Magnuson management and the commercial fishing industry

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The Magnuson Act has been around for over 30 years

- **The major impetus was the fleets of foreign catcher/processors working in our coastal waters beyond the 12 mile limit.**
- **Its primary purpose was to give access to the fisheries resources in US waters to US fishermen and US consumers.**
- **Commercial fishermen were given an unprecedented role in the management process. (While recreational fishermen weren't as well represented initially, they are now.)**
- **Conservation often took a back seat to utilization.**
  - **Just about every coastal state wanted at least one seafood industrial park – fortunately, not every state got one.**
  - **Grants and subsidies were available to aid in harvesting, processing and marketing so-called underutilized as well as traditionally fished species.**
  - **The commercial fleet expanded rapidly, in large part because of "outside" investors taking advantage of the Reagan administrations' economic recovery programs (accelerated depreciation and investment credits).**
  - **The fisheries in the EEZ were successfully "Americanized" by the mid 1980s.**

Too many boats and too few fish?

- **The impacts of the influx of powerful new vessels on the fisheries resources in our EEZ were exacerbated by the World Court decision in 1984 establishing the so-called Hague Line separating US and Canadian waters. This closed off a large part of their traditional grounds to US fishermen. Though responsible neither for the rapid expansion of the fleet nor for the even more rapid contraction of available fishing grounds, the commercial fishing industry in the Northeast is still paying for the resultant "overcapitalization."**
- **The situation in New England regarding the groundfish fishery, inarguably the most historically important fishery in the US, was and is still being used by "conservationists" – predominantly foundation-funded ENGOs – as the reason for ever-increasing restrictions being placed on commercial and recreational fishermen and for ever-increasing inflexibility being imposed on the fisheries management system.**

Where has management under Magnuson gotten us?

- **New England – Still dealing with to many boats, a lingering remnant of Reaganomics and the World Court decision, the seeming incapability of the New England Council to deal effectively with groundfish has provided the impetus for a successful campaign over the last two Magnuson reauthorization cycles to wring any discretion out of the management process.**
- **The Mid-Atlantic – With relatively little fanfare, the Mid-Atlantic Council has established "successful" management programs for all of its fisheries. Only one stock out of all of those managed by the Mid-Atlantic Council is classified as overfished. This should bre a ringing endorsement of the existing management system, as should Alaska, yet it isn't.**

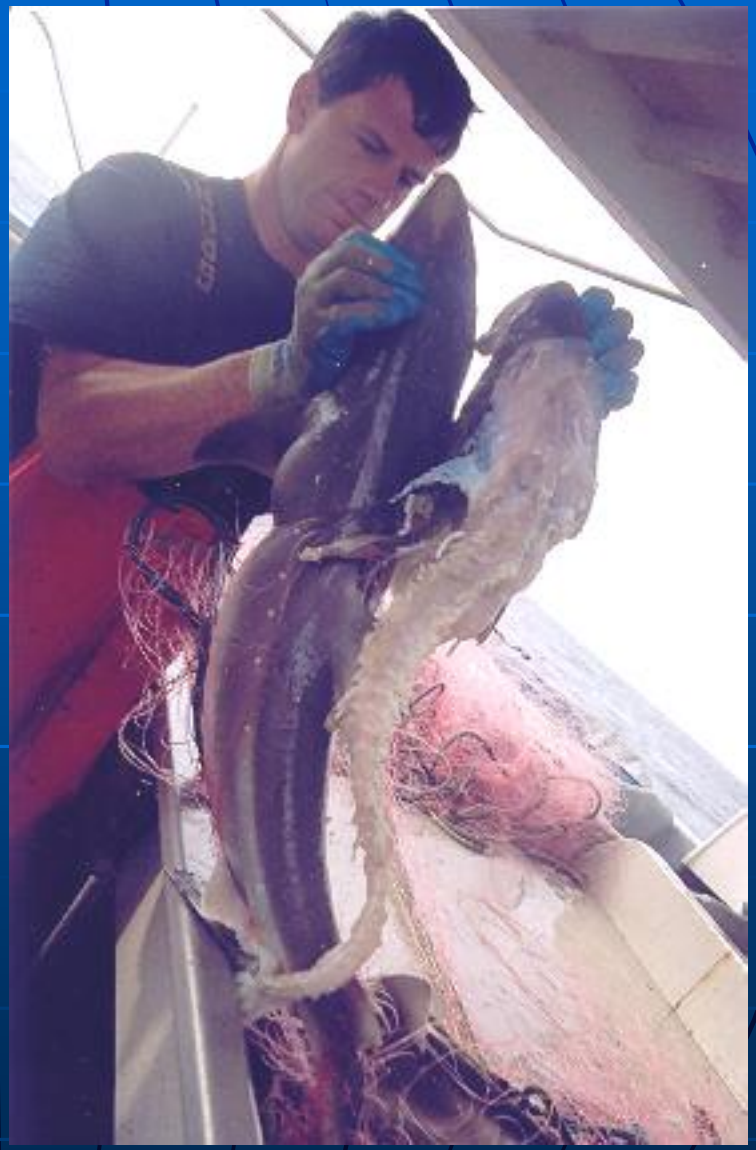
An example of what's wrong with federal fisheries management today from the commercial fishing industry perspective

- **There are at least 1 million metric tons of three species of fish - Acadian redfish (215,000 mt), haddock (340,000 mt) and spiny dogfish (500,000 mt) – available to commercial fishermen off the Northeast US coast.**
- **Each of these species is readily caught with existing technology by the existing commercial fishing fleet, and each has available or readily developable markets.**
- **In 2007, 3,400 metric tons of spiny dogfish, 800 tons of redfish and 600 tons of haddock were landed. That's half a percent of the total biomass of those three species.**
- **In 2007, the total commercial landings of all species in New England and the mid-Atlantic were 350 thousand metric tons (that includes almost 100 thousand metric tons of menhaden and herring). Total landings of groundfish – termed the Multi-species Complex – were on the order of 40,000 metric tons.**

With the New England groundfish fishery in particular, and Northeast commercial fisheries in general, suffering economic hardship, why are landings of these three species so low?

- **Due to successful lobbying by "conservationists" during the last two Magnuson reauthorizations, virtually all discretion has been removed from the federal fisheries management process.**
  - **Stock "rebuilding" requirements for spiny dogfish**
  - **Regulations concerned only with rebuilding the weakest groundfish stocks**

Unfortunately, problems with spiny dogfish management aren't limited to not enough landings.



An example of what's wrong with federal fisheries management today from the perspective of most finfish fisheries in the Northeast

"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)**

Spiny dogfish – as bad as it gets?

- **Targeting one of the so-called underutilized species, a viable spiny dogfish fishery utilizing significant government support was developed in the 1990s, culminating in landings of over 20,000 metric tons in 1998.**
- **The fishery focused primarily on large, mature females.**
- **After a decade or so of encouraging the development of the fishery by various agencies, it was decided that the stock – due to supposed low fecundity – was being severely overfished (stock status was based on estimates of mature females in the total population).**
- **In 2004, landings had been reduced to under a thousand metric tons and recovery times based on zero fishing mortality extended out for decades.**

Why isn’t he smiling?

Spiny dogfish – impacts of the fishery closure

- **Needless to say, a bunch of fishermen, processors and exporters lost a bit more than their proverbial shirts when the fishery was closed.**

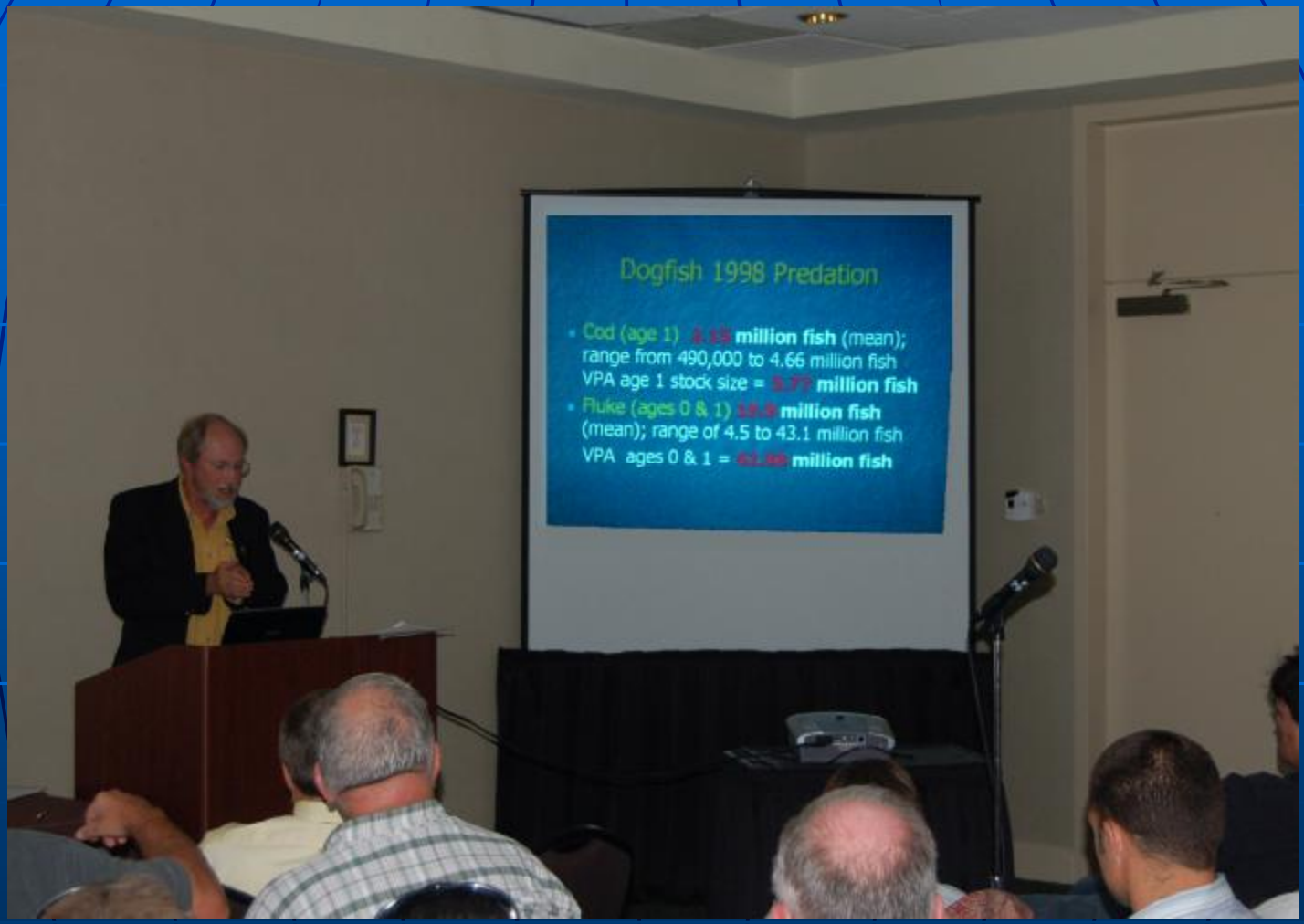
Spiny dogfish as a % of the total catch in the NMFS Northeast Fisheries Science Center's trawl surveys

Survey	Dogfish lbs	Total (lbs)	% Dogfish
Spring '06	66680	107349	62%
Winter '06	58943	114605	51%
Fall '05	73321	152666	48%
Spring '05	46992	83465	56%
Winter '05	79900	121062	66%
Fall '04	58923	145430	41%
Spring '04	32341	94848	34%
Winter '04	89932	150237	60%
Fall '03	32661	124099	26%
Spring '03	55654	133134	42%
Winter '03	86862	163578	53%
Fall '02	33668	153542	22%
Spring '02	49496	111770	44%
Winter '02	88233	164748	54%
Fall '01	58062	128892	45%
Spring '01	26321	75564	35%
Winter' 01	91686	186301	49%
Fall '00	57018	140280	41%
Spring' 00	24961	96789	26%
Winter '00	45923	91674	50%
Fall '99	34720	118596	29%
Spring '99	36434	87783	42%
Winter '99	88268	139124	63%

Spiny dogfish – impacts of rebuilding

Steve Murawski wrote in 1991 in *Can we manage our multispecies fisheries?* (*Fisheries*) "Whether or not species changes on Georges Bank are due to biological interactions among species or are simply due to 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 marketed species may thus be limited by predation from or competition with the elasmobranch species."

Spiny dogfish – impacts of rebuilding



Dogfish 1998 Predation
0n Cod (age 1) 2.15 million fish (mean); range from 490,000 to 4.66 million fish VPA age 1 stock size = 5.77 million fish
On Fluke (ages 0 & 1) 19.9 million fish (mean); range of 4.5 to 43.1 million fish
VPA ages 0 & 1 = 62.88 million fish

Spiny dogfish predation

- **Assuming that spiny dogfish consume a median level of 1.5% of body weight per day, it takes 2.4 million metric tons of prey to support a biomass of 400,000 tons of spiny dogfish (Wetherbee, B.M. and E. Cortes, 2004, *Food consumption and feeding habits*, pp. 223-244 in: *Biology of sharks and their relatives*). And as we've been told by Bigelow and Schroeder, much of this is either species fishermen target or their prey species. For comparison, the total commercial landings for the Atlantic coast of the US amounted to 650 metric tons in 2007.**

111th CONGRESS, 1st Session, H. R. 1584, March 18, 2009

Mr. PALLONE (for himself, Mr. LOBIONDO, Mr. FRANK of Massachusetts, Mr. JONES, Mr. KENNEDY, Mr. ADLER of New Jersey, Ms. GINNY BROWN-WAITE of Florida, and Mr. MCINTYRE) introduced the following bill; which was referred to the Committee on Natural Resources

'Flexibility in Rebuilding American Fisheries Act of 2009'.

SEC. 2. EXTENSION OF TIME PERIOD FOR REBUILDING CERTAIN OVERFISHED FISHERIES.

'(ii) not exceed 10 years, except in cases where--

'(I) the biology of the stock of fish, other environmental conditions, or management measures under an international agreement in which the United States participates dictate otherwise;

'(II) the Secretary determines that such 10-year period should be extended because the cause of the fishery decline is outside the jurisdiction of the Council or the rebuilding program cannot be effective only by limiting fishing activities;

'(III) the Secretary determines that such 10-year period should be extended to provide for the sustained participation of fishing communities or to minimize the economic impacts on such communities, provided that there is evidence that the stock of fish is on a positive rebuilding trend;

'(IV) the Secretary determines that such 10-year period should be extended for one or more stocks of fish of a multi-species fishery, provided that there is evidence that those stocks are on a positive rebuilding trend;

'(V) the Secretary determines that such 10-year period should be extended because of a substantial change to the biomass rebuilding target for the stock of fish concerned after the rebuilding plan has taken effect; or

'(VI) the Secretary determines that such 10-year period should be extended because the biomass rebuilding target exceeds the highest abundance of the stock of fish in the 25-year period preceding and there is evidence that the stock is on a positive rebuilding trend;'; or

(2) in paragraph (7), in the matter preceding subparagraph (A), by inserting after the first sentence the following: 'In evaluating progress to end overfishing and to rebuild overfished stocks of fish, the Secretary shall review factors, other than commercial fishing and recreational fishing, that may contribute to a stock of fish's overfished status, such as commercial, residential, and industrial development of, or agricultural activity in, coastal areas and their impact on the marine environment, predator/prey relationships of target and related species, and other environmental and ecological changes to the marine conditions.'; and

(3) by adding at the end the following:

'(8) If the Secretary determines that extended rebuilding time is warranted under subclause (III), (IV), (V), or (VI) of paragraph (4)(A)(ii), the maximum time allowed for rebuilding the stock of fish concerned may not exceed the sum of the following time periods:

'(A) The initial 10-year rebuilding period.

'(B) The expected time to rebuild the stock absent any fishing mortality and under prevailing environmental conditions.

'(C) The mean generation time of the stock.

'(9) In this subsection the term 'on a positive rebuilding trend' means that the biomass of the stock of fish has shown a substantial increase in abundance since the implementation of the rebuilding plan.'.

Will the Flexibility in Rebuilding American Fisheries Act of 2009 be enough?

Not as long as we're still stuck with the idea that it's desirable for every stock to be at a level that will yield MSY.

Fishing mortality can be an effective management tool. As long as our hands are tied by Magnuson, it's not going to be.

Dogfish forum – September 30, 2008

http://www.fishnet-usa.com and follow the link at the lower left.

Dogfish request to NOAA Director Lubchenco

Signed by over 500 recreational, commercial and party/charter fishing organizations, fishermen, vessel owners and associated business people, it requests her/NOAA's help in dealing with a situation, the "plague" of spiny dogfish, that is costing fishing-dependent businesses in the Northeast millions of dollars annually.