

The life of the oceans is being destroyed. Huge ecosystems, once thought to be resilient and inexhaustible, are collapsing. Populations of top predators, a key indication of ecosystem health are disappearing at a frightening rate, 90% of all large fish - both open ocean species such as tuna, swordfish and marlin and the large groundfish such as cod, halibut, skates and flounder - have been fished out since 1950. The depletion of these species can also cause massive shift in the entire ocean ecosystems where commercially valuable fish are replaced by simpler organisms feeding further down the food web. This century may even see bumper crops of jellyfish replacing cod. Such changes clearly jeopardise not only the structure and functioning of these ecosystems, but also the very future of those dependent on the oceans for their livelihoods.



Photo: © Grace/Greenpeace

Fished Out

Jellyfish off northwest Boreray Island, North Atlantic, off West Scotland. Some scientists fear that fishing down the food chain will render the oceans as aquatic deserts with little to harvest beside jellyfish.

"We were astounded to discover that overfishing was the primary driver of ecosystem collapse."

Dr. Jeremy Jackson Scripps
Institute of Oceanography
July 2001



Photo: © Udo Kefrig/Greenpeace

School of fish in the Mediterranean.

Fished Out.

Much of the damage is the result of overfishing and the advent of industrialised fishing technology. Individual

fishermen often find themselves victims of the decline and are forced out of a way of life that has run in their family for generations. Artisanal fishermen in the developing world, who often have no more equipment than a canoe and a few fishing lines or small nets, are even harder hit when mechanised fleets, displaced from the waters of well-off industrialised countries by the collapse of fish stocks there, journey to the waters of the developing world to take advantage of fish stocks there. For these fishermen destruction of their fish stocks may mean not just unemployment but starvation.

The oceans crisis is a global problem and it needs a global solution. A worldwide network of marine reserves and marine protected areas covering both the high seas, i.e. areas beyond national jurisdiction, and coastal waters is essential if we are to halt wide scale destruction of species throughout the oceans.

Marine reserves and reversing global fishery declines

There is a growing body of scientific evidence that demonstrates that the establishment of large-scale networks of marine reserves, urgently needed to protect marine species and their habitats, could also be key to reversing global fisheries declines ⁽¹⁾. Marine reserves can benefit adjacent fisheries from both the 'spillover' of adult and juvenile fish beyond the reserve boundaries and through the export of eggs and larvae. Inside the reserves, populations' increase in size and individuals live longer, grow larger and develop increased reproductive potential.

Marine reserves could even be of benefit to highly migratory species, such as sharks, tuna and billfish, if reserves were targeted to places where they are highly vulnerable, such as nursery grounds, spawning sites or aggregation sites such as seamounts.

¹⁾ For further information see Gell F.R. and C.M. Roberts. 2003 Benefits beyond boundaries: the fishery effects of marine reserves. *Trends in Ecology and Evolution* Vol. 18 No.9.

Protect Life on Earth

Life on the planet is rapidly disappearing, our forests are being destroyed and our oceans are being depleted. Local peoples are being robbed of the natural resources they need for their survival. At this year's CBD governments must stop this destruction and honour the commitments they have already made to stop the trend of bio-

diversity loss. Governments must provide money for this urgently needed protection instead of wasting it on wars and activities that ultimately end life rather than protect it. Instead of having endless discussions about the devastation, governments must stop the destruction now. As the future guardians of the planet, we have the right to receive a planet rich in life.

Greenpeace urges COP-7 of the CBD to:

- **Pass a Resolution recommending that the UN General Assembly declare an immediate moratorium on bottom trawl fishing on the high seas, and initiate a process to develop and adopt legally binding regimes to regulate, protect and conserve deep sea biological diversity;**
- **Implement the recommendations of SBSTTA-8 to establish a global network of marine reserves and marine protected areas in coastal waters and in areas beyond national jurisdiction.**

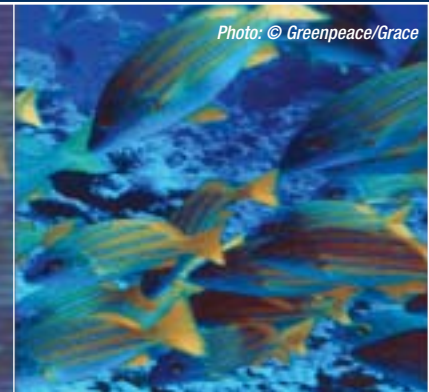


Photo: © Greenpeace/Grace

School of snapper on Moorea coral reef.

BOX: Potential benefits of marine reserves

General:

- Increase habitat quality, species diversity and community stability
- Provide undisturbed control sites for monitoring and assessing human impacts in other areas
- Create or enhance non-extractive, non-destructive uses, including tourism
- Reduce user conflicts
- Provide opportunities to improve public awareness, education and understanding
- Create areas with intrinsic value

Fishery related:

- Increase abundance, average size of target organisms, reproductive output and genetic diversity
- Enhance fishery yield in adjacent grounds
- Provide simple and effective management regime, which is readily understood and enforced
- Guard against uncertainty

and reduce probability of overfishing and fishery collapse

- Protect rare and valuable species
- Provide opportunities for increased understanding of exploited marine systems
- Provide basis for ecosystem management

We have a last chance to save remaining ocean ecosystems. The introduction of marine reserves, expanses of ocean where fishing, dumping and any other activity that damages marine life is forbidden, hold the key to restoring the huge diversity and wonderful productivity that once characterised our seas.

What the CBD's scientists say

The 8th meeting of the CBD's own scientific advisory body (SBSTTA), specifically addressed the issue of declining marine and coastal biodiversity. They recommended a series of suggested measures required to significantly reduce the rate of this decline by 2010.

"There is probably no such thing as an economically viable deep-water fishery that is sustainable... We must consider deep-sea stocks as non-renewable resources."

**Callum Roberts, University of York,
February 2002**



Photo: © Greenpeace/Grace

Tuna crowd caught in driftnet. Arafura Sea.

Foremost among these is:

'The establishment and maintenance of marine and coastal protected areas that are effectively managed, ecologically based and contribute to permanent representative global network of marine and coastal protected areas...'