



NOAA, Stellwagen Bank National Marine Sanctuary

Protecting New England's Marine Ecosystem: Habitat at Risk

All animals need safe places to grow, reproduce, and find food. Marine animals are no different. In the ocean, their habitats can be the sandy bottom, a seamount rising from the ocean floor, or a deep canyon carved into the continental shelf. These places are affected by pollution and other human activities such as oil and gas drilling and commercial fishing, which research shows can have negative consequences. The National Oceanic and Atmospheric Administration is tasked with regulating ocean fishing and protecting our nation's ocean resources.

Some areas of New England's waters have been closed to various types of fishing gear for decades in order to encourage the return of healthy populations of important groundfish (such as cod, haddock, and flounder), but the region does not have a plan for habitat management, as required by federal law. A plan for protecting essential fish habitat has been under development for 10 years. A variety of alternatives will be presented to the public later this year, many of which propose a reduction in the size of the area currently protected. Some of these proposals ignore established science and place the short-term interests of the commercial fishing industry above the need to protect habitat for the long-term benefit of the ecosystem, its fish populations, and the coastal communities they support.

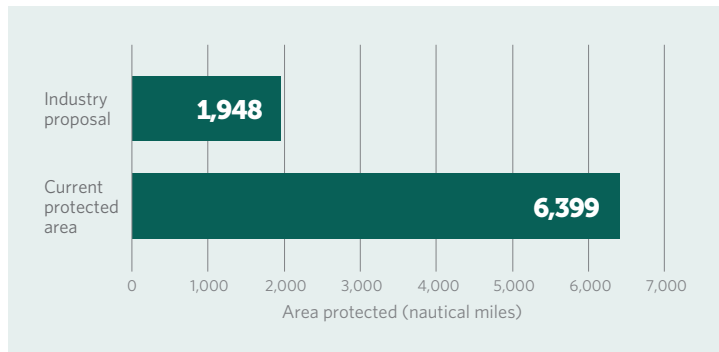
Healthy fish

Biologically productive habitat of ample size is essential to maintain healthy fish populations. For example, recent work by the Gulf of Maine Research Institute found that older cod—critical to the reproductive success of the species—are far more abundant inside protected areas, making these places crucial to the recovery of depleted cod populations.¹ Closed areas also contributed to the recovery of New England's scallop fishery.²

Healthy ecosystems

Habitat protection may be more important now than ever before, because these areas can provide resilience for marine species and ecosystems against the effects of climate change. New England waters are warming,

Protected Habitat Faces Dramatic Cuts



Note: This graph shows the extent of the area currently protected in New England waters and the amount that would be protected under the fishing industry's plan. This proposal would reduce the total protected habitat by 70 percent.

Source: New England Fishery Management Council data

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disrupting fish populations and undermining the marine food web.³ A climate change adaptation strategy produced in 2012 by NOAA and other federal agencies made habitat protection a top priority for helping fish adapt to warming oceans.⁴

A new way to manage fish

Protecting habitat is part of a new way of managing fish, and it can lead to better ecosystem health in the future. Instead of looking at each fish species in isolation, this ecosystem-based fisheries management approach takes into account the ways that marine species interact with one another and with their environment. Leading scientists have advocated for such a management model for many years. It's time to take action. Fisheries managers should:

- Protect habitat.
- Leave enough small fish in the water to feed the entire food web.
- Minimize the incidental take (bycatch) of nontarget fish, birds, and mammals.
- Establish fishery ecosystem plans that take a broader view of interactions among species.

Endnotes

- 1 Andrew J. Pershing et al., "The Future of Cod in the Gulf of Maine," Gulf of Maine Research Institute (June 2013); see also, Gulf of Maine Research Institute, "The Role of Closed Areas on Cod Health," *Waypoints* (2012), <http://www.gmri.org/mini/index.asp?ID=54>.
- 2 New England Fishery Management Council, Final Amendment 10 to the Atlantic Sea Scallop Fishery Management Plan (December 2003), <http://www.nefmc.org/scallops/planamen/a10/A10.pdf>.
- 3 National Oceanic and Atmospheric Administration, "Science Spotlight: Sea Surface Temperatures Reach Highest Level in 150 Years on Northeast Continental Shelf," (April 2013), http://www.nefsc.noaa.gov/press_release/2013/SciSpot/SS1304/.
- 4 Association of Fish and Wildlife Agencies et al., (2012), "National Fish, Wildlife and Plants Climate Adaptation Strategy," <http://www.wildlifeadaptationstrategy.gov/pdf/NFWPCAS-Final.pdf>.

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