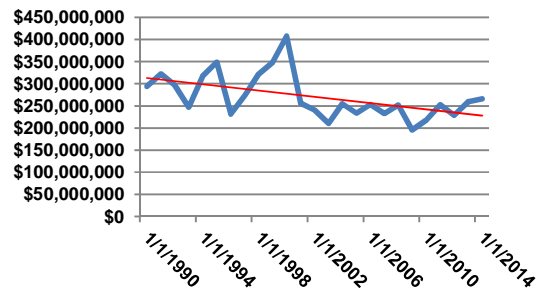


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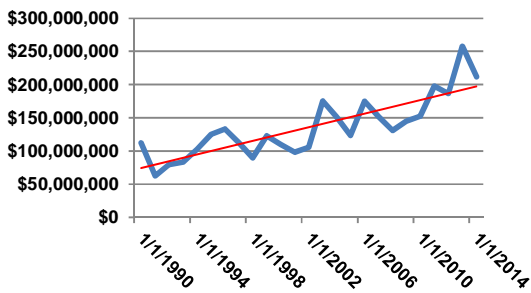
Brown Shrimp In 2015 \$s



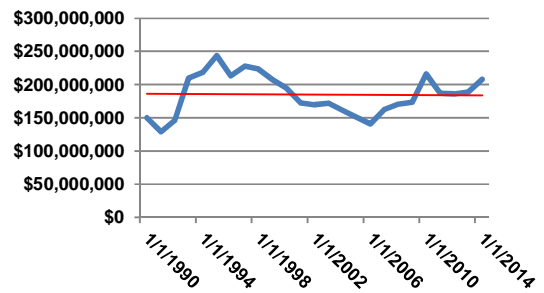
White Shrimp In 2015 \$s



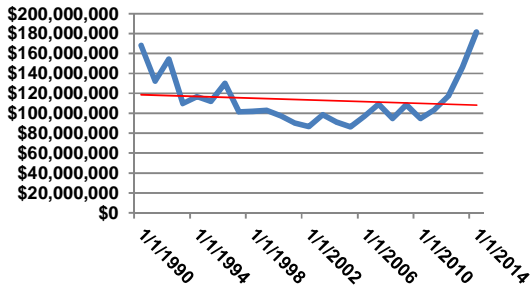
Dungeness Crab In 2015 \$s



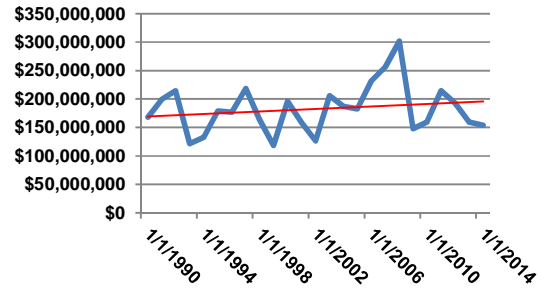
Blue Crab In 2015 \$s



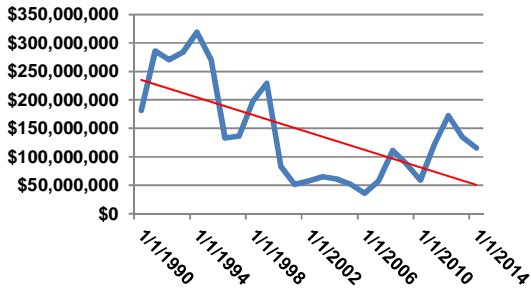
Eastern Oyster In 2015 \$s



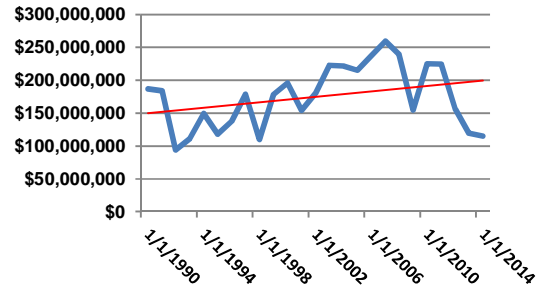
Pacific Cod In 2015 \$s



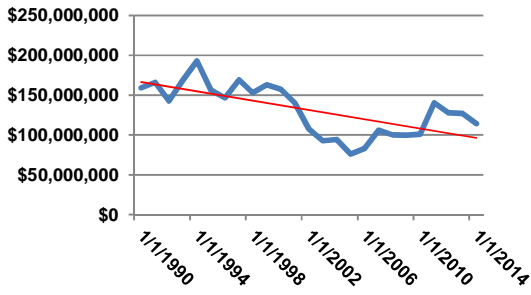
Snow Crab In 2015 \$s



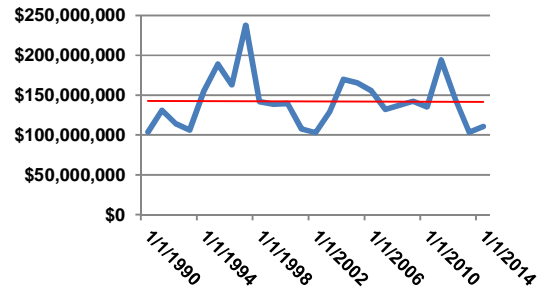
Pacific Halibut In 2015 \$s



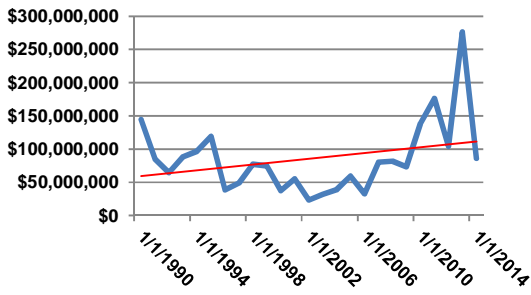
Menhaden In 2015 \$s



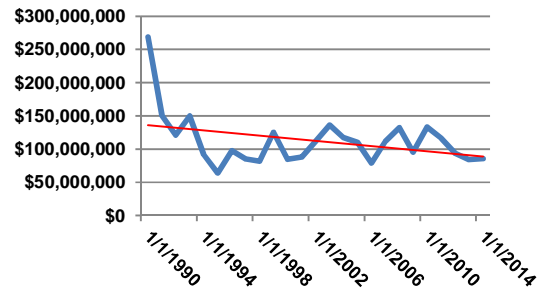
Sablefish In 2015 \$s



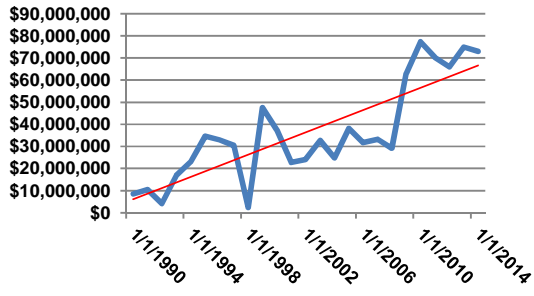
Pink Salmon In 2015 \$s



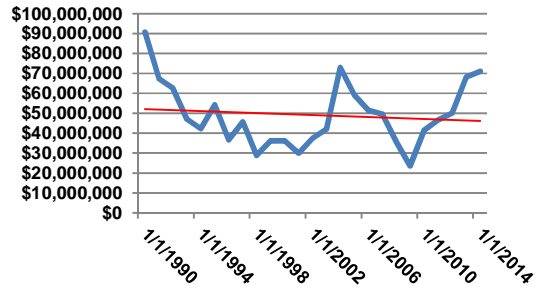
King Crab In 2015 \$s



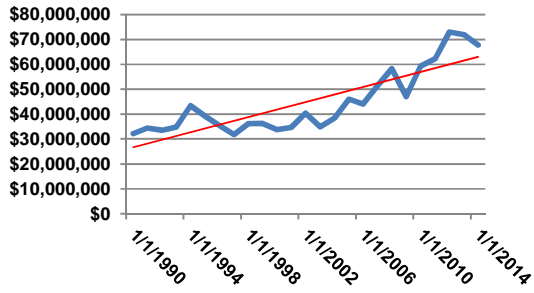
California Squid In 2015 \$s



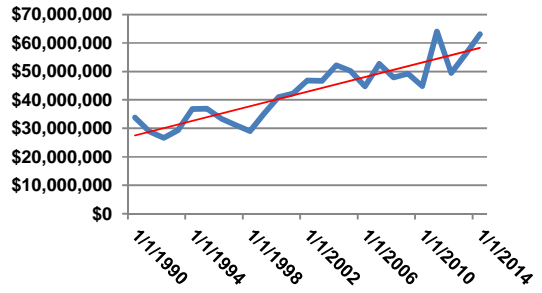
Chinook Salmon In 2015 \$s



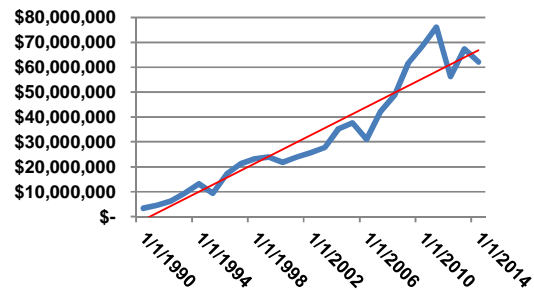
Bigeye Tuna In 2015 \$s



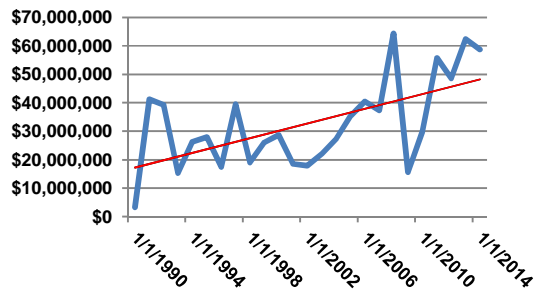
Pacific Oyster In 2015 \$s

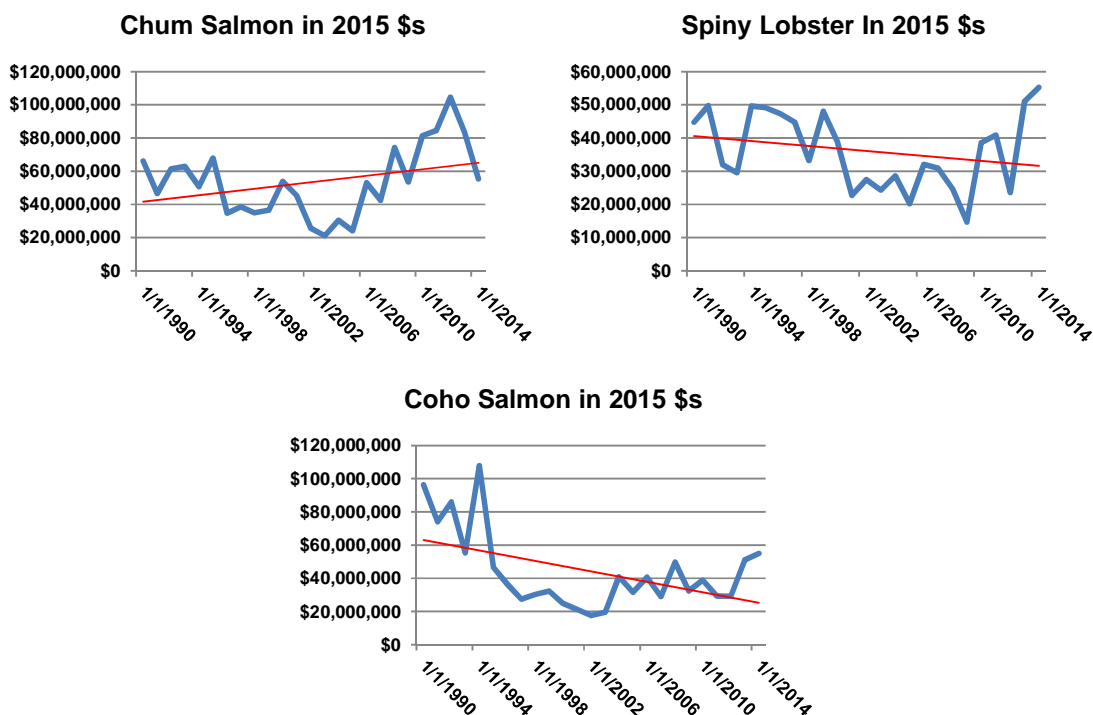


Geoduck In 2015 \$s



Pacific Whiting In 2015 \$s





The red line is a linear trend line based on the inflation corrected values of the landings for the twenty five years between 1990 and 2014. In some cases (i.e. Bigeye Tuna, Pacific Oysters, Geoducks) any five year period would have a similar trend line. In others (Chum Salmon, Spiny Lobster, Coho Salmon) a particular five year interval could be trending up, down or remaining level.

Of the top twenty-five fisheries twelve are trending up, eleven are trending down, and two are essentially level over the last twenty five years. This is particularly interesting in light of the NOAA/NMFS observation that, thanks to that agency’s science-based fisheries management framework established under the Magnuson Stevens Act, everything’s coming up roses. That seems to be true, at least over the last twenty five years, in just under half of our most valuable fisheries.

Fishery	Status	Primary Management	25 Year Trend	5 year Trend
American Lobster	Mixed status	Federal/State	Up	Up
Sea Scallop	Not overfished and not subject to overfishing	Federal	Up	Down
Alaskan Pollock	Not subject to overfishing.	Federal	Down	Up
Sockeye Salmon	N/A - Different Stocks Have Different Status	Federal/State	Down	Up
Brown Shrimp	Not overfished and not subject to overfishing	Federal/State	Down	Up
White Shrimp	Not overfished and not subject to overfishing	Federal/State	Down	Up
Dungeness Crab	N/A	State	Up	Up
Blue Crab	N/A	State	Flat	Down
Eastern Oyster	N/A - In Large Part Cultured	State	Down	Up
Pacific Cod	Not overfished and not subject to overfishing	Federal	Up	Down
Snow crab	Not overfished and not subject to overfishing	Federal	Down	Up
Pacific Halibut	Not overfished	Federal/State	Up	Down
Menhaden	Not overfished and not subject to overfishing	State	Down	Up
Sablefish	Not overfished and not subject to overfishing	Federal/State	Flat	Down
Pink Salmon	N/A - Different Stocks Have Different Status	Federal/State	Up	Flat
King Crab	not overfished	Federal/State	Down	Down
California Squid	Not applicable	State	Up	Down
Chinook Salmon	N/A - Different Stocks Have Different Status	Federal	Down	Up
Bigeye Tuna	Not overfished	Federal/International	Up	Up
Pacific Oyster	N/A - In Large Part Cultured	State	Up	Up
Geoduck	N/A - In Large Part Cultured	State	Up	Down
Pacific Whiting	Not overfished, and is not subject to overfishing	Federal	Up	Up
Chum Salmon	N/A - Different Stocks Have Different Status	Federal/State	Up	Down
Spiny Lobster	Not subject to overfishing	Federal	Down	Up
Coho Salmon	N/A - Different Stocks Have Different Status	Federal/State	Down	Up

If the retrospective examination is limited to the last five years, the adjusted values of nine of the twenty-five fisheries are tending downwards, fifteen are improving and one is flat. This would seem to indicate that in recent years things are getting better for the commercial fishing industry. However, as the downs and ups and the ups and downs in well over half of the selected fisheries indicate, it isn't either that simple or that positive.

The table below compares the adjusted values of the 2014 landings in particular fisheries with the highest adjusted values over the last twenty-five years for that fishery.

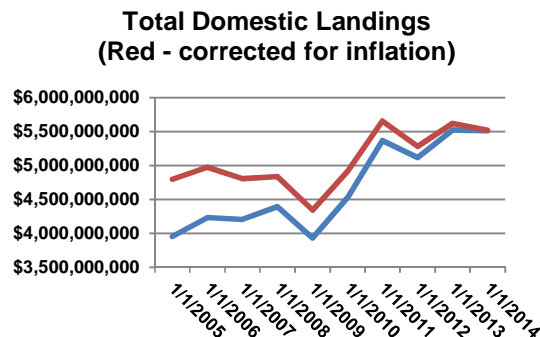
Fishery	2014 Adjusted Value	Highest Adjusted Value	Year of Highest Value	2014 Value as % of Highest
American Lobster	\$567,886,897	\$567,886,897	2014	100.0%
Eastern Oyster	\$181,315,858	\$181,315,858	2014	100.0%
Bigeye Tuna	\$67,671,331	\$67,671,331	2014	100.0%
Spiny Lobster	\$55,287,158	\$55,287,158	2014	100.0%
Pacific Oyster	\$63,025,498	\$64,053,398	2011	98.4%
California Squid	\$72,976,123	\$77,347,865	2010	94.3%
Pacific Whiting	\$58,688,406	\$62,381,898	2014	94.1%
Blue Crab	\$208,020,090	\$243,851,124	1995	85.3%
Dungeness Crab	\$211,775,275	\$257,845,624	2013	82.1%
Geoduck	\$62,091,446	\$76,059,729	2011	81.6%
Chinook Salmon	\$71,059,440	\$90,792,942	1990	78.3%
Sea Scallop	\$424,904,332	\$616,588,089	2011	68.9%
White Shrimp	\$265,995,360	\$407,634,447	2000	65.3%
Alaskan Pollock	\$400,283,681	\$642,290,882	1992	62.3%
Menhaden	\$114,142,895	\$192,766,643	1994	59.2%
Brown Shrimp	\$307,149,085	\$519,536,774	2000	59.1%
Chum Salmon	\$55,398,712	\$104,499,491	2014	53.0%
Pacific Cod	\$153,877,896	\$301,937,937	2008	51.0%
Coho Salmon	\$54,922,361	\$108,018,680	1994	50.8%
Sablefish	\$110,791,110	\$237,657,378	1997	46.6%
Sockeye Salmon	\$349,802,773	\$751,245,784	1990	46.6%
Pacific Halibut	\$114,909,993	\$259,531,315	2007	44.3%
Snow Crab	\$115,481,209	\$318,954,418	1994	36.2%
King Crab	\$85,672,506	\$268,976,183	1990	31.9%
Pink Salmon	\$86,154,476	\$276,398,953	2013	31.2%

Some fisheries are at or near all-time highs, but for each fishery that is, another has landings that are from one-third to two-thirds of what they were at their highest level.

How are total commercial landings doing?

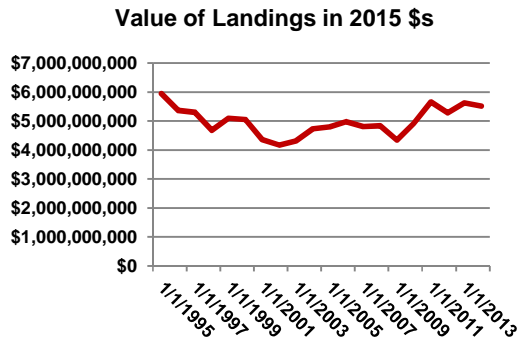
In the recently released NOAA/NMFS **Fisheries Economics of the U.S. – 2014** the time period chosen to illustrate the agency's effectiveness at managing fisheries was from 2005 to 2014. The total landings values presented were not adjusted for inflation.

Using nominal dollars, as NOAA/NMFS did, in the chart below the value of total landings is shown by the blue line. The red line represents the value of those landings after being adjusted for inflation.



Using total landings values that disregard the effects of inflation show an increase of over \$1.5 billion from 2005 to 2014, an impressive level of growth. But correcting for inflation, the increase is \$700 million, a significant gain in the value of landings over the period in question, but less than half as impressive as it is without the inflation adjustment that NOAA/NMFS omitted.

But what happens when we adjust for inflation and look farther back?

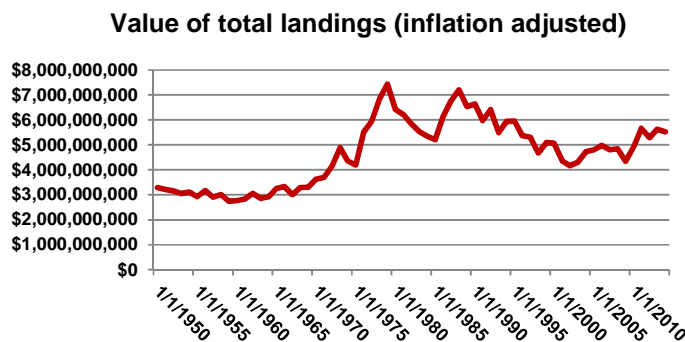


If we go back twenty years we see a significantly different picture. The 2011 “high” isn’t really a high at all and in a twenty year context it seems as if over the last ten years our fisheries – or at least some of them – weren’t really producing maximum returns to the fishermen but simply returning to levels they were at twenty + years ago. And most unfortunately, recent indications are that it hasn’t been a sustained recovery, with a decline of over \$100 million in the adjusted value of landings since 2011.

The average inflation adjusted value of total landings over the last thirty years was \$5.4 billion. The average was \$5.9 billion for the period 1985 to 1999 and was \$4.9 billion from 2000 to 2014. That’s a decrease in adjusted value of almost 20%.

Adjusted Value		Adjusted Value		Adjusted Value	
1985	\$5,197,232,998	1995	\$5,943,111,246	2005	\$4,796,835,314
1986	\$6,134,693,048	1996	\$5,365,327,003	2006	\$4,974,218,464
1987	\$6,754,495,948	1997	\$5,303,715,697	2007	\$4,805,317,472
1988	\$7,191,421,303	1998	\$4,672,110,578	2008	\$4,839,330,739
1989	\$6,535,146,604	1999	\$5,091,537,269	2009	\$4,342,668,823
1990	\$6,637,504,298	2000	\$5,057,500,477	2010	\$4,917,624,601
1991	\$5,976,241,988	2001	\$4,349,609,513	2011	\$5,658,862,948
1992	\$6,415,980,071	2002	\$4,168,472,038	2012	\$5,282,703,063
1993	\$5,492,639,028	2003	\$4,311,681,696	2013	\$5,621,015,196
1994	\$5,932,786,147	2004	\$4,729,946,261	2014	\$5,518,506,581

NOAA/NMFS has made landings data available back to 1950. The inflation adjusted values going back until then are plotted below.



The above chart is particularly important in light of the NOAA/NMFS budget for Fisheries Science and Management, which was over \$500 million for 2016. It’s pretty difficult to look at the above graph without questioning what it is that the U.S. taxpayers are paying a half a billion

dollars a year for. And when the state that half of our most valuable twenty-five fisheries are in is considered, with eleven trending downward and two stagnant over the last twenty-five years, the questions should probably become a little more pointed.

On face value it's difficult to read all of the self-congratulatory material that NOAA/NMFS has been producing without feeling optimistic (and I suspect that it's been designed to engender those warm and fuzzy feelings), but looking at that material in a different context, perhaps from the perspective of the people who are invested in our fishing communities and have a longer time frame than the average appointed or elected official, it's clear that revenues in half of our important fisheries are declining, as are total revenues. In this context, and in spite of NOAA/NMFS assurances to the otherwise, more of us should be asking what is there to feel optimistic about, and most importantly, what are taxpayers actually buying with their fisheries research/management dollars?

Become your own statistician – As I wrote up above, NOAA/NMFS tracks the landings in over 400 fisheries every year. The web-accessible database has the weight (in pounds and metric tons) and the across the dock nominal value (the value not adjusted for inflation) of each of those fisheries going back to 1950. To access the database go to the **Annual Commercial Landing Statistics** page at <https://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/annual-landings/index>, and click on the “Species Locator” button. This will take you to a page with a window in which you enter the “official” name of the fishery you are interested in. (Be aware that the database only returns information if the names are exactly what they are called in the database. For instance, if you enter “sea scallops” or “scallops, sea” you aren't going to get a return. You must enter “scallop, sea” or just enter “scallop” and a drop down menu will give you a choice of one of eight types of scallops. If you are looking for sea scallop data click on “scallop, sea,” click on “Return” and you'll get to a page where you can define other search parameters (Year Range, Geographical Area – State/Area, and Output Form (either a Table, an ASCII File – PC or an ASCII File - Linux).

I usually request the Table. I then highlight and copy the cells I want and paste them into a Microsoft Excel spreadsheet. (For what I need this is a more convenient way of proceeding than downloading a separate file for each search and importing it into Excel.)

At this point you're on your own. If you have any experience with spreadsheets you'll know what to do – or where to look to find out how. If you don't, find a simple spreadsheet tutorial, or a helpful friend, spouse, co-worker, employee or available teenage Geek. It's not rocket science, or anything close to rocket science, and as I hope I've done a reasonable job of demonstrating to you, there's a lot of information in the free Fish Landings database that isn't all that interesting unless you know how to handle it.

One last thing. For the most part the values of landings in the database aren't all that useful as presented. A dollar back in 1964 was much more valuable than a dollar in 2015; actually that 1964 dollar would buy seven dollars and sixty-four cents worth of 2015 products. There are dozens of inflation calculators available on the Internet. Chose one, enter the year and the amount you want to convert and the year which you want to convert it to and it will do the conversion. This gets really cumbersome if you are doing a bunch of conversions. If that's the case, just locate a table of conversion factors – for this FishNet I used the Consumer Price Index or CPI. A table with CPI conversion factors from 1774 to 2026 (the last years' worth of factors are estimated) is at <http://liberalarts.oregonstate.edu/sites/liberalarts.oregonstate.edu/files/polisci/faculty-research/sahr/inflation-conversion/pdf/cv2015.pdf>

Shark Fin Trade Elimination Act of 2016

07/02/16

This ill-advised proposed federal legislation would have no impact on shark finning - or the lack thereof - by domestic fishermen. What it would have would be a significant negative economic impact on domestic fishermen who legally catch and land sharks, prohibiting the sale of the fins of those legally caught and landed sharks.

Please take the time to contact your Senators offices and let them know that the legislation will have no impact of shark conservation and will have no impact on shark finning by U.S. fishermen. All it will do is add another unwarranted economic burden to our industry to no purpose other than allowing a handful of ENGOS to pretend that they are once again saving the oceans from commercial fishing.

Thanks,
Nils



www.gardenstateseafood.org
Gregory P. DiDomenico, Executive Director
gregdi@voicenet.com
609-675-0202
June 23, 2016

The Garden State Seafood Association strongly opposes the “Shark Fin Trade Elimination Act of 2016”

Finning of sharks (the process of removing fins at sea and discarding the shark) is already illegal in the U.S. and Garden State Seafood Association (GSSA) supports that law. However, there is a direct federal allowance for the sale and possession of legally-harvested shark fins supported by NOAA, the U.S. Congress and the Obama Administration. Any effort to overturn this allowance at the federal level is simply not based on fact.

The Shark Conservation Act of 2010 (SCA) already prohibits any person from removing any of the fins of a shark at sea and discarding its body. The GSSA supports this law and existing associated exemptions for spiny dogfish and smooth dogfish sharks.

The “Shark Fin Trade Elimination Act of 2016” makes it illegal to sell the fins from legally-harvested shark species, including all large coastal sharks, Threshers and Mako. One result of this requirement may include the fins of these sharks being removed on shore and needlessly thrown away.

This legislation represents a shameful waste of food and results in decreased revenues to New Jersey fishermen and their families. It will harm commercial fisherman, their families, and coastal communities around the Nation who participate in legal shark fisheries. And since sharks are already sustainably managed by NOAA, the legislation adds no conservation benefit to shark resources.

U.S. fisheries management has a strong conservation ethic with respect to our shark fisheries. The sharks we harvest are sustainably managed by NOAA, the meat is consumed throughout the U.S. and around the world, and the fins associated with these legally-harvested sharks are desired by overseas markets for their food and cultural significance.

Support U.S. fishermen and U.S fisheries management by OPPOSING the Shark Fin Trade Elimination At of 2016

The GSSA is comprised of commercial fishermen, shore-based seafood processors, commercial dock facilities, seafood markets and restaurants, and various NJ-based commercial fishing industry support businesses. The GSSA membership represents every major port in the State, harvesting approximately \$100 million dollars worth of seafood products annually, supporting 2000 jobs, and contributing significantly to the coastal economy of the State of New Jersey.

Déjà vu all over again

07/14/16

Back in 2002, when it was determined that the creation of things called marine protected areas (MPAs) might be sold politically as a mechanism for “saving the oceans,” the people at the Pew Charitable Trusts, the Conservation Law Foundation and several other ENGOs hired a marketing firm, Edge Research, to demonstrate that New Englanders and Maritime Canadians would be firmly behind using them to put even more fishermen out of work. They used what they termed “public opinion polling” to demonstrate this. I devoted a couple of thousand words to a critique of this exercise, and that FishNet is available at <http://www.fishingnj.org/netusa21.htm>. Replies from Sara Clark Stuart at the Conservation Law Foundation and from Lisa Dropkin at Edge Research (to which I added additional comments) are at

<http://www.fishnet-usa.com/AnnotatedDropkinMemo.pdf>.

Well, borrowing from a line made popular by the late Heather O’Rourke in the movie Poltergeist II, they’re back! Only this time they’re trying to convince the Obama White House that two areas off the New England coast are deserving of protection in perpetuity by being designated as National Monuments.

Needless to say, their campaign to do this comes with the expected major PR blast, getting as much mileage as possible from what appears to be saturation-level social media manipulation and another Edge Research “strategic marketing survey.”

One of the more clever things in this most recent bout of “market research” was the lumping of mining, drilling and fishing together. This seems to me to be tantamount to asking people how they feel about crimes committed by “murderers, rapists and shop lifters.” After the recent (and very possibly still ongoing) BP disaster in the Gulf of Mexico we all have a pretty accurate idea of what the potential downsides are to drilling in the oceans, and who hasn’t seen pictures of huge open pit mines (if you are one of the few who hasn’t, Google “open pit mine” and click on “images”)? Not in our ocean, huh?

But in U.S. waters can anyone make a rational comparison of the potential impacts of mining, drilling and fishing? Is there any comparison between the fallout from the gross negligence practiced by our federal regulators and the offshore oil industry and a fleet of fishing boats working sustainably to provide our consumers with healthful seafood? Can tearing down mountains and creating holes that rival the Grand Canyon be equated with the “damage” done by hooks and nets? Not in the real world, for sure. But in the fantasy ocean world that mega-foundation millions are being spent to create there’s apparently no difference – or the people who have been bought by those foundation’s millions want everyone to believe there isn’t.

Regardless of how respondents feel about the relative impacts of fishing, drilling and mining, the pollsters have forced them to approve or disapprove of all three of them as a group. How many respondents were ok with fishing but objected to a repeat of the Macondo disaster or a huge minerals extraction operation offshore of their beaches? Remember that fishing has been a part of the New England heritage since colonial times. But the “pollsters” at Edge Research found a way to mute the voices of people who felt that way.

In a memo presenting their survey results and their conclusions, the Edge Research pollsters write “*while there is currently no drilling and mining in these areas, there is some commercial fishing activity. Protecting these areas would prohibit the fishing activity in these limited areas and could result in a small adverse economic impact on commercial fishing.*” It’s axiomatic but it probably doesn’t hurt to state that what is “*a small adverse economic impact*” to the people at Edge Research, at Pew, at the Conservation Law Foundation or at any of the other involved organizations with their multi-million dollar (or more) budgets, people who can with clear conscience equate the impacts of fishing with the impacts of mining and drilling, is unquestionably the difference between staying in business and bankruptcy to dozens of small New England businesses.* But the drillers will keep on drilling and the miners will keep on digging, just like always.

Should our federal fisheries policy to be a result of manipulations by professional pollsters working for anti-fishing ENGOs and the foundations that support them? Should the fisheries that our seafood lovers depend on be controlled by politically spawned dictates from the White House or by a science-based system that depends on input from fishermen and other stakeholders?

This isn't just a New England problem. This allows any anti-fishing group with enough dollars and enough political clout to ride roughshod over a fisheries management system that, while not yet perfect, is something that we've all invested a tremendous amount of effort into improving.

New York Congressman Lee Zeldin has prepared legislation that, while not a permanent fix, will put the Foundation/ENGO plans on ice for a year. It passed in the House on Wednesday night. Our next hurdle is the Senate. If it becomes law it will allow us time to work on a permanent solution, so call your Senators' offices and let them know how important this issue is to science based fisheries management and to the future of fishing in U.S. waters.

Thanks for your attention,
Nils Stolpe

*For an indication of what might be behind that “so what” financial attitude, below are listed the salaries for the most highly paid employee of each of the organizations that are members of the Protect New England’s Ocean Treasures Coalition (all from the most current IRS Forms 990 from Guidestar):

	Position	Organization	Salary	Perks	Total
Rebecca Rimel	Exec Director	Pew Trusts	\$1,042,946	\$50,812	\$1,093,758
Neera Tandan	President	Center for American Progress	\$301,274	\$38,912	\$340,186
Peter Shelley	Interim President	Conservation Law Foundation	\$116,767	\$13,253	\$130,020
Donnell Van Nopen	President	Earthjustice	\$380,377	\$48,578	\$428,955
Margie Alt	Exec Director (1/2 time)	Environment America	\$53,129	\$3,932	\$57,061
Denise Armstrong	Exec VP	Mystic Aquarium	\$217,080	\$20,869	\$237,949
Tracie Winbigler	Chief Operations Officer	National Geographic Society	\$664,498	\$16,560	\$681,058
Larry J. Schweiger	President	National Wildlife Federation	\$339,450	\$26,458	\$365,908
Frances Beinecke	President	Natural Resources Defense Council	\$383,324	\$52,408	\$435,732
Suellen m. Peluso	VP Development	New England Aquarium	\$203,099	\$13,046	\$216,145
Andreas Merkel	CEO	Ocean Conservancy	\$333,482	\$33,568	\$367,050
Andrew F. Sharpless	CEO	Oceana	\$301,396	\$50,283	\$351,679

Pew/Oceana’s latest exercise in crepe hanging
08/12/16

“The United Nations Food and Agriculture Organization (FAO) has today released its report on the state of world fisheries and aquaculture. The flagship SOFIA report, considered a check-up on the world’s fish supplies, has confirmed an alarming trend over the years in falling fish stocks, the result of vast overfishing on a global scale. Oceana regrets the new findings, which place overfished and fully-fished stocks at 89.5% in 2016, compared to around 62-68% in 2000.” (From a Pew/Oceana press release dated July 7, 2016)

Hard as it is to imagine, Pew/Oceana’s latest “the sky is falling” attempt at mobilizing the forces of righteousness to avoid the end of the world’s oceans via rampant overfishing took some startling liberties in crafting their latest call to arms (i.e. *make a donation to Oceana*). In their attempt to convince potential donors that oceanic doom and gloom had already arrived, the people at Pew/Oceana tried to conflate “overfished” and “fully fished” fish stocks, illogically putting them in the same category, allowing their use of the alarming seeming (to the average unsophisticated reader) 89.5% figure. *Get out the checkbooks, folks!* But, with a nod to Paul Harvey, how about the rest of the story?

From the FAO report (<http://www.fao.org/3/a-i5555e.pdf>) on Pg. 5, “*fully fished stocks accounted for 58.1 percent* (of the world’s capture fisheries) *and underfished stocks 10.5 percent.*” In other words, just under 70% of the world’s fish stocks aren’t overfished and just over 30% are. But that’s nowhere nearly as dismal-sounding as Pew/Oceana’s almost 90% either being overfished or not underfished – though it’s certainly the way that any group that isn’t crisis-oriented would present the data.

Consider the FAO figures in a different context. Obviously there are three classes of drivers; drivers who drive below the speed limit, drivers who drive at the speed limit and drivers who drive over the speed limit. Let’s assume that 10.5% of drivers are in the first group, 58.1% are in the second and 31.4% are in the third. And then let’s assume that you wanted to make it appear as if speeding was as much of a problem as possible. Would you write that just under 70% of drivers drove at or below the speed limit or that almost 90% of drivers drove at or above the speed limit? Both are correct, but in the first case the focus is on drivers who are operating their vehicles lawfully and in the second the focus has been shifted to drivers who are speeding.

Is there any difference between the machinations that the people at Pew/Oceana are using to argue that the world’s fisheries are in really bad shape due to fishing/overfishing and those of some other group using a different spin based on the same illogical logic ?

It should come as a surprise to no one that with a burgeoning world population of well over seven billion people – in 2000 it was 6.1 billion, in 2016 it was 7.4 billion - there’s a tremendous and increasing demand for protein, that a significant part of that protein comes from the world’s oceans, and that sustainably harvested wild fish and shellfish provide one of the most environmentally benign protein sources. Bearing in mind that “fully fished” stocks are sustainable (i.e. they can be harvested at that level *ad infinitum*), it seems almost impossible to understand how the Pew/Oceana people could lump overharvested and sustainably harvested stocks together except for the fact that proclaiming that almost 90% of fish stocks are being fully fished or overfished is going to get a lot more attention than that 30% of fish stocks are being overfished.

Or perhaps the bottom line is they are anti-fishing, whether it’s sustainable fishing or not.

If the FAO is anywhere near correct with their figures, having 30% of the world’s fish stocks overfished seems enough reason for a continuing focus on reducing it. Evidently the people at Pew/Oceana think that lily needs a few more layers of gold, but that seems a pretty shoddy way of getting it. It seems that they must also have an awfully low opinion of the level of comprehension of the people who pay any attention to their Chicken Little pronouncements, but that’s a whole ‘nother story.

And always keep in mind that fisheries will be classified as “overfished” if there aren’t enough fish for any reason, as in the water has become too warm. “Overfishing” can be taking place in a fishery with landings far below what the stock in a healthy environment would support. This

is a misnomer whose use is perpetuated by people and organizations with interests that extend only to controlling – or eliminating – fishing, an effective way of diverting attention away from a whole bunch of environmental affronts inflicted on our marine and fresh waters.

Finally, I can't close without mentioning that last year 91% of federally managed U.S. fish stocks were not being overfished. Adopting the Pew/Oceana analytical framework, I guess that would become something along the lines of “*in the United States 100% of all fish stocks are either overfished or are being fished sustainably.*” Now that's something to keep you awake at night, isn't it?

This is a preface to **When it comes to fish and fishing Huffington Post is all wet** which went to half of the regular subscribers yesterday. On August 29 blogger Dana Ellis Hunnes posted another blog, **Cherry Picking Science**, in which she attempted to explain comments that her original blog generated, which she dramatically referred to as attacks “*by lobbyists from groups who are threatened by my message.*” In her follow-up post she wrote in an explanation of how she developed her “*thoughtful argument*” (her words again) “*I read the literature. I watch the TED conferences.*” For those not in the know, TED stands for Technology, **Entertainment** (my emphasis) and Design. (For some balance see Megan Hustad's op-ed column **The Church of TED** in the NY Times http://www.nytimes.com/2015/03/15/opinion/sunday/the-church-of-ted.html?_r=0. The following is excerpted from Ms. Hustad's column.)

“I grew up among Christian evangelicals and I recognize the cadences of missionary zeal when I hear them. TED, with its airy promises, sounds a lot like a secular religion. And while it's not exactly fair to say that the conference series and web video function like an organized church, understanding the parallel structures is useful for conversations about faith — and how susceptible we humans remain. The TED style, with its promise of progress, is as manipulative as the orthodoxies it is intended to upset.”

A great TED talk is reminiscent of a tent revival sermon. There's the gathering of the curious and the hungry. Then a persistent human problem is introduced, one that, as the speaker gently explains, has deeper roots and wider implications than most listeners are prepared to admit. Once everyone has been confronted with this evidence of entropy, contemplated life's fragility and the elusiveness of inner peace, a decision is called for: Will you remain complacent, or change? Jesus said to the crowds, “Whoever has ears, let him hear.” A skilled tent revivalist can twist those words to suggest that simply showing up to listen makes you part of the solution.”

Ms. Hunnes' blog is the first instance I am aware of where a credentialed scientist used as justification for her or his arguments whatever she or he had gleaned from TED. TED talks seem to be closer to entertainment than to real science, but watching them is a lot easier and unquestionably a lot more entertaining than getting into the actual scientific literature, dry and informative as it is.

Ms. Hunnes ended her blog with the words “*I promise to evaluate the facts and disseminate what I perceive as a scientific truth.*”

I've always thought it was preferable to expose readers to the “state of the art” of relevant research from referenced sources (as I did below) and assume that they are capable of evaluating themselves what they read. Evidently Ms. Hunnes doesn't agree with me. And I must admit that all of those sometimes conflicting ideas can be somewhat confusing. But is that a reason for anyone to take her, the TED talkers' or my word for what's actually going on? I hope not.

As far as Ms. Hunnes, or anyone else, perceiving “*scientific truth,*” that's a level of hubris that I can't relate to, let alone comment on.

When it comes to fish and fishing Huffington Post is all wet

Nils E. Stolpe/FishNet USA
08/14/16

Last week Dana Ellis Hunnes, a Huffington Post blogger, managed to package in just 700 words more false, misleading, distorted and just plain wrong information about fish and seafood production than I've ever seen in works with far more words by professional anti-fishing activists. Addressing her inaccuracies on a point by point basis:

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- *Sustainable Fish Do Not Exist*

Starting out with her title, the Merriam-Webster definition of sustainable is “*able to be used without being completely used up or destroyed, involving methods that do not completely use up or destroy natural resources, able to last or continue for a long time.*” The concept of renewable resources revolves around the sustainable utilization of those resources.

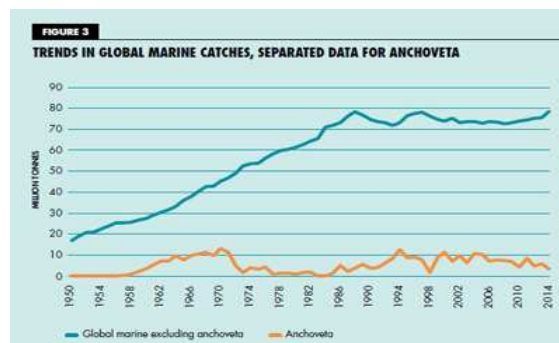
In 2014, according to the United Nation’s Food and Agriculture Organization, the United States was ranked number three in the production of its capture fisheries in the world (behind China and Indonesia). The federal fisheries management system, as set forth in the Magnuson-Stevens Fishery Conservation and Management Act, has sustainability as its primary focus. Overfished fish stocks are those that are harvested at an unsustainable level and the Act demands that fishing effort on overfished stocks be reduced to the level of sustainability (also known as the maximum sustainable yield or MSY). In 2015 only nine percent of U.S. fish stocks were being fished at an unsustainable level -http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/.

Note that as defined in the Magnuson Act “overfished” does not necessarily mean that there has been too much fishing on a stock of fish, it means that it’s been determined that, regardless of the cause, there are not enough fish in the stock to yield MSY.

By any definition of sustainability that is used (except for Ms. Hunnes’), nine out of ten of our fisheries, and more than 90% of the fish that we harvest, are inarguably sustainable.

- *In fact, the United Nations Environmental Programme and Food and Agriculture Organization, report that we are running out of fish. We have overfished or overexploited more than 80% of our fish stocks.*

The Food and Agriculture Organization of the United Nations (FAO) in its 2016 **The State of World Fisheries and Aquaculture** reported “fully fished stocks accounted for 58.1 percent (of the world’s capture fisheries) and underfished stocks 10.5 percent.” (<http://www.fao.org/3/a-i5555e.pdf> on Pg. 5). Fully fished stocks are those that are being harvested at their MSY. So, in spite of what Ms. Hunnes wrote in the Huffington Post, almost 70% of the fish stocks in the world are being harvested sustainably. That is a far cry from “running out of fish.” As the graph below (from Pg. 13 of the same FAO report cited above) demonstrates, the production of the world’s capture fisheries has been level since the late 1980s. I could find nothing on the FAO website that even hinted that there was any indication that we were “running out of fish.”



- *In fact, a number of the species have been declared as critically endangered and threatened with extinction by the International Union on the Conservation of Nature (IUCN).*

In spite of IUCN declarations, in the U.S. Fish and Wildlife Service **Environmental Conservation Online System**, listing animal species that are Endangered or Threatened in the U.S. and abroad (<http://preview.tinyurl.com/z13qgk3>), the only fish listed that support commercial fisheries are geographically distinct groups of salmon (threatened or endangered because of anthropogenic impacts on their spawning grounds, not fishing – see note above). None of those salmon species are considered endangered or threatened throughout their range. Some species of sturgeon are listed throughout their range as are some distinct population segments of others, but no commercial sturgeon fisheries are permitted in the U.S. The same for sawfish. The rest of the listed threatened or endangered species are species of no commercial interest.

- *And, while we may believe that consuming farmed fish is a more sustainable and ecological choice....*

Any definition of “sustainable” that I’m aware of indicates that it’s an all or nothing term. Something is either utilized sustainably or it isn’t. Ms. Hunnes’ use of “more sustainable” is linguistically puzzling. “Ecological” relates to or is concerned with the study

of organisms in relation to each other and to their living and non-living environment. The idea of applying the term to a dietary choice is even more linguistically puzzling than “more sustainable.”

But, the niceties of effective communications aside, there are numerous ways to grow fish and to catch fish. Some are – or should be – unacceptable because of the damage they do to the environment. It’s the role of government to insure that these are not permitted, and in the U.S. they aren’t. Other methods of fish production in the U.S. and in much of the rest of the world are environmentally acceptable and are permitted, though highly regulated.

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- *It takes approximately five pounds of wild small fish such as herring, menhaden, or anchovies to create one pound of salmon, a predatory fish. The proportion of the healthy omega-3 fatty acids found in salmon is lower pound-for-pound than it would be simply in the smaller fish.*

This is a generalization that, like many generalizations, doesn’t hold up under scrutiny. The DHA and EPA (respectively docosahexaenoic acid and eicosapentaenoic acid, fish-derived omega 3 fatty acids) content of the flesh of particular fish as determined by the US Departments of Agriculture and Health and Human Services are below.

Fish, salmon, Atlantic, farmed, cooked, dry heat	2.147 grams DHA and EPA/100 grams
Fish, anchovy, European, raw	1.449 g/100g
Fish, anchovy, European, canned in oil, drained solids	2.055 g/100g
Fish, herring, Atlantic, cooked, dry heat	2.014 g/100 g

(https://health.gov/dietaryguidelines/dga2005/report/html/table_g2_adda2.htm)

I couldn’t find equivalent data for menhaden, and I sincerely hope that anyone reading this never has to dine on them, but because of similar diets their fatty acid content is almost certainly in line with that of Atlantic herring.

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- *Current statistical analyses and estimates indicate that in a “business as usual” world, we will run out of the fish we eat by 2048*

In 2006 Canadian fisheries researcher Boris Worm and a group of scientists published a paper in the journal Science predicting that the continuation of present trends would mean that all of the big fish in the oceans would be gone by 2048. Needless to say, this prediction generated a media storm and much scientific controversy, which the media ignored. Unfortunately, a casual web search will provide links to the dire prediction that Ms. Hunnes focused on.

But she was off by at least a decade with what she refers to as “current statistical analyses.” In fact, in 2009 Worm and University of Washington Fisheries Professor Ray Hilborn and a group of other researchers published a follow-up paper that soundly rejected the 2006 prediction of the imminent destruction of the world’s fisheries.

(<http://www.nature.com/news/2009/090730/full/news.2009.751.html>)

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- *But the fact of the matter is, it’s near impossible to grow or to take a fish in a sustainable way. In a way, nearly every fish humans eat is threatened with extinction.*

It’s hard to imagine in exactly what way that would be, and unfortunately Ms. Hunnes didn’t share her insights on this with her readers. She could have just as easily written *in a way, nearly every cow* (or pig or goat or string bean or ear of corn) *humans eat is threatened with extinction*. The whole point of sustainable food production is to not eat more than is being produced. That covers a very large proportion of our seafood and that proportion increases every year.

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- *Never order bluefin tuna. It would be akin to eating a rhinoceros.*

According to the USFWS bluefin tuna are not classified as endangered or threatened – in spite of an ongoing campaign by anti-fishing zealots to have them listed as such. Accordingly, if it’s legally caught and legally sold, ordering bluefin tuna is akin to or-

dering a beef steak, though the tuna is much healthier. But in keeping with the old adage “even a blind squirrel finds the occasional acorn,” Ms Hunnes was right about rhinoceroses. They definitely shouldn’t be eaten.

- *If you are going to eat fish, consume the small ones. The anchovies, the herring; the bottom of the food chain.*

The bottom of the ocean food chain is composed of plants, almost exclusively algae and almost exclusively planktonic. The “small ones” Ms. Hunnes is referring to are a couple of steps up the food chain from there.

- *Skip that fish oil. You don’t need it, there’s no real benefit, and you can get those healthy oils from other foods including algal oils, flaxseed, seeds and nuts.*

The pros and cons of dietary fish oil, or more precisely of omega 3 fatty acids, and of the relative health benefits of omega 3s produced by oceanic algae and found in oceanic fish vs the health benefits of omega 3s produced by terrestrial plants, has been going on for more than a decade. There’s nothing approaching a scientific consensus as yet, except perhaps in Ms. Hunnes’ mind. For the other side of the argument take a look at **The Best Omega-3 Supplement: Flaxseed Oil vs. Fish Oil** on the University Health News website at <http://universityhealthnews.com/daily/nutrition/the-best-omega-3-supplement-flaxseed-oil-vs-fish-oil/>.

And from the Tufts University Health and Nutrition Newsletter (January 2012 Issue)

Question: *As a vegetarian, can I get enough omega-3 from walnuts, flax seed, canola oil and trace amounts in other foods?*

Answer: *The omega-3 fatty acids found in plant foods (ALA) have their own health benefits, but they are not the same as the omega-3s found in fish (DHA and EPA) that have been associated with heart-health benefits. According to Alice H. Lichtenstein, DSc, director of Tufts’ HNRCA Cardiovascular Nutrition Laboratory, while your body does convert ALA into DHA/EPA, studies have found that this conversion is very inefficient. Only between 3% and 5% of the ALA gets converted into EPA and as little as 0.5% to 9% into DHA. If you’re concerned about getting enough of the omega-3s found in fish, it is possible to buy vegetarian supplements that derive DHA from algae.*

http://www.nutritionletter.tufts.edu/issues/8_1/ask-experts/ask-tufts-experts_1173-1.html

- *Confirm that it is not an endangered species simply renamed for marketing purposes.*

The federal Food and Drug Administration has a list of common and scientific names of fish and shellfish called the **Seafood List**, which is regularly updated. More properly the **Guide to Acceptable Market Names for Seafood**, it’s available at <http://preview.tinyurl.com/jaffa33>, it’s quite extensive, and reputable seafood dealers and restaurateurs adhere to its content. But above and beyond the **Seafood List**, the probability of an endangered – or a threatened – species making its way to any retail markets or restaurants which don’t follow federal and state laws is remote. The probability of buying an endangered species of fish or shellfish from a fish market would be approaching the probability of buying a rhinoceros roast from a butcher.

There has been a problem with misidentified species, but this involves either mislabeling a less expensive product as a more expensive one or concealing where the seafood originated to circumvent import restrictions. Curtailing this misidentification was recently made a federal priority (see <http://www.iuufishing.noaa.gov/>).

In sum it appears as if Ms. Hunnes is not a fan of seafood in the human diet. And she appears to have fully embraced every doom and gloom report she stumbled upon in researching this blog, selecting the worst of the worst. But by looking just the slightest bit behind the headlines she would have found that much of the worst that she has embraced is not justified. I would think that her readers deserve better.

With a world population of over seven billion no one who wasn’t suffering from some level of misanthropy could have a problem with 60 percent of our fisheries being fully and sustainably exploited (though they might not look with favor at the 10 percent that aren’t), but somehow Ms. Hunnes insists that there’s no such thing as a sustainable fishery. Perhaps in another blog she’ll explain how she arrived at that conclusion and set the world of fishing and fishery management straight, because an awful lot of people believe in, an awful lot more people depend on and even more people than that both enjoy and benefit from sustainably grown and sustainably harvested fish and shellfish.

“This significant growth in fish consumption has enhanced people’s diets around the world through diversified and nutritious food. In 2013, fish accounted for about 17 percent of the global population’s intake of animal protein and 6.7 percent of all protein consumed” (Pg. 4 of the FAO report cited above). This might be inconsequential to Ms Hunnes and the Huffington Post, but rest assured that to the people who depend on catching, processing, transporting, marketing and consuming these fish it surely isn’t, and no alternative animal protein sources are very likely. Maybe Ms. Hunnes’ and Huffington Post’s plan, like Marie Antoinette’s, is to let them eat cake instead.

Summer Flounder Management – Can it get any worse?
10/05/16

Note: The Magnuson-Stevens Fisheries Conservation and Management Act National Standards Guidelines were just changed (see <http://tinyurl.com/othltbo>) and it appears as if the added flexibility, which fishermen have been asking for since the last reauthorization of the Act, will help to avoid situations such as this in the future.

Summer flounder, also known as fluke, support recreational and commercial fisheries that are among the most important in the mid-Atlantic and southern New England. They have been a mainstay of recreational fishermen either from their own boats or on for-hire vessels, support a large directed commercial fishery, their incidental harvest is important in other fisheries and they are near the top of the list of must-have meals for summer visits to the shore. Hundreds of party and charter boats depend on them for all or for part of their annual incomes, thousands of private boats seek them out every summer, and much of the business bait and tackle shops do every year depends on the fishery. Hundreds of commercial fishing boats target them or take them incidentally in other fisheries

To say that the summer flounder fishery is important to tens of thousands of people from Cape Cod to Cape Hatteras would be an understatement.

In 2010 the summer flounder stock was declared to be rebuilt. Quotas were significantly higher than they had been when the stock was rebuilding.

Management efforts to control fishing mortality in the face of increasing stock abundance and competing demand for fish from both the commercial and recreational sectors continue to evoke the question of “How much fish is enough?” to provide for long-term sustainability. In spite of the numerous controversies, however, by 2010 the fishing mortality on summer flounder had declined to its lowest level in at least 30 years, and summer flounder stock biomass was the highest since the stock assessments began in the 1960s (From **The summer flounder chronicles II: new science, new controversy, 2001–2010**, M. Terciero, Reviews in **Fish Biology and Fisheries**, Dec 2011)

In the summer flounder stock assessment that was done in 2012 it was reported that for the five previous years “*fishing mortality has been retrospectively overestimated*” and that for the six previous years “*SSB (spawning stock biomass) has been retrospectively underestimated.*” Most simply stated, it was decided that there were more summer flounder and that summer flounder fishing mortality had been less than had been previously estimated.

The summer flounder stock assessment has historically exhibited a retrospective pattern of underestimation of F; the causes of this pattern have not been determined. For the last 5 terminal years, however, fishing mortality has been retrospectively overestimated.

The assessment has historically exhibited a retrospective pattern of overestimation of SSB; the causes of this pattern have not been determined. For the last 6 terminal years, however, SSB has been retrospectively underestimated. (Emphasis added)

<http://www.nefsc.noaa.gov/publications/crd/crd1221/crd1221.pdf>, pg 20/21

But in a memo dated 25 July 2016, the Chairman of the Mid-Atlantic Fishery Management Council’s Scientific and Statistical Committee (SSC), wrote “*the revised understanding of the stock status produced by the assessment update indicates **reductions in the estimates of SSB, and increases in the estimates of annual Fs.***” So five years after declaring that the summer flounder stock was at its highest level in half a century it was determined that fishing mortality was greater and there were fewer summer flounder than was previously estimated.

The SSC “*recommended revised 2017-2018 ABCs that reverted to the typical Council risk policy, due to concerns about the status of the summer flounder stock, including the potential for summer flounder to become overfished in the near future.*”

So for next year both the recreational and commercial quotas for summer flounder will be 31% below this year’s levels. This is on the heels of a 27% reduction in the quota this year from what it was in 2016.

Year	Commercial Quota (million pounds)	Recreational Harvest Limit (million pounds)	Total (million pounds)	Change from previous year
2015	11.07	7.38	18.45	+ 5%
2016	8.12	5.42	13.54	- 27%
2017	5.66	3.77	9.43	- 31%

(Updated from <http://www.asmfc.org/uploads/file/55d1f9bdpr28Mid-AtlanticMultyyearSpecs.pdf>)

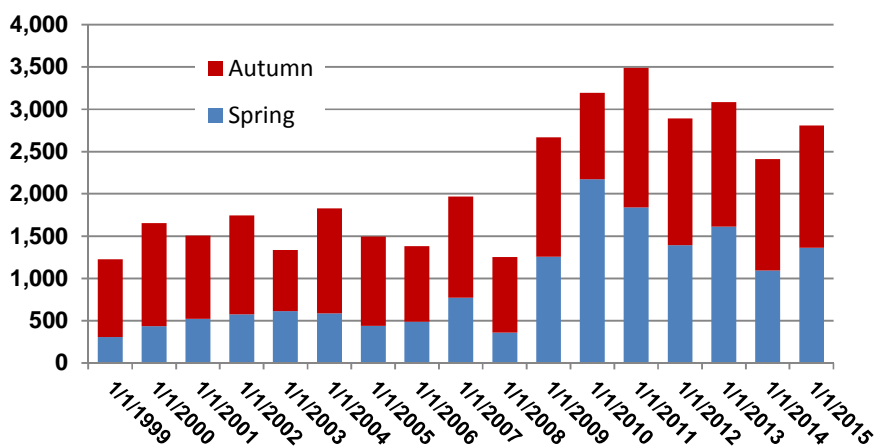
The SSC also reported that “*retrospective patterns were evident in the assessment update that have substantial implications for the reliability of model projections and inferences regarding the status of the stock. The causes of the retrospective pattern are unknown.*”

The summer flounder stock has gone from having the highest biomass in 50 years to being on the verge of overfishing in the five years between 2011 and 2016. While no one seems to know why the management program hadn’t been working, the SSC did come up with several possibilities. These included “*sources of (fishing) mortality that are not fully accounted in the assessment. These could include under-estimation of discards in both the commercial and recreational fisheries and lower estimates of mortality rates applied to the discards than are actually occurring.*”

And summer flounder are not being overfished. The draconian cuts are designed to avoid the possibility of their being overfished.

It kind of makes you wonder in how many years it will be before it’s decided via another retrospective analysis that there are actually more summer flounder and that the fishing mortality is actually lower.

**Summer Flounder Weight (in lbs)
Spring and Autumn Bottom Trawl Survey**



NOAA’s Northeast Fisheries Science Center’s Spring and Autumn Bottom Trawl Surveys – supposedly the “gold standard” in trawl surveys - up until 2015 don’t show any change in abundance that would warrant such a devastating reduction in the summer flounder quota until 2018. (Note that in 2009 the R/V Bigelow replaced the R/V Albatross as the survey vessel, This accounts for the significant increase in the relative biomass).

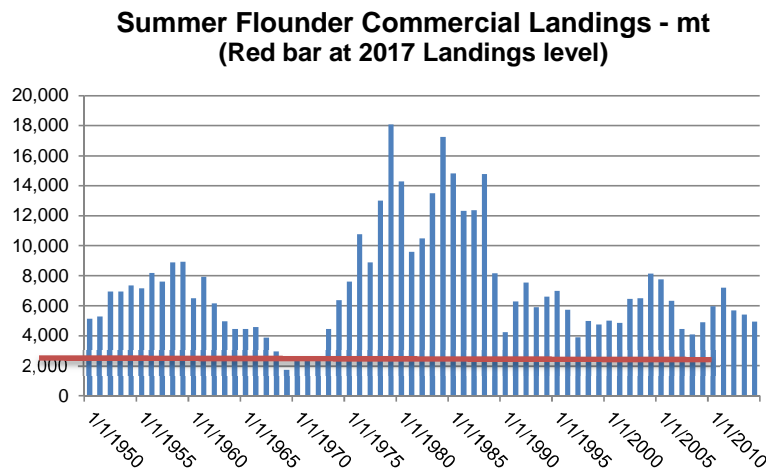
What has it taken for the fisheries managers to get summer flounder landings down to what is almost an all-time low (since 1950 they have only been lower in 1969, 1971 and 1972)? A far from exhaustive review of the public records showed that since 1987, when the **Summer Flounder, Scup and Seabass Fishery Management Plan** was approved by the U. Secretary of Commerce, a series of at least 100 meetings resulted in more than 8,000 typed pages devoted largely (but not exclusively) to summer flounder management. Assuming at least a dozen attendees at each of those meetings, a two day investment of time, travel expenses and etc. by the participants and the cost of writing, editing and distributing those 8,000 plus pages, the cost to the taxpayers must be well into six figures.

Looking back

In 1976, federal management of marine fisheries was virtually non-existent. With the exception of state managed waters, federal activities were limited to supporting a patchwork of fishery-specific treaties governing international waters, which at that time existed only 12 miles off our nation's coasts. A primary impetus of the Magnuson Act was to extend the U.S. exclusive economic zone (EEZ) out to 200 miles and eliminate competition from the foreign fishing fleets off our coasts. (From **The Road to End Overfishing: 35 Years of Magnuson Act - Assistant Administrator for Fisheries Talks about the Cornerstone of Sustainable Fisheries** at <http://www.nmfs.noaa.gov/stories/2011/20110411roadendoverfishing.htm>)

So, with “*virtually non-existent*” management – and the quote above is from the head of the National Marine Fisheries Service - of the summer flounder fishery in twenty-three of the twenty-six years from 1950 (the earliest that commercial landings are available) until 1976, when the Magnuson Act became law, commercial summer flounder landings were higher than they will be in 2017. And back then there were no minimum mesh sizes, no limited access to the fishery, no trip limits, no reporting, in fact not much of anything beyond fishermen catching summer flounder.

Annual summer flounder landings from 1950 to 2014 averaged 7,200 metric tons. The 2017 quota will be a little over one third of that. And all of those scientists and bureaucrats with all of those computer models and all of those opportunities to interact in seaside resorts from Cape Hatteras to Cape Cod didn't see it coming? How can anyone not ask what all of those meetings, all of those pages of reports, all of those salaries and expenses, and especially all of the trouble and aggravation and deprivation inflicted on the fishermen and on those in associated businesses have been for?



And looking forward

How can so many smart and well educated people with access to state of the art resources (including a fifty million dollar, designed for the job, 209' long, state-of-the-art survey vessel) appear to be so befuddled?

Of course there's always the “blame it all on global warming/climate change” explanation. That seems to be a catch all for explaining away any natural phenomenon that isn't understood.

But there's also the fisheries scientists' penchant for automatically assuming that when dealing with a fish stock the only variable at work on that stock is the amount of that species that is killed by fishing.

Natural mortality, referred to as "M," is considered to be a constant in fish stock assessments, and is the sum total of all of the things that will kill the fish other than fishing. Fishing mortality, "F," covers the remaining mortality. So when the scientists and managers estimate that there aren't enough fish in a stock, with natural mortality treated as constant it appears as if it is automatically assumed that fishing mortality is the cause.

Some people, generally either the scientists/managers who are responsible for the management plans or the anti-fishing activists who consider it a really good day when there's a major reduction in quota and a great day when a fishery is closed down, push a "so what, we can't do anything to manage natural mortality" attitude. That is the case today, but if we were really interested in managing fisheries rather than managing fishermen, it wouldn't be.

Let's take a fairly obvious example, the contribution of spiny dogfish to the natural mortality of summer flounder (and other important fish species as well). All one needs are rudimentary observational skills and some significant time on the water to know that spiny dogfish are voracious predators and that there are an awful lot of them on our side of the Atlantic from Cape Hatteras northward.

According to the latest estimates the spiny dogfish SSB (Spawning Stock Biomass) is 371 million pounds, or 168,207 metric tons. Assuming that the total biomass is 2.75 times the SSB (that's the official conversion factor), there are just over 1 billion pounds of spiny dogfish off the Northeast coast (and I'll note here that University of New England researcher James Sulikowski has done satellite tagging work that indicates that there might be significantly more than that (<http://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0103384>)). For the last several years commercial landings of spiny dogfish have hovered around 20 million pounds annually. That's two percent of the total biomass.

"From a practical aspect the spiny dog in the Western Atlantic is chiefly important because it is undoubtedly more destructive to gear and interferes more with fishing operations than does any other fish – shark or teleost.... In the Gulf of Maine, the spiny dogfish feed on a wide variety of species and at one time or another prey on practically all species smaller than themselves. They are regarded as the chief enemy of the cod, and also feed on mackerel, haddock, herring, squid, worms, shrimps, crabs." (Jensen, Edwards and Matthiessen, **The Spiny Dogfish – a Review**, 1961, Woods Hole Laboratory Report No. 61- -7 available at <http://www.nefsc.noaa.gov/publications/series/whlrd/whlrd6107.pdf>).

Researchers Wetherbee and Cortés report that spiny dogfish consume between 0.4% and 2.6% of their total body weight per day. If we assume an intermediate level of 1.5% per day, each dogfish consumes its own weight every 60 days, or six times its body weight every year. (Wetherbee, B.M. and E. Cortes. 2004. **Food consumption and feeding habits**. Pp. 223-244 in: **Biology of sharks and their relatives**. Musick, J.A., J.C. Carrier and M. Heithaus, eds.)

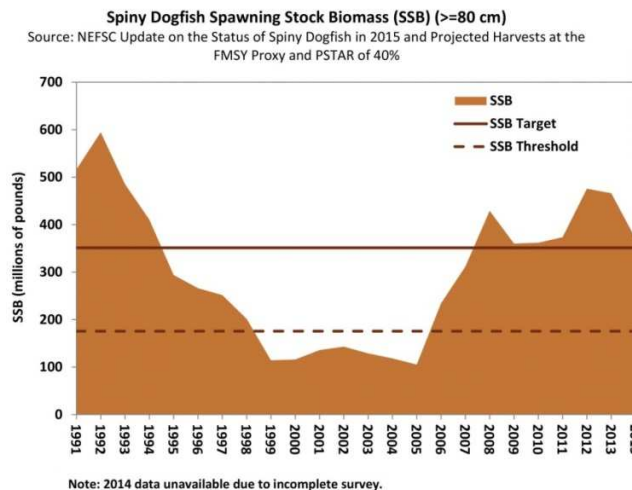
The billion pounds of spiny dogfish are eating six times their weight of fish and shellfish annually. That's six billion pounds. For an idea of how much eating this is, in 2014 the total commercial landings of finfish and shellfish in the Mid-Atlantic and New England were 800 million pounds. Spiny dogfish consumed seven and a half times more fish and shellfish than all of the commercial fishing boats from North Carolina to Maine landed.

In the following table I've listed species (from Bigelow and Schroeder, **Fisheries of the Gulf of Maine**) eaten by spiny dogfish and three other important fish species. When they aren't eating each other these fish are eating the critters that their "competition" is eating, and by both total numbers and by disposition the spiny dogfish are unquestionably out-competing these listed species as well as others that haven't been listed.

Spiny Dogfish (SSB=462,000 mt)	Summer Flounder (SSB=40,000 mt)	Haddock (SSB=135,000 mt)	Cod (SSB=17,000 mt)
Cod	Crabs	Herring	Crabs
Crabs	Mollusks	Mackerel	Haddock
Ctenophores	Sand Dollars	Mollusks	Hake
Haddock	Shrimp	Shrimp	Herring
Herring	Smaller Fish	Squid	Lobster
Mackerel	Squid	Worms	Mackerel
Shrimp	Worms	(Generally not fish)	Menhaden
Smaller Fish			Mollusks
Squid			Shad
Worms			Shrimp
			Squid

Spiny dogfish obviously interact with a number of fish and invertebrate species, directly and/or indirectly, and it's impossible to assume that those interactions are to the benefit of those other species. Those unfavorable interactions are all lumped into what the managers term Natural Mortality, and they are assumed not to vary from year to year.

The following chart (from the Atlantic States Marine Fisheries Commission at <http://www.asmf.org/species/spiny-dogfish>) shows the spiny dogfish spawning stock biomass (total biomass would be 2.75 times the SSB for each year) from 1991 to 2015, increasing from about 100 million pounds in 2005 to 350 million pounds in 2015. Yet if there are not enough summer flounder (or haddock or cod or bluefish or scup or a whole bunch of other finfish or shellfish that are unfortunate enough to interact with spiny dogfish), it has to be because of fishing mortality. So cut back on fishing for them, of course!



The Mid-Atlantic Fishery Management Council is supposedly shifting to an “ecosystem-based approach for more comprehensive management of fisheries.” In its Ecosystem Approach to Fisheries Management (EAFM) Guidance Document, EAFM is defined as the recognition of the biological, economic, social and physical interactions among the components of ecosystems and the Council will be attempting to manage fisheries to achieve optimum yield taking those interactions into account. (J. Rowley, Commercial Fisheries News, October 2016). The Council would do well to focus on the impacts of spiny dogfish predation on and competition with summer flounder on achieving optimum yield for its first venture into serious EAFM.

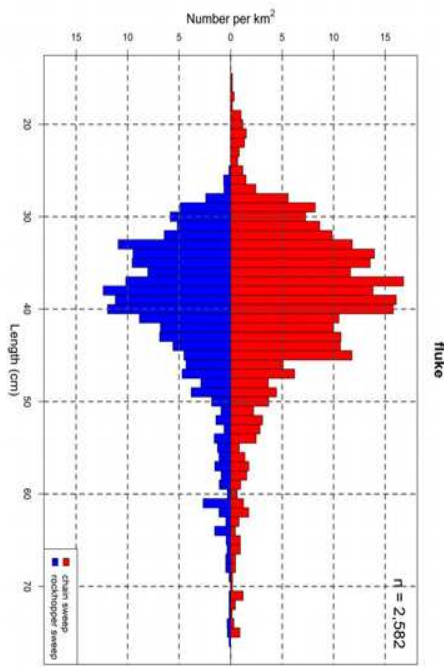
As it is being interpreted, the Magnuson-Stevens Act demands that spiny dogfish fishing mortality be held to what is an unrealistically low level. If ecosystem based management actually means what it sounds like, and if federal fisheries management policy was actually based on providing the highest return from our fisheries, we would be using fishing as a management tool, reducing the abundance of such predator species to more reasonable levels and maximizing the abundance of the more valuable species that they either consume or are in competition with.

We've declared all-out war on lionfish, an exotic species that is finding a home on our Atlantic Coast. We don't need a war on dogfish, we just need a reasonable police action.

.....

In a recently completed trawl survey comparing the ability of a rock hopper equipped net (as used by the R/V Bigelow in the Autumn and Spring trawl surveys since 2009) towed on one side of a commercial fishing vessel with a net equipped with a chain sweep (as used by commercial fishermen to harvest flatfish) on the other, the latter net outperformed the former by a significant margin. While the difference was

more pronounced with other flatfish species, as the length/frequency plot to the left shows, with a total catch of 2,582 summer flounder the net with a chain sweep caught noticeably more than the net with the rock hopper.



This was reported to the Mid-Atlantic Fishery Management Council on May 31 of this year by Michael Martin from the Ecosystems Surveys Branch at the NOAA/NMFS Northeast Fisheries Science Center. The goal of the study was “*To estimate relative catch efficiency for standard BTS (bottom trawl survey) rockhopper sweep for several flatfish species.*” The commercial fishing vessel used was the Karen Elizabeth out of Point Judith, RI. (https://www.mafmc.org/s/chain_sweep_catch_efficiency_NTAP_01June2016.pdf)

This was from a preliminary report on the project and should not be considered as a final determination.

I.U.U. Fishing/The latest supposed ocean crisis/All the news that’s fit to print?
12/18/16

Over the past several years there has been much discussion, debate, posturing, misrepresentation, exaggeration and incipient empire building on and around the subject of illegal, unreported and unregulated (IUU) fishing. Most of this has been driven by ENGOs and the mega-foundations that support them because they have all of these fish saviors on the payroll with, since the demise of overfishing, not an awful lot to do. Not surprisingly the Obama administration has been com-

PLICIT in this.

Starting out with a point of clarification, IUU fishing is, or should be, a concern in some areas of the world’s oceans – but for reasons that I’ll get to in a bit, it isn’t, or shouldn’t be, in the U.S. Exclusive Economic Zone (EEZ). In spite of this you can bet dollars to donuts that that’s where all of the ENGOs will be focusing their IUU efforts, because it’s a lot more comfortable, convenient and safe to assault domestic fishermen from their cushy digs in Philadelphia or Washington DC than from some tropical or sub-tropical Hell hole where most of the IUU activity is based. And, I’m sure the feeling in those cushy digs in Philadelphia and Washington is that the public and the pols aren’t sophisticated enough to realize this, and in all likelihood – thanks to the mega-million dollar PR juggernaut that is backstopping their efforts – never will be.

That being the case, IUU fishing has become the boogeyman employed by the latest generation of “ocean saviors’ to keep the consuming public convinced that domestic fishermen shouldn’t be trusted, and to keep the millions of dollars needed to support their bloated bureaucracies rolling in.

Cutting through the hype - ‘cause what would an anti-fishing program in the U.S. be without the excessive and expensive hype? - how real is the threat of IUU fishing, who or what does it threaten, and how effective will the control measures that are touted by the anti-fishing ENGOs and directed against domestic fishermen be at doing anything substantive to protect U.S. fisheries or the millions of folks who still consume U.S. fish and shellfish?

Should there be any concern about IUU fishing in our federally managed EEZ fisheries?

Emphatically **NO!** U.S. commercial fishermen and U.S. commercial fisheries are among the most intensively managed in the world. What this means is any fish or shellfish caught out of season, caught in the wrong place, beyond a definite aggregate weight, of the wrong size, with the wrong gear, with the wrong gear on board, by a boat that is outside of specification, moved from boat to boat, landed at the wrong time or in the wrong place or out of compliance with any of a number of other restrictions is more than likely going to come to the attention of the state and federal authorities. When they do, significant penalties - ranging to hundreds of thousands of dollars in fines, loss of the right to fish, the confiscation of boats and catch, and imprisonment – can and almost always do ensue. Such big-brother-ish mechanisms as on-board observers, satellite tracking (of the fishing vessels, not yet of the fishermen), random and routine inspections at sea and at the dock, night vision optics and aerial surveillance are all used to detect illegal fishing. And, coupled with the significant penalties for infractions, they are effective deterrents.

And the Magnuson-Stevens Fishery Conservation and Management Act mandates that commercial fisheries be managed sustainably. That means that federal fisheries cannot be overfished or, if they are they must be managed with the goal of being rebuilt by a time certain.

(I'll note here that a diminished fish stock can be declared "overfished" even when fishing is not the culprit. That and inadequate science seem to be the causes of the wildly seesawing summer flounder fishery that I reported on last month. With increasing ocean temperatures we can look forward to an increasing number of "overfished" stocks that are classified that way in spite of the fact that terminating fishing on them will have no impact on their classification.)

Buying domestically produced seafood that was harvested by federally licensed commercial fishermen is a guarantee that it was from a sustainable fishery. Traceability from the ocean to the plate won't change that one iota.

Is increased traceability necessary to protect consumers of domestically produced seafood?

If it's domestically harvested seafood, and if it's harvested by licensed commercial fishermen, traceability will do nothing to make it safer.

Since 1997 the federal Food and Drug Administration has required that domestic businesses that process, handle or transport seafood in the U.S. adopt the Hazard Analysis and Critical Control Point (HACCP) management system. In the HACCP system "*food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product*" (<http://www.fda.gov/Food/GuidanceRegulation/HACCP/>). It "*focuses on identifying and preventing hazards that could cause foodborne illnesses rather than relying on spot-checks of manufacturing processes of finished seafood products to ensure safety. FDA's 1997 science-based HACCP regulations initiated a landmark program designed to increase the margin of safety that U.S. consumers already enjoyed and to reduce seafood related illnesses to the lowest possible levels,*" (<http://www.fda.gov/Food/GuidanceRegulation/HACCP/ucm114930.htm>). As long as the seafood in question is "in the system" it works.

So it's easy to write with full assurance that fish or shellfish harvested by permitted fishermen in U.S. waters is both sustainably harvested and safe for consumers, and no amount of traceability will make it either safer or "more sustainable."

But where should increased seafood traceability be required?

There are some big oceans out there with an awful lot of boats and even more fishermen. The probability that all of their waters are going to be adequately policed and all of the fish and shellfish harvested from them are going to be adequately inspected in the foreseeable future hovers right around zero. But fortunately that's not necessary to guarantee that the health of U.S. seafood consumers is protected or that fish and shellfish imported into the U.S. are harvested sustainably. All that's required is the same level of rigorous policing of those fisheries and the same HACCP requirements – or their equivalent – that domestically produced seafood meets.

Alas, this is nowhere near the actual case.

From the Food and Water Watch 2016 report *TOXIC BUFFET – How the TPP (Trans-Pacific Partnership) Trades Away Seafood Safety* (http://www.foodandwaterwatch.org/sites/default/files/rpt_1609_tpp-fish-web_2.pdf)

- The FDA inspects only 2 percent of imported seafood; more than 5.3 billion pounds of seafood entered the U.S. food supply without even a cursory examination in 2015;
- Less than 1 percent of seafood imports are tested by the FDA at a laboratory for pathogens like Salmonella or Listeria or the presence of illegal veterinary drugs;
- Although few imports are examined, the FDA rejected 11 percent of inspected shipments for significant food safety problems;
- Salmonella, Listeria, filth and illegal veterinary medicines were the most common reasons that imported seafood was rejected; and
- The number of imports rejected for illegal veterinary drugs nearly tripled over the past decade, and made up one-fourth of all FDA refusals between 2014 and 2015.

(The fact that the Trans-Pacific Partnership is dead in the water doesn't alter any of these points.)

So why is there a push for domestic seafood traceability?

Aside from being yet another ENGO "make work" project, there isn't any rational reason. By definition, domestically produced seafood is sustainable and our HACCP-based inspection system has proven to be virtually 100% effective. It's difficult to look at the traceability efforts as anything more than another punitive measure by ENGOs and their corporate controllers to further burden an industry that is already overburdened by expensive, intrusive and largely unnecessary federal requirements.

And at the last minute....

NOAA/NMFS announced a new program on December 8 that “will trace specific fish and fish products from harvest to entry into U.S. commerce.” From the announcement:

“Today, the U.S. established additional protections for the national economy, global food security, and the sustainability of our shared ocean resources. NOAA Fisheries will administer the Seafood Import Monitoring Program to further curb Illegal, Unreported and Unregulated (IUU) fishing practices and to identify misrepresented seafood imports before they enter the U.S. market.

The program requires that importers report information and maintain records about the harvest, landing and chain of custody of imported fish and fish products for certain priority species identified as especially vulnerable to IUU fishing and seafood fraud. The program will eventually expand to include all species.”

The full announcement is at <http://tinyurl.com/jyc5hrm> (when I want to direct readers to web pages with prohibitively lengthy URLs I use the Tiny URL website – see the Wikipedia Tinyurl entry at <https://en.wikipedia.org/wiki/TinyURL> - to generate a shorter URL that links to the original.

More “falling skies” from Pew

The latest bits of doom and gloom in the oceans caused by commercial fisheries deals with so-called “forage species,” which is an interesting bit of media manipulation in and of itself, considering that in the oceans everything, alive or dead, is eventually forage for something else. But then, with hundreds of millions of dollars from the Pew private bank on Philadelphia’s Main Line (<https://www.glenmede.com/our-history>) to spend, such manipulation can be frighteningly effective.

So, the latest Chicken Little initiative created by Pew’s stable of “ocean experts” involves Pacific sardines and anchovies.

From the Pew Trusts website:

New research suggests that the population of California anchovies—a critical food source for ocean wildlife such as whales, salmon, brown pelicans, and sea lions—has dwindled to levels not seen since the early 1950s. **The research, funded in part by Pew** (emphasis added), was conducted by scientists with the Farallon Institute for Advanced Ecosystem Research in Petaluma, California. The study, currently in press with the journal Fisheries Research, was also recently submitted to the Pacific Fishery Management Council. It concludes, “*Although current annual catch levels of a few thousand tons are small by historical standards, current exploitation rates could be high given the low stock abundance, and should be taken under consideration by fishery managers.*”

This latest expression of over-the-top hype is part of a major ongoing Pew initiative which has been in the making for at least five years.

With anchovies, sardines, menhaden and herring – which have all been anointed as uber-necessary forage species by the Pew clique – proposed restrictions have been predicated on the fact that their harvest negatively impacts populations of the critters that eat them.

Statistics on the harvest of these “forage” species are undoubtedly more reliable than they are for most commercial species because they are generally caught by a limited number of larger vessels and landed in only a handful of ports. Accordingly, they are much easier to keep track of.

Thus it would seem a simple matter for members of the Pew clique to come up with correlations between landings of “forage” species and fluctuations in the populations of the fish, marine mammals, birds or other critters that are supposed to be dependent on them. In an hour or so I can get the annual landings data for any commercially fished species, including these “forage” species, going back to 1950. It shouldn’t be much more trouble to collect the corresponding data for the landings of supposedly negatively impacted gamefish or populations of supposedly negatively impacted seals or whales or ospreys. Yet this hasn’t been done, or if it has been the Pew PR machine hasn’t shared any of the results with the rest of the world.

Once again borrowing from Wendy’s 1984 advertising campaign, “where’s the beef?”

Below is a piece I wrote back in 2012 on astroturf activism as it applies to the Pew forage fish initiative. While the focus then was on menhaden and herring, it has since grown to include anchovies and sardines.

The forage fish fake out

In a column urging that menhaden management be overhauled on the Pew Environment Group website, Peter Baker wrote “according to a report issued this year by a panel of 13 eminent ocean scientists, forage fish are twice as valuable left in the water as they are caught in a net.” He is referring to the Lenfest Forage Fish Task Force. Forage fish include menhaden and herring.

The people at the Pew Trusts and more lately the Pew Environment Group don’t like menhaden or herring fishing. That’s not very startling news. In fact, the people at the Pew Trusts/ Pew Environment Group don’t appear to like any kind of fishing, because they’ve spent hundreds of millions of dollars – of course, that’s hundreds of millions of dollars earned by someone else – to curtail fishing in just about any way, shape or form that fishing happens.

The way they’re expressing their dislike of forage fishing has become par for their course of expressing dislike of just about every other fishery; what appears to be a loose confederation of independent researchers and stakeholders and grass roots organizations coalesce into some sort of committee or task force or whatever united behind the righteous cause, which invariably involves either stopping or significantly cutting back some form(s) of fishing, supposedly saving some critical part of some ocean ecosystem or other.

But in the case of saving the East coast ecosystem from the depredations of the supposedly ruinous menhaden purse seiners, how independent are these saviors and the people like Peter Baker who are flogging their “cause?”

Peter Baker is the Director of the Northeast Fisheries Program of the Pew Environment Group. Prior to that he worked for the Cape Cod Commercial Hook Fishermen’s Association. Prior to that he was with the Sierra Club’s Environmental Public Education Campaign. Earthjustice, from which Oceana spun off, was spawned by the Sierra Club.

The Pew Trusts have given \$1.5 million to the Cape Cod Commercial Hook Fishermen’s Association, at least \$60 million to Oceana and over \$23 million to Earthjustice.

I’ve written about the Herring Alliance on the FishTruth.net website at <http://www.fishtruth.net/Herring.htm>. The original member organizations had received well over \$100 million from Pew.

Consider the projects funded by the Pew Trusts (available on the FishTruth website database at http://www.fishtruth.net/ENGO_SPENDING.xls) designed to curtail menhaden/herring harvesting listed below. Herring and menhaden are both considered forage fish – fish that serve as food for other fish species – and, though all of the save the menhaden/herring rhetoric studiously ignores it, are also voracious predators of the early life stages of fish and shellfish species that feed on them as adults.

- 1998 - Conservation Law Foundation - \$30,000 – “To promote responsible herring management.”
- 2004 - National Coalition for Marine Conservation - \$558,000 – “To secure an amendment to the Interstate Menhaden Management Plan that would reduce or eliminate fishing of menhaden in the Chesapeake Bay, in order to protect the broader ecosystem of the Bay.”
- 2004 - Aquatic Farms Limited - \$142,000 – “To assess the amount of competition between catch of small forage fish for direct human consumption and for reduction into fishmeal and fish oil for use as aquaculture and agriculture feed.”
- 2004 - Research Foundation of the State University of New York, Stony Brook - \$750,000 – “To establish the Lenfest Forage Fish Task Force that will develop and recommend ecosystem-based standards for the sustainable management of forage fisheries.”
- 2004 – Research Foundation of the State University of New York, Stony Brook \$145,000 – “To advance ecosystem-based fishery management by evaluating the status of understudied fish and other marine species in several regions of the United States that are impacted by the commercial fishing industry.”
- 2005 - National Coalition for Marine Conservation - \$200,000 – “To ensure a new regulatory cap on the industrial harvest of Atlantic menhaden is implemented and enforced.”
- 2006 - National Coalition for Marine Conservation - \$100,000 – “To support efforts to initiate new regulatory actions that will preserve adequate populations of forage fish which support healthy populations of predators, including numerous species of marine mammals, seabirds and fish.”

- 2006 - *Gulf Restoration Network* - \$210,000 – “To support efforts to stop overfishing, secure conservation-based limits on unintended bycatch of marine life, and to conduct research and prepare a report on management reforms needed in the Gulf of Mexico menhaden fishery to reduce harvests to protect the forage needs of menhaden predators and reduce bycatch of sharks and marine mammals.”
- 2007 - *Cape Cod Commercial Hook Fishermen’s Association* - \$180,000 – “To provide general operating support policy reform campaigns for herring and groundfish.”
- 2007 - *Cape Cod Commercial Hook Fishermen’s Association* - \$596,000 – “To support a New England forage fish campaign to ban or severely restrict destructive trawling, reduce allowable herring catches.”
- 2008 – *Research Foundation of the State University of New York, Stony Brook* - \$3,000,000 – “To conduct scientific research regarding sustainable fisheries management and conservation of threatened and endangered fish.”
- 2008 - *Cape Cod Commercial Hook Fishermen’s Association* - \$722,000 – “To support activities to reform the Atlantic herring fishery.”
- 2008 - *Earthjustice* - \$212,000 – “To reform New England’s Atlantic herring fishery.”
- 2008 - *Marine Fish Conservation Network* - \$125,000 – “For work intended to ensure the full implementation of the Magnuson-Stevens Reauthorization Act and to promote the sustainable management of forage fish species (\$100,000) and for general support (\$25,000)”
- 2009 - *National Coalition for Marine Conservation* - \$30,000 – “To develop guidance for conservation of forage fish through an ecosystem-based approach to fisheries management.”

That’s just under \$7 million Pew dollars going directly to “save” menhaden and herring.

Of the thirteen “eminent ocean scientists” on the Lenfest Forage Fish Task Force, nine can be directly tied to Pew funding via academic programs that have received well over \$30 million in grants from the Pew Trusts, and four are Pew Marine Conservation Fellows to boot (see <http://www.fishtruth.net/Pauly.htm> and <http://www.fishtruth.net/Pikitch.htm>).

The source of funding for the Lenfest Forage Fish Task Force, the Lenfest Ocean Program, is administered by the Pew Environment Group.

The Project Director of the Lenfest Forage Fish Task Force is Christine Santora. She was previously employed for five years as a Senior Research Associate with the Pew Institute for Ocean Science.

So we have two ostensibly “grass roots” initiatives supposedly representing the views of a large group of constituents but which are in reality the handiwork of a handful of activist organizations in large part – to the extent of tens of millions of dollars – supported by the Pew “Charitable” Trusts. The Pew Trusts were founded with dollars from Sun Oil’s Pew family and are still largely under the control of the Pew family.

“Astroturf roots” seems a much more accurate descriptor (and I was pleasantly surprised to see that Wikipedia has an entry for “astroturfing,” which it describes as “political, advertising or public relations campaigns that are designed to mask the sponsors of the message to give the appearance of coming from a disinterested, grassroots participant. Astroturfing is intended to give the statements the credibility of an independent entity by withholding information about the source’s financial connection.”)

Unfortunately, at its regularly scheduled meeting last week the Atlantic States Marine Fisheries Commission in what was an obvious bow to public pressure – pressure driven by mega-bucks foundations and the activist organizations they support – rather than sound science, voted for drastic cuts in the menhaden harvest.

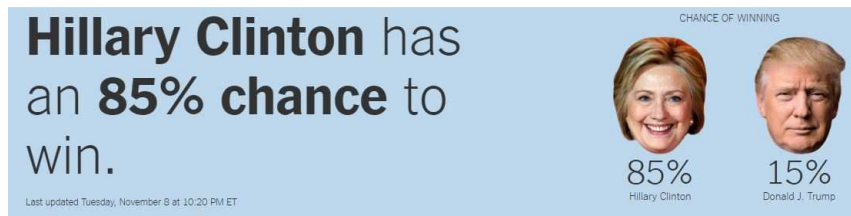
The fishermen, the fish and the consuming public deserve much better.

This effort has now been expanded to include Pacific sardines and anchovies, involving the same people, the same unsubstantiated arguments, the same reliance on the fact that hardly anyone has any idea of what’s going under those waves, and the same overfull pots of foundation money. Diane Pleschner-Steeler, executive director of the California Wetfish Producers Association, has been engaged in a campaign to counter this latest chapter in the “we have to stop fishermen from ruining the world’s oceans” playbook. Her most recent effort was an opinion piece in the Monterey Herald titled **Extremists manufacture anchovy ‘crisis’ where none exists**. It’s at <http://tinyurl.com/grpgsup> and I strongly recommend you read it, because no one can predict which fishery is going to be targeted next.

An afterword –

I studiously avoid any appearance of politics in FishNet. Fisheries issues are far too complex and much too easily misunderstood without the addition of any further complications, and rest assured that this afterword has nothing to do with the presidential election. What it does have to do with is a compelling demonstration of the fallibility, the out-of-touchedness, the arrogance and the ignorance that permeates our mass media today.

The graphic below was posted on the New York Times website in *The Upshot: Who will be President* by Josh Katz on November 8 at 10:20 pm. It's hard to imagine any exercise in prediction being more wrong than the New York Times was here. Going by the election results and a lot of the post-election analysis, Ms. Clinton apparently never had much of a chance of winning. This is the newspaper with the motto "all the news that's fit to print" displayed on the front page every day, the newspaper with the second largest circulation in the U.S.



So what does this have to do with fishing? For at least the past 30 years the New York Times has been "reporting" on fisheries issues with the same degree of accuracy and inattention to reality that it brought to its coverage of the recently concluded presidential election. Swallowing the doom and gloom predictions of a few foundations and a handful of ENGOs hook, line and sinker, the Times – and a handful of other influential publications – have presented a one-sided view of fisheries issues and have for the most part sloughed off any attempts to have any distortions corrected. We can only hope that in the future Times' readers will bear in mind just how capable the Times can be of printing news that is about as far as possible from being fit to print.

Fisheries are choking on good(?) intentions

02/03/2017

*In multispecies fisheries, regulators must distinguish between stocks that are truly threatened or endangered and those that are simply fished harder than would be optimal on a single-species basis. It may be best to not try to rebuild some overfished stocks (so long as they do not continue to decline) if the cost in lost catch of other species is too high. (Ray Hilborn, **Why Fishermen Oppose Stock Rebuilding Plans**, National Fisherman, May 2000)*

I recently came upon a report, **Addressing Uncertainty in Fisheries Science and Management** (it is available at <http://tinyurl.com/hcuryq6>, the appendices at <http://tinyurl.com/zst7jxz>), funded by the Gordon and Betty Moore Foundation through the National Aquarium in Baltimore. The Report's preface states that it is "primarily directed toward fisheries scientists, managers, policy makers and other participants in the U.S. fisheries management process," and the panel of experts brought together for the exercise focused on four general sources of uncertainty, which were:

- **Data Uncertainty:** Fisheries dependent and –independent data that are collected and incorporated into assessments or other scientific management advice have sampling variability. Data uncertainty may also include cases referred to as "data-poor" or "data-limited" where there are insufficient data to support comprehensive scientific assessments.
- **Model and Assessment Uncertainty:** These are uncertainties that arise during the modeling and assessment process. They include process and parameter uncertainty, accuracy of assumptions, choice of modeling approach and forecasting-related uncertainties. These and other factors can result in retrospective inconsistencies. This type of uncertainty becomes an acute challenge in data-poor or data-limited situations.
- **Ecosystem or Population Uncertainty:** Ecosystem changes such as long-term oscillations or directional shifts are often beyond the scope of factors currently considered in single-species stock assessments. While they arise explicitly in data, models and assessments, this special set of challenges includes unknown or poorly understood ecosystem relationships and their effects on single-species management advice.
- **Outcome and Implementation Uncertainty:** There are two components of this source of uncertainty. Outcome uncertainty reflects whether the fisheries management system is setting the right target and limit and is affected by the cumulative im-

pect of data, model and ecosystem uncertainty. Implementation uncertainty addresses whether or not the established target is being accurately met. Uncertain performance of management strategies in response to changing behavior of fishermen and other stakeholders operating within the management system can also introduce new uncertainty.

As far as they go, nobody should have any problems with these general sources of uncertainty, with the report or with the panel that created it. But they don't go anywhere near where they should be going.

Needless to say, each of them is, when combined with the precautionary principle, designed to result in less fish to the fishermen. They are emblematic of the myopic view of our domestic fisheries that has been effectively sold to the public and the pols that "healthy" fish stocks automatically mean healthy fisheries. While the report is purportedly directed towards "*fisheries scientists, managers, policy makers and other participants in the U.S. fisheries management process,*" for a large number of those other participants, U.S. fishermen and those whose businesses depend on fishermen and fishing, it's about as far off target as it's possible to be. As we're seeing while our fish and shellfish stocks continue to thrive, there's a lot more to having healthy fisheries than having healthy stocks.

But this is something that has been forgotten since the Magnuson Act became law in 1976. The Act starts off "*the fish off the coasts of the United States, the highly migratory species of the high seas, the species which dwell on or in the Continental Shelf appertaining to the United States, and the anadromous species which spawn in United States rivers or estuaries, constitute valuable and renewable natural resources. These fishery resources contribute to the food supply, economy, and health of the Nation and provide recreational opportunities.*" In the intervening forty years the focus has shifted from healthy fisheries – in terms of contributing to the food supply, economy and health of the Nation – to healthy fish stocks, with little or no regard given to why those healthy stocks are or should be desirable. Having healthy fish stocks, which started out as a means to the end of having healthy fisheries, has been distorted into an end in and of itself.

That's why over ninety percent of the seafood consumed in the U.S. is imported.

We have fisheries that are on the verge of collapse while the fish stocks that support them are healthy. There is a wanton disregard for the health of the businesses that depend of fishing, a disregard that wasn't really there until the environmental community, funded by a handful of "charitable" mega-foundations (including the Gordon and Betty Moore Foundation), started to interfere in the federal fishery management process. Having healthy fish stocks, their supposed goal, is meaningless without healthy businesses benefitting from the utilization of those stocks.

Today the economic effects of management actions on fishing and fishing dependent businesses are at best given lip service; the only thing that really matters when management decisions are considered is whether or not "overfishing" will be ended.

The argument for the almost total focus on the health of the stocks, a concept that is exemplified by the above four sources of uncertainty from a study that was paid for - surprise, surprise! - by one of the mega-foundation that has spent many millions of dollars on "fixing" fisheries, is that healthy fish stocks are supposed to mean healthy fisheries. The present condition of the New England groundfish fishery shows how wrong that supposition is.

In "*A synoptic view of the stock status of the twenty Northeast groundfish stocks in 2015*" NOAA/NMFS reports that overfishing is occurring in six of the twenty stocks (and that the overfishing status is unknown in one). Overfishing is not taking place in 65% of the New England groundfish stocks (<http://tinyurl.com/j7unuqg>). The assumption is that two-thirds of these stocks are supporting healthy fisheries.

The thirteen fish species listed below are covered by the Northeast Multispecies Fisheries Management Plan – the New England groundfish fishery. Over the last decade and a half the total annual landings of groundfish have declined by fifty percent, at this point being approximately one fifth of what they could be if the acceptable biological catch (ABC) for each fishery was realized.

Species	2000 (metric tons)*	2007 (metric tons)*	2015 (metric tons)*	2016 ABC**
Atlantic Cod	11,370	7,657	1,526	1,262
Haddock	4,002	3,624	5,399	59,698
Yellowtail Flounder	6,934	1,753	968	1,390
Winter Flounder	5,842	2,666	1,700	1,590
Plaice	4,213	990	1,283	1,297
Witch Flounder	2,439	1,069	491	460
Acadian Redfish	318	781	4,930	10,338
White Hake	2,984	1,524	1,638	3,754
Pollock	4,042	8,340	3,045	21,312
Wolffish	200	64	2	82
Windowpane Flounder	272	199	21	805
Ocean Pout	18	2.7	21	165
Atlantic Halibut	11	24.1	21	124
Total	42,645	28,694	21,045	102,277

* From NOAA/NMFS Commercial Landings database at <http://tinyurl.com/jsdyoq8>

** From Table 4, Framework Adjustment 55 to the Northeast Multispecies FMP at <http://tinyurl.com/zovl5lv>

This is because the *raison d'être* of federal fishery management has become the avoidance of overfishing. Written another way, it is to have all fish stocks being managed to be at or approaching the level that will produce the maximum sustainable yield, whether they are being utilized or likely to be utilized at that level or not.

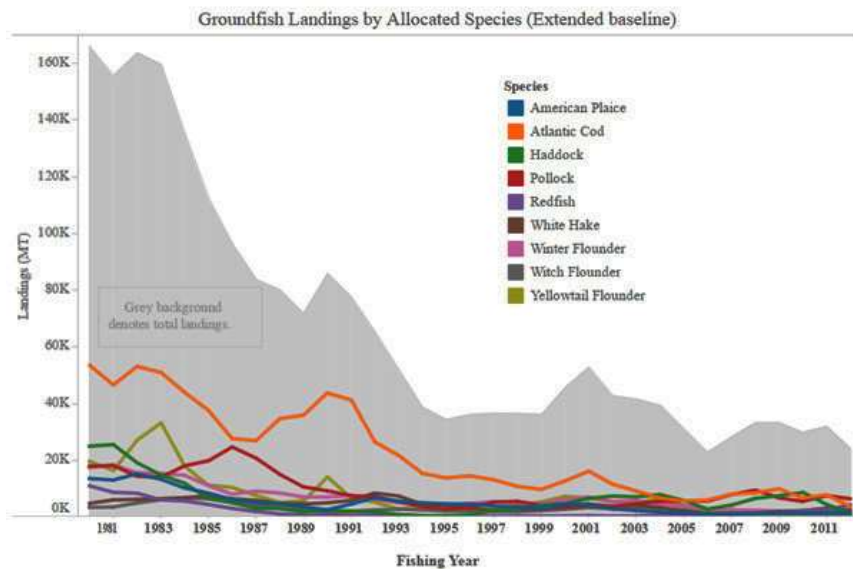
This ignores the fact that different fish species often live in very close association with each other and often behave similarly, making it difficult at best, and often impossible, to catch one species and not others. This is bycatch. It is also the root cause of the phenomena of “choke” species.

Some fish species are out there in huge numbers, some in not such huge numbers, and some are kind of rare. But as the retitled Magnuson Fisheries Conservation and Management Act (and how it is presently being interpreted) demands, each species must be managed so it will be at or approaching the level that will produce the maximum sustainable yield and each species will have a catch limit that will allow this level of catch. Obviously, rare species will have low catch limits. Not so obviously, when one of those low catch limits is reached all fishing – purposefully or inadvertently – that will catch that species must be stopped.

Thus if fish species **X** which is exceedingly common lives in close association with species **Y** which is exceedingly rare, long before the catch limit of **X** is reached the fishery for it will be closed because the catch limit of **Y** was reached.

So theoretically fifty thousand tons of haddock worth \$100 million at the dock could remain uncaught because the catch limit of eight hundred tons of windowpane flounder worth \$2 million or two hundred tons of ocean pout worth \$1/2 million were caught. And I'll note here that, in spite of the anti-fishing clique's (whose members pretend that they are “marine conservationists) best efforts to convince the world that overfishing is a direct route to extinction, no fishery has ever been fished into, or even close to, extinction. An overfished fishery is simply one in which the number of fish which are left in the water can't produce the maximum sustainable yield.

In the New England groundfish fishery, after more than a decade of intensive management and increasing enforcement, the total landings are still declining. This isn't because there is a lack of fish available for harvest; this is because the federal legislation that controls harvesting is focused almost completely on the fish and negligibly on the fishermen. In the neighborhood of fifty thousand metric tons of haddock, twenty thousand metric tons of pollock and five thousand metric tons of redfish, easily worth one hundred million dollars to the fishermen and perhaps half a billion dollars to coastal communities) which could be sustainably harvested every year haven't been.



Why is it necessary to have wolffish, ocean pout and halibut stocks at such high levels of abundance that the maximum sustainable yield can be harvested from them every year? That would be nice if it could be done without leaving a whole bunch of other fish unharvested and a whole bunch of fishermen and people in dependent businesses under- or unemployed, but that isn't what's happening. So our official policy is to maintain maximum population levels of these "choke" species while curtailing fishing in far more valuable fisheries and severely impacting the financial underpinnings of many of our fishing communities.

It doesn't seem like the people in charge of policy at NOAA/NMFS are much interested in having the New England groundfish fishery (or any other) contributing as much as it could be contributing to the food supply, economy, and health of the nation. It's apparently more important to them to wring half a million dollars a year out of some very small fisheries while foregoing tens of millions of dollars of revenues from much more robust stocks than it is to wring a quarter million dollars out of the same fisheries while deriving much greater benefits of significantly increased harvests in the larger fisheries.

So, getting back to the four sources of uncertainty above, they were obviously arrived at to help insure that too many fish aren't harvested, that fisheries aren't "overfished." Why isn't a similar effort put into a determination of the cost – the actual, real world, out of the bank accounts of fishing and fishing related businesses cost – of overfishing the so-called choke species? Or a determination of the risks – if any – involved in allowing a choke species to be overfished?

We have a twenty plus year history of observing the effects of overfishing, what's entailed in recovering overfished fisheries, and the benefits to the fish stocks gained by having those fisheries no longer overfished. Why isn't anything we've learned in these two decades or so used to give us a more realistic understanding of what "overfishing" really means to the economic viability of our domestic fish and seafood industry? Why isn't the Gordon and Betty Moore Foundation, or the Pew, Packard or Allen foundations, the ENGOs they support, or the federal government funding research to determine what preventing "overfishing" is really costing?

What happens if a choke species isn't maintained at the MSY level? Suppose ocean pout in the table above has a catch limit that is higher than the present 165 metric tons. The biomass would be reduced below the MSY level, and those fisheries that took ocean pout as bycatch or in directed fisheries would be able to catch more of their targeted species. This would cause the ocean pout stock to decline. How much should that matter? Would the cost of that decline be outweighed by the benefits to the other fisheries that ocean pout are "choking?"

The cost of requiring all species to be at the MSY level is incalculable and the benefits to the domestic fishing industry are for the most part illusory. It's well past time for a change, a change that will let our fisheries managers get back to managing for both the fish and the fishermen.

For more on good (?) intentions and negative outcomes see the spiny dogfish discussion starting on the third page of the January 2015 FishNet **Dogfish and seals and dolphin, oh my!** (at <http://tinyurl.com/h7xbbgp>). When it was written the most recent Northeast Fisheries Science Center Spring Bottom Trawl Survey, done in 2013, caught 97,440 pounds of spiny dogfish. In 2015 the Spring survey caught 92,869 pounds of spiny dogfish. The same misguided management philosophy that has created choke species that limit harvesting in much more valuable fisheries is responsible for a huge biomass of a low value predatory species that is impacting the New England groundfish fishery and many others from south of Cape Hatteras into Canadian waters from “the other end.”

The Sustainable Fisheries Act - January 11, 2000 revisited February 21, 2017

The Sustainable Fisheries Act, MSY and a consideration of ecological realities

It's an accepted ecological principle that a given area of land or water under natural conditions, as long as the input of energy and other raw materials remains constant, will produce a relatively constant biomass over time. The form of that biomass – the species mix – can vary significantly, but the total amount will remain the same. Thus, without any major disturbances a square mile of woodland will produce the same amount of biomass year after year. The same can be said for a given area of wetland or estuary or coastal or offshore ocean. For example, minus any major changes in the amount of available energy (sunlight) or nutrients (from runoff and upwelling), the waters of the New York Bight will produce approximately the same tonnage of fish every year. Within that tonnage, however, the relative amounts of various species can vary tremendously.

In particular areas, many of the commercially and recreationally important fish species occupy similar or overlapping niches (a niche is most simply defined as an ecological address). That is, they are found in the same areas at the same times, they pursue the same prey, are pursued by the same predators and likely feed on each other's young. To a large extent they can be considered in competition with each other for space, food and shelter. In some years there will be a large number of a particular species and, because of the ecological limits on the area's ability to support total biomass, lessened numbers of the “competing” species. In the New York Bight we will have periods when bluefish are extremely plentiful and striped bass and weakfish aren't, or, as has been the case for the last three or four years, there will be striped bass all over, a large population of fluke, and relatively few bluefish. The populations of particular fish species cycle over time in a particular area, but the total biomass at a particular trophic level remains relatively constant.

The Maximum Sustainable Yield (MSY) of a fish species or stock must necessarily be considered to be the harvest from that stock or species when its population is at or approaching its peak. Thus, the MSY for bluefish in the Mid-Atlantic is determined based on the biomass of bluefish available when the population was at its highest level. Ditto for weakfish, for striped bass, for fluke, etc. But it's important to note that the years of peak production of these species didn't, and in fact couldn't, coincide. The natural production limits of the system (sunlight and nutrients) simply wouldn't allow it.

Under the provisions of the federal Sustainable Fisheries Act (SFA), at any point when the populations of each of these competing species aren't at MSY they are considered to be “overfished” and stringent harvest restrictions implementing strict rebuilding schedules (to MSY) are mandated. By requiring that all species be at their MSY, our coastal waters are expected in the SFA to support a level of overall production that is ecologically impossible, and fishermen, both recreational and commercial, are expected to reduce their catch to meet this impossible standard.

Species by species management - an idea whose time has gone?

The species-by-species management philosophy that became law with the Magnuson Act in 1976 has proved to be predictably ineffectual. This is, as far as we can tell, the reason why the New England Fishery Management Council voted for a dogfish harvest of over 20 million pounds while the Mid-Atlantic Council, using the same data and managing under the same guidelines, has voted to virtually close the fishery down, allowing less than 3 million pounds to be harvested. At this point dogfish are among the most abundant fish in the waters off New England and the Mid-Atlantic. They are so numerous that in the most recent survey conducted by the National Marine Fisheries Service in the waters extending from Cape Hatteras to Canada, dogfish made up over 40% by weight of all of the fish taken (See **Of Dogfish and overfishing and productive capacity** at <http://www.fishingnj.org/netusa7.htm>). The New England council members realize that if the already huge biomass of dogfish is

allowed to build up to even higher levels, it will do so at the expense of “competing” and much more desirable/valuable/depleted species like cod and haddock. They have tried to act accordingly by recommending the continuation of the dogfish fishery at a reduced yet significant level of harvest. (This week the Secretary of Commerce approved the Dogfish FMP including the disturbingly low quotas, but has directed a reevaluation of the plan’s assumptions that were used to set them.)

This isn’t just a management issue. As the provisions of the Sustainable Fisheries Act come into play over the next year, and as other fisheries are determined to be below MSY, along with the financial devastation of many fishing businesses we will be faced with the loss of critical industry infrastructure that, considering development demands in coastal areas, will never be replaced. And all because we won’t be able to meet the biologically impossible goal of having numerous species at their MSY level simultaneously.

Exacerbating this situation are several other factors that might well have led to unnaturally high levels of production for particular species in the past, consequently generating even more inflated expectations of MSY.

Culminating in the 1970s or early 1980s, we had significantly “enriched” our inshore and coastal waters with untreated (or lightly treated) municipal and industrial wastewater. While some of these effluents were toxic, many were composed primarily of nutrients which might very possibly have increased the ability of the receiving waters to produce fish and shellfish. And until fairly recently we had significantly reduced the populations of cetaceans (whales, dolphins, etc.) and pinnipeds (seals and sea lions) in all of the world’s oceans. These animals are very efficient predators of many of the same fish species that we harvest, or of the species that those species prey upon.

Since then we have spent billions of dollars to reduce the amount of point-source pollutants - including uncounted tons of nutrients - entering our estuarine and coastal waters, very possibly decreasing overall biomass production in these waters (see **Managing The Waterways — Too Clean For The Fish?** by Alan Mearns, Lincoln Loehr and Herbet Curl. The Seattle Times. July 19, 1998). Interestingly, it’s now thought that a recent upswing in biological production in the Mediterranean is most probably due to “fertilization” attributable to coastal development there. At the same time, marine mammal predation on fish and shellfish has increased dramatically as their populations have increased because of the mandates of the Marine Mammal Protection Act in the U.S. and similar legislation and regulations in other countries. We’ve also seen the unintended and uncontrolled spread of toxic materials (herbicides, pesticides, petroleum products, etc.) in every oceanic or estuarine area that has been sampled. Finally, we’ve lost - and continue to lose - significant amounts of our coastal wetlands to development, and with them we’ve lost a corresponding amount of what is vital spawning and nursery habitat for 70% of our economically important fish species. The expectation is that if we manage our fisheries correctly (meaning if we restrict harvesting rigorously enough) we can return them to levels of abundance that were commonplace several decades back. The reality is that, regardless of how stringently we control harvesting, those levels are no longer reachable.

A simple fix

It appears as if, with good intentions, the Congress of the United States has painted recreational and commercial fishermen into an ecological corner. Individual fish stocks are required by federal legislation to be returned to probably unreachable levels of former abundance (given yesterday’s sparsely developed coastlines, nutrient-rich effluents and paucity of marine mammals, and today’s abundance of marine mammals, cleaner waters and the ongoing exodus from inland areas to the coasts), and they are all required to be at those levels simultaneously. That’s far beyond the productive capacities of the involved ecosystems, but in spite of that, when it doesn’t happen more stringent management measures will be imposed on the commercial and recreational fishing industries. And this will all be going on while many fisheries are satisfactorily rebuilding towards or are already at high levels of abundance.

The immediate problem, that of drastically reducing fishing effort when impossible-to-achieve population levels aren’t reached, could be easily solved by requiring that we manage stocks of fish in naturally occurring assemblages rather than on a species-by-species basis. Instead of futilely attempting to simultaneously return all managed fish species to peak levels of abundance, we should recognize that natural ecosystems have limitations and we should give our managers the flexibility to work within the constraints imposed by those limitations. We can’t have an ocean that is filled with maximum amounts of dogfish, cod and haddock, or fluke, bluefish and weakfish all at the same time. We should recognize this and start to manage for a balance of species, with the balance determined by economic and social factors as well as the “natural order.” Logic would dictate that, considering their recreational and commercial demand, New England’s codfish are much too valuable to allow their rebuilding to be retarded in order to have an ocean even more fully populated by dogfish. But that’s what we’re being forced to do today, and our coastal communities will pay tens of millions of dollars if we don’t fix it.

What's so hard about managing fisheries?

May 3, 2017

“We live in a world in which data convey authority. But authority has a way of descending to certitude, and certitude begets hubris. From Robert McNamara to Lehman Brothers to Stronger Together, cautionary tales abound. We ought to know this by now, but we don't. Instead, we respond to the inherent uncertainties of data by adding more data without revisiting our assumptions, creating an impression of certainty that can be lulling, misleading and often dangerous. Ask Clinton” Stephens, B., **Climate of Complete Certainty**, NY Times, 4/28/17.

The above quote was from an op-ed piece by Bret Stephens, the New York Times' recently acquired columnist. While he was targeting climate scientists, their “disciples” and the overblown pseudo-science hidden beneath an oversufficiency of less than convincing statistics that is used to strengthen their arguments, it appears that fisheries scientists are increasingly adopting the same techniques (the emphasis is mine) to support their often erroneous - sometimes sadly so - conclusions.

*NMFS proposes revised black sea bass specifications for the 2017 fishing year and projected specifications for 2018. In addition, this rule proposes to remove an accountability measure implemented at the start of the fishing year designed to account for commercial sector overages in 2015. Updated scientific information regarding the black sea bass stock indicates that higher catch limits should be implemented to obtain optimum yield, and that the accountability measure is no longer necessary or appropriate.... The (Mid-Atlantic Fishery Management) Council and the (Atlantic States Marine Fisheries) Commission's Summer Flounder, Scup, and Black Sea Bass Management Board met jointly on February 15, 2017, to consider the SSC and Monitoring Committees' recommendations.... The Council's recommendations represent a 53-percent increase in the 2017 commercial quota established in 2015 and a 52-percent increase in the 2017 recreational harvest limit. (from **Fisheries of the Northeastern United States; Black Sea Bass Fishery; 2017 and Projected 2018 Specifications**, Federal Register / Vol. 82, No. 71 / Friday, April 14, 2017 / Proposed Rules).*

The above adjustment would apply to black sea bass, an important commercial and recreational fishery in the Mid-Atlantic. When it is implemented the value of the commercial black sea bass fishery in the Northeast, based on 2015 across-the-dock prices, would be in the neighborhood of \$15 million. In 2015 the value of the commercial black sea bass fishery in the Northeast was approximately \$4.5 million. Before the results of the new stock assessment, the impetus for the above adjustment, were available the commercial landings for 2017 were set to be under \$7 million.

The recreational fishery will get a comparable increase.

Summer flounder, black sea bass and scup are all managed under the same fishery management plan, which with amendments has been going on for almost 30 years.

Last autumn I described in *Summer Flounder Management – Can it get any worse?* (available at <http://fisherynation.com/summer-flounder-management-can-it-get-any-worse>) how another important mid-Atlantic fishery over the same period was subject to a greater than 50% quota cut over a two year period. And, like the black sea bass quota, though with much less desirable results, the quota change was mandated with minimal lead time.

Imagine what the effects of these drastic changes in supply in these fisheries have been/will be on the people, the businesses and the communities that depend on them. I doubt that the federal government could come up with any other management strategy, short of an out and out harvest moratorium, that would be more damaging to fishing and fishing dependent businesses. Successful businesses depend on predictability; predictable supplies at predictable prices and with predictable markets, and in fisheries the federal government has been far to capable of delivering unpredictability since the passage of the Sustainable Fisheries Act in 1996. In certain fisheries unpredictability seems to be the rule rather than the exception.

Fisheries management minus the overblown science, bureaucratic bluster and ENGO manipulation

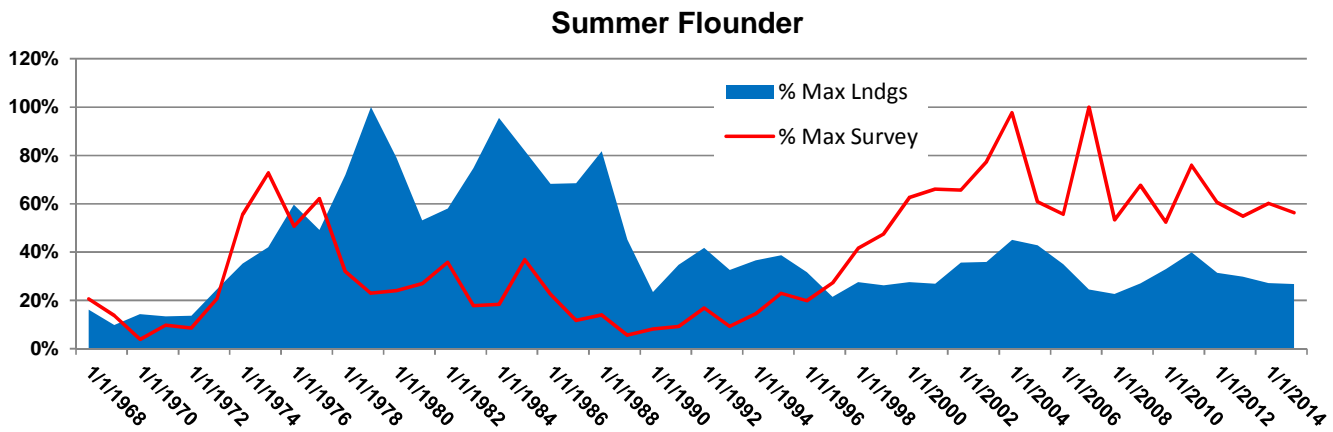
In theory, there's not much involved in effective fisheries management. All that's required is the wherewithal to accurately estimate the condition of the fish/shellfish stock or stock complex you are managing on an annual basis, an accurate determination of the fishing mortality you will allow, and a mechanism to maintain, increase or decrease the mortality level dependent on the following fishing year's mortality.

Obviously this management scenario assumes that there is a relationship between the status of the stock being managed and the fishing mortality, perhaps not expressed immediately but surely after a lag time of a year or two (arguably that's not always the case, but that's a whole other story).

But, as the current summer flounder/black sea bass situation so clearly demonstrates, today this is far beyond the capabilities of our federal fisheries managers and our federal fisheries management system.

Back to summer flounder (yet another Never Ending Story)

Let’s use summer flounder management as an example of what supposed “state of the art” fisheries management looks like. Below I’ve graphed the results of the summer flounder component of the Northeast Spring and Autumn Bottom Trawl Surveys – supposedly one of the best (i.e. most accurate/longest running) fish surveys we’ve got (<http://www.nefsc.noaa.gov/publications/crd/crd1221/t36thru37.pdf>). I’ve also graphed the summer flounder landings from the NMFS on-line landings database (<https://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/>) for the past 40+ years. (The commercial landings and the survey results are expressed as percentages of the maximum survey catch - 2008 - and the maximum landings - 1979 - for the period).



Below are charts of landings and survey results in three logical periods based on what have to be considered as revolutionary changes in how we manage or don’t manage fisheries. These are pre-Magnuson (Figure 1 below), post-Magnuson/pre-Sustainable Fisheries Act (Figure 2) and post-Sustainable Fisheries Act (Figure 3). Blue are survey samples (as the % of the maximum survey sample weight in the respective period) and red are landings (as the % of the maximum landings weight in the respective period).

Using linear trend lines *a la* MS Excel, there appear to be relationships between the bottom trawl survey results and harvest for summer flounder prior to the passage of the Magnuson Act in 1976 (survey catch and commercial landings both increase) and post-Magnuson/pre Sustainable Fisheries Act (survey catch and commercial landings both decrease). In the period following the passage of the Sustainable Fisheries Act in 1996 the survey results increase dramatically while commercial landings remain flat.

Fig 1 - Summer Flounder survey results and landings pre Magnuson (1968 to 1977)

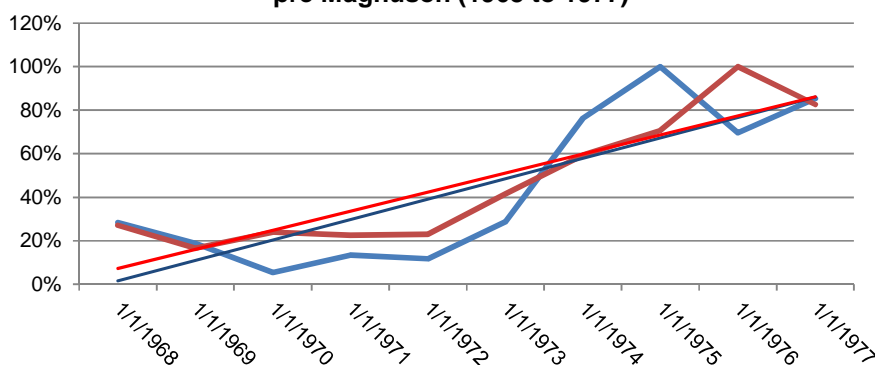


Fig 2 - Summer Flounder survey results and landings post Magnuson, pre SFA (1978 to 1997)

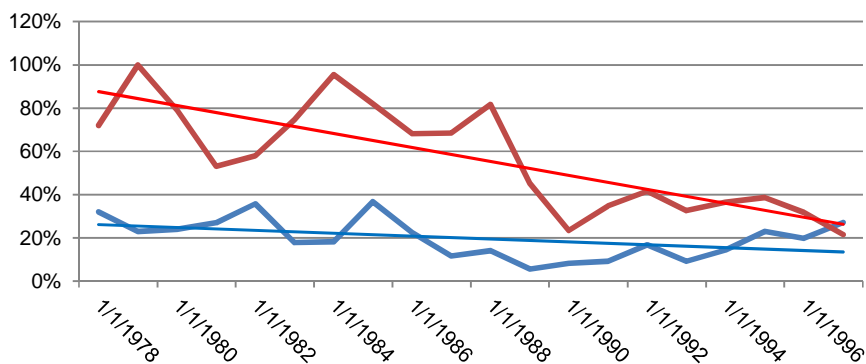
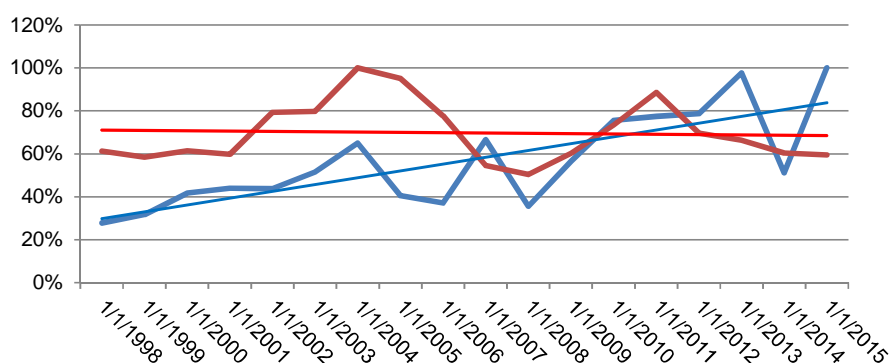


Fig 3 - Summer Flounder survey results and landings post SFA (1998 to 2015)



Since the beginning of the annual Northeast bottom trawl surveys and commercial landings tracking began (at least until the Sustainable Fisheries Act was passed in 1996) there's been an apparent relationship between the estimated summer flounder population size and the harvest. At first - Fig. 1 above - from 1968 to 1975 and with minimal management measures, the population increased and the landings increased correspondingly. Then in 1976 - Fig. 2 - with the advent of Magnuson management and with an increase in effort that came about in just about every federally managed fishery because of its provisions, the population decreased and the landings followed suit. That's the way it's supposed to work. But as Fig. 3 above indicates, since the SFA was enacted it no longer works that way. The weight of the summer flounder sampled, hence the biomass, has increased steadily and seemingly consistently in spite of the switch from the R/V Albatross to the R/V Bigelow, yet landings have remained flat.

(I'll note here that I have had a request in to the survey people at the NOAA/NMFS Northeast Fisheries Science Center for two months or so for survey results for other northeastern fish species but have yet to receive anything in return other than an acknowledgement that the request was received.)

While it might be ill-advised to generalize from a single FMP, some things seem apparent

First off, and possibly most importantly, after the passage of the Magnuson-Stevens Act and before the passage of the Sustainable Fisheries Act (SFA) the Regional Fisheries Management Councils had significant latitude in interpreting the information that was presented to them from the scientific/academic community and the "anecdotal" input from people knowledgeable in fisheries on both sides of the Council table. On-the-water observations and (sometimes multi-generational) knowledge wasn't automatically discounted as it is far too often of late. The Councils' job was to consider all of the information presented to them and to determine their management strategy accordingly (bear in mind that both then and now the Councils only made/make recommendations to the Secretary of Commerce, who has been and still is ultimately responsible for management decisions).

Since 1996 and the SFA, management has been completely different - though as Fig. 3 above seems to indicate, it certainly hasn't been more effective, at least from what used to be the acceptable "if there are more fish, fishermen should be allowed to catch more" pre-SFA perspective. Now scientists have much more input and much more influence, learned judgment, which is still referred to deprecatingly as "anecdotal information" takes a far back seat, and statistics, no matter how inadequate, reign.

Hence the huge, and costly, changes in management parameters based on reassessments and reinterpretations and “uncertainty” penalties. Looking at summer flounder and black sea bass, the scientists appear to be clueless from year to year and yet luxuriate in a system in which the only accountability is borne by the fishermen.

As I have written before, what passes for fisheries management in the U.S. today has been purposefully distorted by anti-fishing activists (misrepresenting themselves as marine conservationists) into a top-heavy bureaucratic system that is focused almost completely on preventing “overfishing,” regardless of the effects this monomaniacal focus has on domestic fishermen and domestic fishing businesses. In the distorted view of these “conservationists,” overfishing should be classified as one of the Cardinal sins, and there should be no acceptable excuse for allowing it to happen in any of our domestic fisheries.

The end result of their successful selling of this view to the unknowledgeable is totally unrealistic harvest restrictions which make it increasingly difficult – and increasingly, impossible - for domestic fishermen to remain in business. And not too surprisingly, of having over 90% of the seafood sold in the U.S. being imported.

To give you an idea of what constitutes federal fisheries management today, the post-SFA managers will start out with the determination of the Overfishing Limit (OFL) in a fishery. The OFL is equivalent to the Maximum Sustainable Yield (MSY), the maximum amount of fish that can be sustainably harvested from a given stock of fish.

But the OFL is then reduced to what is termed the Acceptable Biological Catch (ABC). This is the OFL reduced by “Scientific Uncertainty.”

Scientific uncertainty refers to uncertainty in the information about a stock and its maximum sustainable yield reference points. Sources of scientific uncertainty could include: uncertainty in stock assessment results; uncertainty in the estimates of maximum fishing mortality threshold, maximum stock size threshold, the biomass of the stock, and overfishing limit; time lags in updating assessments; the degree of retrospective revision of assessment results; uncertainty in projections; uncertainties due to the choice of assessment model; longer-term uncertainties due to potential ecosystem and environmental effects; or other factors (http://www.nmfs.noaa.gov/sfa/management/acls_ams/setting_acl.html).

Then the ABC is further reduced by management uncertainty to the Annual Catch Target (ACT).

Management uncertainty refers to uncertainty in the ability of managers to constrain catch so that the annual catch limit is not exceeded, and the uncertainty in quantifying the true catch amounts (i.e., estimation errors). The sources of management uncertainty could include: late catch reporting; misreporting; underreporting of catches; lack of sufficient in-season management, including in-season closure authority; or other factors (ibid.).

So, because the various individuals, agencies and organizations aren’t particularly good at what they do, the harvest is just about always reduced to far under the MSY level. And then, following what is termed a “retrospective analysis,” it may be reduced even farther. Quoting from the **Summer Flounder Stock Assessment Update for 2016** (<https://tinyurl.com/SummerFlounder2015>):

The consistent pattern in the underestimation of F (Fishing Mortality) and the overestimation of SSB (Spawning Stock Biomass) noted for the last several terminal years has continued. Moderate internal model retrospective patterns in F and SSB are evident in the updated assessment model, as the average retrospective errors over the last 7 terminal years are -20% and +11%, about twice as large as the magnitude of the 2013 SAW 57 retrospective errors.

The Chairman of the Mid-Atlantic Council’s Scientific and Statistical Committee (SSC) wrote in a July 26, 2016 memo “the revised understanding of the stock status produced by the assessment update indicates reductions in the estimates of SSB (spawning stock biomass), and increases in the estimates of annual F s (fishing mortality).” Naturally, the way the management system was biased against fishermen and fishing dependent businesses in 1996 in the SFA, this necessitated an immediate and as drastic as necessary correction. So, because the scientists presumably got it wrong in 2013 and then presumably got it right, (or, as the SSC Chairman wrote, developed a “revised understanding”) in 2016 the summer flounder harvest was reduced 27% for the 2016 fishing year and 31% for the 2017 fishing year.

If it was only summer flounder...

In tabular form for four major mid-Atlantic fisheries the reductions from the MSY for 2017 in millions of pounds are as follows (the MSY of Black Sea Bass wasn’t determined so the percentage of the ABC was used. The chart was compiled before the increase in the black sea bass harvest was proposed):

	Summer Flounder	Black Sea Bass	Scup	Bluefish
OFL (MSY)	16.76	-	14.59	26.44
ABC (landings and discards)	11.3	6.67	12.9	20.64
Commercial Quota	5.66	1.86	8.35	8.54
Recreational Harvest Limit	3.77	2.82	2.5	9.65
Total Harvest	9.43	4.68	10.85	18.19
% of MSY	56%		74%	69%
% of ABC		70%		

For these four mid-Atlantic fisheries the Total Harvest ranges from slightly over half (56%) to two thirds of the Maximum Sustainable yield.

Assuming an average value of \$2.50 per pound for the four listed species, the fact that the scientists and managers aren't particularly effective at counting fish in the ocean or on the dock will cost the mid-Atlantic fishing industry over \$60 million in 2017. Assuming that a pound of recreationally caught fish is as valuable as a commercially caught fish and assuming a 5:1 multiplier for economic activity generated by fish landings, that's a third of a billion dollars lost to the coastal economy in the Mid-Atlantic and Southern New England in a single year in only four fisheries.

How well is the summer flounder, scup and black sea bass FMP working?

*“Since 1987, when the Summer Flounder, Scup and Seabass Fishery Management Plan was approved by the U.S. Secretary of Commerce, a series of at least 100 meetings resulted in more than 8,000 typed pages devoted largely (but not exclusively) to summer flounder management. Assuming at least a dozen attendees at each of those meetings, a two day investment of time, travel expenses and etc. by the participants and the cost of writing, editing and distributing those 8,000 plus pages, the cost to the taxpayers must be well into six figures.” (From **Summer Flounder Management – can it get any worse?** at http://www.fishnet-usa.com/SummerFlounder_AnyWorse.pdf.)*

After almost 30 years of intensive management, in two consecutive years the federal managers - bureaucrats and scientists – missed, or determined that they had missed, the condition of two of the three stocks being managed in the FMP by such a wide margin that in one the allowable harvest had to be cut by more than half and in the other the harvest had to be doubled. In case you missed it the first time, **that's after almost 30 years of intensive management!** Not much onward and upward there, is there?

And what about underfishing?

And then there are the harvest restrictions that come into play after the allowable harvests are determined by accounting for scientific and management uncertainty. These generally involve the cessation of harvesting of a target species because of the incidental catch of other species (bycatch of so-called “choke species”) in that fishery. The chart below shows what the Annual Catch Limits were for the species managed under the New England Fishery Management Council's Northeast Multispecies Fishery Management Plan in 2015. In fishing years 2011 to 2015 New England fishermen caught between 29% (in 2015) and 39% (in 2011) of what they potentially could have caught but didn't because of the bycatch of “choke” species reaching their limits or because of lack of markets for the targeted species (<https://www.greateratlantic.fisheries.noaa.gov/ro/fso/MultiMonReports.htm>). In 2015, with a potential catch of 79 thousand metric tons, just over 23 thousand metric tons were harvested from these stocks. Of that total harvest only 21 thousand tons were retained by the fishermen and almost 2,000 metric tons were released or discarded. This left 27% of the total allowable catch to support the remnants of one of our oldest and most culturally significant fisheries.

Stock	Cumulative Kept (mt) 2015	Cumulative Discard (mt) 2015	Cumulative Catch (mt) 2015	Sub-ACL (mt) 2015	Percent Caught (FY 2015)	Percent Caught (FY 2014)	Percent Caught (FY 2013)	Percent Caught (FY 2012)	Percent Caught (FY 2011)	Percent Caught (FY 2010)
GB Cod East	80.1	1.9	82	122.7	66.8	49.2	36.2	41.6	82.1	75
GB Cod	1,608.50	28.3	1,636.80	1,787.00	91.6	78.4	87	35.2	76.2	82.5
GOM Cod	172.4	14	186.4	207	90.1	79.9	89.3	59.8	92.5	84.1
GB Haddock East	921.9	136	1,057.90	17,760.00	6	15.4	15.4	5.3	11	15.2
GB Haddock	4,217.90	856.7	5,074.70	21,759.00	23.3	31.7	11.4	4.4	12.6	20.6
GOM Haddock	537.9	36.2	574.1	958	59.9	74.5	91.6	37.7	62.4	45.8
GB Yellowtail Flounder	36.5	1.9	38.4	202.9	18.9	24.5	36.1	58.5	86.7	92.1
SNE/MA Yellowtail Flounder	272.7	10.9	283.5	579.3	48.9	71	63.7	60.9	71.8	55.4
CC/GOM Yellowtail Flounder	366.3	18.8	385.1	458	84.1	52.3	79.4	91.5	85.8	76.6
Plaice	1,296.10	83.9	1,379.90	1,408.00	98	94.1	98.3	49	52.6	53.9
Witch Flounder	488.2	48.8	536.9	610	88	84.5	105.3	67.9	80.7	85.1
GB Winter Flounder	864.7	4.1	868.8	1,891.00	45.9	34	48.8	57	95.9	75.1
GOM Winter Flounder	119	2.1	121	392	30.9	17.4	23.7	36.4	48.9	67.2
SNE Winter Flounder	679.4	8.6	688	1,306.00	52.7	45.1	65.2	35	12.9	
Redfish	5,182.70	101.9	5,284.60	11,034.00	47.9	44.4	39.5	53.2	35.9	31.4
White Hake	1,584.70	14.4	1,599.10	4,343.00	36.8	40.9	53.1	75.3	101.8	88.4
Pollock	2,848.20	75.8	2,923.90	13,720.00	21.3	30.4	38.1	51.2	54.6	33.8
Northern Windowpane	0	73.6	73.6	98	75.1	160.9	242.4	100.5	142.2	
Southern Windowpane	0.2	137.4	137.6	102	134.9	94.4	113.7	147.9	72.4	
Ocean Pout	0	52.3	52.3	195	26.8	16.8	16.9	18.3	25.4	
Halibut	22	37	59	64	92.2	83.9	105.2	168.7	129.1	
Wolffish	0	18.7	18.7	62	30.1	23	27.6	41.3	45.1	
Totals			23062.3	79058.9	29.17%	36.40%	33.39%	32.66%	39.84%	34.43%

Because of artificial restrictions on harvesting, perhaps half of what would be the total, scientifically justified (before scientific and management uncertainties are allowed for) allowable catch remains unharvested each year. In the Northeast the value of landings in 2015 were \$1.5 billion, using a 5:1 multiplier generating on the order of \$7.5 billion in economic activity. It's plain that those landings could approach \$3 billion, generating \$15 billion in economic activity, 1) if fisheries scientists were better at estimating fish population, 2) if the slight risk of overfishing was accepted each year and effective provisions for dealing with that risk in one or two subsequent years were mandated, and 3) if the totally nonsensical idea that even inconsequential species should be at levels that would allow for their harvesting at MSY levels was discarded, to be replaced by the requirement that their harvesting wouldn't threaten the continuation of the species.

Do you think a fresh start might be indicated?

Reduced to an elementary level, what if the summer flounder allowable catch in the Northeast was set at the Maximum Sustainable Yield/Overfishing Limit of 16.76 million pounds rather than at the "safe" level (allowing for scientific and management uncertainty) of 9.43 million pounds? There is a probability that the 16.76 million pounds would be a safe level of harvest – no overfishing. There is also a probability that that level of harvest would allow overfishing.

If there was no overfishing everything would be fine. If there was overfishing the amount by which the quota was exceeded would simply be deducted from the quota for the next year (or the next two or three years). There would be no loss; the summer flounder fishery would be ahead by 6 million pounds or so - \$15 million to the industry and \$75 million in increased economic activity spread out from North Carolina to Southern Massachusetts. Reducing a quota for one year because the quota was exceeded in the previous year is something that's regularly done in various federally managed fisheries. It isn't anything like a big deal, but rather is a routine adjustment. Is there a difference if the quota is set at the MST/OFL level instead of millions of pounds less than that? Except for the lost income there isn't.

And this isn't a problem that is restricted to the Northeast (see Ray Hilborn's comment on West Coast groundfish on the CFood website (<http://cfooduw.org/west-coast-groundfish/>)).

How fisheries management could (should?) work

The initial step in every fishery would be the design of a species-specific sampling/assessment process by a panel of stake holders and scientists. With the results of this process in hand an initial TAC would be set and initial management measures designed allowing this TAC to be caught would be put in place. In each subsequent year the stock would be assessed and the TAC would be adjusted accordingly (if assessment results were lower the TAC would be decreased, if higher the TAC would be increased, if the same the TAC would remain unchanged).

Considering the spectacularly inadequate performance of the existing assessment/management process – severe underfishing in fishery after fishery, huge harvest adjustments in either direction because of "retrospective analyses" or "revised understandings" – could such a simple system perform more poorly? It would certainly be more affordable, in all likelihood it would be more acceptable to the resource users, it would definitely be more understandable to the public, and think of all of the bureaucratic/scientific salaries and all of the trees that would be saved.

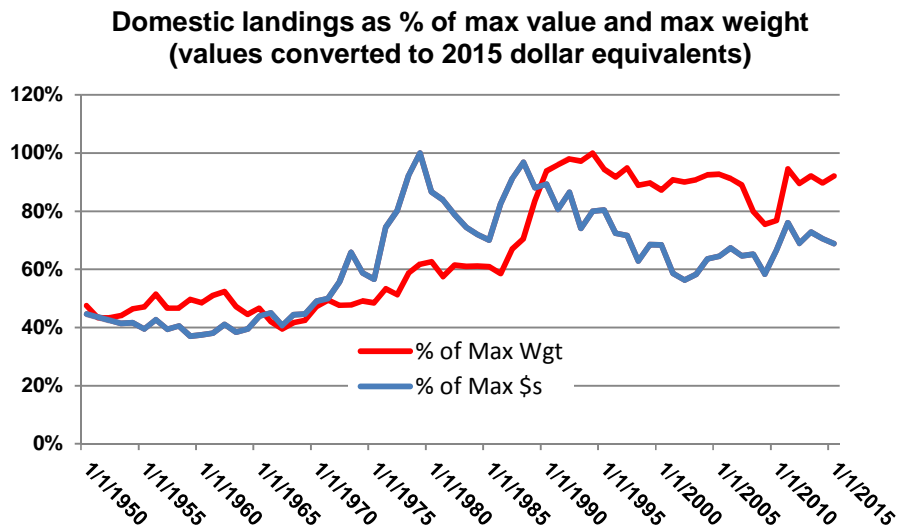
Each year thousands of tons of finfish and shellfish remain unharvested because of a totally unjustified fear of overfishing, a fear that has been created by the anti-fishing community with the complicity of bureaucrats, scientists and politicians who are orders of magnitude more concerned with avoiding the slightest hint of overfishing than they are with the vitality of our fishing industry.

It's time that we treated overfishing for what it really is. It isn't a precursor to extinction or a threat to sustainability, it's a fisheries management misstep that, with proper safeguards in place, will be obviated in a year or two with absolutely no permanent or even lasting damage to our stocks of finfish and shellfish. The only damage – if it could be considered as such – would be due to the long overdue recognition of the redundancy of the doom-predicting anti-fishing activists who have built careers and bureaucracies on preventing overfishing.

So how are we doing (2017 edition)?
June 28, 2017

I occasionally share my impressions of how the domestic commercial fishing industry is doing, using as my primary data source the NMFS online database “Annual Commercial Landing Statistics” at <https://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/annual-landings/index>. We are fortunate to have these extensive records of commercial landings of fish and shellfish in the United States extending back to 1950 because they allow a fairly comprehensive view of long term industry (and resource) trends.

Among the most useful statistics are those dealing with the value and weight of the total landings for each year. Together they give an overview of how the domestic fishing industry is progressing (or regressing) from year to year. I've tried to incorporate that in the chart below, but rather than using the specific weights and dollars I converted them to the percentages of the maximum weights and dollars (and corrected the value of landings for each year for inflation using the US Inflation Calculator at <http://www.usinflationcalculator.com/>). As an example, the cumulative rate of inflation between 1950 and 2015 is 983%. Thus the \$336,266,187 of fish and shellfish landings reported in 1950 was worth \$3,307,087,254 in 2015 dollars.

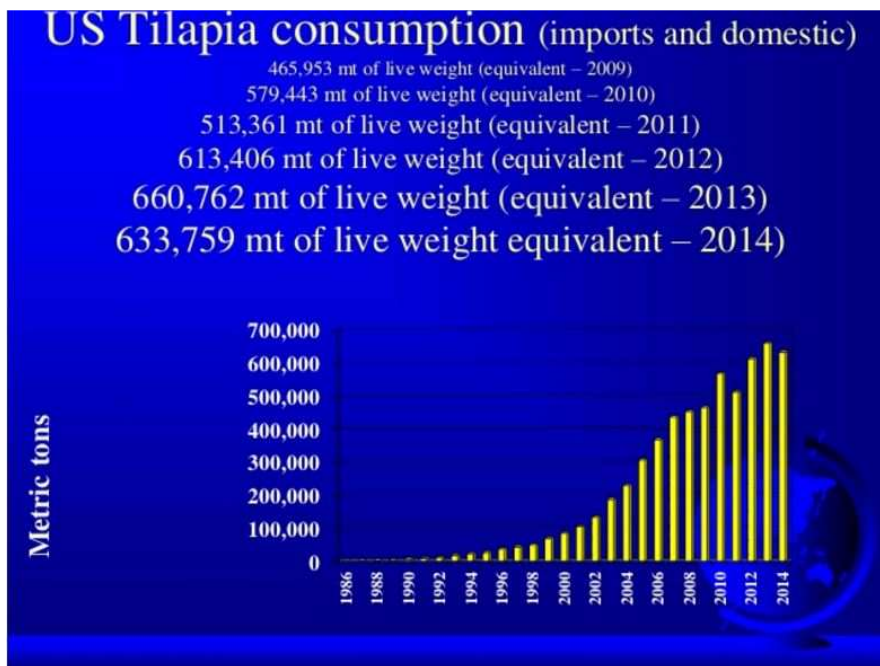


From a weight-of-landings perspective it looks as if the commercial fishing industry nationally isn't doing too badly. Unfortunately that isn't the case from an income perspective, with recent landings being in the range of from under 60% to approaching 80% of 1979, the peak year for value of landings (at almost \$4.5 billion when adjusted for inflation).

Each year's weight and (corrected) value is represented by its percentage of the maximum weight (4,752,254 metric tons in 1994) and maximum value (\$7,418,658,938 in 1979). This allows for fairly accurate year-to-year comparisons. At the macro-level this chart shows that U.S. commercial landings have dropped in the neighborhood of 5% below their maximum level of production in 1994. However, the value of those landings appears to have declined at a significantly greater rate. The value of the landings in the year with the peak weight was only 80% of the maximum value of landings, and that relationship appears

to have continued and for the most part increased. It's safe to say that over the last quarter of a century domestic fishermen have been catching more for a significantly smaller return.

This could at least partially be a function of a relative increase in the production of lower value fish, or of market pressures (as it's illustrated below, consider the extraordinary growth of the domestic tilapia demand and its possible market impacts on domestically produced seafood).



(From Fitzsimmons, K., Tilapia Aquaculture 2016, **Eleventh International Symposium on Tilapia in Aquaculture**, <https://cals.arizona.edu/azaqua/ista/ISTA11/ISTA11.htm>),

But of course the national performance doesn't mean much to the many businesses that are dependent on one or several fisheries.

Getting more specific, I have charted the weight and inflation adjusted value of the twenty-five most valuable domestic fisheries as of 2015. To list them in order of descending value, they are American lobster, walleye pollock, sea scallops, Pacific cod, blue crabs, sockeye salmon, eastern oysters, Atlantic menhaden, snow crabs, pink salmon, Pacific halibut, sablefish, Dungeness crabs, king crabs, bigeye tuna, chum salmon, chinook salmon, Pacific geoducks, northern quahogs, spiny lobsters, Atka mackerel, tanner crabs, Pacific oysters, stone crab (claws) and yellowfin sole (all of these charts are available in a Adobe Acrobat document at http://www.fishnet-usa.com/Top25Fisheries_2015.pdf).

Thus, Atlantic menhaden, one of our largest fisheries, had maximum landings of 1.36 million metric tons in 1983 valued at 290 million dollars (in 2015 dollars) while the maximum value landed was in 1973 for 850 thousand metric tons valued at just over \$400 thousand (again in 2015 dollars). Atlantic Menhaden Landings in 2015 were 740 thousand metric tons, valued at just under \$180 thousand. This was 45% Of the maximum weight of Atlantic menhaden landed and was worth 54% of the maximum value.

The table below lists the 25 most valuable fisheries for 1950 (the earliest year for which catch data is available on the Commercial Landings web site), 1980 (post-Magnuson), 2006 (post-SFA) and 2015 (the most recent year with landings data available). The landed value is reported for the particular year as well as that value adjusted for inflation ("2015 Value"). Ten fisheries have consistently been in the top twenty-five. These are in colored cells.

(Note that because of naming inconsistencies the various shrimp groups were omitted. Among our most valuable fisheries, if they were included a number of them would have been listed in the top 25 for at least one of the four years and several for more than one year.)

Looking at the performance of the top 25 fisheries, generalizations seem to be pretty hard to come by. Some are and have be trending upward fairly steadily since the fishery began (bigeye tuna, American lobster), some trending steadily downward (Eastern oysters until oyster aquaculture got serious, king crab since the peak production), many a significant decline in the last decade or so (Dungeness crab, king crab, chinook salmon, northern quahogs, sablefish, halibut), and others are impossible to categorize,

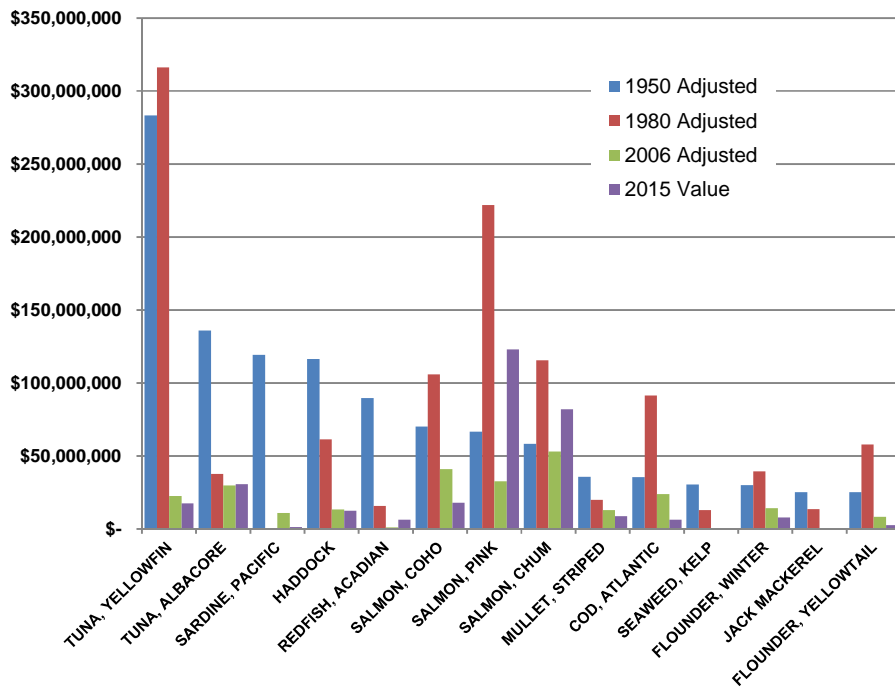
seeming to vary randomly. If only the last ten years – since the SFA was passed, it appears to be about a tie between winners and losers (with the winners slightly in the lead) as far as production is concerned.

	1950	1950 Value	2015 Value	1980	1980 Value	2015 Value
TUNA, YELLOWFIN		\$ 28,823,213	\$ 283,332,184	CRAB, KING	\$174,339,680	\$ 502,098,278
OYSTER, EASTERN		\$ 27,391,974	\$ 269,263,104	SALMON, SOCKEYE	\$113,184,650	\$ 325,971,792
TUNA, SKIPJACK		\$ 18,130,439	\$ 178,222,215	MENHADEN	\$12,098,237	\$ 322,842,923
TUNA, ALBACORE		\$ 13,839,263	\$ 136,039,955	TUNA, YELLOWFIN	\$109,837,713	\$ 316,332,613
SARDINE, PACIFIC		\$ 12,140,322	\$ 119,339,365	SCALLOP, SEA	\$108,599,672	\$ 312,767,055
HADDOCK		\$ 11,833,865	\$ 116,326,893	TUNA, SKIPJACK	\$89,710,031	\$ 258,364,889
MENHADEN		\$ 10,402,294	\$ 102,254,550	SALMON, PINK	\$77,108,313	\$ 222,071,941
SALMON, SOCKEYE		\$ 9,277,170	\$ 91,194,581	LOBSTER, AMERICAN	\$76,118,331	\$ 219,220,793
SCALLOP, SEA		\$ 9,207,583	\$ 90,510,541	CRAB, SNOW/TANNER	\$62,612,350	\$ 180,323,568
REDFISH, ACADIAN		\$ 9,137,318	\$ 89,819,836	OYSTER, EASTERN	\$61,412,934	\$ 176,869,250
LOBSTER, AMERICAN		\$ 8,346,062	\$ 82,041,789	SALMON, CHINOOK	\$49,715,768	\$ 143,181,412
HALIBUT, PACIFIC		\$ 8,344,127	\$ 82,022,768	CLAM, QUAHOG	\$45,585,372	\$ 131,285,871
SALMON, CHINOOK		\$ 8,328,433	\$ 81,868,496	SALMON, CHUM	\$40,105,769	\$ 115,504,615
CLAM, QUAHOG		\$ 7,247,240	\$ 71,240,369	SALMON, COHO	\$36,800,602	\$ 105,985,734
SALMON, COHO		\$ 7,151,008	\$ 70,294,409	CRAB, BLUE	\$35,477,103	\$ 102,174,057
SALMON, PINK		\$ 6,773,180	\$ 66,580,359	COD, ATLANTIC	\$31,790,379	\$ 91,556,292
SALMON, CHUM		\$ 5,920,158	\$ 58,195,153	HERRING, PACIFIC	\$30,210,921	\$ 87,007,452
CRAB, BLUE		\$ 4,783,949	\$ 47,026,219	CRAB, DUNGENESS	\$30,199,635	\$ 86,974,949
MULLET, STRIPED (LIZA)		\$ 3,631,214	\$ 35,694,834	SWORDFISH	\$23,349,558	\$ 67,246,727
COD, ATLANTIC		\$ 3,622,665	\$ 35,610,797	HADDOCK	\$21,333,755	\$ 61,441,214
CRAB, DUNGENESS		\$ 3,110,258	\$ 30,573,836	FLOUNDER, YELLOWTAIL	\$20,079,867	\$ 57,830,017
SEAWEED, KELP		\$ 3,090,493	\$ 30,379,546	CLAM, ATLANTIC SURF	\$19,360,810	\$ 55,759,133
FLOUNDER, WINTER		\$ 3,042,074	\$ 29,903,587	CLAM, SOFTSHELL	\$17,558,068	\$ 50,567,236
JACK MACKEREL		\$ 2,571,869	\$ 25,281,472	FLOUNDER, SUMMER	\$16,191,097	\$ 46,630,359
FLOUNDER, YELLOWTAIL		\$ 2,568,673	\$ 25,250,056	ROCKFISHES	\$15,560,288	\$ 44,813,629
Total (in 2015 \$s)			\$ 2,248,266,917			\$ 4,084,821,801

	2006	2006 Value	2015 Value	2015	2015 Value
LOBSTER, AMERICAN		\$ 404,394,801	\$ 477,185,865	LOBSTER, AMERICAN	\$ 620,643,370
SCALLOP, SEA		\$ 386,341,021	\$ 455,882,405	POLLOCK, WALLEYE	\$ 441,635,772
POLLOCK, WALLEYE		\$ 329,878,840	\$ 389,257,031	SCALLOP, SEA	\$ 439,744,189
HALIBUT, PACIFIC		\$ 201,974,407	\$ 238,329,800	COD, PACIFIC	\$ 257,745,064
COD, PACIFIC		\$ 197,236,979	\$ 232,739,635	CRAB, BLUE	\$ 211,905,867
HERRING, ATLANTIC		\$ 167,561,313	\$ 197,722,349	SALMON, SOCKEYE	\$ 200,057,890
SALMON, SOCKEYE		\$ 159,474,687	\$ 188,180,131	OYSTER, EASTERN	\$ 196,968,643
CRAB, DUNGENESS		\$ 148,983,061	\$ 175,800,012	MENHADEN	\$ 179,558,847
SABLEFISH		\$ 132,156,202	\$ 155,944,318	CRAB, SNOW	\$ 133,698,748
CRAB, BLUE		\$ 119,904,669	\$ 141,487,509	SALMON, PINK	\$ 123,062,354
OYSTER, EASTERN		\$ 82,568,612	\$ 97,430,962	HALIBUT, PACIFIC	\$ 118,326,177
MENHADEN		\$ 70,553,063	\$ 83,252,614	SABLEFISH	\$ 113,742,703
CRAB, KING		\$ 67,060,178	\$ 79,131,010	CRAB, DUNGENESS	\$ 112,270,382
CLAM, NORTHERN QUAHOG		\$ 49,420,090	\$ 58,315,706	CRAB, KING	\$ 98,709,867
SALMON, CHUM		\$ 45,126,082	\$ 53,248,777	TUNA, BIGEYE	\$ 79,215,328
SALMON, CHINOOK		\$ 43,746,254	\$ 51,620,580	SALMON, CHUM	\$ 59,998,414
OYSTER, PACIFIC		\$ 38,068,410	\$ 44,920,724	SALMON, CHINOOK	\$ 59,265,369
TUNA, BIGEYE		\$ 37,406,117	\$ 44,139,218	CLAM, PACIFIC GEODUCK	\$ 56,028,313
CLAM, SOFTSHELL		\$ 36,820,168	\$ 43,447,798	CLAM, NORTHERN QUAHOG	\$ 51,662,515
SALMON, COHO		\$ 34,766,161	\$ 41,024,070	LOBSTER, CARIBBEAN SPINY	\$ 47,793,142
HAKE, PACIFIC (WHITING)		\$ 34,425,260	\$ 40,621,807	ATKA MACKEREL	\$ 42,016,122
SOLE, YELLOWFIN		\$ 33,713,740	\$ 39,782,213	TANNER CRAB	\$ 41,198,731
GOOSEFISH		\$ 33,574,743	\$ 39,618,197	OYSTER, PACIFIC	\$ 36,879,746
CLAM, MANILA		\$ 30,818,049	\$ 36,365,298	STONE CRAB CLAWS	\$ 36,769,878
CRAB, SNOW		\$ 30,453,809	\$ 35,935,495	SOLE, YELLOWFIN	\$ 34,204,400
Total (in 2015 \$s)			\$ 3,441,383,525		\$3,793,071,831

The chart below indicates the great range in the value of landings in the four years selected in various “top 25” fisheries. Note that the 1950 value was at or approaching peak levels in six fisheries as it was in the immediate post-Magnuson period (1980). The wide variations could be caused by resource/environmental, economic or political factors, or any combination, but they make clear the lack of stability in many of our fisheries – and are a good argument for the difficulty (futility?) of attempting to manage for anything like a “constant harvest” unless the harvest is reduced to such an extent that natural cycling becomes the overwhelmingly dominant population determinant.

List of fisheries which had landings values in the top 25 nationally at least once in selected years



The situation in the Mid-Atlantic

I treated what I consider the fourteen major ocean-based fisheries in the Mid-Atlantic region as I did the national “top 25.” Then I went one step beyond that and graphed only the last ten years – again as percentages of the peak production of each fishery since 1950. I also included linear trend lines for both the weight and the (inflation corrected) values of the landings. The values of landings are in blue and the weights in red (go to http://www.fishnet-usa.com/MidAtlanticFisheries_2015.pdf).

Eight of the fourteen fisheries have had both production and value trending down for the past decade and two, sea scallops and loligo squid, have had production heading down but value increasing. Considering the ongoing major cuts in the summer flounder TAC I have no doubt that as soon as the 2016 landings are included they will be heading downward as well. Over 70% of the Mid-Atlantic fisheries will be in a state of decline.

So what does this all mean?

Beyond what seems to be the inescapable conclusion that if maximizing production is the goal we aren’t doing a particularly good job managing our fisheries, at this point your guess is at least as good as mine. Based on what seemed to be some inconsistencies in summer flounder trawl survey/landings data post-SFA (see <http://fisherynation.com/58407-2>), over the next month I am planning on examining how indices of abundance (aka surveys) relate to landings in particular fisheries – again with a focus on Mid-Atlantic/Northeastern fisheries. Perhaps this additional data will contribute to a more clear picture of what’s going on in some of our fisheries and in their management.

In 2015 the National Marine Fisheries Service Commercial Landings database reported on 485 species/fisheries. The most valuable of these fisheries, that for American lobster, landed 66,500 metric tons worth \$620 million at the dock. The least valuable, that for leather skin (<https://www.tradeindia.com/fp474459/Leather-Skin-Fish.html>), reportedly landed 4 pounds worth \$8. The walleye pollack fishery, the largest in 2015, produced over 3.2 billion pounds. The leather skin made the list as the smallest fishery as well. Domestic fisheries may be managed by international organizations, tribal councils, federal, state or local agencies, or combinations of these groups. Domestic fish and shellfish can be caught by multi-million dollar state-of-the-art fishing vessels or folks slogging around on mud flats with shovels and buckets (I have no idea how the 4 pounds of leather skin were caught). The landed value of domestically produced fish and shellfish ranges from pennies to tens of dollars per pound (the 2.6 million pounds of Pacific geoduck returned \$56 million to the producers). And there is – to me, at least – a surprising inconsistency in year-to-year landings in virtually all fisheries.

The domestic commercial fishing industry could best be described as diverse, and deciding how to characterize its performance over time was a bit of a challenge. Taking into account the fact that in 2015 the 25 most valuable fisheries accounted for 78% of the value of the total landings, I decided to focus on these top fisheries. Considering that the weight produced in particular fisheries could vary by several orders of magnitude compared to other fisheries, the weights landed are expressed as percentages of the maximum landed weights reported. All of the landings values have been corrected for inflation, using 2015 equivalents and are also presented as percentages of maximum (corrected) value. This should allow for useful year-to-year comparisons within and between particular fisheries.

The Excel spreadsheet containing all of the data I used for this FishNet is just under a megabyte in size. If you wish a copy, email me at nilsstolpe@cfl.rr.com.

That sky keeps on falling. Apparently the anti-fishing foundation funding doesn't follow suit
July 3, 2017

“New research shows that industrial fisheries are responsible for dumping nearly 10 million tons of perfectly good fish back into the ocean each year—enough to fill 4,500 Olympic-sized swimming pools. This news comes at a time when nearly 90 percent of the world’s fish stocks are threatened by overfishing.” (Dvorsky, G., A Staggering Amount of Fish Is Wasted Each Year, Gizmodo.com, 6/27/2017)

This is from the latest bit of “fishing is ruining the oceans” alarmism, this time in a paper published in *Fish and fisheries* reporting on research funded by the Pew connected Sea Around Us (see <http://www.pewtrusts.org/en/about/events/2014/the-sea-around-us-taking-stock-of-our-fish-oceans-and-people>).

Sounds kind of awful, doesn't it? Thousands of “Olympic-sized” swimming pools filled to the brim with dead and dying fish and shellfish, totally wasted and evidently rotting in the sun.

But as is so often the case, with a little bit of perspective the truth isn't anywhere nearly as catastrophic as the anti-fishing clique would have you believe.

By the numbers, the area of the world's oceans is 140+ million square miles. If the fish and shellfish in those 4,500 swimming pools were equally distributed in our oceans that would be 10 tons per 140 square miles, or 1 ton (metric, I assume) per 14 square miles, or 157 pounds per square mile. A square mile being 640 acres, **all of those swimming pools of supposedly wasted sea life would equal on the order of 4 ounces – a small sardine can - per acre of the world's oceans.**

Some stagger! Some crisis!

But then it's apparent that a bunch of impressionable alarmist reporters who are “covering” this tempest in a sardine can aren't aware of one of the most rudimentary facts concerning the world's oceans and the organism's in it, which is how quickly dead and dying critters become dinner for other critters. From the action around fishing boats when the crews are culling their catch, this transformation from dead or dying protein to living, swimming around protein happens awfully quickly. Food for dolphin and turtles and fish and shellfish, how wasteful is that?

And then there's the contention that these are “nearly 10 million tons of perfectly good fish.” Perfectly good is one thing, saleable is another. Were those “perfectly good fish” saleable as well, they would be kept and then sold by the fishermen, 'cause that's what fishermen do. I wonder if anyone at Pew's palatial digs in Philadelphia or DC has ever considered funding research into turning all of those swimming pools – or sardine cans – filled with fish into incentives to the fishermen to keep and sell them?

And finally, and most tellingly, they assume that fishermen are indifferent to unnecessarily killing critters they can't use. From what I've seen and heard, nothing could be further from the truth. When you get right down to it, fishermen are as concerned with – if not more so – the health of the ocean ecosystems than your average citizen because that's what their chosen way of life depends on. Besides that, every animal that gets caught inflicts wear and tear on the gear it was caught with, it wastes fuel and it wastes crew time in dealing with it. Bycatch, even if it amounts to only a sardine can per acre of ocean, is expensive to deal with and takes time and effort that could be invested in catching more saleable product.

For more in crisis mongering see *Pew/Oceana's latest exercise in crepe hanging* (http://www.fishnet-usa.com/MorePew_OceanaCrepe.pdf) and going back to 2006, *Full of sound and fury, signifying nothing* at (http://www.fishnet-usa.com/then_now.pdf).

Trawl Surveys, what are they good for?

July 27, 2017

(Note that I am only addressing the NOAA/NMFS reliance on bottom trawl survey data in finfish stock assessments. I am not questioning the value of the wealth of biological and physical data that this long - running series of surveys generate.)

“The spring and autumn bottom trawl surveys conducted by the Northeast Fisheries Science Center are the longest running continuous time series of research vessel sampling in the world. The autumn survey began in 1963; the spring in 1968 (Azarovitz 1981). These surveys cover the ocean environment from 5 to 200 fathoms deep, from Cape Hatteras, North Carolina to well beyond the Canadian boarder [sic]. About 300 half-hour trawl sets are made at sites (stations) randomly chosen prior to the beginning of each survey. The objective of each tow is not to catch large numbers of fish, but to capture a representative sample of the various species and relative numbers in a given area. The distribution of trawling locations is allocated according to a statistical method that divides the region into a number of smaller areas (strata) with similar depth characteristics. The method is a stratified-random sampling design, and is commonly used for a wide variety of statistical estimates, including exit polling for elections. In the history of the trawl surveys, only three research vessels -- NOAA's FSV Henry B. Bigelow, FRV Albatross IV and the FRV Delaware II -- have been used to conduct these surveys.” https://www.nefsc.noaa.gov/femad/ecosurvey/mainpage/why_nefsc_surveys.htm#neo7.

“The NEFSC bottom trawl survey is a fisheries independent, multi-species survey that provides the primary scientific data for fisheries assessments in the U.S. mid-Atlantic and New England regions,” NOAA National Centers for Environmental Information, https://www.ngdc.noaa.gov/metaview/page?xml=NOAA/NESDIS/NGDC/MGG/Sonar_Water_Column/iso/xml/HB1201_EK60.xml&view=getDataView&header=none.

For the fishing industry in the mid-Atlantic and New England the results of the two annual – with three annually for a few years ending in 2008 – bottom trawl surveys are more important than any other factor in determining what the upcoming harvest in several dozen fisheries will be.

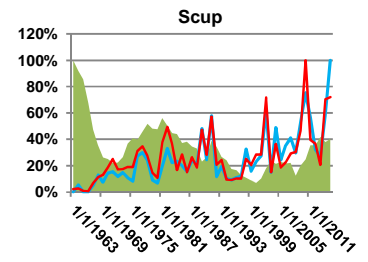
According to NOAA/NMFS these surveys have provided and continue to provide “the primary scientific data” for fisheries assessments from North Carolina to Maine (fisheries assessments are the periodic – generally held every 3 to 5 years - scientific/bureaucratic exercises. In NOAA’s words “NOAA Fisheries’ scientific stock assessments are critical to modern fisheries management. Using data gathered from commercial and recreational fishermen and our own on-the-water scientific observations, a stock assessment describes the past and current status of a fish population or stock, answers questions about the size of the stock, and makes predictions about how a fishery will respond to current and future management measures.”)

Needless to say, these stock assessments are of overriding importance to anyone who is dependent on fish and fishing, and the annual bottom trawl surveys provide the scientific underpinnings for management decisions in those fisheries for the majority of species in the Northeast region.

This being the case, I thought that it would be instructive to examine the relationship between the survey results and the commercial landings for some of the species which the surveys sample. I used what I judged to be the twenty-one most valuable/important species and ignore several (sculpin, little skate, etc.) which I judged to be of less commercial significance.

So how accurate are these bottom trawl surveys – and the stock assessments which depend on the information they generate? I doubt that there are easy answers to these questions, and I'm certain that if there are, I don't have them. But in an attempt to provide you with enough information to at least begin to consider such questions I've charted the survey results and commercial landings going back to 1963 for twenty mid-Atlantic/New England fisheries.

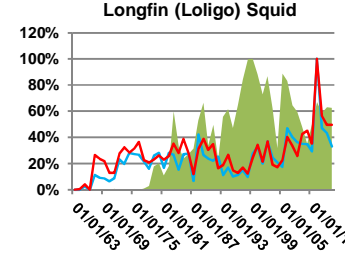
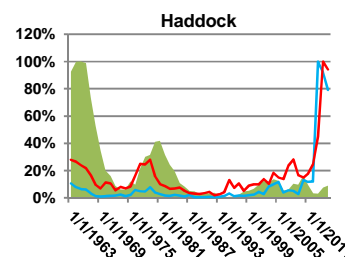
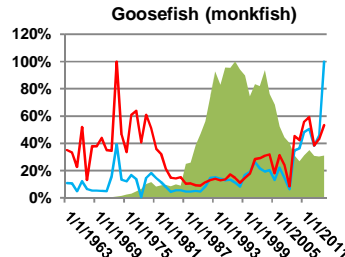
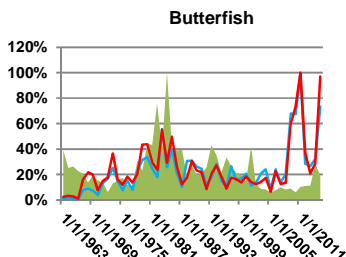
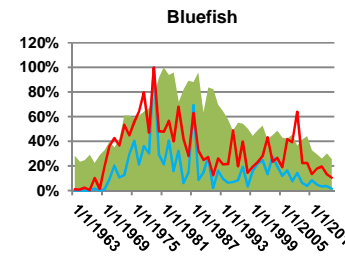
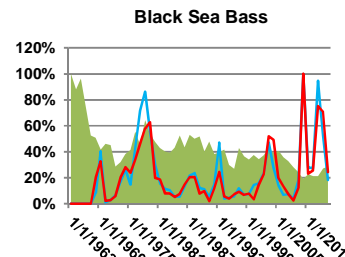
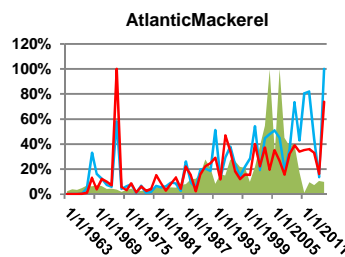
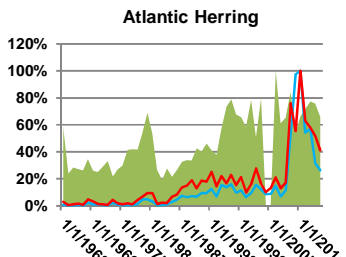
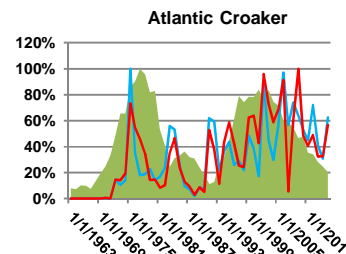
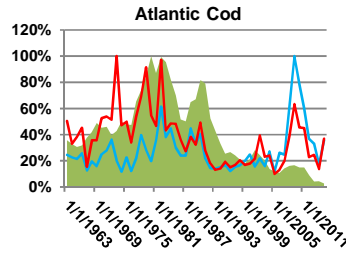
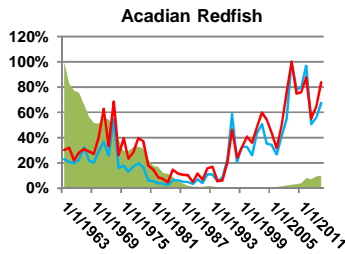
As in my last FishNet, instead of considering the actual survey results and landings I've charted each annual datum as a percentage of the maximum for that species (i.e. the 1977 total survey count for scup - blue line - was 18,549, 30% of the maximum total count of 61,818 in 2015, the 1977 total survey weight – red line - was 830 kilograms, 35% of the maximum of 2,387 kilograms in 2010, and the 1977 commercial landings – green area - were 8,699 metric tons, 35% of the maximum landings of 19,015 metric tons in 1963).

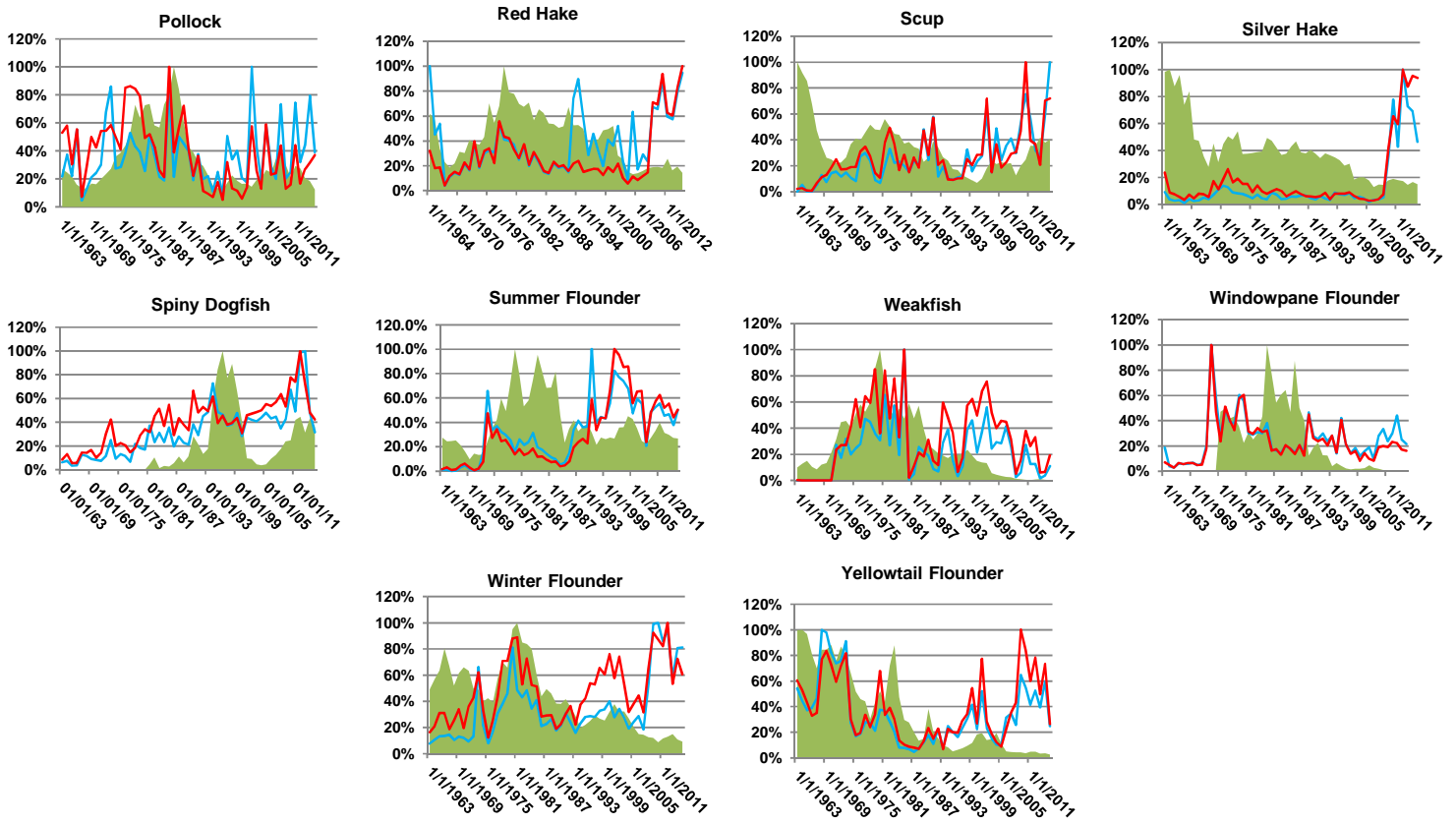


In 1963 when only one trawl survey was done the total weights/counts for that survey were used, in subsequent years when two or three surveys took place the total weights/counts were divided by two or three respectively.

Beneath each species chart I have recorded the maximum (100%) numbers for fish sampled each year, weight of sampled fish, and commercial landings.

Below are thumbnails of twenty-one charts.





Larger images are available at <http://www.fishnet-usa.com/Charts.pdf>.

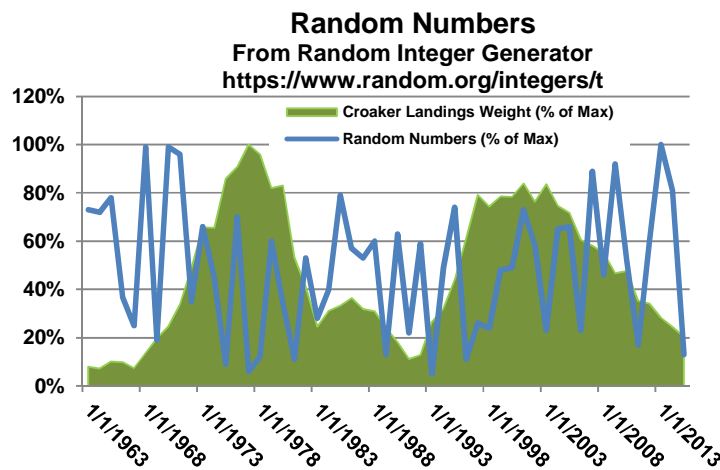
While the charts are all similarly sized, keep in mind that they represent fisheries with landings that ranged from 3,000 to 120,000 metric tons valued at \$2 million to almost \$200 million per year.

The table below details the maximum survey results (count and weight) for each fishery (the 100% point in each chart above), maximum landed weight and value (corrected for inflation), the weight and value of the 2015 landings and the percentage of the maximum landed weights represented by the 2015 weights.

Among the secondary questions that this raises are 1) are the trawl surveys – at least in the Northeast – worth their cost, 2) should the trawl survey results be accorded the importance in stock assessments that they are, 3) is the situation similar in the other NOAA/NMFS regions, and 4) is there a more cost effective way to generate more useful/relevant data? But the most important question - particularly in view of the last column in the above table (2015 landings as % of Max) is how much of the domestic commercial fishing industry is being sacrificed on the NOAA/NMFS/ENGO altar of sustainability? The commercial landings of these 21 species in 2015 were on the average only 21% of the maximum landings for each species since 1963. Such a level of underfishing surely isn't what sustainability - or conservation - is supposed to be about.

	Maximum Survey Count		Maximum Survey Weight (kg)		Maximum Landings - Weight (mt)		Maximum Landings - Value		2015 Landings (mt)	2015 Landings Value	2015 kg as % of Max
	Year	Year	Year	Year	Year	(Inflation adjusted)					
Acadian Redfish	2009	23,740	2009	5,315	1963	49,120	1963	\$39,884,864	4,930	\$6,269,135	10%
Atlantic Cod	2009	2,724	1970	4,234	1980	53,422	1991	\$129,275,171	1,526	\$6,427,437	3%
Atlantic Croaker	1975	27,450	2009	3,186	1977	15,516	1980	\$19,346,714	3,121	\$6,268,319	20%
Atlantic Herring	2011	89,501	2011	5,549	2006	120,833	2006	\$197,722,349	79,551	\$24,627,741	66%
Atlantic Mackerel	2015	14,951	1973	2,820	2006	56,640	2006	\$28,181,713	5,573	\$3,936,787	10%
Black Sea Bass	2010	2,018	2010	488	1963	4,190	1986	\$10,169,423	1,173	\$8,636,294	28%
Bluefish	1979	4,655	1979	595	1981	7,466	1979	\$6,932,351	1,899	\$2,983,116	25%
Butterfish	2011	152,379	2011	4,356	1984	11,795	1984	\$16,073,049	2,129	\$3,099,589	18%
Goosefish	2015	1,857	1973	2,295	1995	26,574	2000	\$73,670,460	8,623	\$19,145,767	32%
Haddock	2013	135,673	2014	23,051	1965	60,732	1965	\$102,491,952	5,399	\$12,638,386	9%
Longfin Squid	2012	24,550	2012	4,488	1999	19,094	1998	\$47,116,257	11,943	\$31,207,038	63%
Pollock	2002	958	1985	1,613	1986	24,625	1987	\$37,326,514	3,045	\$7,529,626	12%
Red Hake	1964	2,576	2015	2,445	1979	3,127	1981	\$2,310,476	460	\$503,344	15%
Scup	2015	61,818	2010	2,387	1963	19,015	1965	\$24,526,533	7,690	\$11,346,104	40%
Silver Hake	2012	196,168	2012	10,119	1964	42,743	1978	\$26,172,324	6,453	\$10,484,533	15%
Spiny Dogfish	2013	62,080	2012	54,785	1996	23,078	1996	\$13,987,832	8,406	\$2,976,132	36%
Summer Flounder	1996	1,784	2001	1,265	1979	18,077	1979	\$68,463,345	4,838	\$33,635,833	27%
Weakfish	1985	19,029	1985	907	1980	16,312	1981	\$23,605,072	67	\$267,020	0%
Windowpane Flounder	1973	5,948	1973	1,215	1985	4,206	1985	\$10,767,200	21	\$34,500	0%
Winter Flounder	2010	4,084	2012	1,296	1981	18,293	1984	\$50,476,143	1,700	\$7,854,923	9%
Yellowtail Flounder	1969	4,899	2009	1,441	1964	37,581	1983	\$83,842,752	968	\$2,799,647	3%

Finally, for reference, I used a random number generator to get 53 random numbers between 1 to 100 and treated the generated numbers as I did the survey weights and numbers. Below I superimposed the graph of these numbers over the Atlantic Croaker landings graph. (There was no particular reason I used croaker landings. Any of the 21 species would have served the same illustrative purpose.)



The most obvious take-away message I could glean from all of this is that, at least to a statistically unsophisticated eye there is no apparent relationship between the trawl survey results and commercial landings among all twenty-one species that I focused on. I can't say that when the sample numbers and/or weights go up the landings will increase correspondingly or that when the landings go up the sample numbers and/or weights will go down correspondingly. In fact the random numbers chart, to my perhaps untrained eye, could be substituted for any of the twenty-one other charts and nothing about it would jump of the page at a reader.

Among the secondary questions that this raises are 1) are the trawl surveys – at least in the Northeast – worth their cost, 2) should the trawl survey results be accorded the importance in stock assessments that they are, 3) is the situation similar in the other NOAA/NMFS regions, and 4) is there a more cost effective way to generate more useful/relevant data? But the most important question - particularly in view of the last column in the above table (“2015 landings as % of Max”) is how much of the domestic commercial fishing industry is being sacrificed on the NOAA/NMFS/ENGO alter of sustainability? The commercial landings of these 21 species in 2015 were on the average only 21% of the maximum landings for each species since 1963. Such a level of underfishing surely isn't what sustainability - or conservation - is supposed to be about.

(I'm encouraging comments on this FishNet and will distribute those that I receive that I feel are well informed, either pro or con.)

Magnuson Reauthorization, let's get it right this time

August 23, 2017

“The Regional Council system was designed to allow regional, participatory governance by knowledgeable people with a stake in fishery management” (U.S. Regional Fishery Management Councils, <http://www.fisherycouncils.org/>).

A bit of history

When the Magnuson-Stevens Act (MSA) became law On April 13, 1976, one of its primary selling points, along with reserving the fish and shellfish in our coastal waters out to two hundred miles for U.S. fishermen, was that the eight regional Fishery Management Councils that it established had as voting members both government employees who were involved in fisheries management and private citizens who were knowledgeable about fisheries. Ideally this made for balanced decision making, allowing for both the official view of what's going on in particular fisheries and the on-the-water observations of people with an actual working knowledge of the fisheries, and with the Secretary of Commerce required to sign off on any fishery management actions. (It's important to note that this was well before supposed environmental crises were supporting a multi-billion dollar industry.)

After decades of watching foreign fleets harvesting the fish in our near-shore waters, the enactment of the MSA generated a sense of euphoria in both the domestic fishing industry and in the investment community (encouraged by a very favorable investment climate fueled by federal underwriting of risk in the form of low-interest loans), with the predictable outcome of overcapitalization – too many boats working on extensive, though limited, fisheries resources.

In a number of instances this led to overfishing – removing more fish than natural production can replace.

Understandably chronic overfishing is undesirable. Accordingly the management regime responded, and responded appropriately, by enacting reasonable – and potentially effective – measures to reduce mortality. And these measures were (and would have been) in large part thanks to the input of the public members on the Councils. For the most part they realized that the welfare of the fishermen and the businesses and communities that depended upon them could be, and should be, balanced with the welfare of the fish. And they also realized that fisheries statistics, no matter how tortuously they were manipulated, did not always tell the full story about what was going on in the oceans.

Unfortunately this was all occurring concurrently with the burgeoning of the environmental crisis industry, and fishermen became the targets of choice for some of its most powerful members (and for a handful of their mega-foundation bankrollers).

This resulted in the enactment in 1996 of the Sustainable Fisheries Act (SFA), a series of changes to the MSA which among other things removed almost all of the discretion from the federal management process. What this meant was that a complex tangle of largely inadequate estimates of fish stock parameters cranked into any of a number of computer models that were well beyond the grasp of just about everyone, and the with reductions applied because of the inadequacy of those estimates, would result in a determination of the permissible catch level in a particular fishery. This catch level couldn't be exceeded, regardless of any other factors – and if it were, one or several ENGOs on the mega-foundation gravy train would sue the Secretary of Commerce.

And the last Magnuson reauthorization in 2006 *“included additional mandates for conserving and rebuilding fish stocks and strengthening the role of scientific advice in fisheries management.”* (National Research Council of the National Academies of Science, *Evaluating the Effectiveness of Fish Stock Rebuilding Plans in the United States*,

<https://www.nap.edu/catalog/18488/evaluating-the-effectiveness-of-fish-stock-rebuilding-plans-in-the-united-states>.)

The trend in Magnuson-based federal fisheries management has been an increasing reliance in what is still tremendously imprecise fisheries science and a minimization of reliance on what is now known disparagingly as anecdotal information, even though it is generally based on on-the-water observations by people whose livelihood depends on “getting it right,” often stretching back for generations.

“Scientific concepts are characterizations of nature. However, science is imperfect in its characterizations. Consequently, the law sometimes oversimplifies scientific concepts or applies them inaccurately or in an unclear way. In practice, what is represented as being the law is actually a combination of Executive Branch policies and legal judgments constrained by court rulings. It may or may not be the best interpretation of the science, and there may be other reasonable scientific interpretations. Most importantly, interpretations of the law must be consistent with the realities of nature. The Act does not recognize the dynamic nature of fish stocks and the limits of science. Although the NSIG (National Standard 1 Guidelines) help, they provide little practical guidance for many, if not the majority, of stocks.”
(National Research Council of the National Academies of Science, as above)

Best available? So what?

The Magnuson requirement that management decisions be based on the best available science rather than on science that is adequate to the task, coupled with the fact that since 1996 there has been no place in the process for the exercise of judgement based on on-the-water observation and experience belies the stated claim of the Councils on the home page of their website “to allow regional, participatory governance by knowledgeable people with a stake in fishery management” (<http://www.fisherycouncils.org/>). In essence fisheries policy in federal waters is entirely in the hands of the scientists, regardless of how inadequate their level of understanding is or how unproven their computer models. And the worse the underlying science is, the more the permissible catch quotas are reduced because of something called the precautionary principle.

We tried to fix it seven years ago

On February 24, 2010 the Keep Fishermen Fishing Rally was held on the steps of the Capitol in Washington. Sponsored by over 30 recreational and commercial fishing groups, it attracted an estimated 5,000 plus people who were fishermen, were in fisheries-dependent occupations, or were family/friends of fishermen. Another 5,000 plus people signed an on-line petition in support of the goals of the rally.



Two dozen federal, state and local officials spoke at the rally.

The rally organizers, the petition signers and the people who trekked from as far from the Nation's Capital as Alaska to attend in-person, and the twenty-plus elected and appointed officials participated for one reason; the federal government's fisheries policies were not working for the fishermen and some necessary changes to the MSA were long overdue.

What these changes boiled down to was that a restoration of the management flexibility that was an integral part of the Act since it was originally conceived, and that was removed by intense lobbying by mega-foundation founded ENGOs and the fishermen they had coopted, had to be restored if the recreational, commercial and party-charter fishing industries were to survive.

Then again five years ago

There was a follow-up rally two years later. In the words of the organizers:

The 2012 Keep Fishermen Fishing Rally in Washington on the grounds of the U.S. Capitol was a great success. The organizers' expectations were exceeded in the number and the range of the federal and state legislators and other public officials who interrupted their busy schedules to address the assembled fishermen, focusing on the NOAA/NMFS excessively rigid interpretation and implementation of the Magnuson-Stevens Act. This rigidity is unnecessarily forcing too many fishermen and folks in fishing-related jobs off the water and out of work while our fisheries are more productive than they've been for years. In 2012 it's hard to imagine as politically diverse a group of Senators and Representatives sharing the same platform and repeating the same message. There were 21 Democrats and Republicans, ranging from the most liberal of the liberal to the most conservative of the conservative, and they were all there to support commercial and recreational fishermen and to get the Magnuson Act back to where its original authors intended it to be, with a reasonable balance between commerce and conservation with an emphasis on keeping fishermen fishing.

In spite of continuing industry and political support, the opposition to any changes by the anti-fishing foundations and ENGOs along with the ill-informed leadership in Congress and an agency that was disturbingly and increasingly "green," the MSA has remained a text book example of top down bureaucratic control.

NOAA/NMFS at the Keep Fishermen Fishing rally

It's interesting to note that the newly appointed NOAA Assistant Administrator for Fisheries, Eric Schwaab, while purposely not invited to speak at either rally, attended the first. While he was ostensibly there to meet with participants, he passed out a prepared statement saying in essence everything was ok with the Magnuson-Stevens Act and it didn't need any changes. (For more on Mr. Schwaab's visit to the rally to "talk to fishermen" see my column Fishermen find their voice at [http://www.fishnet-usa.com/Fishermen find their voice.pdf](http://www.fishnet-usa.com/Fishermen%20find%20their%20voice.pdf).)

This was a federal agency head who had been on the job for only a week. Unfortunately his words were nowhere near accurate in 2010 and they continue to be as equally inaccurate today. At the time everything wasn't ok with Magnuson. Hence the rally. Ditto in 2012. Hence the second rally. And it's still not ok now.

In spite of all of the effort and all of the political support back then, none of the proposed "fix Magnuson" legislation (see <http://www.fishunited.com/msamendments.html>) went anywhere. Fishermen today are still trying to contend with the same arbitrary and inflexible federal management regime that they were trying to contend with since 1996 when federal fisheries management was turned into a virtual strait jacket giving all of the breaks to the fish and none to the fishermen.

(See my *So how are we doing 2017 edition* at <http://fisherynation.com/fishnet-usaso-how-are-we-doing-2017-edition> for an indication of how the domestic commercial fishing industry has fared under NOAA/NMFS leadership over the last two decades).

But it appears as if we can finally see some light at the end of this particular tunnel

On August 1 the Senate Commerce Committee's Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard held a hearing on *Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act: NOAA and Council Perspectives*. Two witnesses testified: Chris Oliver, who only a month prior had left his job as Executive Director of the North Pacific Fishery Management Council to become the head of the National Marine Fisheries Service, and John Quinn, Chairman of the New

England Fishery Management Council and also of the Council Coordinating Committee (a group of regional Fishery Management Council leaders).

It's hard to imagine two people better qualified to talk about federal fisheries management from the managers' perspective. Between them they unquestionably have a thorough understanding of the good, the bad and the ugly when it comes to how we are managing our domestic fisheries.

Excerpted from their testimony (the written testimony and video of the hearing are available at <https://tinyurl.com/ycrly8wa>):

The current Act works very well for most fisheries. However I believe that there are opportunities to provide additional flexibility to allow us to more effectively manage some of these fisheries, particularly those that have different catch accounting challenges or can benefit generally from alternate management approaches (C. Oliver recorded testimony @ 45 minutes, 20 seconds).

We also need to remember that practicality and common sense are important as we engage strategically. We look forward to working with Congress on fisheries management issues in a holistic, comprehensive way that builds on its success and considers the needs of the fish, fishermen, ecosystems, and communities (C. Oliver, written testimony).

We acknowledge that rebuilding often comes with necessary and unavoidable social and economic consequences, but targeted changes to the law would enable the development of rebuilding plans that more effectively address the biological imperative to rebuild overfished stocks while mitigating the social and economic impacts. For example, increased flexibility in rebuilding timelines would allow for a better balance between the biology of the fish and the socioeconomic needs of fishermen (J. Quinn, written testimony).

While the anti-fishing “conservationists” would have everyone believe that the MSA was written to protect the fish, and that if the fish are “taken care of” the fisheries that depended upon them will prosper, this obviously hasn't been the case in fishery after fishery. One of the reasons for this is the inflexibility that was injected into the MSA by the Sustainable Fisheries Act (SFA). Both Mr. Oliver and Dr. Quinn recognized this in their testimony.

So what's so bad about overfishing?

One of the major selling points employed by the proponents of the SFA was that it was supposed to end “overfishing” in every federally managed fishery by some arbitrary date (generally within ten years), and that this was to be accomplished regardless of the impact on fishermen, fishing businesses and fishing communities.

From the outside looking in, one could think that this is a good thing, but is it really?

In the first place, a fishery can be declared “overfished” even if it only supports an insignificant fishery. When this happens, more important fisheries which unavoidably catch these species – known as a choke species – as bycatch will be shut down when their allocation of the choke species is caught. So there can be super-abundance in a far more valuable fishery but if catching that particular species involves unavoidable bycatch of the technically overfished choke species, the more valuable fishery will be shut down regardless of how much of its quota has been harvested.

There is overfishing that is bad – that's the kind where catching too many fish is allowed to go on year after year. But then there's overfishing that isn't bad – that's the kind where catching too many fish for a limited (and carefully monitored) period is allowed to get a fishery, port, or region over a bad spell. If it's a matter of shutting down businesses because they can't get enough fish or shellfish to operate or of keeping them open and allowing what is very possibly an arbitrary quota to be exceeded for a season or two with no permanent damage to the stock, why not go with the latter?

The answer today is because the Magnuson Stevens Act won't allow it.

And then there is the term “overfished,” a misnomer of classic proportions

At present, when a stock falls below a minimum biomass, it is described as “overfished” and a rebuilding plan is required. While fishing can be the cause of a reduced stock, there may be other reasons as well, such as warming ocean

waters or degraded habitat. An alternative term could be useful for describing fisheries that are depleted as a result of non-fishing factors, unknown reasons, or a combination of fishing and other factors.... Furthermore, the term “overfished” can unfairly implicate fishermen for depleted conditions resulting from pollution, coastal development, off-shore activities, natural ecosystem fluctuations, and other (perhaps unknown) factors (J. Quinn, written testimony).

Are there not enough fish because the waters in the normal range of the species are now too warm? The fishery is “overfished.” Not enough fish because domestic pollution (think birth control meds or other non-industrial pollutants) has reduced the fecundity of the species? The fishery is “overfished.” Not enough fish because another species is out-competing the managed species (think spiny dogfish)? The fishery is “overfished.”

If a fishery is deemed to be overfished, regardless of the reason, the managers must cut back on fishing, regardless of whether it can or will do anything to actually address the cause(s) of the supposed “overfishing.”

Obviously this is a public relations bonanza for anti-fishing organizations as well as for any entities (Drug manufacturers? Water treatment facilities? Generating stations? Seismic testers?) that might be engaged in actions that could significantly impact fisheries. Not enough fish? It can't be blamed on any other industry, it has to be the fishing industry because if it wasn't the fishermen's fault it wouldn't be called overfishing!

So where are we now?

We have what appears to be almost universal appreciation of the inexactitude of fishery science. That “almost” is there to exclude some fishery scientists and a host of anti-fishing activists (aka marine conservationists) who use that inexactitude as a weapon against fishermen.

We have a federal law which, when it was written in 1976, recognized how inexact fishery science was and addressed that inexactitude by including in the management process “*knowledgeable people with a stake in fishery management,*” whose experience and judgment could make up for the shortcomings of the inexact science.

The influence of these knowledgeable people in the management process has been steadily eroded by the anti-fishing lobby for well over two decades and is now at the point where it is almost inconsequential. The science and the scientists are in charge, but there are no requirements for the science employed other than that it has to be “the best available.”

We have two of the top managers in the federal fisheries hierarchy who have recognized – and who have gone on the record supporting – putting some much needed flexibility back into Magnuson. The imprecision and unfairness of using “overfished” in instances where there aren't enough fish in a stock due to any of a number of non-fishing reasons, and the fact that the welfare of domestic fishermen, fishing businesses and fishing communities should be as important to the fishery management establishment as the welfare of the fish have been brought to the attention of Congress by impeccable witnesses with no ulterior motives.

Now it's up to our supporters in Congress to finally take this ball and run with it. We in the U.S. have what are among the most productive coastal waters in the world and yet we are importing over 90% of the seafood we consume. We have a fishing industry that is as collectively conservation- minded as any. Let's get back to a federal management system that recognizes the limits of today's fishery science and gives due credit to judgment and experience.

(Note: the concept of overfishing itself is fairly complicated. In *Congress Must Make Magnuson Recognize Existence, Content of National Standards in Fishery Plans*, Brian Rothschild, Montgomery Charter Professor of Marine Science at the University of Massachusetts Dartmouth, wrote:

“Arriving at a determination of overfishing depends on the choice of model (there are several). The magnitude of a overfishing “value” generally differs among “models”. For example, overfishing can be defined in the context of production models, age-structured production models, or yield-per-recruit models, each of which gives a different view of stock sta-

tus. It is also often the case, amidst this profusion/confusion, that all of these definitions are just simply ignored and replaced by arbitrary “proxies” that rely upon highly uncertain age-structured production models.

Consider also that two different forms of overfishing are well-known: “stock overfishing” and “recruitment overfishing”. Each is determined on the basis of different information requirements. Each has different conservation content.”

The article is available on the Saving Seafood website at <http://www.savingseafood.org/opinion/dr-brian-rothschild-congress-must-make-magnuson-recognize-existence-content-national-standards-fishery-plans/> and I highly recommend it.)

“Fish Wars” or a Regime Shift in Ocean Governance?

09/30/17

The reasons for Big Oil’s (now more accurately Big Energy’s) focus on fisheries – and on demonizing fishing and fishermen - has been fairly obvious since a coalition of fishermen and environmentalists successfully stopped energy exploration on Georges Bank in the early 80s. Using a handful of ocean oriented ENGOs as their agents, the Pew Charitable Trusts and other “charitable” trusts funded a hugely expensive campaign that the domestic fishing industry is still suffering from, but that campaign has paid off handsomely to the entities that participated in or funded it.

However, the entry of Philadelphia’s Lenfest Foundation into the fray, particularly considering that operational control was delegated to Pew, appeared to put the participation of other foundations with roots in the high tech area in a different light. Packard, Moore and Lenfest all working together with Pew et al to scuttle the public image and “revolutionize” the financial and social underpinnings of an entire industry in an apparently coordinated way started to make some sense (see <http://www.savingseafood.org/opinion/nils-stolpe-on-the-consultative-group-on-biological-diversity-november-23-2009/>).

But my thinking on this was further crystallized after reading a recent article in the New York Times. From the February 22, 2016 Fishnet:

“The authors (of the most recent Daniel Pauly assault on commercial fishing) acknowledge, and it will probably come as no surprise to most readers, “that The Pew Charitable Trusts, Philadelphia, funded the Sea Around Us from 1999 to 2014, during which the bulk of the catch reconstruction work was performed.” However, it might be news that “since mid-2014, the Sea Around Us has been funded mainly by The Paul G. Allen Family Foundation.” If anyone wonders why one of the founders of Microsoft might be interested in supporting research by Daniel Pauly, from an article in the NY Times last week - Microsoft Plumbs Ocean’s Depths to Test Underwater Data Center (at <http://www.nytimes.com/2016/02/01/technology/microsoft-plumbs-oceans-depths-to-test-underwater-data-center.html>):

“REDMOND, Wash. — Taking a page from Jules Verne, researchers at Microsoft believe the future of data centers may be under the sea. Microsoft has tested a prototype of a self-contained data center that can operate hundreds of feet below the surface of the ocean, eliminating one of the technology industry’s most expensive problems: the air-conditioning bill. Today’s data centers, which power everything from streaming video to social networking and email, contain thousands of computer servers generating lots of heat. When there is too much heat, the servers crash. Putting the gear under cold ocean water could fix the problem. It may also answer the exponentially growing energy demands of the computing world because Microsoft is considering pairing the system either with a turbine or a tidal energy system to generate electricity. The effort, code-named Project Natick, might lead to strands of giant steel tubes linked by fiber optic cables placed on the seafloor. Another possibility would suspend containers shaped like jelly beans beneath the surface to capture the ocean current with turbines that generate electricity.”

Of course this needs to be coupled with Microsoft's commitment to the future of "cloud computing" (for those readers who have successfully avoided advanced nerdhood up until now, the "cloud" is just a lot of web-connected servers housed in what are called server farms. Server farms are becoming increasingly expensive to operate shoreside – see the NY Times article linked above) and do a Google search on "Microsoft cloud future" to see where the tech industry thinks Microsoft is heading vis a vis cloud computing.

Is it possible that in the near future we'll be reading foundation-funded research reports from our neighbors in British Columbia "proving" that submerged server farms put in place by the well-known Redmond conservationists provide much needed shelter for a myriad of marine creatures that are threatened by those rapacious fisher-men? Or that Marine Protected Areas are a really logical place to put those submerged servers?"

If you haven't fully embraced the high-tech, internet-based wonders that are now easily and affordably available to virtually all of us - how about a Brita water purifier that will automatically order another filter before the old one needs replacing? – the major impetus for this seems to be to get folks to spend money without consciously deciding to do so. Propping this all up, making it possible, is "cloud computing" enabling you to receive a Brita filter and to get Amazon and Brita handsomely paid for getting it to you without you being involved.

With the increase in web-connected, web-enabled, web-anythinged appliances, processes, monitors, alarms, lighting and who knows what else in the future, and in hi-definition video and music streaming, a rapid growth in the capacity of the so-called cloud, which is going to become increasingly crowded, is guaranteed. That means that the demand for server farms will be increasing as well – and the closer those server farms are to the demand (population centers), the more efficient they will be.

As the Microsoft interest clearly demonstrates, alternatives to land based server farms in close proximity to population centers are going to become a high priority, and the only alternative is going to be siting them in the ocean – which offers the additional benefit of significantly reducing, or perhaps eliminating, cooling costs.

These sub-surface server farms will be as compatible with fishing 7as offshore power generation or the petroleum industry are. Would there be a more rational solution to what has already become a significant problem, given hundreds of billions of dollars in the bank, than for these high tech industries that are committed to a future in the oceans, than to marginalize fishermen.

And then, in what certainly fits the hackneyed term "hot off the presses," on September 22 of this year Microsoft and Facebook announced the completion of a new submarine cable. From Barry Grossman on the Popular Mechanics website:

"Microsoft, Facebook and global telecommunication infrastructure company Telxius have completed the Marea subsea cable, the world's most technologically advanced undersea cable. The Marea crosses the Atlantic Ocean over 17,000 feet below the ocean's surface, connecting Virginia Beach with Bilbao, Spain."

Finally - at least for now – we have Google – or now Alphabet, Inc., which is most known, at least in ocean circles, for its relationship with supposed ocean savior Sylvia Earle. At least back in 2010, according to Network World columnist Michael Cooney, "Google wants to control wind energy."

From Mr. Cooney's column:

"The project, known as the Atlantic Wind Connection (AWC) backbone will be built across 350 miles of ocean from New Jersey to Virginia and will be able to connect 6,000MW of offshore wind turbines. That's equivalent to 60% of the wind energy that was installed in the entire country last year and enough to serve approximately 1.9 million households, Google stated."

The AWC backbone will be built around offshore power hubs that will collect the power from multiple offshore wind farms and deliver it efficiently via sub-sea cables to the strongest, highest capacity parts of the land-based transmission system. This system will act as a superhighway for clean energy.”

Fortunately, as reported by NJ.com in 2015 (<http://tinyurl.com/y7ddvmur>), “with wind energy projects stalled throughout the area, this one has been put on the back burner.” New Jersey Assemblyman John Burzichelli was quoted in the article as saying of the AWC project “*the will to get it done from the federal level seems to be stalled and our state BPU is distracted and we can't get them to put it on the front burner... It's not dead but it's on life support.*”

We can only hope that by now that life support has been terminated. Whether Alphabet Inc.’s interest in offshore, shallow-water energy development has been terminated as well is another question.

So we have a whole lot of stuff going on in the oceans, stuff that requires huge investments and stuff that a large and increasing part of the U.S. – and the world’s – economy is based on. It’s difficult to consider any of this without questioning how Microsoft and Facebook and Amazon and a slew of other multi-national mega (and not so mega) corporations intend to protect these investments. And, unlike on land, security is a whole different matter when coastal waters are involved, and the complexity (and the potential for “differences of opinion” and misunderstandings) increases tremendously offshore in international waters. It’s questionable that any corporation, no matter how mega, would be eager to get involved in securing their inshore or offshore investments.

Last week Johan Bergas, Senior Director of Public Policy at Paul Allen’s Vulcan Inc (from Wikipedia “Vulcan Inc. is a private company founded by philanthropist and investor Paul Allen. It was established in 1986 and oversees Allen's diverse business activities and philanthropic endeavors....”) and retired admiral and Chairman of the Board of the U.S. Naval Institute James G. Stavridis had a column in the September 14 Washington Post titled *The Fishing Wars Are Coming*. The column was a justification for the militarization of fisheries enforcement as a way to stave off the supposedly inevitable international conflicts brought about by future “fish wars.”

For some unfathomable reason the two authors neglected to mention that international disputes over fishing rights are hardly new phenomena and fishing wars have come and gone for centuries. While they attempt to make fish wars the latest threat to international political stability, that’s about as inaccurate as a forecast can be.

For those readers who aren’t that well versed in the history of fishing, the so called Cod Wars, running from the 1950s to the 70s, were a series of disputes between Britain and Iceland over who got to fish in Icelandic waters (<http://britishseafishing.co.uk/the-cod-wars/>).

But the Cod Wars had roots extending much farther back. In the last century, “*in April 1899 the steam trawler Caspian was fishing off the Faroe Islands when a Danish gunboat tried to arrest her for allegedly fishing illegally inside the limits. The trawler refused to stop and was fired upon, first with blank shells and then with live ammunition. Eventually the trawler was caught, but before the skipper, Charles Henry Johnson, left his ship to go aboard the Danish gunboat, he ordered the mate to make a dash for it after he went on to the Danish ship. The Caspian set off at full speed. The gunboat fired several shots at the unarmed boat but could not catch up with the trawler, which returned heavily damaged to Grimsby, England. On board the Danish gunboat, the skipper of the Caspian was lashed to the mast. A court held at Thorshavn convicted him on several counts, including illegal fishing and attempted assault, and he was jailed for thirty days.*” (Bale, B., 2010, *Memories of the Lincolnshire Fishing Industry*, Countryside Books pg. 35.)

A little later we have “*no more vexatious international entanglement could well be imagined than the present fishery dispute between Newfoundland and the United States. While, superficially, it appears to be a mere question of whether the Colonial Government can hamper American fishermen in procuring cargoes of herring on the West Coast of the Island, it really comprehends the genesis of the dispute between the Republic and Canada respecting the whole Atlantic Fisheries, which has proved so difficult of solution during the past fifty years. A close study of the subject shows it to be fraught with serious problems and complicated offshoots, and to bristle with issues demanding the subtlest reasoning and most cautious presentments by jurists and state.*”

(1906, McGrath, P.T., **The Newfoundland Fishery Dispute**, The North American Review, Vol. 183, No. 604, <https://www.jstor.org/stable/pdf/25105716.pdf?refreqid=excelsior%3A50c1e52aa484cac4fe652ccd1b0f1042>).

And in 1911 T.W. Fulton published *The sovereignty of the sea: an historical account of the claims of England to the dominion of the British seas, and of the evolution of the territorial waters : with special reference to the rights of the fishing and the naval salute*. In it he wrote “the Scandinavian claims to maritime dominion are probably indeed the most important in history. They led to several wars; they were the cause of many international treaties and of innumerable disputes about fishery, trading, and navigation; they were the last to be abandoned. Until about half a century ago Denmark still exacted a toll from ships passing through the Sound, a tribute which at one time was a heavy burden on the trade to and from the Baltic. Still more extensive were the claims put forward by Spain and Portugal. In the sixteenth century these Powers, in virtue of Bulls of the Pope and the Treaty of Tordesillas, divided the great oceans between them. Spain claimed the exclusive right of navigation in the western portion of the Atlantic, in the Gulf of Mexico, and in the Pacific. Portugal assumed a similar right in the Atlantic south of Morocco and in the Indian Ocean. It was those preposterous pretensions to the dominion of the immense waters of the globe that caused the great juridical controversies regarding *mare clausum* and *mare liberum*, from which modern international law took its rise.”

<https://archive.org/details/sovereigntyofsea00fultuoft>.

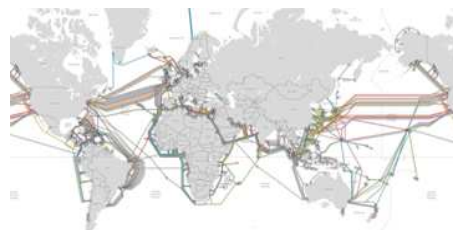
In this context it's hard to understand how Bergas and Stavridis could write “that lawmakers are finally catching up to something that the Navy and Coast Guard have known for a long time: The escalating conflict over fishing could lead to a ‘global fish war.’ This week, as part of the pending National Defense Authorization Act, Congress asked the Navy to help fight illegal fishing. This is an important step. Greater military and diplomatic efforts must follow. Indeed, history is full of natural-resource wars, including over sugar, spices, textiles, minerals, opium and oil. Looking at current dynamics, fish scarcity could be the next catalyst.” Or how they could omit fish from their list of “natural-resources wars.”

It's kind of easy to imagine a retired admiral of a certain stripe engaging in saber-rattling over a perceived imminent threat to the sovereignty of the seas.

But why the interest in this issue by Andrus, Inc., founded and (I presume) controlled by one of the mega-rich founders of Microsoft? And why the interest in other ocean- and fishing-related issues by other luminaries of the hi-tech firmament?

(Perhaps not as an aside, the Washington Post is owned by Amazon's Jeff Bezos. Amazon and Microsoft are two of the largest providers of “cloud” services.)

Bergas and Stavridis finish with “this week, as part of the pending National Defense Authorization Act, Congress asked the Navy to help fight illegal fishing. This is an important step. Greater military and diplomatic efforts must follow.” **But they don't qualify their “illegal fishing.” Most readers will automatically assume that they are referring to the illegal fishing that is supposedly happening on the high seas, in international waters and beyond the reach of our Coast Guard - predictably with a focus on China. But is that necessarily the case? “Illegal fishing” also includes a family catching clams on Sunday, a recreational angler keeping a striped bass that is a half an inch too short or too long, a commercial fisherman transiting - not fishing in - a particular area with the wrong net on board and seemingly uncountable ways for people to catch or to attempt to catch fish. What are the odds that it will also include any fishing vessel getting too close to offshore “windmills” or threatening submarine cables in the not too distant future? (Below is “a map of the world's submarine cables” from Bob Dorman's article *How the Internet works: Submarine fiber, brains in jars, and coaxial cables posted to the ARS Technica website in May of last year - available at <https://tinyurl.com/kth7g24> . A higher definition image is available in the linked article).***



Obviously many of these cables (and prospective wind generators and sub surface server farms) are or are going to be where fishermen fish. It's axiomatic that much of the world's fishing happens adjacent to where much of the world's population lives – particularly those members of the world's population who can afford relatively expensive protein from the sea. It's equally obvious that most of those internet cables and other barriers to fishing are going to places where there are concentrations of people who can afford, and who in fact demand, state-of-the-art telecommunications access and dependable electricity. And to get them there some of their susceptible infrastructure will have to be sited in relatively shallow areas – where most of the world's fish and shellfish are live and where most fishermen fish.

If you don't see any problems developing here, I'll refer you to The International Cable Protection Committee's Fishing And Submarine Cables - Working Together, which can be downloaded via the ICPC Publications page at <https://www.iscpc.org/publications/>.

Like the failed attempts to raise the world's concern about so-called seafood slavery a few years back, full of “sound and fury” but signifying not much at all, this is all part and parcel of what appears to be a well-coordinated and a frighteningly well-funded campaign to further marginalize fishermen, who seem to have this belief that they need to fish where the fish are, not where the big-time ocean exploiters want them to fish

So the multi-billion dollar multinational tech giants have collectively invested billions in what, at least from the outside, makes it appear as if their next frontier isn't Gene Rodenberry's space, but those nearshore waters that have supported the world's fishermen, and a big part of the world's population, for quite some time. All of the foregoing makes one wonder who will own – or control – the world's oceans, and what fishing remains possible – or legal – in the coming years.

And, lest anyone is inclined to forget the folks at Pew and their efforts....

From an email message by Pew Oceana staffer Lora Snyder dated September 18, 2017:

"Tell Congress: Don't gut our key fisheries law. Our oceans and marine life need your help, immediately. There is a bill in the U.S. House of Representatives that would undermine and undo years of successful work to manage the health of America's fisheries. We must speak out now against this anti-science bill before sharks, fish and many other marine animals suffer the consequences. Tell your representative to protect our oceans, at-risk species, fisheries, and the communities that rely on them."

I won't comment here on Ms. Snyder's/Pew Oceana's contention that Congressman Young's legislation which would return solely needed flexibility to federal fisheries management would “gut” the Magnuson-Stevens Act. In my last FishNet (http://www.fishnet-usa.com/MagnusonReauthorization_2017.pdf) I quoted from the Senate Testimony of Chris Oliver, the head of the National Marine Fisheries Service and until a couple of months ago the Executive Director of the North Pacific Fishery Management Council, and John Quinn, the Chairman in the New England Fishery Management Council and of the Council Coordinating Committee – made up of Regional Fishery Management Council leadership. To suggest that these two individuals – and the groups they have represented or are currently representing would support “an anti-science bill” might be a record in stretching credulity, even for Pew/Oceana.

What I will comment on is Ms. Snyder's – or her editor's/overseer's - ability to make a mistake that most advanced secondary school students with even a superficial interest in our oceans and the creatures in them wouldn't. In spite of what Ms. Snyder wrote “to save our oceans,” sharks are actually real, genuine fish. They aren't bony fish (Osteichthyes) but, having - along with skates, rays and a few other groups of fish – cartilaginous skeletons, are in the class Chondrichthyes. But they are emphatically fish. Just ask anyone, at least anyone who isn't employed by Pew/Oceana.

It’s hard for me to imagine any sentence more “anti-science” than Ms. Snyder’s “we must speak out now against this anti-science bill before sharks, fish and many other marine animals suffer the consequences.” And yet someone who is capable of such a gross scientific blunder feels free to question the judgment of Chris Oliver, John Quinn and a large portion of the domestic fishing industry and to presume that the future of the oceans is in her hands. World-class hubris has surely found a home at Pew/Oceana!

Cape Cod Commercial Hook Fishermen’s Association/Cape Cod Commercial Fishermen’s Alliance/Cape Cod Fisheries Trust: A Chronology

11/28/2017

Note: This work was commissioned but not paid for by Robert Vanasse at Saving Seafood/Stove Boat LLC and The Coalition for Seafood Communities. Hence its inclusion here.

2014	<p><i>“Occasionally employees of the Cape Cod Commercial Fishermen's Alliance, Inc. travel to Washington DC to meet with both elected and non-elected federal government officials (Congressman, Senators and non-elected government officials) to discuss proposed or existing legislation in certain circumstances, the employees of the Cape Cod Commercial Fishermen's Alliance, Inc. are merely proving (sic) information on aspects of the proposed legislation or existing legislation that is within the expertise of the organization and, in other circumstances, the employees of the Cape Cod Commercial Fishermen's Alliance, Inc are expressing their opinion or providing support for either enacting, modifying or supporting particular legislation which would have (or does have) an impact on the environment or industries the Cape Cod Commercial Fishermen's Alliance, Inc supports.”</i> (Part I-A Political Expenditures: \$54,929, Part IIA-Lobbying nontaxable amount 2013/2014: \$472,086, Total lobbying expenditures 2013/2914: \$118,022, Grassroots nontaxable amount 2013/2014: \$118,022).</p> <p>(Source: CCCFA IRS Form 990 for 2014)</p>
2014	<p><i>“Best Practices in Permit Bank Management Grantee: Community Development Partnership, Eastham, MA Fisheries Innovation Fund Award: \$75,000 Matching Funds: \$73,859 Total Project: \$148,859 The Community Development Partnership will expand its work developing best practices in permit bank management and providing technical assistance to fishermen, to be shared with a national fisheries network via the Fish Hub. Project objectives include but are not limited to strengthening fishing businesses, deepening current work with the Cape Cod Fisheries Trust, recruiting additional fishermen to utilize the Fish Hub to strengthen their businesses, providing innovative financing options, enhancing the aggregate data capability of the Fish Hub and developing resource tools for business advisers to utilize the Fish Hub.”</i></p> <p>(Source: National Fish and Wildlife Foundation, 2014 Fisheries Innovation Fund Grants by region - http://www.nfwf.org/fisheriesfund/documents/2014-fif-grants.pdf)</p>
2014	In 2014 John Pappalardo’s compensation from Cape Cod Commercial Fishermen’s Alliance and related organizations was \$166,739. Paul Parker’s was \$142,526 (Source CCCFA Form 990).
2014	\$225,000 from the Walton Family Foundation to the Cape Cod Commercial Fishermen’s Alliance (in the “Catch Shares” category but details not disclosed)
2014	From 2010 to 2014 the Cape Cod Commercial Fishermen’s Alliance received \$6,775,012 in “Gifts, grants, contributions and membership fees.” (CCCFA 2014 form 990)
2013	<i>Northeast Regional Office of the NOAA Fisheries Service has just granted an Exempted Fishing Permit to the Cape Cod Fisheries Trust, which will allow the use of alternative landing containers and tag protocols to support a high-quality, niche market for Atlantic surfclams (Spisula solidissima) harvested by day-boat vessels on Cape Cod.</i> Source: Cape Cod Commercial Fishermen’s Alliance press release, 08/15/2013
2013	<i>“Depending on the size of your community and how many members you’d like to invite to your Fish</i>

	<p><i>Hub, we offer a variety of pricing levels to help you meet your needs. Fish Hub was built by the Cape Cod Fisheries Trust, the Pacific IFQ Risk Pool communities with support from The Nature Conservancy, and the Community Development Partnership through generous grants made by the Walton Family Foundation, Gordon and Betty Moore Foundation, National Fish and Wildlife Federation and Erol Foundation. Pricing packages are set to cover maintenance and ongoing enhancements to the platform. Ask about pricing.”</i></p> <p>Source: Fish Hub website at https://fishhub.org/how / web page first posted on internet in 2013 – Way Back Machine)</p>
2013	<p>(Available at Guidestar.com)</p> <p><i>Statement of Activities For the Year Ended December 31, 2013</i></p> <p><i>Revenues and Support:</i></p> <p><i>Grants \$ 1,330,416</i></p> <p><i>Membership dues and contributions \$58,700</i></p> <p><i>Fundraising and special events 292,761</i></p> <p><i>Merchandise sales \$5,335</i></p> <p><i>Permit leasing \$340,785</i></p> <p><i>Miscellaneous \$875</i></p> <p><i>Investment income \$19,239</i></p> <p><i>Loss on exchange of permits and disposition of assets (\$10,165)</i></p> <p><i>Total Revenues and Support \$2,037,946</i></p> <p>Note Payable - The Ford Foundation: <i>The Organization received a program related investment loan dated September 17, 2009 from the Ford Foundation for \$1,000,000 to fund the Cape Cod Fisheries Trust. The Trust will acquire fishing permits, licenses and fishing rights which will then be leased to local fishermen who agree to adopt sustainable fishing practices. The interest rate for this loan is 1% payable quarterly, principal payable in three equal installments due on the eighth, ninth, and tenth anniversary. This note contains financial and operating covenants including maintaining the funds in a segregated account.</i></p> <p>Note Payable - Calvert Social Investment Foundation: <i>The Organization received a \$100,000 loan in 2009 to fund the Cape Cod Fisheries Trust for the purpose of purchasing fishing rights to be leased to local fishermen and to make loans to qualified fishermen for their direct purchase of fishing rights. Interest is payable semi annually at 4.25%. In 2010 the Calvert Social Investment Foundation increased the loan to \$350,000. In 2012 the Calvert Social Investment Foundation increased the loan to \$600,000. The principal sum is due in full May 31, 2015.</i></p> <p>Note Payable - Keith Campbell Foundation. <i>The Organization received a loan in 2011 to fund its activities to promote fisheries' conservation and increase local control over natural resources. Interest is payable semi annually at 2%, payable in arrears on each June 30th and December 31st. The principal sum is due in full October 21, 2016.</i></p> <p>(Source: Cape Cod Commercial Fishermen's Alliance, Inc. Independent Auditor's Report 2013)</p>
2013	<p>\$220,000 from the Walton Family Foundation to the Cape Cod Commercial Fishermen's Alliance (in the "Catch Shares" category but details not disclosed)</p>
2012	<p><i>"The CHOIR Coalition was formed in 2002 by commercial and recreational fishermen to advocate for the responsible development of the Atlantic Herring Fishery in the face of a growing fleet of midwater single and pair trawlers."</i></p>
2012	<p>Choir Coalition website (http://www.choircoalition.org/)</p> <p><i>"Commercial fishermen, recreational fishermen, ecotourism businesses, researchers and concerned citizens throughout New England and the Mid-Atlantic have united with one voice to protect Atlantic Herring stocks."</i></p> <p>Note that on the CHOIR website there is a picture captioned "pair trawlers towing through tuna fleet on Georges." However there is no indication that there are any tuna boats beyond the herring boats. That would make it "pair trawlers towing past the tuna fleet," wouldn't it?</p> <p>As an irrelevant aside, on the third photo down the caption is "pair trawlers, seperating, one boat will know pump the fish aboard." It's pretty amazing to have two mistakes in an eleven word sentence, isn't it?</p>
2012	<p><i>"Calvert Foundation – Calvert Notes</i></p> <p><i>Organization Description: The Calvert Foundation launched a community investment initiative with Calvert Notes, formally known as Community Investment Notes, which allows individuals to invest</i></p>

	<p><i>small sums of money in funds that are specifically chosen for their social and environmental impact. The full value of the investment is lent to underserved communities. As the loans are repaid, they are lent out again, multiplying the impact. At maturity, the loan is repaid to the investor.</i></p> <p><i>Fisheries Work: As of October 2012, the Calvert Foundation had one fisheries project that accepts investments, the Cape Cod Fisheries Trust. The Cape Cod Fisheries Trust was created in 2000 when a fisheries quota system was established to ease the pressure on ecosystems that had been overfished. The trust has attracted investments and loans, building its capital and allowing the trust to lease quotas to commercial fishermen. This capital has allowed fishermen to retain their jobs as the fishing community transitions toward sustainability.</i></p> <p><i>Ways to Invest: Calvert Notes accepts cash investments beginning at \$20, with rates of return up to 2 percent. The Calvert Foundation also accepts grants and program-related investments."</i></p> <p>(Source: Doubling Philanthropic Impact: Using Below Market Rate Investments to Advance Sustainable Fisheries. https://c.yimcdn.com/sites/www.confluencephilanthropy.org/resource/resmgr/docs/confluence_below_mrkt_fisher.pdf)</p>
2012	<p><i>"Since 2005, the (Cape Cod Fisheries) Trust has raised a diverse, multi-million dollar portfolio of debt and grant capital from a number of philanthropic and private sources to lease quotas to local small-scale fishermen in Cape Cod communities. Similar to a carbon credit, which "allows" the owner to emit a certain amount of carbon, a quota is an allowance to catch a certain amount of fish or other seafood. Quotas are assets that can be bought, sold and leased."</i></p> <p><i>"Calvert Foundation is a pioneer investor in the Trust through our Green Strategies Initiative, and along with the Ford Foundation has continued to support its mission since it was founded. Working with the Trust has been exciting as we build knowledge in the sector and challenging as we learn what role socially motivated investors like Calvert Foundation can play in financing fisheries worldwide. As with other green sectors, investable deals in sustainable fisheries are sparse and require extensive technical assistance and philanthropic subsidy. Regulatory risk also makes it difficult for businesses and investors to take long-term positions in these types of projects."</i></p> <p>(Source: Calvert Foundation website - http://www.calvertfoundation.org/blog/354-luring-capital-towards-sustainable-fishing-our-work-with-the-cape-cod-fisheries-trust)</p>
2011	<p><i>"The National Fish and Wildlife Foundation (NFWF), a federal quasi-agency, just announced that it will fund 18 new projects totaling over \$2 million that "will engage fishermen around the country in the design and implementation of effective catch-share fisheries." The funds for this were provided by the Walton and Moore Foundations, two of NFWF's "foundation partners," which are described as "supporting NFWF's National Fisheries Innovation Fund, which will assist the transition of United States fisheries to catch share programs by encouraging fishermen to pursue innovative management strategies through a competitive grant award process.... The NFWF lists among its corporate partners Exxon/Mobil, Shell, Chevron, BP, Conoco Phillips and Walmart."</i></p> <p>(Source: Call it conspiracy, cooperation or coincidence, but no matter what you call it, the public record isn't going to change, N. Stolpe, FishNet USA - http://www.fishnet-usa.com/Black%20helicopters%20in%20Boston.pdf)</p>
2011	<p>04/05/2011 letter from Brady Schofield, President, NORPEL (New Bedford, MA)</p> <p><i>"We can demonstrate these management actions are the direct result of the "Atlantic Herring Campaign" conceived, coordinated and funded by the nonprofit/non-taxpaying Pew Environment Group and their proxies at Chatham-based Cape Cod Commercial Hook Fishermen's Association (CCCHFA), Chatham-based Pew Herring Alliance and Chatham-based CHOIR Coalition. These are all related Chatham-based NGOs with a combined payroll in excess of \$1.5 million but accounting for less than 2% of the groundfish landings in the Northeast.</i></p> <p><i>Since 2003, according to the public record, CCCHFA has received millions of dollars from Pew Charitable Trusts (and other Foundations) to conduct the "Atlantic Herring Campaign", designed, according to the Pew and CCCHFA websites to: "Eliminate, or severely restrict the Midwater trawl fishery for Atlantic herring". This is part of a larger "Forage Fish Campaign" coordinated and funded by Pew Environment Group which includes direct payments to Universities, SSC members and other newly conceived NGOs. It Is critical to understand that ecosystem "forage" needs are considered in the federal</i></p>

	<p><i>herring and mackerel fishery FMPs and are deducted "off the top" before any allocations to the domestic commercial fishery are made.</i></p> <p><i>Nonetheless, with this funding and resulting media machine, CCCHFA secured voting positions and a hugely disproportionate political influence in the region's fisheries management arena, given their paltry landings and minimal economic contribution to the Commonwealth."</i></p>						
2011	\$75,000 from the Walton Family Foundation to the Cape Cod Commercial Hook Fishermen's Association (in the "Marine Conservation" category but details not disclosed)						
2011	<p><i>The Trust leases quota and provides business development services to local fishermen. In 2010, we leased nearly 700,000 quota pounds at below-market rates to Cape Cod fishermen, enabling 112 captains and crew working aboard 36 fishing vessels to catch seafood worth \$2.1 million. In 2011, leasing grew to over one million pounds, enabling 124 fishermen on 33 vessels to catch \$3.6 million worth of seafood.</i></p> <p><i>Through it all we've enjoyed close and productive working relationships with our core collaborators, the Community Development Partnership, the Fixed Gear Sector and Amplifier Strategies. We learned that working with likeminded groups expanded our capacity in important ways and helped us do more with less.</i></p> <p><i>The Trust couldn't do what it does without the contributions of our donors, the Cape Cod Commercial Hook Fishermen's Association board, our partners and especially the fishermen of Cape Cod. We look forward to continuing this work together in 2012 and beyond.</i></p> <p>REVENUES</p> <table> <tr> <td><i>Net Lease Income</i></td> <td><i>\$321,969</i></td> </tr> <tr> <td><i>Grants & Gifts</i></td> <td><i>\$283,770</i></td> </tr> <tr> <td><i>Other Revenue</i></td> <td><i>\$54,603</i></td> </tr> </table> <p>(Source: Cape Cod Fisheries Trust Annual Report – 2011)</p>	<i>Net Lease Income</i>	<i>\$321,969</i>	<i>Grants & Gifts</i>	<i>\$283,770</i>	<i>Other Revenue</i>	<i>\$54,603</i>
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<i>Other Revenue</i>	<i>\$54,603</i>						
2010	\$75,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association " <i>for the creation of Sustainable Fisheries Trusts in Alaska and Cape Cod that will finance community-based fishermen, employing conservation practices vital to ocean health and whose access to fisheries is critical to local economic and social vitality.</i> "						
2010	\$15,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association " <i>for a comprehensive assessment of the organization as it enters its second decade as a professionally staffed nonprofit.</i> "						
2010	\$150,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association " <i>to grow the Cape Cod Fisheries Trust into a nationally significant model for preserving marine ecosystems and ensuring the environmental, economic, and cultural sustainability of the communities on which they depend.</i> "						
2010	\$538,821 from the Gordon and Betty Moore Foundation to the Cape Cod Commercial Hook Fishermen's Association " <i>to provide expertise and support to ensure appropriate and durable implementation of sectors for groundfish, expansion of catch shares into other bottom-dwelling fisheries, and regulations and design elements for sectors that address sustainable fishing communities.</i> "						
2010	\$175,000 from the Walton Family Foundation to the Cape Cod Commercial Hook Fishermen's Association (in the "Marine Conservation" category but details not disclosed)						
2010	<p><i>"A small but influential association of Cape Cod commercial fishermen, granted access to a disputed, oversized portion of the harvest when the New England groundfishery was converted to a catch shares system last year, has been leasing out much of its allocation for profit, according to a market report posted by the government.</i></p> <p><i>During roughly the first six months of the fishing season that began on May 1 — the start of the catch share system — the Cape Cod Commercial Hook Fishermen's Association leased the rights to catch close to 2 million pounds of mixed groundfish from its allocation, according to the report of transactions.</i></p> <p><i>The environmental group Oceana issued a statement Wednesday, calling the transactions "disappointing."</i></p> <p><i>Oceana asserted that the "Hookers," which practice lower impact fishing with hook and line or fixed gillnets, were profiting by selling to mainstream fishermen who worked with trawl gear that disrupts the</i></p>						

	<p><i>ocean bottom.”</i></p> <p>(Source: Report: Cape group profiting off disputed catch shares, R. Gaines, Gloucester Times, 11/10/2010)</p>
2009	<p><i>In September 2009, the Hook Association committed to purchasing the Captain Nathan Harding House property from the Oppenheim family, and launched a \$1.3 million capital campaign for the purchase of the house and other associated expenses. The renovated historic sea captain’s home, to serve as the Hook Association’s new headquarters, will reinvigorate our commitment to preserving the local fishing community and provide much-needed space to support programming. (CCCHFA 2009 Annual Report)</i></p>
2009	<p>John Pappalardo was on the Obama Administration’s Setting Ocean Priorities for the New Administration and Congress Workshop</p>
2009	<p>\$250,000 from the Walton Family Foundation to the Cape Cod Commercial Hook Fishermen's Association (project details not disclosed)</p>
2008	<p>\$722,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “<i>to support activities to reform the Atlantic herring fishery by (1) establishing protocols to set science-based fishery catch limits that specifically account for the changing needs of marine predators; (2) implementing a comprehensive monitoring and observer program that measures all catch, bycatch, and discards in a real-time manner; and (3) implementing improved time and area conservation and management measures to regulate when and where herring trawling is allowed.</i>”</p>
2007	<p><i>In 2007, CLF (Conservation Law Foundation) Ventures collaborated with the Cape Cod Commercial Hook Fishermen’s Association (CCCHFA) to design and launch the Cape Cod Fisheries Trust (CCFT). The trust’s aim is to obtain fishing licenses and other “fishing rights” from the open market and lease these permits back to local fishermen to access fishery resources off of Cape Cod. In return for a permit, fishermen are required to follow predetermined sustainable fishing guidelines. The CCFT protects fisheries and improves marine management. In addition, it guarantees continued access to this resource by local commercial fishermen and preserves an important way of life for Cape Cod communities.</i></p> <p><i>Specifically, CLF Ventures developed a business plan and fundraising strategy to attract institutional capital, identified and engaged capital resources, and structured a trust to hold the permits and lease-proceeds. Through development of the CCFT, CLF Ventures’ expertise in designing innovative market mechanisms will significantly advance the goals of CCCHFA, those of the local commercial fishing industry, and the environment of the Cape.</i></p>
2007	<p>\$912,953 from the Gordon and Betty Moore Foundation to the Cape Cod Commercial Hook Fishermen's Association to “<i>support implementation of DAPs in New England through promoting regulatory reform and leading the region in sector governance and monitoring.</i>”</p>
2007	<p>\$180,000 from the Surdna Foundation to the Cape Cod Commercial Hook Fishermen's Association “<i>to provide general operating support policy reform campaigns for herring and groundfish, and to implement the nation's first Sustainable Fisheries Trust.</i>”</p>
2007	<p>\$596,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “<i>to support a New England forage fish campaign to ban or severely restrict destructive trawling, reduce allowable herring catches to leave sufficient herring in the ecosystem as forage, and establish new bycatch limits and reforms.</i>”</p>
2005	<p>\$491,744 from the Gordon and Betty Moore Foundation to the Cape Cod Commercial Hook Fishermen's Association “<i>to align economic incentives with conservation in the Georges Bank Fixed Gear Sector for gillnet fishermen and to implement a video-based electronic monitoring system for bycatch and catch of groundfish and other species. Outcomes for this grant include verification of video-based electronic monitoring for hook & line gear, analysis of video-based electronic monitoring for gillnet and small-mesh gear, and implementation and increased stakeholder awareness of Georges Bank dedicated access privilege (DAP) programs.</i>”</p>
2005	<p>John Pappalardo member Joint Oceans Commission</p>
2004	<p>John Pappalardo member Pew Oceans Commission</p>
2002	<p>John Pappalardo was a member of the New England Fishery Management Council from 2002-2011. He was chairman for five of those years (2016 federal hourly rate for Council members is \$59.02). Source http://www.federaljobs.net/salarybase.htm</p>
2001	<p>\$150,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “<i>to promote sustainable management of marine fish populations in New England through public education and administrative advocacy.</i>”</p>
1999	<p>\$100,000 from the Pew Trusts to the Cape Cod Commercial Hook Fishermen's Association “<i>for support of the Fisheries Reform Campaign: Fishermen Paving the Road to Ecosystem Management.</i>”</p>

EMF (Electromagnetic Field) Effects and the Precautionary Principle

December 18, 2017

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The following is taken from an OSPAR Commission (<https://www.ospar.org/>) report from 2008. It clearly shows that at the time when interest in offshore wind turbines was really starting to grow there was very little knowledge of, nor had much significant research been done on, the effects of electromagnetic fields on marine or estuarine species, and what little had been done was on mature organisms, with little or no attention given to immature stages.

Background Document on potential problems associated with power cables other than those for oil and gas activities: Conclusions in regard to electromagnetic fields

Our current knowledge about effects of electromagnetic fields on the marine environment, in particular fauna, is not sufficient. Only a few preliminary conclusions can be reached.

Occurrence of magnetic fields associated with power transmission is best limited by field compensation to be achieved by an appropriate transmission system layout (preference of AC transmission systems or bipolar DC transmission system against monopolar systems). In case of monopolar transmission systems magnetic fields in close vicinity to the cable exceed natural ambient conditions significantly.

Directly generated electric fields are regarded to be controllable by adequate shielding. However, an induced electric field generated by the magnetic field occurs. In case of high current flows during power transmission the electric fields in proximity to the cable significantly exceed values typical under natural conditions.

Simulation studies revealed the potential for induced electric field mitigation by using highly specialized materials with high permeability or conductivity values for armouring of cables. Development of modern materials with such properties has to be encouraged. Though cable burial will not effectively mitigate against magnetic fields and induced electric fields it is likely to reduce exposure of electromagnetically sensitive species to the strongest electromagnetic fields that exist at the 'skin' of the cable owing to the physical barrier of the substratum i.e. the greater distance to the cable, and cable burial should therefore be realized.

There is an apparent lack of information on electromagnetic fields emitted from communication cables (with electric components).

In regard to effects on fauna it can be concluded that there is no doubt that electromagnetic fields are detected by a number of species and that many of these species respond to them. However, threshold values are only available for a few species and it would be premature to treat these values as general thresholds. The significance of the response reactions on both individual and population level is uncertain if not unknown. More field data would be needed to draw firm conclusions but data acquisition under field conditions is complicated. (OSPAR Commission, 2008 - <https://www.ospar.org/documents?d=7128>)

An electromagnetic field (EMF) is "a field (as around a working computer or a transmitting high-voltage power line) that is made up of associated electric and magnetic components, that results from the motion of an electric charge, and that possesses a definite amount of electromagnetic energy" (Webster's on-line dictionary). With the potential proliferation of offshore energy, telecommunications and internet infrastructure, (see "**Fish Wars**" or a **Regime Shift in Ocean Governance?** At <http://www.fishnet-usa.com/Fish%20Wars%20or%20Regime%20Shift.pdf>), we can expect to see a corresponding increase in the propagation of EMFs in the oceans, and particularly in those parts of the oceans adjacent to population centers.

The Bureau of Offshore Energy Management (BOEM) has leased tens of thousands of acres of offshore ocean (for use from below the sea floor to hundreds of feet above the water's surface) for siting offshore wind turbines, other electrical "generators" and the necessary support and transmission infrastructure. Part of the transmission infrastructure, in fact from the EMF perspective the most significant part, will be the vast network of transmission cables that will crisscross the ocean floors, potentially imposing significant (and perhaps insurmountable) barriers to some of the organisms that either live in proximity to or transit over such networks.

It's plain from the quotation above that the scientific community didn't have a clue about what these barriers might be, let alone how significant their impacts on marine fauna.

Several years later, in May of 2011, the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM) received a 169 page report with an additional 250 pages or so of appendices titled **Effects of EMFs (Electromagnetic Fields) from Undersea Power Cables on Elasmobranchs and Other Marine Species** (<https://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Pacific->

[Region/Studies/2011-09-EMF-Effects.aspx](#)). The study was done for the Pacific OCS Region but wasn't geographically limited and included an extensive bibliography that appeared to be world-wide in scope.

The Executive Summary starts “*anthropogenic electromagnetic fields (EMFs) have been introduced into the marine environment around the world and from a wide variety of sources for well over a century. Despite this, little is known about potential ecological impacts from EMFs.*”

From there it goes on for several hundred pages discussing just how much is not known about the effects of these fields on aquatic, estuarine and marine organisms, be they invertebrates, fish, amphibians, reptiles or marine mammals.

For a little bit of history, BOEM was formed during and was a direct result of the political fallout from the BP debacle in the Gulf of Mexico – aka Deepwater Horizon Oil Spill - that began in April of 2010 (and the bureaucratic response of which I wrote about – see NOAA Inaction in the Gulf of Mexico at http://www.fishnet-usa.com/NOAA_Inaction.pdf and Fish and Oil: NOAA's Attitude Gap at <http://www.fishnet-usa.com/FishAndOil.pdf>).



Needless to say, some dramatic political intervention was called for, and not surprisingly that intervention resulted in the formation of yet another bureaucracy, the BOEM. But this bureaucracy was supposed to differ from its predecessor agency in more than its name. From BOEM's current website:

OUR VALUES

Responsible Stewardship: The bureau is responsible for stewardship of U.S. OCS energy and mineral resources, as well as protecting the environment that development of those resources may impact. The resources we manage belong to the American people and future generations of Americans; wise use of and fair return for these resources are foremost in our management efforts.

Science-Informed Decisions: BOEM is committed to using the best available science in bureau decision making. To fill critical gaps in the information needed to inform the wide range of decisions within the bureau, BOEM facilitates world class research by talented scientists in many disciplines. The bureau also employs a significant number of scientists and technical experts across a range of relevant disciplines that provide the foundation of human capital needed to make sound decisions at all levels of the organization.

Integrity and Ethics: As public servants, we adhere to fundamental principles of ethical behavior. The bureau as a whole is committed to conducting its business according to the highest ethical standards. In accordance with the examples set by BOEM leadership, each BOEM employee is expected to conduct their daily operations in a way that demonstrates both professional and personal integrity. This includes a commitment to the highest level of scientific and scholarly integrity.

The following quotes are from the report submitted to BOEM in 2011.

“Studies indicate that sandbar shark also respond to magnetic stimuli. A magnetic sense may assist with seasonal migratory movements of adults and juveniles through coastal waters along the eastern seaboard. Thus, this combination of sensory capabilities and natural history attributes makes the sandbar shark a good example species for potential responses to power transmission cables from offshore wind generation facilities on the US East Coast.” (Page 68)

“Based on evidence for sensitivity to either electric or magnetic fields, fish species from 12 families in 10 orders were targeted for review in this report. This includes 183 species of fish that occur in coastal waters (bottom depth <200 meters) of the continental US. Either direct evidence for these species or evidence for a closely related taxon suggested that these species should be prioritized for consideration of potential sensitivity to EMFs.” (Page 75)

“...in some cases, segments of long power cable runs can transect migration routes, feeding grounds, or spawning sites for those species sensitive to EM fields and alter their normal behavior. Such effects are currently unknown.” (Page 77)

“...if a species uses a magnetic sense for homing capabilities, these capabilities maybe affected in close proximity to certain cable systems.” (Page 77)

“Induced electric fields may also potentially affect functions such as prey detection or social interaction and reproduction.” (Page 78)

“No studies were found that have tested effects of power cable EMFs (AC or DC) on salmon.” (Page 87)

“North Atlantic right whales inhabit coastal waters to at least 200 m, and because they have been observed to be feeding near bottom (180 m), this behavior may expose them to magnetic field levels above their sensitivity threshold. There is no scientific evidence as to what the response to exposures to such a field would be however.” (Page 96)

“Scientific studies examining effects of EMF on marine mammals have not been conducted. However, it is possible that many marine mammals are capable of detecting the magnetic fields resulting from undersea power cables, particularly those species that can detect the Earth’s magnetic field and use it (in addition to other cues) for migration. Responses to exposure to cable-induced magnetic fields are likely to vary depending on the geographic region for the energy project, available habitat for each species, the resulting intensity of the EMF cables orientation and direction combined with local geomagnetic intensity. In addition, depending on the depth of burial, those marine mammals feeding on benthic organisms may excavate or uncover buried power cables. Potential responses from exposure to EMF may include a temporary change in swim direction, a more serious delay to the animal’s migration, possibly stranding if EMF from undersea cables resulted in magnetic minima.” (Page 96)

“Responses to exposure to cable-induced magnetic fields are likely to vary depending on the geographic region for the energy project, available habitat for each species, the resulting intensity of the EMF cables orientation and direction combined with local geomagnetic intensity. In addition, depending on the depth of burial, those marine mammals feeding on benthic organisms may excavate or uncover buried power cables. Potential responses from exposure to EMF may include a temporary change in swim direction, a more serious delay to the animal’s migration, possibly stranding if EMF from undersea cables resulted in magnetic minima.” (Page 98)

“Many displacement and sensory manipulation experiments have proven that changes in field intensity and inclination angle can cause turtles to deviate from their original direction. The mechanisms for sea turtles sensory abilities are not known and to date, there are no data on impacts from magnetic fields from underwater cables for sea turtles.” (Page 105)

“Sea turtles are known to use multiple cues (both geomagnetic and nonmagnetic) for navigation and migration. However, conclusions about the effects of magnetic fields from power cables are still hypothetical as it is not known how sea turtles detect or process fluctuations in the earth’s magnetic field. In addition, some experiments have shown an ability to compensate for “miscues,” so the absolute importance of the geomagnetic field is unclear.” (Page 105)

“No direct evidence of impacts to invertebrates from undersea cable EMFs exists. Few marine invertebrates have ever been evaluated for sensitivity to electric or magnetic fields; and the available data for those that have been studied are limited. In addition, these magnetoorientation studies are focused on the behavior of mobile adults and the effects on their pelagic larval stages are poorly studied. Thus, discussion of potential impacts to invertebrates from anthropogenic EMFs must rely on speculation and very likely overlooks a number of sensitive species.” (Page 115)

“...disorientation within the range of the magnetic field surrounding some DC cables could presumably confuse or delay lobsters. Nonetheless, the (Florida or Caribbean spiny) lobster’s ability to rely on backup orientation and navigation cues and their adaptability to change in magnetic cues is not well known.” (Page 121)

“Acknowledgement of substantial gaps in our understanding of the effects of EMF in the marine environment should not be construed as a recommendation to avoid installation of new undersea cables until these gaps are closed however. The modeling presented in Section 4.1 is representative of the types of existing and proposed cables that are suitable to support the offshore wind (or other types of offshore renewable energy) industry and can be used to develop at least a preliminary understanding of field strengths of proposed cables. Coupled with the available information on the ability of various species to sense these fields, it is evident that there are spatial boundaries surrounding each cable beyond which the fields are unlikely to have an effect on biota. Historical use of undersea power cables (e.g., connecting islands and oilrigs to the mainland, offshore wind projects in Europe) provides no documented evidence in the literature of major impacts to marine species from EMFs although there have been few studies that have actually assessed the interaction between marine organisms and cable EMF. Given that the offshore renewable energy industry in the US is in its infancy, it is reasonable to believe that any potential risks of exposing particularly sensitive species or populations to EMFs from undersea cables can be substantially reduced by careful site selection, mitigation, and an increased knowledge base on the sensitivities and responses of marine species to EMFs to improve siting decisions. The current hierarchy of offshore wind project development anticipated in US waters, with early emphasis on the Mid-Atlantic and New England, allows us to focus on key species and research topics.” (Page 121)

This report demonstrates that no one had much of an idea of what the actual impacts of anthropogenic EMFs would be on estuarine/marine ecosystems even after several more years of intensive planning for and promoting of offshore energy production. So it was with some relief that I read near the top of the listing of BOEM values on their website that “the bureau is responsible for stewardship of U.S. OCS energy and mineral resources, **as well as protecting the environment that development of those resources may impact**” (my emphasis).

But it seems that to BOEM “protecting the environment” didn’t extend to EMFs. Three years after the above quoted BOEM funded report was completed, in **Effects of offshore wind farms on marine wildlife—a generalized impact assessment** (Bergström et al, 03/19/14), the authors wrote “there was paucity in studies on cumulative impacts and long-term effects on the food web, as well as on combined effects with other human activities, such as the fisheries. These aspects remain key open issues for a sustainable marine spatial planning (<http://iopscience.iop.org/article/10.1088/1748-9326/9/3/034012/meta>).

Then in 2016, quoting from **A Review of the Evidence of Electromagnetic Field (Emf) Effects on Marine Organisms** (Emma B*, **Journal of Ecology and Environmental Sciences**, 11/28/16) “it was logical to conclude that the worst outcome for the future would be if cable manufacturers disregarded the best available scientific advice regarding the potential effects of subsea cables. Presently, there is insufficient evidence to suggest biological impacts upon marine organisms from EMFs. Nonetheless, there is a significant gap in understanding of any long-term impacts marine organisms might face” (<http://www.rroij.com/open-access/a-review-of-the-evidence-of-electromagnetic-field-emf-effects-onmarine-organisms-.pdf>).

Apparently, and assuming that Bergström et al and Emma B. completed reasonable reviews of the literature, the people at BOEM haven't taken their agency's assurance that it's personnel would protect the environment as they would like us to think they had, because we seem to know little more about EMF effects now than we did in 2011 (or previously).

Evidently the authors of the BOEM report in 2011 had quite a different perspective on the environmental acceptability of offshore cable installations.

Of course this difference in perspectives brings up the precautionary principle, to wit “when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.” (**Wingspread Statement on the Precautionary Principle**, 1998).

For an interesting discussion of the application of the Precautionary Principle when dealing with human exposure to EMF see the World Health Organization's **The Precautionary Principle and EMF** (L.I. Kheifets, http://www.who.int/peh-emf/meetings/southkorea/Leeka_Kheifets_principle_.pdf).

Anyone who is familiar with fisheries management, particularly as it has “evolved” over the last decade or so, is almost certain to be familiar with the Precautionary Principle. As applied to fisheries it means that fishermen should not be allowed to do anything until it is proven beyond a reasonable doubt that what they wish to do won't affect the fishery they propose to participate in, any other fishery, or the environment of the area where the potentially affected fisheries are located.

This makes it extremely difficult (if not impossible) to develop new fisheries or to expand existing fisheries – but some would argue that's what fisheries management is for.

As far as the Precautionary Principle as applied to fisheries is concerned, Peter Shelley, Conservation Law Foundation Senior Counsel wrote in a 2009 CLF press release “we are dismayed that the NMFS chose to base its determination on untested hypotheses that leave the future of the wolffish to chance, rather than to use well-recognized principles of precaution to ensure its survival.” In April of 2012 in a CLF blog he wrote “we think catch levels were set too high, too little was done to reduce the growing cod catches of recreational fishermen, and nothing was done to balance fishermen's economic and social pain by directing the small allocation of Gulf of Maine cod toward coastal fishing boats. The decision of the National Marine Fisheries Service (NMFS) to accept the New England Fishery Management Council's quota recommendation had little to do with precautionary principles and much to do with politics.” And in the CLF blog **Talking Fish** in November, 2014, “the precautionary principle should have triggered greater caution by the managers and the fishing industry in the face of mounting uncertainty about the health of the remaining cod biomass but it didn't. Now, the price has to be paid.” (This isn't to imply that attempts to limit fishermen or fishing via the Precautionary Principle are limited to Mr. Shelley or the Conservation Law Foundation. To the contrary – and in spite of Mr. Shelley's attempts to lump fisheries managers in with fishermen as ocean “bad guys,” the (over)application of the Precautionary Principle permeates federal fisheries management at every level, in large part due to strenuous lobbying efforts by foundation funded ENGOs including the CLF.

And yet, in shilling for the recently sunk Cape Wind Project (see **What Was Once Hailed as First U.S. Offshore Wind Farm Is No More** at <https://www.bloomberg.com/news/articles/2017-12-01/cape-wind-developer-terminates-project-opposed-by-kennedys-koch>) another CLF release titled **Conservation Law Foundation Applauds DPU Conclusion That Cape Wind is in the Public Interest** in 2010 stated “the Conservation Law Foundation (CLF) hailed today's decision by the Massachusetts Department of Public Utilities (DPU) approving a fifteen-year contract for the sale of Cape Wind's power and renewable energy credits to electric utility National Grid, a crucial step toward advancing the country's first utility-scale offshore wind farm. The decision, based on extensive expert testimony and other evidence brought forward by supporters and opponents of the Cape Wind offshore wind energy project, reached the important conclusions that Cape Wind's long-term power purchase agreement is “cost-effective” and “in the public interest,” and will deliver substantial benefits for ratepayers and the Commonwealth. John Kassel, president of CLF, said, “The DPU's decision to approve the Cape Wind power purchase agreement brings Massachusetts one step closer to realizing the economic and environmental promise of offshore wind energy (<https://www.clf.org/newsroom/conservation-law-foundation-applauds-dpu-conclusion-that-cape-wind-in-public-interest/>).

From the Cape Wind Final Environmental Impact Statement (FEIS at <https://www.boem.gov/Cape-Wind-FEIS/>) Section 9-2 **Lessons Learned From European Wind Farms**: (Emphasis added)

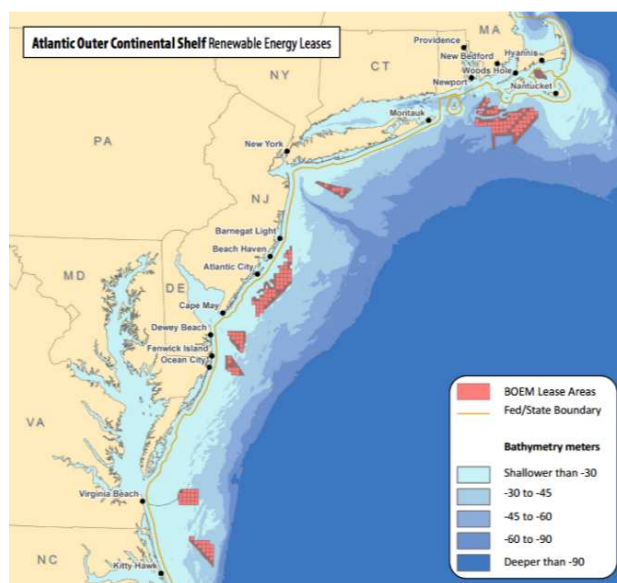
“In order to identify possible lessons learned from other offshore wind energy projects, MMS reviewed the monitoring results from a recent study on two demonstration wind farms in Denmark (Horns Rev and Nysted), which have been the subject of research and monitoring programs to examine the potential environmental impacts of offshore wind farm projects. Horns Rev, constructed during the summer of 2002, is sited 8.7 to 12.4 miles (14 to 20 km) off the coast of Denmark in the North Sea, and consists of 80 turbines totaling 160 MW. Nysted was constructed between 2002 and 2003 approximately 6.2 miles (10 km) offshore in the Baltic Sea, and incorporates 72 wind turbines placed in 8 rows of 9 turbines each, with a total installed capacity of 165.5 MW. The monitoring data at both sites consist of three years of baseline monitoring, monitoring during construction, and three years of monitoring during operation.

The environmental monitoring program focused primarily on the effects of construction and operation of the offshore wind farms on the infauna, epifauna, and vegetation of the benthic community; on fish, marine mammals and birds; and on peoples' attitudes towards offshore wind farms locally and nationally....

Overall, the results from the Danish wind farms suggest that with proper siting and placement of turbines, offshore wind farms can be engineered and operated without significant damage to the marine environment and vulnerable species. In general, the monitoring results show that the wind farms **seem to pose** a low risk to birds, mammals, and fish. The studies stress that appropriate siting is an essential precondition for ensuring limited impact on nature and the environment, and that careful spatial planning is necessary to avoid damaging cumulative impacts. Important differences between the two sites were observed in the results of some studies, suggesting that **environmental impacts are likely to vary by location even with careful site planning**. Therefore, **it is difficult to generalize the results of this monitoring program to potential environmental impacts at other offshore wind sites including the proposed action....**

Conclusions reached from the Danish offshore wind farms, therefore, showed generally minimal environmental impacts over the long term at these sites, but enough differences between sites **to recommend caution in generalizing too much from these limited studies**. New benthic habitats were colonized fairly rapidly, without strong observed effects on the surrounding soft bottom communities. The effects of the offshore wind farms were neutral with regard to fish density, species composition and abundance, showing neither positive nor negative effects. **Results from the study on the potential effects of EMFs were inconclusive**. Marine mammals, in general, were affected during construction temporarily, but their use of wind farm areas recovered during the operation phase, **with the exception of the porpoises at Nysted, which exhibited long-term avoidance of the area**. Bird studies showed general avoidance of wind farm areas for migration in most species, as well as avoidance by some species that otherwise use the area as a feeding ground. Collision rates with turbines for a large diving duck, the common eider, during migration, were predicted and observed to be very low....”

The study at Nysted also looked for effects on fish and fish behavior that might be caused by the EMFs created by submarine cables during the operation phase of the wind farm. **The Nysted study was not conclusive on this point, but suggests that there is no strong effect**. There was some evidence of either avoidance or attraction to the magnetic fields depending on the fish species. The data, however, did not rule out the possibility that physical conditions, not EMFs, along the cables might have caused the observations. Only one species, flounder, showed a correlation between the inferred strength of the EMF and increased avoidance of the cable. **It may be invalid, however, to assume that other species do not feel an effect of the EMFs**; a weakness of this study was that the EMFs around the cables were not measured directly, and the strength of the fields was inferred from turbine output only, which may not be sensitive enough to produce a correlation.



Several lease areas in the Mid-Atlantic have been identified
For offshore wind development (BOEM Graphic)

It appears as if research on the EMF effects of these two “demonstration” wind farms in Norway were as cursory and as inconclusive as those that have been reported by other researchers cited above, being extremely limited temporally and spatially and in species/life stages considered.

Yet the FEIS for the Cape Wind project was apparently good enough for the Conservation Law Foundation, the personnel of which write about their focus on their website “together, we can ensure a healthy future for New England’s ocean. The ocean plays an integral role in New Englanders’ lives, our economy, and our communities. But pollution, overfishing, and climate change threaten its health and our future. CLF has safeguarded New England’s ocean for decades – from blocking oil and gas drilling on Georges Bank, to curbing overfishing, to pioneering

smart ocean planning across the region. Today, we're fighting for a clean, healthy, and productive ocean – for today and for generations to come.”

Obviously to ENGOs like the CLF the precautionary principle doesn't apply to possible EMF effects in marine or estuarine environments the way it does to limiting fishermen and fishing – or to excoriating fisheries managers who have the temerity to disagree with the CLF in general and Peter Shelley in particular on how to best manage the New England fisheries.

But as anyone with even an elementary understanding of fish, shellfish and fisheries knows, one of main characteristics of many fish stocks is migratory behavior – either North (cold) and South (warm) or inshore and offshore. These migrations are not necessarily confined to adults and are not necessarily accomplished by the critters themselves but may be aided by ocean currents. Can anyone say with any certainty that EMFs spread across these migratory paths won't interfere with the migratory patterns of recreationally/commercially important species of fish/shellfish, or on other species which they are dependent on? Or won't interfere with reproductive behavior or larval development? The science on these issues is severely limited, yet the ENGOs and management bodies that are not willing to allow any management actions without “definite” proof that such actions won't have even a minimal downside are more than willing to permit the installation of extensive networks of EMF producing cables adjacent to or within some of our most productive – and heavily fished - areas. Evidently In these instances the Precautionary Principle isn't all that important – or seemingly makes no difference at all.