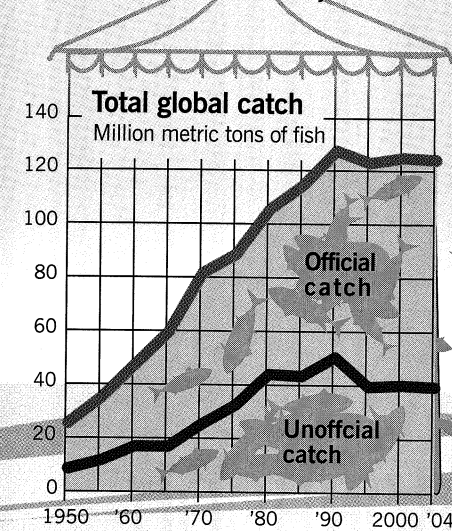


Sushinomics

The world's ravenous appetite for sushi has taken its toll: Fishermen have been able to keep up with seafood demand only by heading to new shores and deeper waters. Unfortunately, we're rapidly reaching the limits of the seas. | By Daniel Pauly

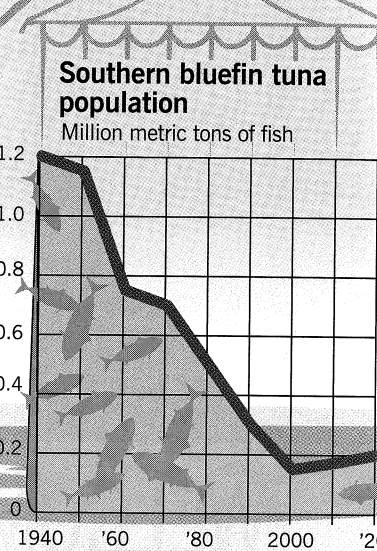
What's the Catch?

Fishing saw its heyday between 1950 and 1990, but catches leveled off as fish couldn't reproduce fast enough to keep up with fishermen's nets. Today, the number of fish we pull in is actually shrinking. Illegal and unreported fishing, whose magnitude has only recently been estimated by researchers, has contributed massively to the depletion of the oceans, accounting for an estimated 30 percent of global annual catches in recent years.



Fished Out

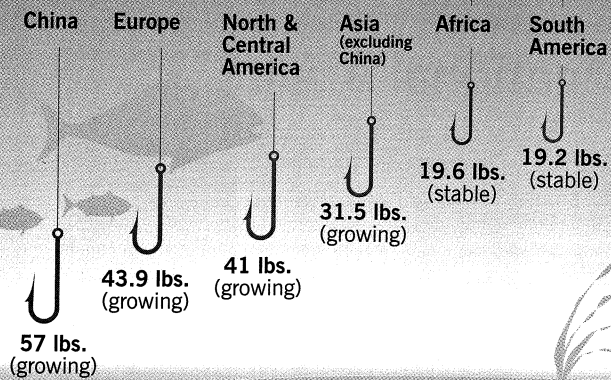
Look no further than your local sushi restaurant for a taste of the ocean's trauma. Three species of bluefin tuna, the cuisine's most popular fish, have been driven to near extinction in recent years. It will take decades for them to recover—and that's only if we stop eating now.



Casting a Wide Net

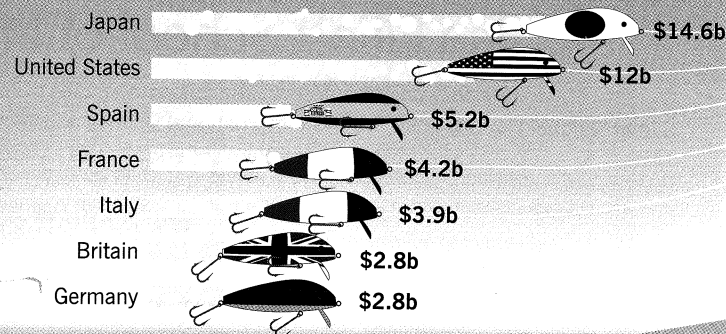
Overfishing is a global problem, but most of the spoils—80 percent of the fish caught for human consumption—land on tables in the developed world. With seas in the Northern Hemisphere nearly depleted, fishermen have sailed south to fill their nets. Shrimp, tuna, hake, and octopus are just a few

Fish consumption per capita













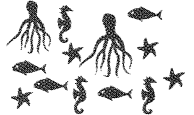

of the seafoods now carried from Africa, Latin America, and South Asia to China, Europe, and the United States. Subsidies in the rich world only add to the mess, propping up a global fishing fleet that is now two to four times larger than is needed to net the world's current catch.

Top importers of fish and fish products (figures for 2004)



Industrial Strength

With global demand at record highs, large-scale fishing rules the seas. Industrial ships employ just a few fishermen on each vessel, leaving a mass of small-scale fishermen unemployed or unable to compete. Large-scale ships waste fuel, too. Trawlers, the worst offenders, use up to 660 gallons of fuel for every metric ton of fish they catch. That amount could drive you between New York and Los Angeles six times.

	Large Scale 	Small Scale 
Fishermen employed	 About 1 million	 More than 12 million
Annual catch for human consumption	 About 29 million metric tons	 About 24 million metric tons
Fisherman's annual salary and benefits	\$\$\$\$\$\$\$\$\$\$\$\$ \$30,000-\$300,000	\$ \$250-\$2,500
Annual catch for industrial use	 About 22 million metric tons	 Almost none
Fuel used each year	 14-19 million metric tons	 1-3 million metric tons
Fish and invertebrates thrown back to sea each year	 10-20 million metric tons	 Few

124 million metric tons

the annual total global catch of fish, is equal in weight to:

378 Empire State Buildings

or the equivalent of 41.1 pounds for every person on the planet every year.

Troubled Waters

When fishermen first tap a fishery, they set their sights on big, valuable fish. After these grabs become scarce, fleets turn to previously spurned middle-sized species. To boost a dwindling catch, the fishermen reach deeper and deeper, their trawlers scraping the ocean floor, destroying the seabed and much of its life. This damage at the top and bottom of the food web has a cascading effect, allowing harmful algae and jellyfish to take over once plentiful waters and creating oxygen-barren dead zones.

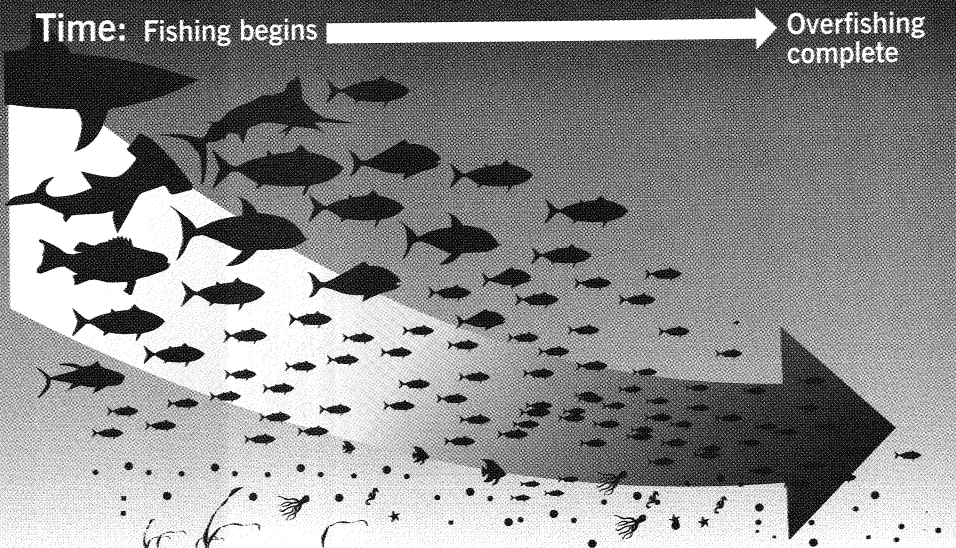
Fish Facts

80%

of the fish caught in 2006 came from the developing world.

80%

of the fish caught in 2006 were consumed in the rich world.



Daniel Pauly is principal investigator at the Sea Around Us Project, a scientific collaboration between the University of British Columbia and the Pew Environment Group.