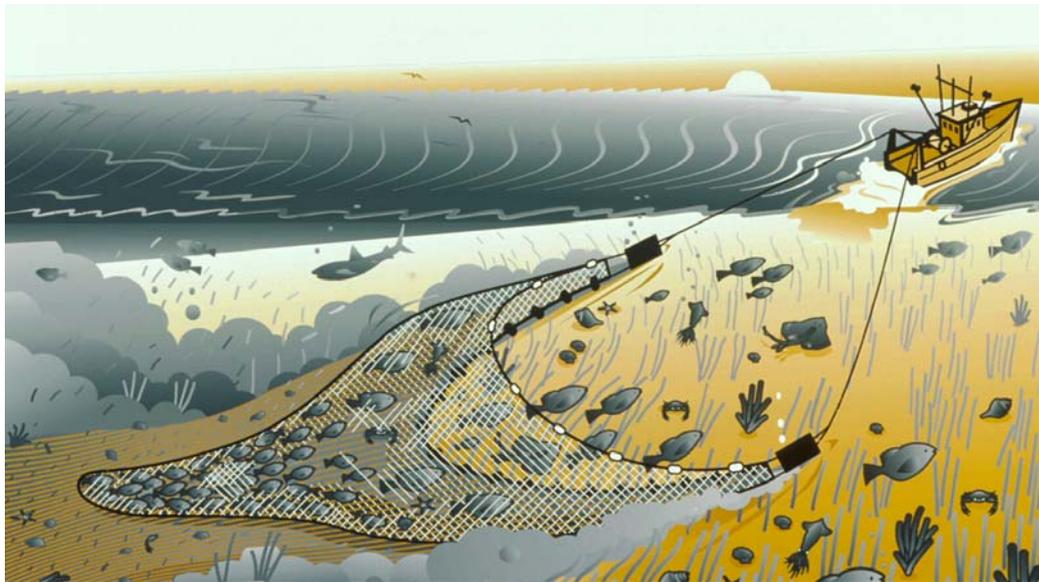




Far from human eyes exists an undiscovered world ... veiled by water, far beneath the surface, where no light penetrates, the mysterious islands of the dark ocean depths are rich with life but for how long?

SUPPORTING A
MORATORIUM
ON
**HIGH SEAS
BOTTOM TRAWL
FISHING**



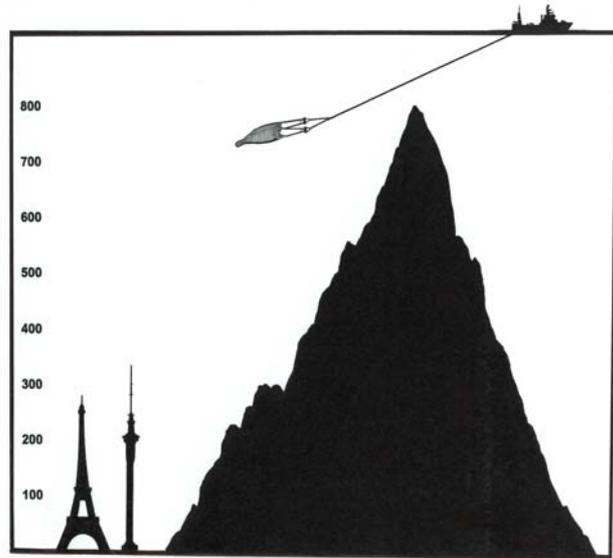
GREENPEACE

PACIFIC ISLANDS FORUM
BRIEFING PAPER
OCTOBER 2005

Seamounts: Islands of the deep blue

A great deal of deep-sea biodiversity is concentrated around features known as seamounts. Seamounts are like underwater islands -- mountains that rise 1,000 meters or higher from the seabed but do not break the ocean surface. Although they have not been comprehensively mapped, it is estimated that there may be more than 100,000 seamounts worldwide. Almost half of these are believed to lie in the Pacific Ocean. To date, less than one percent of known seamounts have been comprehensively studied. The largest mountain range on planet Earth is beneath the ocean – the Mid-Atlantic Ridge.

In addition to being physically impressive, some seamounts are remarkably food-rich. Because of their physical characteristics and strong localized currents, seamounts accumulate enormous quantities of plankton. The plankton in turn attracts a vast array of marine life – providing feeding as well as spawning grounds for a myriad of pelagic species, including some that have migrated across wide oceanic areas and are the economic lifelines for many Small Island Developing States. From large marine mammals, such as dolphins and whales, to an extraordinary diversity of fish species and the birds that prey on them, to exotic sponge ecosystems and microscopic bacteria, seamounts are among the world's greatest marine biological treasures.



Pacific Ocean Seamounts

The Pacific region is estimated to have between 30 – 50,000 seamounts. While commercial fishers do not yet target many seamounts in the Pacific, trends indicate a global expansion in the high seas bottom trawl fishery. With the Pacific seamounts most clearly mapped there is potential for expansion into this area in the near future. As noted above, bottom trawlers can now reach down to 2000 metres below the surface to trawl the ocean bottom. It is only a matter of time before the technology is developed for them to reach beyond those depths to even deeper areas. Just because they cannot fish deeper than that today does not mean that they will be unable to do so tomorrow.

Bottom Trawling: a destructive fishing method

Seamounts of the deep sea are now the target of industrial fishing fleets. These fishing fleets are not only targeting the unfished waters of developing countries, but have also moved out into the deep sea, combing international waters in search of new species to grace the dinner plates of Northern consumers. In many ways, the story of the race to fish the deep sea is a story of haves and have-nots: more powerful engines, more precise mapping, advanced navigational and fish-finding electronics, stronger and lighter

“Everyone must be aware that without intact coral reefs, warm and cold water reefs, you will not be able to restore fish stocks fully.”

- Dr Klaus Toepfer, UNEP Executive Director

synthetic materials – all of these developments have made it possible to locate and target shoals of deep sea fish as they gather around seamounts to spawn. By far the most effective way to catch such deep-sea fish is through a fishing method known as **bottom trawling**.

Bottom trawling is especially destructive of deep-sea habitats and species because the gear is designed to avoid damage to the net as it passes across the sea floor. To protect the trawl net from tearing, multi-ton plates, rollers and chains are dragged across the sea floor in order to catch the target species. Trawls can now be deployed in waters that are up to two kilometres (1.2 miles) deep. Because of the high degree of endemism on seamounts and the tendency of bottom trawl fleets to target fish populations that concentrate around areas rich in biodiversity, the extinction of countless known and unknown deep-sea species can be expected. Studies also show that the long life cycles and slow sexual maturation of deep-sea fish, makes them particularly vulnerable to large-scale fishing activities. Whole populations can be quickly fished out and Deep-sea fisheries have historically caused the serial depletion of stocks or populations of targeted commercial fish species. These fisheries are also known as ‘boom-and-bust’ fisheries: a population is targeted and fished out, then the deep-water trawlers search for new grounds and new stocks of fish. Fisheries and markets for previously un-fished species are developed to fill the void created by depleted species. And still more depletion ensues. Thus, as deep-sea bottom trawl fisheries continue to expand, the total catch of deep-sea species from the high seas may never grow significantly. In this sense, the only true growth that can be certain to follow from high seas bottom trawling is in the destruction of deep-sea ecosystems and high seas biodiversity.

In addition to the demise of targeted fish species, bottom trawling is known for its high impact on non-target marine species. By-catch from a bottom trawl can typically include deep-sea sharks, squids, barnacles, shellfish, various bottom dwelling marine species and ancient corals. take decades to recover.



“Scientific studies around the world have shown that trawling is devastating to corals and sponges.”

- 1.136 scientists from 69 countries, February 2004

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Fishermen onboard the *Wai-poni* – a NZ vessel bottom trawling in the Tasman Sea, June 2005 – dump a branch or *paragorgia* coral estimated to be about 500 years old. Ancient coral forests are vulnerable to bottom trawling. The high level of coral by-catch that gets documented is only the tip of the iceberg.

“We are particularly concerned about the status of vulnerable cold-water reefs, many of which are threatened with destruction.”
-OSPAR Ministerial meeting, para. 12 of the Bremen Statement

United Nations: Steps to Protect the Deep Sea

The Deep Sea Conservation Coalition have been calling on the United Nations General Assembly to protect deep-sea biodiversity by adopting an immediate moratorium on high seas bottom trawl fishing until legally binding regimes for the effective conservation and management of fisheries and the protection of high seas biodiversity can be developed, implemented and enforced by the global community.

United Nations General Assembly (UNGA) 2003-2004

In 2002, recognising the vulnerability of deep-sea biodiversity, the UNGA called upon the international community to urgently consider the risks to the biodiversity associated with seamounts and other deep-sea areas. The UNGA reiterated its concerns in 2003 and further called on relevant global and regional organizations

“to investigate urgently how to better address, on a scientific basis, including the application of precaution, the threats and risks to vulnerable and threatened marine ecosystems and biodiversity in areas beyond national jurisdiction...”

Right: June 2003, Greenpeace documentation of bottom trawl bycatch discarded by bottom trawler vessels in the Tasman Sea included CITES listed endangered black coral, deep-sea sharks and some unknown species.



Convention on Biological Diversity (CBD) 2004

The Parties to the CBD which met in February 2004, called on the UNGA to address the impacts of destructive practices impacting on deep-sea ecosystems. Referring to marine areas beyond the limits of national jurisdiction that have seamounts, hydrothermal vents, cold-water corals and other vulnerable ecosystems and features, the Parties urged the UNGA to:

Urgently take the necessary short-term, medium- term and long-term measures to eliminate / avoid destructive practices, consistent with international law, on a scientific basis, including the application of precaution, for example, on a case by case basis, interim prohibition of destructive practices adversely impacting the marine biological diversity associated with the areas....

UNGA 2004

By October 2004, negotiations in New York over the United Nations General Assembly (UNGA) Resolutions on Sustainable Fisheries and Oceans and the Law of the Sea, focussed largely on the issue of how to deal with the threats to deep-sea biodiversity posed by high seas bottom trawling. The UNGA's Sustainable Fisheries Resolution called on States to:

take action urgently, and consider on a case-by-case basis, and on a scientific basis, including the application of the precautionary approach, the interim prohibition of destructive fishing practices, including bottom-trawling that has adverse impacts on vulnerable marine ecosystems, including seamounts, hydrothermal vents and cold-water corals located beyond national jurisdiction, until such time as appropriate conservation and management measures have been adopted in accordance with international law...

Pacific Islands Forum (PIF)

The response so far from the PIF and some of its individual members shows potential for leadership from the Pacific region on this issue. The Pacific led the world in the call for a moratorium against driftnet fishing, a fishing method that fast became known as the 'walls of death'. Bottom trawling, has been regarded by many scientists as worse than driftnet fishing and it has constantly been likened to "clear felling ancient rainforests, just to catch a few birds." The PIF can lead the world once again towards protection of the deep-sea treasures within our oceans



Above: Bottom trawling's impact on the seabed can be seen through the amount of bottom dwelling species like shellfish that it dredges up. All these species, most already dead, are discarded as by catch

"The disaster of bottom trawling on the high seas threatens thousands of species and can mean a reversal in evolution of tens of thousands of years."

- Mikhail Gorbachev

Pacific Islands Forum Group

Speaking on behalf of the PIF at the UNGA debate on this Resolution, Ms Perina J. Sila, Deputy Permanent Representative of Samoa to the United Nations, stated that:

Coming from a region that has a high concentration of vulnerable marine ecosystems including coral reefs and underwater seamounts, we are well aware of, and firmly support the need to take urgent action to prevent and manage the effects of destructive fishing practices including bottom-trawling that has adverse impacts on vulnerable marine ecosystems. In that context, we were pleased that all States were able to reach agreement on a package of short-, medium- and longer-term responses to problems caused by these practices. We will be sure to take the necessary action in our own region in this regard, and will welcome further discussion next year of progress around the globe.

Nov 2004

Palau

The representative from Palau expressed grave disappointment that the resolutions before the UNGA did not call for an immediate moratorium on bottom trawl fishing in all high seas regions. He noted that such a moratorium would be consistent with the best traditions of the UN on global marine stewardship, and argued:

"we far too often find ourselves trying to solve problems that have already developed destructive and sometimes unstoppable momentum...At the same time, we know that a small number of fleets from larger, more developed countries, that have depleted their own fisheries, are now bottom-trawling in international waters, a method of fishing which ploughs up ancient coral systems and untold scores of endemic species..."

Nov 2004



Left: Diverse coral and sponge-based community
©Alberto Lindner courtesy NMFS



Federated States of Micronesia (FSM)

Ambassador Masao Nakayama of FSM, expressed his country's concern:

"Mr President of increasing and serious concern is the threat to marine habitats and the adverse impacts on vulnerable marine ecosystems caused by deep-sea trawling. Because it occurs at great depths and in areas beyond national jurisdictions, some may still not take this threat seriously... Though, we realize that the issue will continue to be debated for years, we fear even more strongly that time is not on our side. The Precautionary Principle must guide our deliberations in ad-

New Zealand (NZ)

His Excellency Mr Don Mackay, Permanent Representative of NZ to the United Nations stated that:

There is no question that the time has now come for States to sit down together and focus in earnest on the question of high seas marine biodiversity, which we are all ware involves a multitude of interests. We must not be deterred by the number and complexity of issues that will arise in the course of this work, nor by the expectation that resolution of these will take time ... We are ready and willing to use this forum to engage seriously with others to work through the relevant issues of importance to enhance protec-

Fiji

Speaking in June 2005 at the **United Nations Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS)** Mr Sainivalati Navoti, First Secretary of the Fijian Mission to the United Nations said:

To our delegation, the continued use of this fishing practice [bottom trawling] is indicative of the fact that despite our best intentions, and despite the formulation of the finest and appropriate words, little could be done to curtail this destructive activity ... the environmental impact of bottom trawling does not wait for Regional Fishing Management Organisations (RFMOs) to act or for reports to be drafted, for the destruction of the seabed will continue unabated nevertheless.

Mr. Co-Chair, we believe that the time is opportune for us to consider re-employing the precedent we had set whilst addressing driftnet fishing and put in place a temporary global moratorium on certain bottom trawling technique whilst we allow the scientists and RFMOs carry out their tasks as stipulated in last year's resolution.

Frankly put sir, the destruction wrought by bottom trawling fishing techniques and practices does nothing towards the attainment of MDG7 which is to Ensure Environmental Sustainability.



Basket Star [*Asteroschema bidwillae*] which live on paragorgia coral are only found on 4 seamounts around NZ.

Palau

Speaking on behalf of the Government of Palau at **UNICPOLOS**, H.E. Ambassador Stuart Beck concluded:

It is time to choose. Do we allow the continued unregulated destruction of deep-sea biodiversity of the high seas for the benefit of fishing companies? Do we stand by while deep-sea trawlers eradicate species that may hold promise for the treatment of cancer, asthma and other deadly diseases? Do we simply watch, while the health of ocean ecosystems on which all life depends is jeopardized?

My answer, Distinguished Co-Chairs, is, "No". And so, echoing the calls made by Canada and numerous other states here at these meetings, it is time to move from words to action. It is time to stop unregulated high seas bottom trawling until such time as regulations can be put in place that ensure that the interests of all of us in protecting deep-sea biodiversity and fisheries can be protected.

New Zealand (NZ)

NZ's represented stated that:

New Zealand continues to share the growing concern of the international community at the damage that is being caused to seamounts and other underwater structures from the practice of bottom-trawling.

New Zealand calls upon states to cooperate to give effect to the UNGA call for interim targeted bans of destructive fishing practices in vulnerable areas. ... New Zealand will pursue long-term, medium-term and immediate actions at the international, regional and domestic levels to address adverse impacts on high seas biodiversity, including those caused by bottom-trawling.



Aurelia aurita mars 2

Australia

Australia asserted that:

The high seas are the last great commons, however, unless all countries cooperate to ensure that activities in these areas are managed sustainably, more of these areas may soon become marine deserts, stripped of resources and diversity and destroyed for future generations.

UNICPOLOS 2005-09-21

The urgency of addressing deep sea bottom trawling was reflected in this year's UNICPOLOS, which recommended that the General Assembly:

- (a) reaffirm the importance it attaches to resolution 59/25, paragraphs 66 to 71, and urge **accelerated** progress on implementing these elements of the resolution;
- (b) welcome progress made in the implementation of paragraphs 68 and 69 of resolution 59/25 calling for the expansion of the competence of existing regional fisheries management organizations or for the establishment of new regional fisheries management organizations to cover areas of the high seas where no such organization or arrangement currently exists;
- (c) request regional fisheries management organizations and arrangements with existing competency to implement spatial and temporal measures to protect vulnerable marine ecosystems do so as **a matter of urgency**;
- (d) request States and regional fisheries management organizations and arrangements to be in a position to report on actions pursuant to paragraphs 66 to 69 of General Assembly resolution 59/25 when it reviews progress in 2006, and consider further recommendations for action.
- (e) encourage progress to establish criteria on the objectives and management of marine protected areas for fisheries purposes and welcome the proposed work of the FAO to develop technical guidelines in accordance with the Convention on the design, implementation and testing of marine protected areas, and urge close coordination and cooperation with relevant international organizations, including the Convention on Biological Diversity;
- (f) call upon States to urgently accelerate their cooperation in establishing interim targeted protection mechanisms for vulnerable marine ecosystems in regions where they have an interest in the conservation and management of marine living resources

Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its sixth meeting: Letter dated 7 July 2005 from the Co-Chairpersons of the Consultative Process addressed to the President of the General Assembly, para. 11.

Beyond the United Nations

Beyond the UN, the groundswell in support of a moratorium on high seas bottom trawling has also been growing.

A week after the debate on Oceans and the Law of the Sea that took place at the United Nations General Assembly in 2004, **the World Conservation Congress of the World Conservation Union (IUCN)**, passed an important resolution passed with clear support from 62 countries:

Calling upon the UNGA at its 60th session for areas not covered by RFMOs and/or other management arrangements with the legal competence to manage bottom fisheries, to urgently adopt a resolution calling for an interim prohibition on high seas bottom trawling, until such time as a legally binding regime is developed and adopted to conserve and protect high seas biodiversity from the impacts of destructive fishing practices including bottom trawling and protect biodiversity, consistent with the UN Convention on the Law of the Sea (1982), the UN Fish Stocks Agreement (1995), the FAO Compliance Agreement (1993), the Convention on Biological Diversity (1992), the FAO Code of Conduct for Responsible Fisheries (1995) and the UN FAO International Plan of Action to prevent, deter and eliminate Illegal, Unregulated and Unreported Fishing (2001)... and

Calling upon the UNGA at its 61st session in 2006 to adopt a resolution calling for the elimination of destructive fishing practices, and for an interim prohibition on high seas bottom trawling in areas covered by RFMOs and other management arrangements, until such time as effective conservation and management measures to protect the deep sea environment have been adopted in accordance with international law.



Mollusk at the Davidson Seamount
Image courtesy NOAA / MBARI



Periphylla periphylla 1-03

ACTION NEEDED

Pacific Islands Forum Meeting, October 2005

It is clear that there is strong momentum for action by the international community to adopt immediate, comprehensive and effective measures to address the destructive impacts of high seas bottom trawling on deep-sea biodiversity. The only viable short-term measure to address the harm caused by high seas bottom trawling is to adopt and implement a United Nations moratorium on this fishing practice, to remain in place until scientific assessment has been undertaken and regulatory measures put in place to ensure that the deep-sea life of this global commons is conserved, and managed sustainably and equitably.

The Pacific Islands Forum, following on their statement at the UNGA in November of 2004 “to take the necessary action in our own region in this regard”, must now act. A good start is to ensure that all the PIF countries express concerns and support urgent interim measures being discussed at the UN level, in particular, the moratorium. The PIF meeting in Fiji (Forum Officials Committee Meeting) and Papua New Guinea (PIF Leaders Meeting) in October 2005 provides a good opportunity to discuss this issue and formalise the PIF position on bottom trawling in the high seas. The PIF Leaders must use this opportunity to make resolutions that will see them once again, take leadership on ocean issues at the international level, like it did with driftnet fishing. An example of a resolution, which is similar to the resolution passed in 1989 by the South Pacific Forum in Kiribati, could be that:

Leaders call on the international community to adopt and implement an immediate moratorium on high seas bottom trawl fishing until legally binding regimes for the effective conservation and management of fisheries and the protection of high seas biodiversity can be developed, implemented and enforced by the global community.

Leaders further resolve that member States of the Forum should take all possible measures in the interim to prevent high seas bottom trawl fishing and actively to discourage the operations of such fishing.