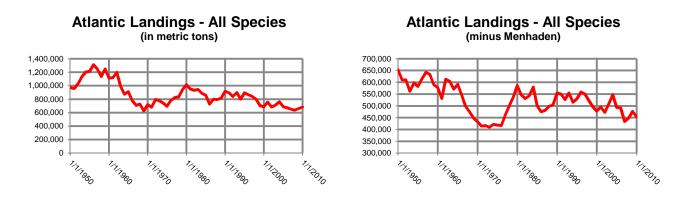
# More and better research: a win for the fishermen and a win for the fish – so why aren't Pew et al helping to provide it?

FishNet USA - July 27, 2012 Nils E. Stolpe

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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 <a href="http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual\_landings.html">http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual\_landings.html</a>.



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.

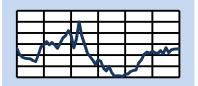
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Unfortunately, as a measure of anything beyond the level of economic damage that has been and continues to be inflicted on the commercial fishing industry and those parts of our coastal communities that depend on it by (primarily) the federal fisheries 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.

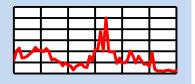
However, one thing is abundantly obvious; when it comes to managing commercial fisheries on the Atlantic coast, if one of the criteria for measuring success is stable landings at or approaching the maximum sustainable yield, our fisheries management institutions at the federal, state and regional levels 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.

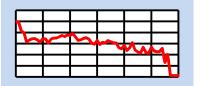


**Striped Bass** High: 6,686 mt (1973) - Low: 100 mt (1989) -2010: 3,444 mt - Average: 2,729 mt



#### Butterfish

High: 11,794 mt (1084) – Low: 476 mt (2005) – 2010: 6,09 mt – Average: 3,142 mt

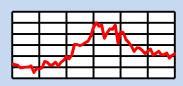


## Hardshell Clam

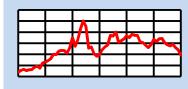
High: 9,425 mt (1950) - Low: 215 mt (2010) - 2010: 215 mt - Average; 5,498 mt



**Blue Crab** High: 73,715 mt (1981) – Low: 35,369 mt (1956) – 2010: 70,701 mt – Av: 54,263 mt



**Bluefish** High: 7,466 mt (1981) - Low: 771 mt (1958) – 2010: 3,302 mt – Average: 3,669 mt



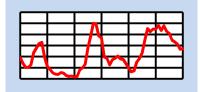
Surf Clam

High: 43,596 mt (1974) – Low: 3,511 mt (1950) – 2010: 16,994 mt – Average: 22,951 mt

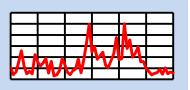


## Soft Shell Clam

High:6,115 mt (1969) - Low: 967 mt (1996) - 2010: 1,524 - Average: 3,136 mt



**Croaker** High: 13,532 mt (1977) – Low: 459 mt (1970) – 2010: 7,324 – Average: 6,004 mt

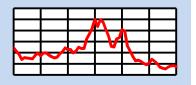


Atlantic Bonito High: 254.9 mt (1992) – Low: 15.9 mt (1966) – 2010: 28.6 mt – Average: 79 mt



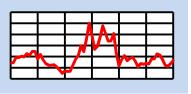
#### **Ocean Quahog**

High: 21,870 mt (1993) – Low: 93 mt (1951) – 2010: 14,380 mt – Average: 8,598 mt

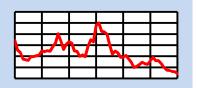


Cod

High: 53,422 mt (1980) – Low: 5,722 mt (2006) – 2010: 17,723 mt – Average: 23,043 mt

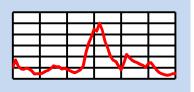


Summer Flounder High:18,007 mt (1979) – Low:1,782 mt (1969) – 2010: 5,971 mt – Average: 7,308 mt



#### Winter Flounder

High: 18,292 mt (1981) – Low: 1,586 mt (2010) – 2010: 1,586 mt – Average 8,300 mt



#### Plaice

High: 15,132 mt (1982) - Low: 989 mt (2007) - 2010: 1,412 mt - Average: 4,328 mt



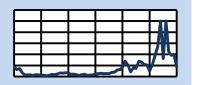
#### Red Hake

High: 4,746 mt (1956) - Low: 429 mt (2005) - 2010: 616 mt - Average: 1,746 mt



#### Atlantic Herring

High: 101,171 mt (2009) – Low: 454 mt (2004) – 2010: 65,200 mt – Average: 52,641 mt



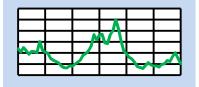
#### Atlantic Mackerel

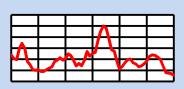
High: 56,639 mt (2006) - Low: 942 mt (1962) - 2010: 9876 mt - Average: 8,514 mt



#### Menhaden

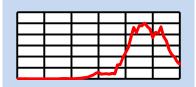
High: 697,362 mt (1956) - Low: 177,051 mt (1969) - 2010: 229, 658 mt - Av: 346,829 mt





#### Witch Flounder

High: 6,652 mt (1984) – Low: 759 (2010) – 2010: 759 – Average: 2,679 mt



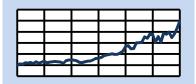
#### Monkfish

High: 27,811 mt (1997) – Low: 36 mt (1950) – 2010: 7,292 mt – Average: 7,702 mt



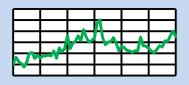
#### Silver Hake

High: 60,346 mt (1957) – Low: 5,59 mt (2006) – 2010: 8,078 mt – Average: 24,299 mt



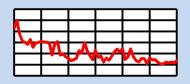
#### American Lobster

High: 52,729 mt (2010) – Low: 10,522 mt (1950) – 2010: 52,719 MT – Av:22,452 mt



## King & Cero Mackerel

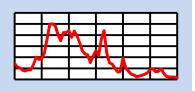
High: 2,747 mt (1982) – Low: 418 mt (1954) – 2010: 1,926 mt – Average: 1,415 mt



#### **Striped Mullet**

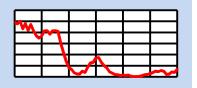
High: 5,794 mt (1951) - Low: 1,230 mt (2004) - 2010: 1,573 mt - Average: 2,412 mt





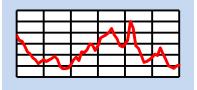
#### Yellowtail Flounder

High: 37,581 mt (1964) – Low: 2,905 mt (2010) – 2010: 2,905 mt – Average: 14,097 mt



#### Haddock

High: 71,921 mt (1950) - Low: 328 mt (1994) - 2010: 9,811 mt - Average: 23,833 mt



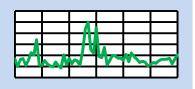
#### White Hake

High: 7,371 mt (1985) – Low: 1,274 mt (1968) – 2010: 1,807 mt – Average: 3,772 mt

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#### Caribbean Lobster

High: 2,917 mt (1972) – Low: 93 mt (1984) – 2010: 218 mt – Average: 536 mt



#### Spanish Mackerel

High: 5,015 mt (1977) - Low: 865 mt (1967) - 2010: 2,045 mt - Average: 1,770 mt



#### Eastern Oyster

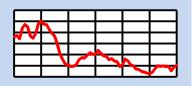
High: 26,692 mt (1954) - Low: 826 mt (2004) - 2010: 1,4309 mt - Average: 10,084 mt



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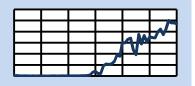
### Pollock

High: 24,635 mt (1986) – Low: 2,961 mt (1996) – 2010: 5,157 mt – Average: 9,196 mt



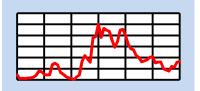
## Scup

High: 22,298 mt (1960) - Low: 1,211 mt (2000) - 2010: 4,714 mt - Average: 6,654 mt



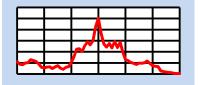
### Skates

High: 18,945 mt (2007) – Low: 36 mt (1961) – 2010: 17,881 mt – Average; 5,420 mt



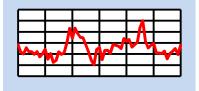
#### Swordfish

High: 4,625 mt – Low: 35 mt (1971) – 2010: 1,547 mt – Average: 1,618 mt



## Weakfish

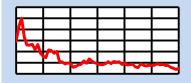
High: 16,312 mt (1980) – Low: 93 mt (2010) – 2010: 93 mt – Average: 4,451 mt



Shrimp High: 29,277 mt (1996) – Low: 7,301 mt (1963) – 2010: 16,350 mt – Average: 14,887 mt

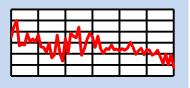
## Acadian Redfish

High: 117,173 mt (1951) - Low: 251 mt (1997) - 2010: 1,645 mt - Average: 24,125 mt



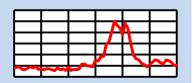
## Black Sea Bass

High: 9,978 mt (1952) - Low: 793 mt (2009) - 2010: 948 mt - Average: 2,607 mt



## Spot

High: 6,586 mt (1952) – Low: 1,032 mt (2010) – 2010: 1,032 mt – Average: 3,483 mt



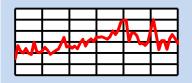
Tautog

High: 527 mt (1987) - Low: 60 mt (1965) - 2010: 110 mt - Average: 159 mt



Groupers

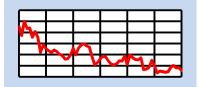
High: 1,000 mt (1978) - Low: 91 mt (1963) - 2010: 184 mt - Average: 386 mt



**Snappers** High: 937 mt (2001) – Low: 279 mt (1950) – 2010: 542 mt – Average: 563 mt

## Sea Scallop

High: 27,768 mt (2006) – Low: 2,399 mt (1973) – 2010: 25,876 mt – Average: 11,802 mt



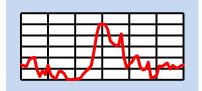
## Spotted Sea Trout

High: 1,049 mt (1952) - Low: 85.2 mt (2004) - 2010: 119 mt - Average: 403 mt



Squid

High: 42,737 mt (1998) – Low: 1,067 mt (1950) – 2010: 22,582 mt – Average: 12,599 mt



#### Tilefish

High: 4,042 mt (1980) – Low: 32 mt (1968) – 2010: 1,090 mt – Average: 1,215 mt

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Dogfish (Spiny & Smooth)

High: 27,255 mt (1996) – Low: 24 mt (1952) – 2010: 7,510 mt – Average: 4,474 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

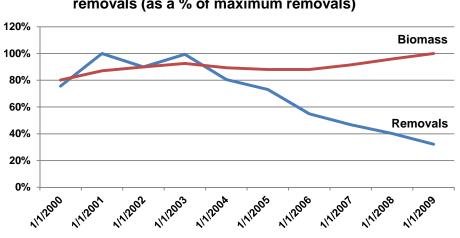
There wasn't a significant directed fishery for monkfish up until the late 1970s, but when Julia Child, one of the earliest celebrity chefs, featured a large and impressive (and ugly) specimen on her television show in 1979, it's generally agreed that she spurred domestic consumer interest in the fish 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.

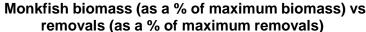
As the chart above indicates, the harvest has declined steadily and precipitously since 2002.

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 (<u>http://www.nefsc.noaa.gov/ publica-tions/crd/crd1009/pdfs/monkfish.pdf</u>). 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).

Spawning Stock Biomass (SSB) and Recruitment (R)

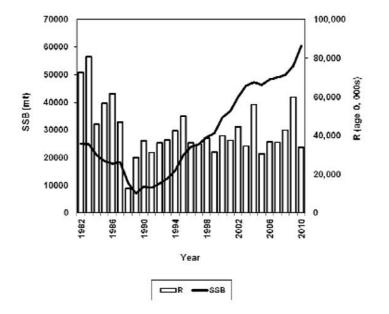
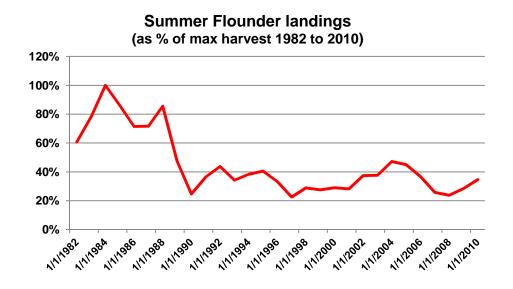


Figure 18. Spawning Stock Biomass (SSB) and Recruitment (R, age 0) by calendar year.

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.

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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 NO-AA/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 <a href="http://www.fishtruth.net">http://www.fishtruth.net</a> 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.