



Huge subsidies destroying Earth's marine fisheries

Thanks to official policies of leading world nations, Earth's oceans are being emptied of their larger fish and invertebrate species. In addition, the ocean floor (benthic) habitat, with its corals, sponges, and hosts of other sea creatures, is being mechanically trashed, scraped, and repeatedly plowed up by the heavily weighted trawls of ever-larger fishing fleets licensed by several dozen nations. A review of world fisheries catch trends published by Reg Watson and Daniel Pauly in *Nature* (29 Nov. 2001) reports that over 80 million tonnes of fish and larger invertebrates are now sold annually. In addition, discards (or "bycatch") are estimated at 16 to 40 million tonnes.

Government subsidies to ship owners, and including ever larger factory ships, are the most important causes of what can only be called the world-wide rape of the oceanic commons. The Organization for Economic Cooperation and Development defines subsidies as: "the monetary value of government interventions associated with fisheries policies." This puts the finger squarely on *policy* as the driving factor behind the systematic destruction of the world's fisheries.

The size of subsidies is under appreciated. Annually, these amount to between \$US11 billion and \$50 billion, depending on how subsidies are defined and who defines them. Some subsidies are transparent: others are buried deep in government budgets. Some are neutral or even positive (e.g. research into marine life cycles, food chains, stock censuses), but the overwhelming bulk of them are negative or "perverse," a term applied by resource economists to cases where *the consequences or outcomes* are catastrophic losses of the productive capacity of the oceans.

Perverse subsidies may include support for fisheries infrastructure - docks, fish plants, utility services, the building of new vessels including factory ships, modernization of vessels and gear (i.e. support for overcapacity in fishing equipment), fuel credits, exemptions, allowances, exclusions, deductions, tax relief, tax deferrals, preferential treatment, export support, payments for access to the territorial waters of other countries and outright grants. Some perverse subsidies are worse than others. The most destructive serve to further increase the already *huge overcapacity* in *high technology ships and gear*, from which no school of fish can hide.

As the oceans become biologically depleted and ecologically damaged, is it any wonder that biologists are reporting ever more cases of reproductive failures or starvation among whales, puffins, seals, and other marine organisms? Some of the most beautiful of the Earth's large marine *carnivores* are being fished to near extinction - hma, halibut, cod, tooth fish, groupers, sharks, turtles, and others. And all with the full blessing of governments that dole out the subsidies! As the larger *carnivore* species at the tops of food chains disappear, the subsidized fishing fleets zero in on ever-smaller species so as to maintain their tonnage and justify their existence - thus, engaging in the most destructive of all fishing practices called "fishing down the food chain." Does it not seem obvious that the oceans are now in an acute crisis situation and that the restoration of marine fisheries will require the speedy elimination of truly *perverse subsidy policies* of the leading nations of the world?

Ted Mosquin, Ph.D.
Editor

Goals of *Biodiversity*:

To publish articles on current research in biodiversity

To deliver information on all life forms and their roles in the life-sustaining systems on Earth

To bring awareness, understanding and appreciation of all life forms and their roles in the life-sustaining systems on Earth

To provide an international forum on matters concerning the integrity and wellness of ecosystems and the environment

