

Cooking Green

Plant Based Food to Restore the Oceans: Bounty on the Brink (The first of four installments.)

A few centuries ago sea creatures were so abundant that they sometimes posed hazards to navigation. For years the loss of ocean wildlife from overfishing was gradual. Today marine scientists are issuing alarms with the threat of mass extinction imminent. Within the lifetime of many Loma Prieta readers numerous wild fish stocks have become depleted from overfishing. According to the United Nations Food and Agriculture Organization, nearly every commercial fish species in every ocean is now either fully exploited, overexploited, or depleted. Cod, pollock, haddock, redfish, and flounder were once abundant and are now considered commercially extinct.

An extensive investigation of marine ecosystem collapse published in *Science* (Vol. 293, 27 July 2001) by Jeremy B.C. Jackson and 18 other scholars documents the effects of overfishing. Overfishing accelerated with the widespread use of mechanized fishing technology in the early 20th century. Today's fishing industry has adapted military technologies to hunt on the high seas. Electronic navigation aids and satellite positioning systems have organized the trackless sea into a grid. The use of radar and sonar leave no fish safe from the factory fishing ships that strip-mine the oceans.

Few creatures can evade the 1.5 mile-long driftnets, 25-50 mile submerged long lines with their thousands of hooks, and enormous trawls that gouge the sea bottom, dislodging the honeycomb of rock and shells and killing the creatures that live there.

According to Jackson and his colleagues, the crisis of the seas has occurred partly because "Scientific investigation consistently lagged behind economic realities of [nearby] depleted stocks and inexorable exploitation of more-distant fishing grounds."

Overfishing any one marine species affects the entire marine ecosystem. According to Earthjustice, Steller sea lions that depend on pollock and other depleted fish have declined more than 80% in twenty years. As popular species of seafood vanish, previously ignored critters are hunted and given new names on restaurant menus. Slimehead is reborn as orange roughy, and Patagonian toothfish becomes Chilean sea bass. Now even these fish are on the problem list of the National Audubon Society's Living Oceans Program. (www.audubon.org/campaign/lo)

Making a commitment to reduce consumption of seafood can lead to exciting new options in food choices. Those who enjoy a hearty seafood chowder can use nutrient-packed sea vegetables and other plant foods instead of ocean wildlife. Kelp powder and dulse infuse the chowder with the flavor of the sea. Oyster mushrooms have a chewy texture similar to that of clams. Treat yourself and your friends to a steaming bowl of this wonderful sand-free Seafood Chowder.