

CALL FOR PROTECTION OF ALL CORAL REEF, SEAGRASS, AND SHALLOW WATER ECOSYSTEMS IN INTERNATIONAL WATERS

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The Global Coral Reef Alliance calls for immediate international agreements to protect all shallow water ecosystems in International Waters, especially coral reefs and seagrasses.

Coral reef and seagrass ecosystems, among the most productive, biodiverse, and economically important marine ecosystems, are confined to shallow water (generally less than 100 m depth), because of their need for light. While almost all of them are found near coastlines of continents and islands, and therefore lie within national Exclusive Economic Zones (EEZs), coral reef, seagrass, and other shallow water ecosystems can also be found in the high seas on shallow submerged banks and seamounts. These ecosystems in international waters have no protection of any kind, nevertheless they are disproportionately important, and urgently need to be protected.

Recently an international call to protect deep sea ecosystems and seamounts has been made to the United Nations and the Law of the Sea Conference by a group of marine scientists and conservationists coordinated by Matt Gianni of the Greenpeace Oceans campaign. Deep sea species are highly diverse, but are vulnerable because they are often extremely slow growing, and are increasingly being targeted by industrial fishing fleets as shallow water species are being fished out. We strongly support these important conservation efforts aimed at protecting deep sea fauna, but it is important to also focus on protection of shallow water ecosystems in the high seas. Like deep sea ecosystems they are totally unprotected from destructive fishing methods and over-harvesting, but they may be even more in peril because of several unique characteristics.

- 1) Shallow water ecosystems in the high seas are extremely rare and virtually all are very small areas, occupying only a very tiny fraction of the ocean surface.
- 2) Despite their small size these ecosystems are of incredible biological importance because they are the only stepping stones by which shallow water organisms can migrate across oceans and colonize new areas if climate changes.
- 3) They are central to maintaining gene flow of shallow water species across oceans, maintaining the genetic identity of species and the genetic diversity, which is essential for adaptation to changing environmental conditions, such as global climate change and pollution.
- 4) Shallow water ecosystems are essential nursery areas and refuges for coral reef and other shallow water fish species that may form part of economically important straddling stocks.
- 5) Shallow water seagrasses and reef areas are essential feeding habitats for many endangered species of turtles, and important breeding or calving grounds for endangered whales and dolphins.
- 6) These ecosystems are of global importance because they are highly productive and export large amounts of seagrass detritus to surrounding deep ocean sediments, acting as a sink for carbon dioxide and source of oxygen.

- 7) Shallow water ecosystems in International Waters are highly vulnerable because they are easily accessible and lines and trawling gear can be quickly lowered to them, making them much more profitable to exploit than deep sea ecosystems where it takes hours to raise and lower gear.
- 8) They are easily found because the most productive areas can be seen from boats, planes, or satellite images, and even the deeper ones where the bottom may not be visible from the surface may be easily located from changes in water color and wave patterns.
- 9) Shallow water ecosystems have much higher biomass than deep-sea ecosystems, providing larger catches, and giving a strong incentive for overharvesting. For example the Saya de Malha Banks in the Indian Ocean has been extensively trawled in the past by industrial fishing fleets from the former Soviet Union, Eastern Europe, and East Asia, and has become an important fishing area for Mauritius as fish stocks within the Mauritius EEZ have sharply declined. The Fish catches of Mauritius and Seychelles could collapse further if this important nursery area that restocks their EEZ zones is not protected.

The issue to protect deep sea ecosystems and seamounts will be carried forward at the next meeting of the UN GA's Informal Consultative Process on oceans, which will take place 2-6 June 2003 in New York, which will be in a position to make a recommendation for further action by the UN General Assembly in 2003. A process within the UN system has begun that will require a lot of effort to ensure that the outcome of this biodiversity in the deep sea and on the high seas.

The Global Coral Reef Alliance urges over 100 countries, for whom coral reefs are the major source of marine biodiversity, fisheries, tourism, sand supplies, and coastal protection, to take steps to ensure that the forthcoming UN negotiations also make specific recommendations to protect all shallow ecosystems in the high seas which may be extremely important sources of genetic diversity for the living resources within their EEZs.

The Global Coral Reef Alliance, Sun and Sea, and the Lighthouse Foundation have recently issued a report on the Saya de Malha Banks calling for special international protection for them, as the largest seagrass and coral reef ecosystem in International Waters in the Indian Ocean, and perhaps in the world. For the full, illustrated report on Saya de Malha, please go to: <http://globalcoral.org/SAYA%20REPORT.pdf>. For more information on sustainable development and protection of ocean resources in the face of global ocean change please go to: <http://www.globalcoral.org/World%20Summit%20on%20Sustainable%20Development.htm>.

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