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Net Loss: Overfishing Off the Coast of New England



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Acknowledgements

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Summary

America's oceans are home to whales, dolphins, fish and an enormous variety of other sea life. But today our oceans are in trouble. Destructive overfishing, bycatch (i.e., unintended catch of unwanted fish), pollution, and habitat damage are putting important marine animals at risk. Many populations are in serious decline. The result of this poor management is a drastic reduction in fishing opportunities for commercial and recreational fishermen.

In New England, almost one half (44% or 15 out of 34) of all federally managed fish stocks for which there is adequate information are depleted (i.e., overfished).¹ Approximately one third of stocks (29% or 9 out of 31) are experiencing overfishing and headed in that direction. Even these numbers do not tell the whole story.

'Overfished' typically means that a fish population has been reduced to below 20-25% of its original population. When eight out of ten fish of any kind are missing from the ocean, it has profoundly negative effects on the rest of the ocean's animals like whales, dolphins, sea turtles and other fish. The ecosystem is unbalanced; predators may not find enough to eat or prey species may explode in number because their predators are gone.

'Overfishing' means that a fish stock is being caught faster than it can replace itself and it is therefore heading towards overfished status or it will never recover to healthy levels. Taken together these two terms describe fish stocks in jeopardy or threatened.

Many of these threatened fish are regionally popular such as the cod, flounder, and halibut and part of New England seafood culture. But decades of overfishing have led to substantial declines. The New England Council often ignored the advice of its independent scientists in setting target catch levels and refused to impose absolute limits on the amount of fish that could be caught and landed. Instead, the Council relied on managing fishing effort with limits on days of fishing, fish size, fishing seasons, trip limits, closed areas, gear restrictions, and the like. Clearly these have not worked and fish stocks keep declining.

The Council has recently begun to confront its problems and make wiser resource decisions. For example, actions on forage fish (herring) in the Gulf of Maine and proposed plans for groundfish like cod and flounder indicate a new found awareness that the old ways are not working.

In an effort to improve fisheries management, Congress revised the primary law governing fishing in U.S. oceans, the Magnuson-Stevens Fishery Conservation and Management Act, at the end of 2006. The Act requires the National Marine Fisheries Service and the regional fishery management councils that devise and propose local plans to maintain healthy fish populations to follow new rules. These rules are now under development; and this report recommends that the new rules follow important conservation principles.

Status of Fish in New England

The New England Fishery Management Council manages fishing in federal waters (3-200 miles offshore) off five states: Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut. According to the most recent government report from the National Marine Fisheries Service (NMFS) about the health of our Nation's fish, the New England Council has sole oversight on a

total of 35 fish stocks.² Of these, 15 are overfished which typically means they are depleted to below 20-25% of historical abundance, and 9 are subjected to overfishing which means that at the current rate of fishing the species could become overfished.

To put this into context, fish stocks that are overfished represent almost one half (44% or 15 out of 34) of all federally managed fish stocks for which there is adequate information to assess their status. Almost one third of stocks (29% or 9 out of 31) that have sufficient information are experiencing overfishing and headed in that direction.

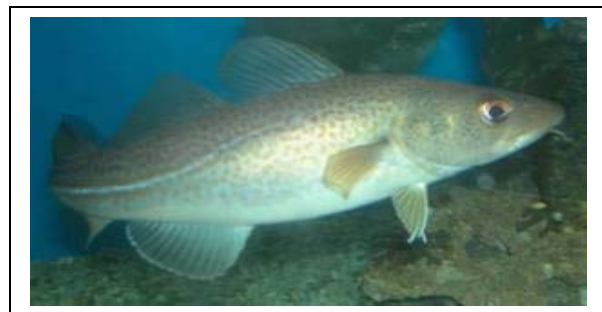
Status of New England Fish Stocks in 2006

Overfished	Overfishing
Cod	Cod
--Gulf of Maine*	--Gulf of Maine*
--Georges Bank*	--Georges Bank
Yellowtail flounder	Yellowtail flounder
--Georges Bank	--Georges Bank
--Southern New England*	--Southern New England
--Cape Cod	--Cape Cod
--Gulf of Maine	--Gulf of Maine
White hake*	White hake*
Winter flounder	Winter flounder
--Southern New England	--Southern New England
Ocean pout	--Georges Bank
Atlantic halibut	
Haddock	
--Gulf of Maine*	
--Georges Bank*	
American plaice	
Windowpane flounder	
--Southern New England	
Thorny Skate	

Source: National Marine Fisheries Service, Report on the Status of US Fisheries for 2006, June 22, 2007 pg. 20. Available at: www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm

*Indicates fish stocks with same status on the 2001 Status of Fisheries report or subject to a rebuilding plan in 2001. Source: National Marine Fisheries Service, Annual Report to Congress on the Status of U.S. Fisheries – 2001, Table 3, pgs. 15-16. Accessed at: www.nmfs.noaa.gov/sfa/reg_svcs/statusostocks/Stock_status01.htm

Cod Fish



aquarium.nefsc.noaa.gov/intro/introfiles/v3_slide0009.htm

Two things are particularly troublesome about this list of threatened stocks in New England. The first is that several fish: cod, yellowtail flounder, winter flounder and hake are both overfished and being caught so fast that their populations can not rebound (i.e., overfishing). When managers know that a fish is overfished, managers should immediately stop continued overfishing. In fact, the newly revised Magnuson-Stevens Act prohibits overfishing of overfished populations.

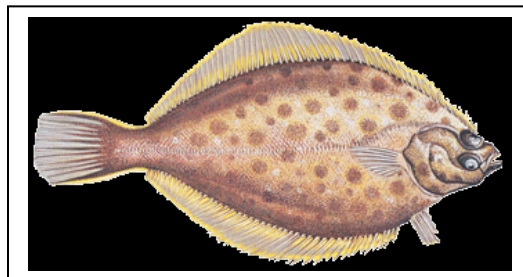
Second, many of the stocks that are on the 2006 list were also on the same list in 2001 as overfished, headed in that direction, or subject to a rebuilding plan.³ One reason for so little progress in 5 years is that New England rebuilding plans explicitly allowed for a continuation of overfishing in the early years of some plans. Amendment 13 to the multispecies (groundfish) plan explicitly allowed overfishing on cod for the first five years of a ten year plan.⁴

This is consistent with national data. Nationwide, the number of overfished stocks (47) in 2006 increased by 9% compared to 2005 when 43 were found to be overfished.⁵ Stocks which were experiencing overfishing increased from 45 to 48 an 8% increase. Obviously, this one year change does not give us a long term picture, but it is worrisome and it must be reversed in future years.

Why Healthy Fish Populations Are Important

Fishing has a substantial economic, cultural and community impact in parts of New England. Fishing and the communities and people it supported have all shaped the culture of the northeastern U.S. for generations. Unfortunately, many of the most threatened fish in the region like cod and flounder have been declining for a long time.

Yellowtail Flounder



Source: www.nero.noaa.gov/nero/fishermen/images/Multispecies/images/yellowtailflounder.gif

In New England, the commercial fishery brought in almost \$1 billion (\$954 million) in 2006 from ex vessel sales (i.e., value of fish sold by fishermen) alone without adjusting for any economic multiplier effect from jobs like onshore processing, wholesaling or retailing related to fishing.⁶

Numbers for the economic worth of commercial and recreational fishing are not directly comparable because the recreational number includes a multiplier effect, accounting for secondary spending such as hotel rooms and meals generated by recreational fishermen, while the commercial number does not include shore side jobs and secondary impacts. In 2001, recreational fishing was estimated to bring in \$1.4 billion after adjusting to 2006 dollars. This accounted for almost 9,200 jobs.⁷

Council History

The New England Council failed for many years to prevent overfishing in the groundfish complex of fish (i.e., cod, hake, and flounder, etc.) and rebuild these species back to health after decades of abuse. From 1986 to 2006, the cod fishery for example declined from 60 million pounds per year landed to 12 million pounds.⁸ The stock has been severely depleted due to mismanagement.

For many years the Council imposed ineffective fishing rules such as limits on days at sea (i.e., how many days a fisherman can fish), trip limits, size limits, closed areas, and gear restrictions. Instead of prohibiting catch above some scientifically established limit, the Council neither followed the advice of scientists in setting the limits nor stopped fishing after its own limits were routinely exceeded. The complex rules which were supposed to limit fishing effort with days at sea did not work; and populations of these fish continued to decline.⁹

Recent Decisions

Pushed by NMFS, new data on declining populations, and lawsuits, the Council is beginning to improve its earlier performance. Recently, it decided to impose better rules for herring in the Gulf of Maine. Herring were being locally depleted by huge trawlers that catch entire schools in one pass. The Council banned trawling for herring off Maine in near shore waters during the summer when other threatened fish depend on herring for food. As a result, this summer fishermen have been reporting increased catches of many predators that eat herring, increased sightings of whales and other marine mammals that eat herring, and other positive signs of ecosystem recovery.¹⁰

The Council is improving in other ways too. A proposed fishery management plan (Amendment 16) for groundfish will probably include an assignment of hard numerical catch limits to specific fishing sectors in New England.¹¹ This would be a huge step forward for New England. Catch will no longer be managed by reliance on fishing days at sea and other indirect controls. Instead, catch limits will be enforced by weighing fish at the dock. If these proposals are adopted and enforced on the water, the Council will have made major progress in one of its most important fisheries.

Recommendations

For the National Marine Fisheries Service

In December 2006, Congress unanimously approved changes to federal laws governing U.S. fisheries by reauthorizing the Magnuson-Stevens Fishery Conservation Act. Currently, the federal government is preparing and revising regulations to implement the new law. The administration should enact strong, clear rules that implement Congress' intention for overfishing to end. The regulations should follow these principles:

- **There must be strong conservation minded rules that sustain healthy fish populations, including numerical annual catch limits for the amount of fish that can be caught.** The catch limits should be set to minimize the potential for overfishing.
- **Decisions about annual catch should be based on science, not self interest.** Independent science advisors must set limits on the amount of fish caught. In the past, fishery managers often ignored the advice of independent scientists and the limits were set at unsustainable levels.

- **The rules need to be enforced.** If the limits on amount of fish caught are exceeded, there must be consequences. Fishing should be stopped or catch limits lowered for the next fishing season. Fishery managers and fishermen should be held accountable .

For the New England Fishery Council

The changes to the new Magnuson-Stevens Act were in direct response to the failure of the New England Council and other councils to prevent overfishing and act in accord with scientific advice. The new law requires the New England Council to prevent overfishing by setting precautionary catch levels based on scientific advice. The council may not set the catch level higher than the safe level recommended by its scientific advisors. When overfishing does occur there should be some accountability measure or consequence for the fishery such as closure for the remainder of the season or lower annual catch limits next season to make up for the overage. The Council appears to be reforming its approach to fisheries management in New England with several recent actions. We applaud this change.

End Notes:

1. National Marine Fisheries Service Office of Sustainable Fisheries, *Report on the Status of U.S. Fisheries for 2006*, June 2007. Tables 2 & 3. Available at: www.nmfs.noaa.gov/sfa/domes_fish/StatusofFisheries/2006/2006RTCFinal_Report.pdf
2. Ibid, pg. 15
3. National Marine Fisheries Service Office of Sustainable Fisheries, *Annual Report to Congress on the Status of U.S. Fisheries – 2001*, April 2002. Table 3, pgs. 17-19
Accessed at: www.nmfs.noaa.gov/sfa/reg_svcs/statusostocks/Status02.pdf, October 1, 2007
4. New England Fishery Management Council, Final Amendment 13 to the Northeast Multispecies Fishery Management Plan, December 2003. Available at: www.nefmc.org/nemulti/index.html.
5. National Marine Fisheries Service, *Report on the Status of U.S. Fisheries for 2006*, pg 1
6. Based on data from query of all New England state landings by species in 2006. Available at: www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html. Accessed September 20, 2007.
7. American Sportfishing Association, Table: State Overview – 2001 Saltwater Fishing. Accessed September 20, 2007. Available at: http://www.asafishing.org/asa/statistics/saleco_trends/state_reports_saltwater.html
Number based on ‘Output’ as measure of value. To adjust for inflation with the consumer price index, www.bls.gov/cpi/ using the inflation calculator on Bureau of Labor Statistics website.
8. Based on data from query of all New England state landings by species in 2006, 1996, and 1986. Available at: www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html. Accessed September 20, 2007.
9. Marine Fish Conservation Network, *Shell Game: How the Federal Government is Hiding the Mismanagement of Our Nation’s Fisheries*, 2006, Washington, D.C., pgs 16-19. Available at: www.conservefish.org/site/pubs/network_reports/shellgame_lowres.pdf
10. Tom Bell, *Kennebec Journal*, “Results Seen From New Herring Rules”, September 11, 2007. Available at: www.kennebecjournal.maintoday.com/news/local/4267833.html.
11. Becky Evans, *New Bedford Standard-Times*, “Regulators Consider Plan for Fishing Grounds’, June 28, 2007