

Chapter 20

Management and conservation of seamounts

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Supplementary Material

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International tools and institutions

United Nations Convention on the Law of the Sea

The UN Convention on the Law of the Sea 1982 (UNCLOS) provides the legal framework for ocean uses and activities, and prescribes the basic rights and duties of states. A basic obligation common to all areas of the oceans is the duty to protect and preserve the marine environment (Article 192). This includes the obligation to take measures to protect and preserve rare and fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life (Article 194.5). Seamounts should, on such grounds, be accorded special protection.

Within waters under national jurisdiction, which may extend to 200 nautical miles (nm) from shore, states have sovereign rights to exploit their natural resources subject to the environmental policies and their duty to protect and preserve the marine environment (Article 193). Beyond the 200 nm Exclusive Economic Zones (EEZs) (or 12 nm territorial seas where EEZs have not been claimed), states have a general right to use the high seas, but must do so with regard to the rights of other states and to the UNCLOS obligations to conserve marine resources (Article 116), and protect the marine environment, including rare and fragile ecosystems and to cooperate with other states to conserve such living marine resources (Articles 117-118). Measures are to take into consideration the effects of fishing on species associated with or dependent upon harvested species, a fundamental element of an ecosystem approach to fisheries management (Article 119). Such measures would clearly benefit seamount ecosystems.

The International Seabed Authority

The International Seabed Authority (ISA) is charged with administering the resources and distributing the benefits arising from minerals related activities in the seabed beyond national jurisdiction. The seabed “Area” and its mineral resources are deemed the “common heritage of mankind” under UNCLOS. ISA’s responsibilities include ensuring

that the marine environment is protected from harmful effects which may arise during mining operations. Regulations are required to prevent pollution, protect and conserve the natural resources, and prevent damage to the flora and fauna (UNCLOS Article 145).

United Nations General Assembly

The United Nations General Assembly (UNGA) is responsible for setting oceans policy at the global level. It holds annual debates on oceans and law of the sea, monitors progress and sets future directions through negotiated resolutions. Although in general not legally binding, a UNGA resolution can have a powerful influence (e.g. resolutions on high seas pelagic drift-net fishing in the late 1980s).

A UNGA resolution in 2004 (UNGA Resolution 59/25 (2004)) to protect deep sea biodiversity on the high seas puts pressure on states and regional fisheries management organizations (RFMOs) to take action. This includes interim prohibitions of destructive fishing practices, including bottom trawling that has adverse impacts on seamounts beyond national jurisdiction until appropriate measures have been adopted to protect deep sea biodiversity. Its reliance on RFMOs to “consider action on a case-by-case basis” may, however, do little to protect unstudied areas, or areas where there are no RFMOs or none with the legal authority to regulate biodiversity impacts. Thus calls for a moratorium or an interim prohibition on high seas bottom trawling will persist until more comprehensive protective measures are in place.

In 2004 UNGA established a working group to examine conservation and sustainable use of biodiversity in areas beyond national jurisdiction. The European Union (EU) has proposed that this working group should develop an implementing agreement to UNCLOS to address the conservation and management of biodiversity in areas beyond national jurisdiction (EU 2005). Such an agreement could address:

- (1) identification of vulnerable ecosystems and species;
- (2) regulation of human activities (e.g. destructive fishing practices, harmful marine scientific research practices, deep sea tourism);
- (3) establishment of an integrated network of MPAs to protect vulnerable ecosystems;
- (4) cooperation between existing regulatory frameworks and bodies that remain competent to regulate activities under their responsibility (e.g. ISA, the Antarctic Treaty Consultative Party Meetings, International Maritime Organization and RFMOs), so as to promote ecosystem based management.

Such measures would improve protection of seamounts in areas beyond national jurisdiction.

UN Agreement on Highly Migratory and Straddling Fish Stocks

The 1995 Fish Stocks Agreement is the major international instrument designed to elaborate and implement the vague provisions of UNCLOS relating to highly migratory and straddling fish stocks. Articles 5 and 6 oblige Parties to: (1) prevent overfishing, (2) assess the impact of fishing on other species in the ecosystem, (3) minimize bycatch and the impact of fishing on non-target, associated and dependent species, (4) protect habitats of special concern, (5) apply the precautionary approach, and (6) protect biodiversity in the marine environment. Due to concerns over the Agreement’s failure to include discrete

high seas fish stocks such as orange roughy, states are now considering whether to officially extend the application of the Agreement, create a new agreement, or develop non-binding guidelines for deep sea fisheries. A binding legal agreement would directly benefit deep water fish stocks and seamount habitat on the high seas, assuming it contains similar obligations to the Fish Stocks Agreement.

The Fish Stocks Agreement designates RFMOs as the lead institutions for ensuring the conservation and management of fish stocks and minimizing the impacts of fishing. However, the Agreement has not been widely implemented by its 61 (as of 30 September 2006) state parties or applied by RFMOs. As a result, there are now serious efforts underway to expand its membership and to ensure its rapid implementation at all levels. New RFMOs or other arrangements are also necessary as a large percentage of the oceans lack management bodies with authority to manage deep sea fish stocks or protect deep sea habitats beyond national jurisdiction (Fig. 20.2). An agreement for the Southern Indian Ocean is now open for signature, and negotiations are underway in the South Pacific and North Pacific regions, but it may be some years before these agreements come into force.

At present, only five RFMOs are able to regulate seamount fisheries beyond national jurisdiction: the Commission on the Conservation of Antarctic Marine Living Resources (CCAMLR), the General Fisheries Commission for the Mediterranean (GFCM), the Northwest Atlantic Fisheries Organization (NAFO), Northeast Atlantic Fisheries Commission (NEAFC), and the South East Atlantic Fisheries Organization (SEAFO) (Molenaar, 2005).

A report by the UN Secretary-General (UNGA 2006) on the impacts of fishing on vulnerable marine ecosystems concludes that in the high seas, few states or RFMOs have taken action to protect fishery habitat, in particular through the establishment of protected areas. CCAMLR is the most advanced, with rules to prevent the expansion of fisheries into new areas without sufficient scientific information on the fishery and its potential impacts. CCAMLR is also initiating work towards a comprehensive system of MPAs. NEAFC closed off on an interim basis five areas in 2005, but has not taken any further action. In 2006, after the Secretary General's Report was released, NAFO and SEAFO closed four and ten areas respectively to bottom fishing on an interim basis; the areas are to be opened partially for experimental fishing. The GFCM closed three areas in 2006, after closing off in 2005 the entire Mediterranean below 1000 m as a precautionary measure. Outside of CCAMLR, there is apparently no systematic attempt to identify potentially vulnerable (or non-vulnerable) areas, or to advance the development of representative systems of MPAs.

UN Food and Agriculture Organization (FAO)

FAO is charged with promoting sustainable and responsible fishing, including the promotion of key global instruments and the monitoring and analysis of fisheries. The FAO has been requested to develop technical guidelines on deep sea fisheries and on the design, implementation and testing of MPAs and to assist member states to establish representative MPA networks by 2012 (FAO 2005).

FAO Code of Conduct for Responsible Fisheries

The 1995 FAO Code of Conduct (FAO 1995) sets forth fundamental principles and management practices that nations have agreed should apply wherever fishing occurs. It calls for states and users to apply a precautionary approach, develop and apply environmentally safe and selective fishing gear and practices, minimize waste, bycatch and impacts on associated or dependent species, and to protect critical fisheries habitats such as reefs, nursery and spawning grounds (Paras 6.5-6.8). Implementation of the Code of Conduct by states in national waters and for their legal continental shelf, and by states and RFMOs with respect to high seas fisheries, would significantly improve deep sea fisheries management and protection of seamount ecosystems.

Convention on Biological Diversity

The 1992 Convention on Biological Diversity (CBD), one of the most widely subscribed to conservation treaties, is premised on the belief that biological diversity is of “common concern to humankind” wherever it is located. The Convention sets out a framework for conservation, sustainable use and equitable benefit sharing of biodiversity, with an emphasis on *in situ* protection through protected areas and ecosystem based management. Though focused on biodiversity within national jurisdiction, the CBD also requires states to cooperate for the conservation and sustainable use of biodiversity in areas beyond national jurisdiction (Article 3). Contracting parties are legally obliged to control the activities of their ships and their nationals that may damage seamounts in other state’s waters or continental shelves, as well as in areas beyond national jurisdiction.

The Convention on Migratory Species

The Convention on Migratory Species requires “Range States” to protect listed migratory species including sperm whales, sea turtles, sea birds and small cetaceans, and their habitat. Certain seamounts are known to provide important habitat for sea turtles and others may serve similar roles (Bolten *et al.* 2007). A Range State includes any state whose flag vessels are engaged in taking a specific migratory species in areas beyond national jurisdiction (Article 1 (h)). Several regional agreements have already been developed to promote cooperation in protecting small cetaceans, albatrosses and petrels, as well as a memorandum of understanding on sea turtles. These can encourage Range States to protect migratory corridors, breeding and feeding grounds and other essential habitats (Hoyt 2005).