

Protecting Vulnerable Marine Ecosystems: Seamounts and the Biodiversity of the Deep Sea

Matthew Gianni

UN General Assembly Resolution A/57/141

- *Encourages relevant international organizations, including the Food and Agriculture Organization of the United Nations, the International Hydrographic Organization, the International Maritime Organization, the International Seabed Authority, the United Nations Environment Programme, the World Meteorological Organization, the Secretariat of the Convention on Biological Diversity and the United Nations Secretariat (Division for Ocean Affairs and the Law of the Sea), with the assistance of regional and subregional fisheries organizations, to consider urgently ways to integrate and improve, on a scientific basis, the management of risks to marine biodiversity of seamounts and certain other underwater features within the framework of the Convention;*

Based on the recommendation from UNICPO 2002

Since then:

- UN FAO Committee on Fisheries: Deep Sea Fishing Conference (December 2003)
- CBD Subsidiary Body on Scientific, Technical and Technological Advice:
 - “there are increasing risks to biodiversity in areas beyond national jurisdiction”
 - “agrees there is an urgent need to establish in areas beyond national jurisdiction further marine protected areas consistent with international law, and based on scientific information, including in relation to areas of seamounts, hydrothermal vents, cold water corals, and open ocean”
 - effectively endorses and operationalizes UN GA resolution’s paragraph 56 by calling on the CBD Secretariat to work with other international bodies on this issue
- UN Secretary General’s report on Oceans and the Law of the Sea:
 - Highlights the risks to seamounts and discusses various options for action

Why all of the concern over seamounts?

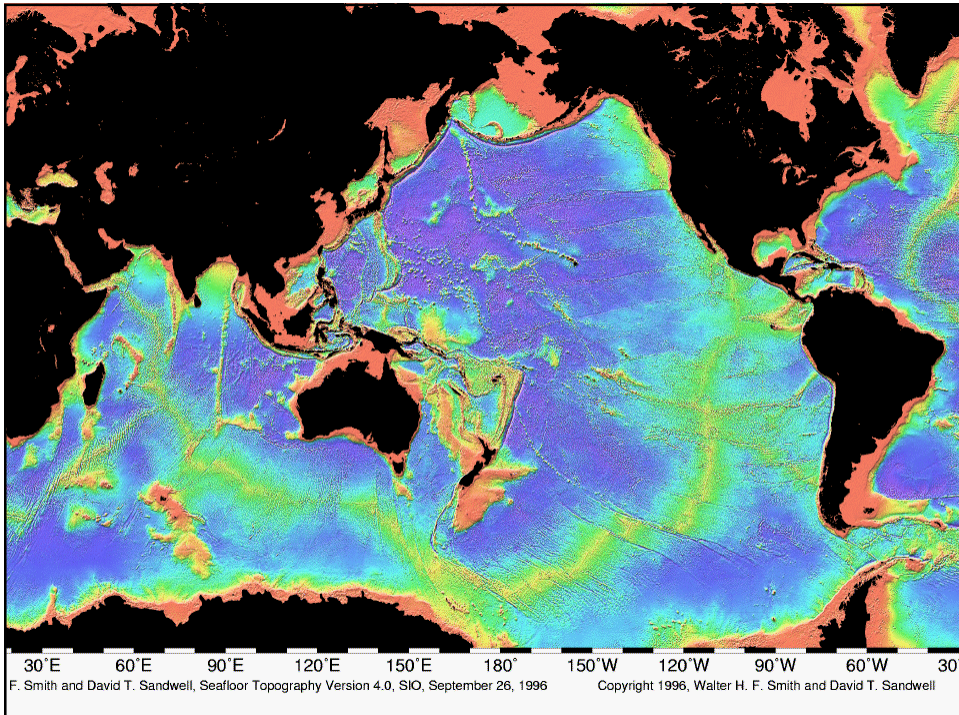
1. Biodiversity

- 30,000 or more seamounts world-wide
- deep water coral ecosystems high in biodiversity
 - (15% of the species found on average are endemic to individual seamounts or seamount clusters)
- tens of thousands to several million species endemic to seamounts?
- vulnerable, fragile ecosystems

Why (cont)

2. Seamounts under threat from fishing

- Up to 95% destruction from bottom trawling
- Strong possibility of species extinction
- Fishing vessels moving into deeper waters - more seamounts likely to be fished



ROUGHY BONANZA IN INDIAN OCEAN!

Fishing News International May 2000

- “Up to 40 freezer trawlers could be joining in an orange roughy bonanza now developing on newly discovered seamounts spreading over a huge area of the Indian Ocean...”
- “Catches of up to 100 tonnes a day of orange roughy and alfonsino are being taken by the dozens of freezer ships already on the seamounts which are mostly outside national limits”
- “Ships from Namibia, New Zealand and South Africa are already on the grounds, while others are expected from as far away as Russia and China ...Spanish freezer trawlers are being offered for sale to owners seeking to join in the fishery”
- “The fishing effort is expected to build up on the seamounts this month and during June and July...However, owners working in or planning to target this fishery are not willing to discuss their operations”

FRAMEWORK FOR INTERNATIONAL ACTION

UNCLOS

- Articles 117-119: the duty to cooperate and take such measures as may be necessary for the conservation of the living resources of the high seas
- Article 194.5: the duty to “protect and preserve rare or fragile ecosystems”

FRAMEWORK FOR INTERNATIONAL ACTION

1995 UN FISH STOCKS AGREEMENT

Articles 5 & 6

- Assess and minimize the impact of fishing activities on non-target and associated or dependent species and their environment; protect biodiversity in the marine environment; protect habitats of special concern [Articles 5(f), 5(g), 6.3]
- Apply the precautionary approach widely to protect and preserve the marine environment. States shall be more cautious when information is uncertain, unreliable or inadequate and, the absence of adequate scientific information cannot be used as a reason for postponing or failing to take conservation and management measures [Articles 6.1, 6.2]

FRAMEWORK FOR INTERNATIONAL ACTION

UN FAO CODE OF CONDUCT FOR RESPONSIBLE FISHERIES

Article 6.5

- “States and subregional and regional fisheries management organizations should apply a precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment, taking account of the best scientific evidence available. The absence of adequate scientific information should not be used as a reason for postponing or failing to take measures to conserve target species, associated or dependent species and non-target species and their environment.”

FRAMEWORK FOR INTERNATIONAL ACTION

Hague Ministerial Declaration of the 6th Conference of Parties to the UN Convention on Biological Diversity

- “We ... resolve to strengthen our efforts to put in place measures to halt biodiversity loss, which is taking place at an alarming rate, at the global, regional, sub-regional and national levels by the year 2010” (Paragraph 11)

UN World Summit on Sustainable Development Plan of Implementation

- “(a) Maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction;”
- “(c) Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012...;” (Paragraph 32)

UN FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing

The international community has drawn attention to the urgent need to improve the management of risks to the marine biodiversity of seamounts based on scientific evidence and consistent with international law

- It has strongly condemned IUU fishing in all its forms
- A large percentage of seamount fishing on the high seas is IUU fishing
- As indicated by the Secretary General’s Report there have been calls for a moratorium on all seamount fishing

1. Better define the scope of the problem

- the location of affected seamounts (and deep-sea ridges and plateaus),
- existing fishing effort, particularly on the high seas,
- the impact of bottom fishing on seamount biodiversity and ecosystems;

However, the absence of adequate scientific information cannot be used as a reason for postponing or failing to take conservation and management measures...

2. Action to address urgent problems through:

a. Calling on RFMOs to immediately put into place effective measures within their areas of application to manage seamount fisheries and to enforce the measures using all means at their disposal. Until such measures are in place, call on them to establish a moratorium on seamount fishing within their area of application.

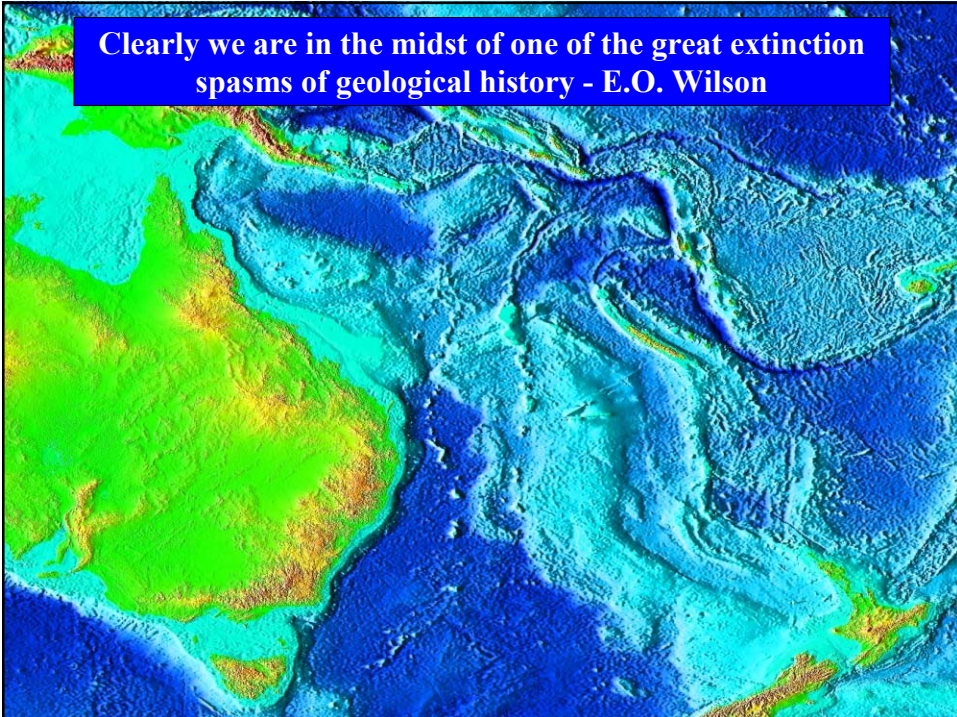
b. In high seas areas outside of the application of relevant regional fisheries management organizations, efforts to establish management agreements, mechanisms and measures should be expedited where unregulated fishing on seamounts takes place and, again, call for a moratorium on seamount fishing until such measures are in place.

Coordinated international approach applied consistently across all high seas areas

Role for the UN General Assembly with UNICPOLOS acting in an advisory capacity

Precedent established through the UN General Assembly Resolutions 44/225, 45/197 and 46/215 on large-scale driftnet fishing on the high seas

Clearly we are in the midst of one of the great extinction spasms of geological history - E.O. Wilson



A bathymetric map of the ocean floor, showing various depths and features. The colors range from dark blue (deep) to light blue, green, yellow, and orange (shallow). The map shows the continental shelf, deep-sea trenches, and seamounts.

**Hague Ministerial Declaration of the 6th
Conference of Parties to the UN Convention
on Biological Diversity**

**“We ... resolve to strengthen our efforts to
put in place measures to halt biodiversity
loss, which is taking place at an alarming
rate, at the global, regional, sub-regional and
national levels by the year 2010”**

tropical and temperate rainforests?

tropical coral reefs?

Seamounts on the high seas!

