





Summary of activities and proposals for future action

Component 3: Ecosystem Analysis

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At a glance – IUCN

- A unique democratic union of more than 1,000 member organizations
- A body of knowledge; 10,000 scientists in six networks of expertise
- More than 1,000 staff in 62 offices worldwide
- A neutral forum for governments, NGOs, scientists, business and local communities to find pragmatic solutions
- Global reach with field activities on the ground, but also policy influence at the highest level
- UN Observer Status







- The ecological impacts of tuna fishing in the Pacific Islands region, in relation to seamounts (related to component 1.3, Ecosystem analysis)
- Original concept by IUCN involved the use of a research vessel to conduct a series of cruises to conduct biological sampling on seamounts in a number of PICs
- Cancelled when it became obvious the vessel would not be available by 2008.
- Modified to consider long-line fisheries and relationship to fisheries around seamounts



Modified plan



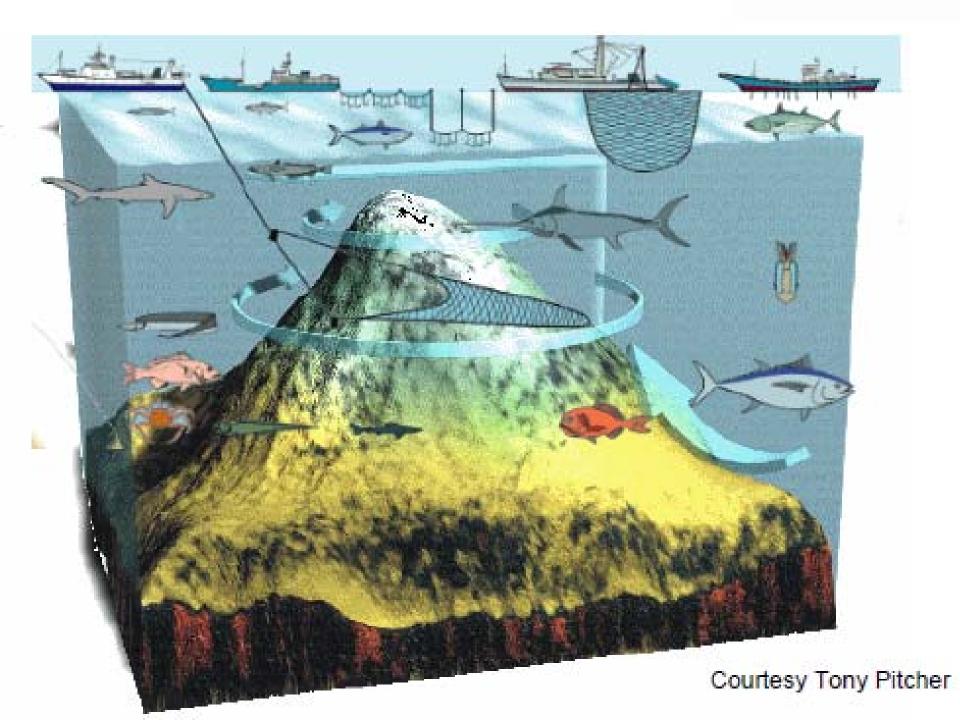
- 1. Interview pelagic longline fishermen regarding fishing methods, gear, strategies for fishing on seamounts.
- 2. Review the state of understanding of conservation issues around pelagic seamount longline fishing seamount fishing
- Convene a workshop to discuss sustainability issues and methods for managing pelagic longline fisheries around seamounts around seamounts
- 4. Conduct outreach with relevant stakeholders, including national governments and longline fishing industries of the 15 OFM participating countries,
- Prepare an information paper for the participating countries outlining options for management of longline vessel fishing around seamounts.



Status and findings

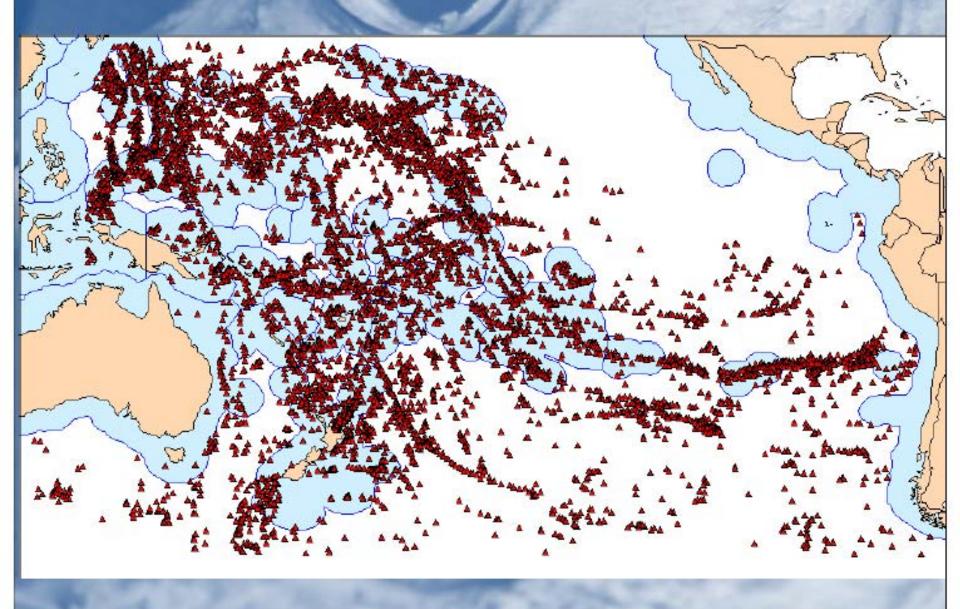


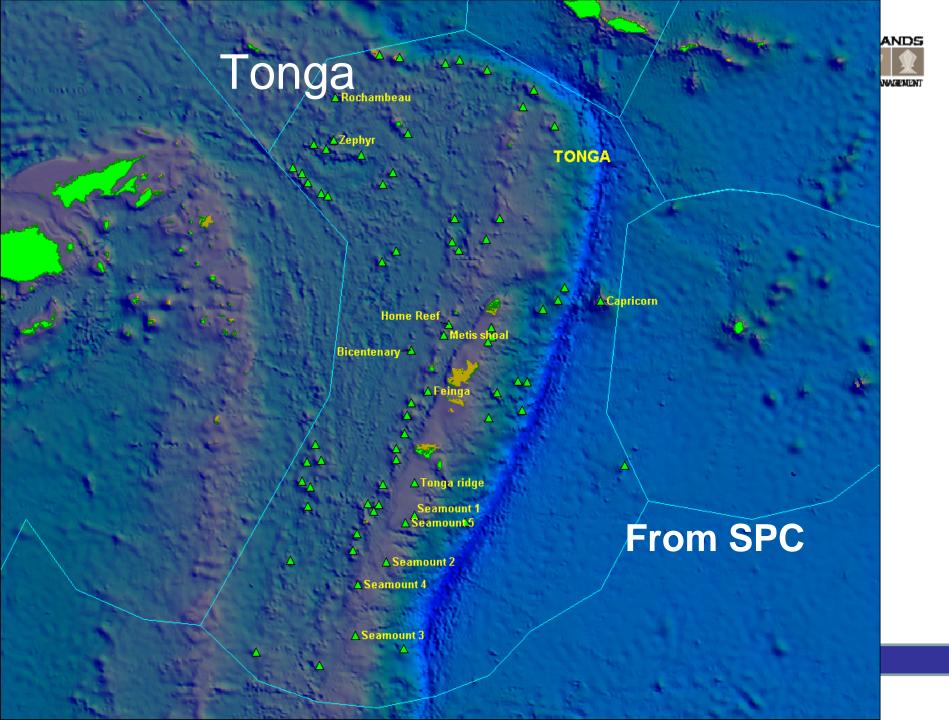
- Reports prepared
- Information material under preparation
- Workshop was held two weeks ago in Nadi
 - Good participation 7 countries
 - National reports completed
 - Data presented by SPC
 - Report on global seamount status
 - Feedback provided by the countries
 - Outputs being compiled.
 - Preliminary summary of workshop



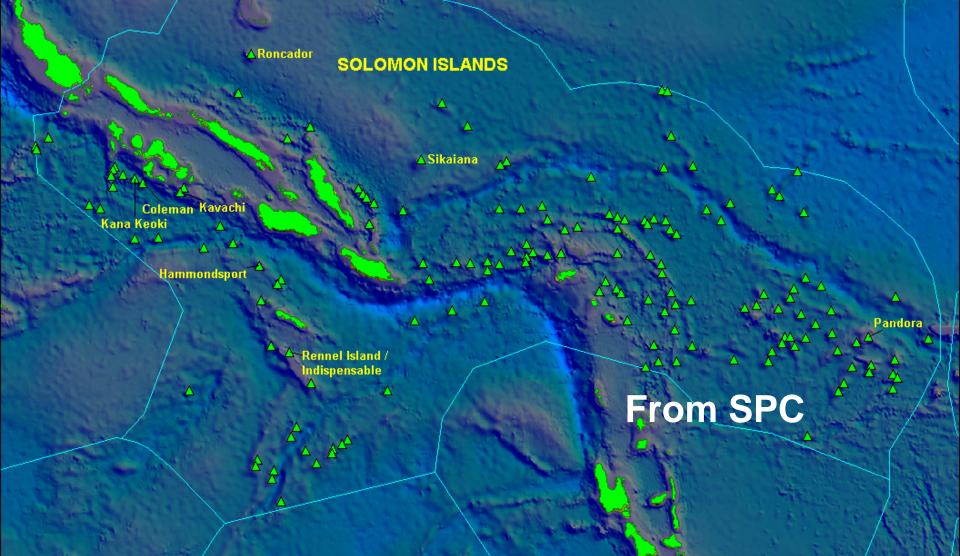
RESULTS

From 9337 potential seamounts 6334 underwater unique features have been validated





Solomon Islands



Findings – what is known



- At least 10% of sea mounts may be important for pelagic longline fisheries (not albacore)
- Seamounts maybe important for breeding and nursery grounds
- Demersal fish also aggregate over seamounts snappers, pomfrets, groupers and sharks.
- Seamounts act as aggregating areas for bill fish and some pelagic species.
- Seamounts have a substantially higher diversity of species than open ocean





- There is little protection of seamounts in the WC Pacific.
- Kiribati has protected seamounts in Phoenix Island Protected Areas. Also the largest MPA in the World..
- Seamounts contain high quantities of valuable metals that will be mined..
- Very little known of the biology of seamounts
- 4 bio-geographic zones of seamounts in Pacific need to have more information





- Detailed understanding of relationship between sea mounts and fisheries; aggregation, spawning, nursery grounds ? Local fisheries, snapper..
- Understanding of the proposed 4 bio-geograhic zones of pacific seamounts
- Benthic biodiversity. What is on the seafloor of the seamounts?
- Benthic-pelagic linkages. Need to know more about processes on the seamounts, and how they may affect pelagic production.





- How to identify and select sea mounts for protection ?
- Impact of mining on environment / fisheries, particularly those areas where active surveys are being undertaken, i.e. PNG, and potentially Cook islands. ,,,





• 80. *Calls upon* States to take action immediately, individually and through regional fisheries management organizations and arrangements, and consistent with the precautionary approach and ecosystem approaches, to sustainably manage fish stocks and protect vulnerable marine ecosystems, including seamounts, hydrothermal vents and cold water corals, from destructive fishing practices, recognizing the immense importance and value of deep sea ecosystems and the biodiversity they contain;

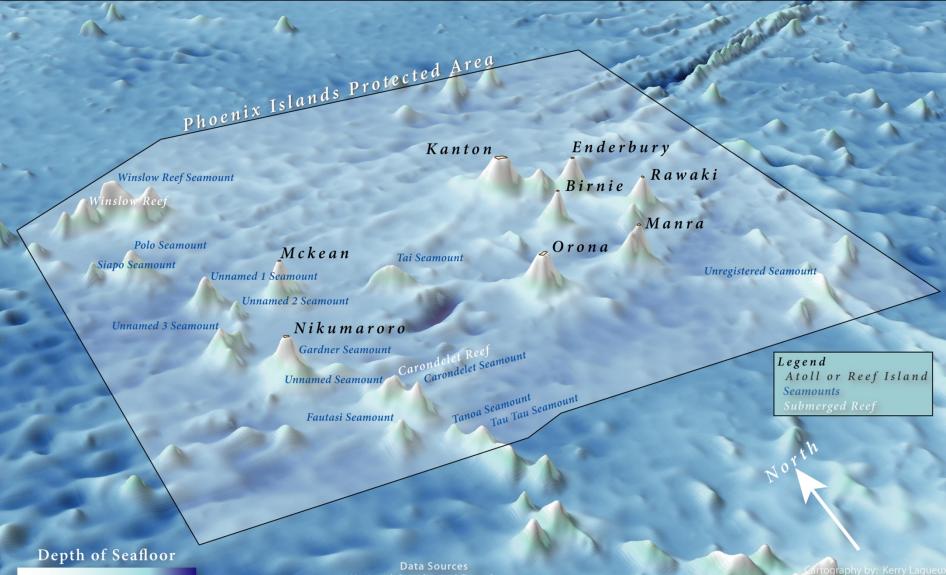




Seamounts and ecosystem based fisheries

- Develop a comprehensive information management system using catch data to clearly identify linkages between sea months and pelagic fisheries
- Consider exclusion zones / FAD use around seamounts, based on more comprehensive data

Looking for innovative solutions



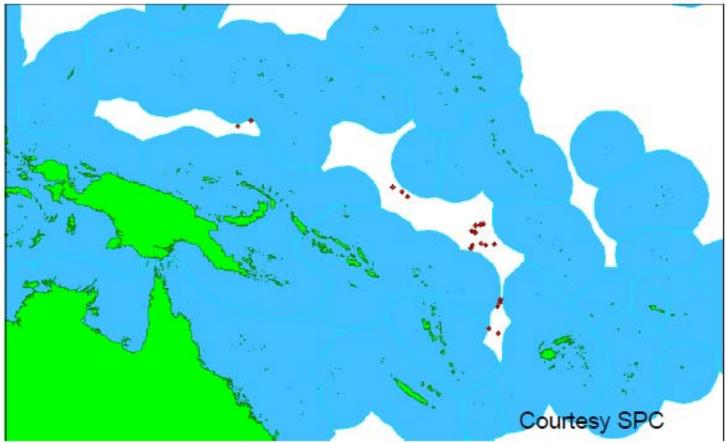
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Data Sources National Geophysical Data Center Earthref.org

Cartography by: Kerry Lagueu cale Varies from this perspectiv 8x Vertical Exaggeratio



High seas pockets seamounts



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Increased understanding and management

- Increase awareness of the importance of seamounts, local, national, regional and global levels
- Conduct research into the biodiversity of seamounts and identify priorities for protection and management
- Continue to identify deep sea research opportunities
- Scale up the efforts of Kiribati to other countries in the region to develop regional seamount management plan



In High Seas



- Develop appropriate legal instruments for protection and management of seamounts
- Increase understanding of the importance of sea mounts
- Develop approaches for management of high seas seamounts with appropriate regional agencies, e.g. SPRFMO

And finally

 Adopt precautionary principle in the management of sea mounts, particularly in relation to deep sea mining.







- Seamounts have been identified as important and relevant for fisheries management
- Seamounts have been identified as biodiversity hot spots
- A decision needs to be made at national and regional develop to identify specific action within EEZs
- High seas seamounts need urgent attention and regional collaboration for long-term management

Thank you

IUCN