The Exhausted Sea

Good fish managers, like good parents, eventually learn that one of the kindest words they can utter is "no."

By Ted Williams

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In the Bering Sea, where fisheries have crashed in recent years, dead walleye pollock ooze out of a commercial trawler's net.
Photo by Natalie B. Fobes

The year is 1965, circa July 4. Rocked by gentle swells on a glassy sea, Robbie Troup and I are fishing from a wooden lobster boat off Rye, New Hampshire. Five miles seaward the gray backs of the Isles of Shoals breach through the morning haze like humpback whales. The dawdling offshore breeze carries the fragrance of salt marsh, clam flat, and kelp. "It's amazing what you can do with monofilament and sea worms," announces Ken, our skipper, while we boat haddock. Most of the 40 or so fish already onboard weigh more than eight pounds.

We let the cod go unless we've brought them up too fast and their air bladders stick out their throats like cadaverous thumbs. We club the mini sharks called dogfish and toss them overboard because we've been taught that there are "too many" and that they are "trash fish. "Whenever they get too thick, we haul anchor and move.

Suddenly it is June 23, 2002. I am standing on the fish pier at Chatham, Massachusetts, as the commercial fishing fleet unloads its catch. Every fish from every boat is a dogfish. Gray and skinny, they lie tangled together in wooden crates, staring with dead, reptilian eyes. Almost three decades of litigation, legislation, planning, and media flap about the worst debacle in the history of American fish management—the demise of

14 bottom species collectively called "groundfish"—hasn't fixed anything. Nine years earlier the National Marine Fisheries Service (NMFS), a tentacle of the Commerce Department, had declared haddock commercially extinct in the Gulf of Maine. The cod population has collapsed, too. Still, in its 27-year history, there has never been a time that the New England Fisheries Management Council—which, with NMFS oversight and approval, sets quotas for cod, haddock, and other groundfish—has not allowed gross overfishing.

When groundfish disappeared, dogfish expanded, feasting on the rich shoals of baitfish that were suddenly available. The response of state and federal managers and seafood promoters in the New England and mid-Atlantic states was to encourage an unsustainable fishery for dogfish, which they called an "underutilized species" and to which they assigned the consumer-friendly name "cape shark." But unlike cod, dogfish don't start spewing millions of eggs at age two. It takes females as long as humans to reach sexual maturity, and dogfish bear their young alive, producing dog-size litters of 6 to 10 pups after two-year pregnancies.

The fishery, directed at females because they're larger, got under way in the late 1980s. By 1996 annual landings had increased from about 9.9 million pounds to 60 million pounds. Four years later mature females had declined by 80 percent.

The New England and Mid-Atlantic fisheries councils, which manage federal waters (from 3 to 200 miles out), didn't even hatch a dogfish plan until 2000. And the Atlantic States Marine Fisheries Commission (ASMFC), which manages state waters (out to three miles), procrastinated until 2002. But the states' plan had been in place only three months when, in February 2003, commission members effectively deep-sixed it after Massachusetts flimflammed them with bogus data. Despite the fact that 80 percent of the mature females had been killed off and virtually no new pups had been born during any of the past seven years, the commission rejected the recommendation of its own scientists and increased the annual dogfish quota from 4 million pounds to 8.8 million pounds. Still, there would be a chance to amend that at the commission's June 10, 2003, meeting in Crystal City, Virginia.

For four months the environmental community—led by Sonja Fordham, the Ocean Conservancy's fish conservation project manager, and Merry Camhi, assistant director of Audubon's Living Oceans Program and president of the American Elasmobranch Society—blitzed the ASMFC with letters pleading for sanity.

At the June 10 meeting the scientists on the dogfish technical team objected to the increase. Still, the motion to lower the quota failed. "And this was after the commission had watered down the amendment to have the right quota but a high limit on the number of trips," declared Fordham, who testified for the Ocean Conservancy, Audubon, and Environmental Defense.

"The New England states wouldn't even vote for their own ompromise. It was the worst day for marine fish management I can remember. What an embarrassment! The U.S. blew it at a time when we're running around to international meetings and telling the world how vulnerable sharks are and how we need to protect them." No sooner had the Atlantic states more than doubled their dogfish quota than Canadian fishermen, who had been leaning toward responsible management, announced that they wanted to double theirs as well.

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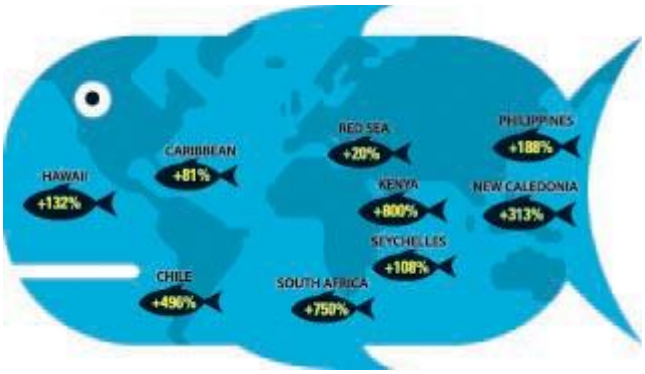
In the Northeast and elsewhere in U.S. marine waters, at least 40 percent of the species that managers have information on are overfished (meaning the population is too low to produce maximum sustainable yield) or are experiencing overfishing (meaning they're being caught at a rate that exceeds maximum sustainable yield). Such is American marine fisheries management in action.

an answer:

OCEAN REFUGES



Marine protected areas (MPAs) are vital management tools—sanctuaries where marine ecosystems are safe from, say, oil and gas exploration, mining, and mobile net gear that kills fish as it clear-cuts their habitat. Recent studies of "no-take" MPAs worldwide showed that, on average, they nearly triple biomass (above). As of late July 2003, the Department of Commerce had inventoried only 328 federally managed MPAs and was predicting a final tally of fewer than 400. We are in desperate need of more. The MPA known as the Florida Keys National Marine Sanctuary has benefited recreational anglers by zoning jetskis out of bonefish flats. MPAs don't necessarily (or even usually) forbid recreational fishing. But occasionally, where species are depleted, total fishing bans are prudent.

Audubon hasn't made recommendations about MPAs, but other environmental groups have, and they've gotten a crash course in sportsmen paranoia. There was little outreach and apparently no recognition that some recreational fishing—such as catch-and-release for shallow-water species—doesn't affect populations. Some of the proposed MPAs banned all fishing in vast areas of the continental shelf—everyone's favorite fishing hole. "Environmental extremists are conspiring with federal bureaucrats to take away our freedom to fish," shrieked the otherwise low-key and thoughtful Coastal Conservation Association.

"I think the whole MPA issue was handled very poorly,"comments Audubon's Merry Camhi. "The work was not done to bring the recreational guys around." This was a major oversight, because whenever environmentalists enlist the help of the 50 million Americans who hunt or fish, they blow through all political opposition.

Chastened by the hook-and-bullet press, MPA proponents are trying to do better. On April 2, 2003, recreational fishing and environmental groups exchanged ideas during a daylong, professionally facilitated meeting at the New York office of the Norcross Wildlife Foundation. Representing both sides, I came away convinced that limited fish recovery via MPAs is now at least politically possible.

—T.W.

Chart by Knickerbocker

With a few notable exceptions (Alaska being one), the situation is no better in the Pacific or the Gulf of Mexico. And it's even worse in foreign waters. Canada has depleted its cod to the point that commercial fishing is basically over for the foreseeable future. Recovery may not be possible. The journal Nature reports that the planet has lost 90 percent of its high-level marine predator fish, such as cod, flounder, and tuna. "I still believe the cod fishery . . . and probably all the great sea-fisheries are inexhaustible; that is to say that nothing we can do seriously affects the number of fish," proclaimed the great British biologist Thomas Huxley.

Since he made that comment, 140 years ago, marine biologists have learned better. Managers, politicians, and commercial fishermen have not. The United States has no discernible policy for the oceans. Management decisions are made by special interests or court rulings, and they are implemented in three geographical jurisdictions under 140 statutes by six frequently feuding departments.

If any entity can convince Congress, the administration, and the public to do better, it is the Pew Charitable Trusts. On June 4, 2003, amid a perfect storm of professionally generated fanfare, the 18-member Pew Ocean Commission unveiled a three-year, $3.5 million study that offered the first comprehensive review of U.S. ocean policy together with recommendations for reform. It was everything Audubon, the Ocean Conservancy, the Natural Resources Defense Council (NRDC), and other environmental outfits have been saying for 30 years, but it was said all at once, in a flashy, easily understood way and by people who have lots more credibility with this administration and Congress. The commission included New York governor George Pataki, former Kansas governor Mike Hayden, philanthropist David Rockefeller, and Kathryn Sullivan, a former astronaut and onetime chief scientist at the National Ocean and Atmospheric Administration.

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What I was seeing at the Chatham fish pier is called "fishing down the food chain." As you destroy each descending link, you reduce biodiversity, until you literally hit jellyfish. In the early 1990s, when marine activist Carl Safina, then director of Audubon's Living Oceans Program and a member of the Mid-Atlantic Fisheries Management Council, suggested a management plan for tautog, he elicited incredulous stares. "There are plenty of tautog," exclaimed one member."That's the whole point," Safina said. "Let's keep it that way."

"Next you'll be asking for a management plan for jellyfish," remarked someone else. The following year mid-Atlantic fishermen, desperately seeking "underutilized species," started netting jellyfish and shipping them to the Japanese, who had decided they liked them in salads.

Fishing down the food chain is dangerous, because recovery of a depleted species may not be possible. It may be permanently suppressed by species that have moved into its niche. Also, survivors may be spread so thinly over the continental shelf that they have difficulty finding one another. Consider the Atlantic halibut—a giant, predacious flounder that doesn't spawn until it's three feet long and that is capable of attaining weights of 700 pounds. It was fished to commercial extinction in the 19th century. But despite the fact that there has been virtually no directed fishery ever since, it hasn't recovered. When Atlantic halibut are caught today, it's almost always by accident. They're rugged fish and lack air bladders, so they can be safely released even when brought up from great depths. But incredibly, the NMFS allows commercial fishermen to kill one per trip. "We have fishery management regimes but not ecosystem regimes," comments Steve Murawski of the NMFS's Woods Hole Science Center.

In those rare cases where scientists are allowed to set quotas, marine fish management isn't an oxymoron. Sometimes, however, even the scientists are reluctant to cut the public out of decision making. It's just not PC. "We rely heavily on the regionalization of the process and a lot of public input," says Murawski. "Ours is an exercise in Jeffersonian democracy." But there are places where Jeffersonian democracy doesn't work—such as in cardiovascular-surgery units and carrier battle groups. Americans have never understood this. In 1976, after watching vessels from the Soviet bloc wipe out Atlantic groundfish, Congress passed the Magnuson Fishery Conservation and Management Act, thereby creating the 200-mile limit, setting up eight regional councils on all three coasts to manage fish in federal waters (supposedly under the paternal gaze of the NMFS), and providing sufficient financial aid to the U.S. fishing fleet to double it by 1983.

The Magnuson Act was a grand experiment in Jeffersonian democracy in that it ensconced user-group representatives on the councils, thus giving people who profited directly or indirectly from commercial fishing "a stake in their own future." It sounded wonderful and very American. But when regulations are made by those requiring regulation, nothing good ever seems to happen. The public pays to educate fisheries professionals, pays for their salaries and benefits, pays for their equipment, then tells them how to take care of fish. So the guiding principle of American fish management has become: "Strict dieting, except in cases of hunger."

By 1989 it was clear that we had saved our marine fish from foreigners in order to wipe them out ourselves. With record low catches that year, the New England council declared groundfish "overfished." When scientists recommended a 50 percent reduction in catch, the council refused. In 1991 a lawsuit by the Conservation Law Foundation and the Massachusetts Audubon Society forced the council to write a new groundfish plan, a process it dragged out for three years. Congress tried to fix things in 1996 with the Sustainable Fisheries Act, which finally defined and forbade overfishing and mandated the fast recovery of overfished stocks. But there has been scant enforcement.

Despite the new law, the NMFS allowed the New England council to implement groundfish quotas four times those deemed safe by scientists on the technical committee. So in 2000 the Conservation Law Foundation, Audubon, the Ocean Conservancy, and the NRDC sued. On April 26, 2002, U.S. District Judge Gladys Kessler ordered prompt, tough restrictions needed for groundfish recovery. But after hearing arguments from states, cities, fishermen, and the NMFS, Judge Kessler amended her original decision and substantially weakened protections. "We won hands down, and we now have weaker groundfish restrictions than we did before," laments Fordham.

"We have to separate the scientific aspects of fisheries management from the allocation," Camhi told me. "You can't have them both done under the same roof by the same people." Consider the Cape Cod Commercial Hook Fishermen's Association (CCCHFA), represented on the Joint Dogfish Committee of the New England and Mid-Atlantic councils by John Pappalardo, who fishes out of Chatham, Massachusetts. Hook fishing by longline (at least for dogfish and groundfish) is promoted by the environmental community as "habitat-friendly," because it doesn't bulldoze the seabed like mobile net gear, or drown seabirds and turtles like pelagic longlines. Along with Audubon, the CCCHFA is a member of the Marine Fish Conservation Network. It is funded by the Pew Charitable Trusts and other conservation-minded foundations. It's a good group in lots of ways, but it's conflicted, because 80 percent of the dogfish quota for the New England and mid-Atlantic management regions is taken by Massachusetts, and 65 percent of that is landed at Chatham. Moreover, most of the dogfish are caught by hook fishermen. When Massachusetts proposed doubling the quota, Pappalardo and the other five members of the Joint Dogfish Committee cast yes votes. To its credit, the NMFS overrode the committee, insisting on a sustainable quota. But this didn't ease the slaughter in state waters.

It is difficult to understand the thinking of your typical commercial fisherman, who is outraged by all quotas and who invariably gets politicians to increase them. Essentially, the argument is this: "We need fish for our livelihoods, so let us eradicate them." I have heard more than one commercial fisherman utter words to this effect: "When the law of diminishing returns kicks in, we back off, and the fish recover." Their apologists even have a name for it: "pulse fishing." Left to regulate themselves, commercial fishermen will continue to strip-mine the sea, fish down the food chain, and spew pseudo science to justify whatever seems profitable at the moment.

Where they have been regulated by scientists, commercial fishermen have profited from healthy fish stocks. Good fish managers, like good parents, eventually learn that one of the kindest words they can utter is "no." There aren't a lot of happy endings, but an examination of successes (or near successes) illuminates the reasons for failures. Fordham and Camhi don't agree with the NMFS's Murawski that summer flounder management is a "success," but they acknowledge that it's close. A good reason for this is that the Ocean Conservancy, Audubon, Environmental Defense, and the NRDC won a lawsuit against the NMFS four years ago, forcing it to impose quotas that had a decent chance of helping the stock recover. But another reason is that the Mid-Atlantic council, in charge of summer flounder (even though the fish's range extends well into New England), has behaved aberrantly—that is, it has accepted quotas for a decade. The New England council seems allergic to quotas. Instead, it seeks painless diets, vainly trying to make things right by restricting gear and limiting days at sea.

Swordfish are recovering, despite the dereliction of the International Commission for the Conservation of Atlantic Tunas (ICCAT), a sorry congregation of fishmongers and politicians that tends "highly migratory species" (tuna, sharks, and billfish) beyond our federal waters. In 1990, under intense lobbying by commercial swordfishermen, Congress enjoined the NMFS, which tends highly migratory species in federal waters, from setting regulations that were stricter than ICCAT's. As a result swordfish collapsed. Average weight dropped from 115 to 60 pounds, and 25-pounders were being sold at Manhattan's Fulton Fish Market as "pups."

The NMFS, which was doing nothing to stop gross longline bycatch of sublegal swordfish, needed to be shaken by the lapels, and in 1998 the NRDC and SeaWeb (a Pew offshoot) did just that by organizing the "Give Swordfish a Break" campaign, which convinced 27 leading East Coast restaurants to remove swordfish from their menus. This got the attention of the feds. Meanwhile, Audubon and its allies went to court and forced the NMFS to close large areas to fishing. Today North Atlantic swordfish have recovered to 94 percent of the biomass scientists consider "healthy." But most of the fish are still juveniles, and now the industry is pushing a plan to open up swordfish sanctuaries in the guise of "scientific research."

Although the ASMFC recently punted on an opportunity to recover the age and size structure of the Atlantic Coast striped bass population, the management of "stripers," as they are affectionately known by anglers, is about as close to pure success as fish management gets. As with virtually all species of marine fish, however, we had to nearly wipe them out before we managed them. Despite effort that I'd call prodigious (others, "obsessive"), I went whole seasons in the mid-1980s without catching a single striper, contenting myself instead with the giant bluefish that had surged into the inshore niche. Today a dozen stripers, caught and released, is a slow day. Striper recovery has come about because Congress got fed up with the individual states' inability to say no, and in 1986 passed the Atlantic Striped Bass Conservation Act, which transformed the ASMFC from a sideline adviser to an enforcement power. Now the agency can shut down fishing if a state doesn't manage stripers scientifically.

But there''s another reason for success. Stripers are caught (and were depleted) mostly by recreational fishermen. And recreational fishermen were willing to accept—in fact demanded—draconian quotas: one-fish daily limits at first. Now, for most states, it's two fish. "Stripers are a success," remarks Camhi, "because we got the commercial guys off the fish, and the recreational guys were willing to do what it took."

Largely responsible for the consistent excellence of the fisheries sections of the recent Pew report was Pew oceans commissioner Mike Hayden—trained biologist; ardent angler and conservationist; former Republican governor of Kansas; former assistant secretary for fish, wildlife, and parks under George H. Bush; former president of the American Sportfishing Association; and now secretary of the Kansas Department of Wildlife and Parks. When Hayden talks fish, his friend George W. Bush listens.

The President himself is an ardent angler. So is the Vice-President. So is Commerce Secretary Donald Evans, who presides over the NMFS. On April 25, 2003, the administration took a strong stand for marine fish when Evans blasted ICCAT for consistently setting unsustainable quotas against the advice of its own scientists. In a letter to Pascal Lamy, European Union Commissioner for Trade, Evans wrote: "I am urging you to take prompt action to improve EU compliance with existing ICCAT obligations and to reconsider accepting science-based conservation measures to guarantee a sustainable future for species like the Atlantic bluefin tuna and white marlin."

Congress is in far greater need of education than the administration. For example, Richard Pombo (R-CA), chair of the House Resources Committee, which has primary jurisdiction over the oceans, calls the Pew report "a $5 million coffee-table picture book." And Senate Appropriations chair Ted Stevens (R-AK), who cowrote the Sustainable Fisheries Act provisions that kept commercial fishermen regulating themselves, proclaims that the document "is tainted by the millions of dollars [the Pew Charitable Trusts] spend on environmental litigation aimed at stopping commercial fishing."

Pew released its report at precisely the right time. As of this writing, an even more ambitious study by the U.S. Commission on Ocean Policy, established and funded under the Oceans Act of 2000, is expected out in draft form in October. The governors of each state, all of whom have received the Pew report, will get 30 days to comment on the federal study. Probably in November the final draft will go to the administration, which will have 90 days to formulate an oceans policy, and to Congress.

If enough people who care about marine ecosystems make themselves heard, the result could be the nation's first cogent, cohesive oceans policy. Now George W. Bush has the chance to redeem his image and be a genuine environmental hero. As Ocean Conservancy president and Pew oceans commissioner Roger Rufe put it at the June 4 press conference: "We have an opportunity for the President of the United States to be the Teddy Roosevelt of the oceans."

Ted Williams was named Conservationist of the Year by the Coastal Conservation Association of New York in March 2003.

What You Can Do

Contact Secretary of Commerce Donald Evans (U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230), your governor, and your national legislators, and tell them you want marine ecosystems managed by scientists, not special interests. Avoid buying fish that are being caught faster than they reproduce. Go to www.audubon.org/campaign/lo/index.html and click on "Seafood Guide." This Living Oceans site also provides the latest news on seabirds and other marine life as well as ways to protect it.