

DSCC policy paper

Economics and equity ... the deep seas parted

The global race to fish the deep seas is, in many ways, a story of haves and have nots.

As coastal fisheries have grown more and more depleted, fleets from more developed nations are increasingly combing deep international waters in search of commercial fish and crustacean species. More powerful engines, more precise mapping, advanced navigational and fish-finding electronics, stronger and lighter synthetic materials – all of these developments have made it possible to bottom trawl in seas up to two kilometers (1.2 miles) deep. As a result, trawling has become the dominant high seas bottom fishing method, accounting for approximately 80 percent of the total high seas bottom fisheries catch in 2001.

Witch Eel (Nettastomat.)
Davidson Seamount, Pacific Ocean.



Image courtesy of NOAA and MBARI

Virtually all of this activity is being conducted by 11 of the world's wealthier nations – Denmark/Faroe Islands, Estonia, Iceland, Japan, Latvia, Lithuania, New Zealand, Norway, Portugal, Russia and Spain. The European Union, in particular, is the epicenter of deep-sea bottom trawling. In 2001¹, E.U. countries (including the newly admitted Baltic states) took approximately 60 percent of the high seas bottom trawl catch. In 2001, Spain was the most aggressive bottom trawl nation, accounting for approximately two-thirds of the E.U. catch and 40 percent of the global catch in high seas bottom trawl fisheries.

Less-developed countries are not major players in the new global fishing game. Their fleets lack the capital to acquire sophisticated high seas bottom trawl technology and to fuel worldwide travel in search of fish. (One marine scientist has estimated that 20 tons of fuel is required to trawl up one ton of fish on the high seas.) Instead, developing nations face the prospect of having their national fisheries undermined by predatory fishing outside their national jurisdiction – and perhaps sometimes within it.

Under the United Nations Convention on the Law of the Sea (UNCLOS), coastal states with continental margins extending beyond 200 nautical miles have the sovereign right to explore and exploit sedentary seabed resources such as corals, scallops and crabs. Most countries, particularly less-developed ones, have not performed coastal mapping sufficient to understand the scope of these rights. As a result, many nations not only stand to have stocks straddling their Exclusive Economic Zones (EEZs) diminished or depleted, but may also be losing deep-sea corals and other vulnerable and potentially valuable species along their continental margins as a result of destructive bottom trawling by distant water fleets fishing on the high seas.

An analysis of current fishing areas

and exploratory fishing trends commissioned by the Deep Sea Conservation Coalition member organizations indicates that there are a number of coastal “wide margin” states likely to be most vulnerable to bottom trawl fishing on the high seas. These include Angola, Argentina, Brazil, Canada, Iceland, India, Mauritius, Mozambique, Namibia, New Zealand, Norway, Seychelles, South Africa and a number of E.U. countries.

Though high seas bottom trawl fishing has already had a devastating impact, the use of bottom trawls on the high seas is still only in its early stages. At present, it is estimated that out of 3.1 million fishing vessels in operation worldwide, only 100-200 at most are bottom trawling the high seas on a full-time, year-round basis. Counting vessels that bottom trawl fish on the high seas on a part-time basis, no more than several hundred vessels are likely to be engaged in this activity on an annual basis.

In 2001, the world's high seas bottom trawl fleet caught approximately 170,000 – 215,000 metric tons of fish. This

represents a tiny fraction – a mere 0.2 - 0.25 percent – of the 84 million tons of fish caught worldwide that year. Most of the high seas catch is sold in E.U., U.S. and Japanese markets, making international bottom trawl fisheries virtual non-contributors to global food security.

Nor is high seas bottom trawling yet a strong economic force in the global fisheries market. The overall annual value of high seas bottom trawl fisheries is estimated to be approximately \$300-\$400 million USD. At most, this equals 0.5 percent of the estimated \$75 billion value of the global marine fish catch in 2001 – even less when measured against the approximately \$135 billion value of total fisheries production (marine, freshwater and aquaculture) that same year. By any measure, high seas bottom trawl fishing is causing ecological destruction that is grossly disproportionate to its very limited economic contribution.

The situation, however,

can only be expected to worsen in the years ahead. Deep-sea fish stocks within EEZs will either continue to be depleted or become less accessible under more restrictive fisheries management regulations. Demand for fish products is rising and will continue to do so. Some fishing nations are subsidizing the construction and/or operational costs of their high seas bottom trawl fleets. Having dug themselves into a hole through unsustainable fishing practices, some of these nations may believe that expanding deep-sea fisheries on the high seas will alleviate overfishing within their EEZs and create new opportunities for their fishing fleets.

Any or all of these developments would provide incentives for well-capitalized deep-water vessels to push out into the high seas and extend the destructive scope of bottom trawl fishing. Indeed, the fleets of some of the world's more developed nations – for example, Spain, Russia, and New Zealand – are actively engaged in exploratory deep-sea fishing on the high seas in the North and South Atlantic, the South Pacific, and the Southern Indian Ocean.

As the deep-seas bottom fisheries continue to expand, however, the catch of deep-sea species on the high seas may never grow significantly. Deep-seas fisheries have historically caused the serial depletion of stocks or populations of commercial fish species targeted. Once a population is fished out, deep-water trawlers search for new stocks of fish. Fisheries and markets for previously unfished species are developed to fill the void created by depleted species. And still more depletion ensues. In this sense, the only true growth that can be certain to follow from high seas bottom trawling is in the destruction of deep-sea ecosystems and biodiversity on the high seas.

To protect deep-sea biodiversity

on the high seas from continued indiscriminate destruction the Deep Sea Conservation Coalition is calling on the UNGA to adopt an immediate moratorium on deep-sea bottom trawl fishing on the high seas until legally binding regimes for the effective conservation and management of fisheries and the protection of biodiversity on the high seas can be developed, implemented and enforced by the global community.

FOOTNOTE

¹ 2001 is the last year for which data on catch and value is consistently available worldwide according to a recent report published by IUCN, WWF, NRDC and Conservation International. M. Gianni, *High Seas Bottom Fisheries and their Impact on the Biodiversity of Vulnerable Deep-Sea Ecosystems*, (IUCN/NRDC/CI/WWF 2004), www.iucn.org/themes/marine/pubs/pubs.htm

The Deep Sea Conservation Coalition, an alliance of over 30 international organisations, representing millions of people in countries around the world, is calling for a moratorium on high seas bottom trawling. For further information about the Coalition visit www.savethehighseas.org