Oceans of Nothing

A study says overfishing will soon destroy the seafood supply

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Fishermen on the high seas have plenty of worries, not the least of which are boat-tossing storms, territorial squabbles and even pirates. Now Boris Worm, a marine biologist at Dalhousie University in Halifax, Canada, has added another. After studying, among other things, global catch data over more than 50 years, he and a team of 13 researchers in four countries have come to a stunning conclusion. By the middle of this century, fishermen will have almost nothing left to catch. "None of us regular working folk are going to be able to afford seafood," says Stephen Palumbi, a Stanford University marine biologist and co-author of the study published in Science. "It's going to be too rare and too expensive."

Don't tell that to your local sushi chef. Over the past three decades, the fish export trade has grown fourfold, to 30 million tons, and its value has increased ninefold, to $71 billion. The dietary attractiveness of seafood has stoked demand. About 90% of the ocean's big predators--like cod and tuna--have been fished out of existence. Increasingly, fish and shrimp farms are filling the shortfall. Though touted as a solution to overfishing, many of them have--along with rampant coastal development, climate change and pollution--devastated the reefs, mangroves and seagrass beds where many commercially valuable fish hatch.

Steven Murawski, chief scientist at the U.S. National Marine Fisheries Service, finds Worm's headlining prediction far too pessimistic. Industry experts are even more skeptical. "There's now a global effort to reduce or eliminate fishing practices that aren't sustainable," says industry analyst Howard Johnson. "With that increased awareness, these projections just aren't realistic."

Perhaps. Still, the destructive fishing practices that have decimated tuna and cod have not declined worldwide, as Johnson suggests. Up to half the marine life caught by fishers is discarded, often dead, as bycatch, and vibrant coral forests are still being stripped bare by dragnets. Worm argues that fisheries based on ecosystems stripped of their biological diversity are especially prone to collapse. At least 29% of fished species have already collapsed, according to the study, and the trend is accelerating.

So what’s a fish eater to do? "Vote with your wallet," says Michael Sutton, who runs the Monterey Bay Aquarium's Seafood Watch program in California. Since 1999, the aquarium has handed out pocket guides listing sustainably harvested seafood. The Marine Stewardship Council has partnered with corporations to similarly certify wild and farm-raised seafood. Some 370 products in more than two dozen countries bear the British group's "Fish Forever" label of approval. Wal-Mart and Red Lobster, among others, have made commitments to sell sustainably harvested seafood.
But that's just a spit in the ocean unless consumers in Japan, India, China and Europe join the chorus for change. "If everyone in the U.S. started eating sustainable seafood," says Worldwatch Institute senior researcher Brian Halweil, "it would be wonderful, but it wouldn't address the global issues. We're at the very beginning of this."