

**Seamount Planning Workshop
20-21 March 2006
Oceanic Fisheries Programme
Secretariat of the Pacific Community
Nouméa, New Caledonia**

Introduction

In the context of the 5-year Pacific Islands Oceanic Fisheries Management Project (OFMP) funded by the Global Environment Facility (GEF), SPC in collaboration with the World Conservation Union IUCN, will conduct studies on the ecology of seamounts in relation to pelagic fisheries in the Western Tropical Pacific (see summary description of OFMP in annex). The project officially started in November 2005 and we are holding a workshop to plan the seamount activities for the duration of this project.

The OFMP study on the ecology of seamounts in relation to pelagic fisheries

Context of the study

There are a large number of seamounts in the western tropical Pacific (WTP) and the possible impact of fishing around seamounts is a major global environmental concern.

Seamount ecosystems are characterized by a high degree of endemism, they support vulnerable benthic communities (corals, sponges), including long-lived, slow-growing fish species and they are thought to aggregate pelagic species and to support a mix of pelagic species that differs from the open ocean.

Deep sea bottom trawling can have destructive effects on seamount habitats and ecosystems; there is currently no known deep sea bottom trawling in the WTP but the potential risks from future fishing are now subject to pre-emptive management..

Concerns about the impact of pelagic fishing around seamounts include:

- 1- the possibility of higher proportions of juvenile fish in catches
- 2- likely higher levels of catches of some bycatch species (species of special interest such as sharks, marlins, or species locally important for food security such as wahoo)
- 3- possibly a higher rate of interaction with fishing gear and then possible higher mortality of turtles, seabirds and marine mammals
- 4- possible sharing of prey between pelagic and demersal species due to vertical migration of some prey species.

Despite their importance, the relationships between seamounts, pelagic fishing and pelagic species are not well understood. Considerable historical data exist and their analysis may provide important leads regarding appropriate management strategies for

seamounts. However, additional data are required from interdisciplinary studies, targeted fishing experiments and tagging in order to investigate ecological interactions and to quantify population parameters that can be used in predictive models to assess management options in a rigorous way.

Objectives of the OFM project

Acquire enhanced understanding of the ecology of seamounts in relation to pelagic fisheries in order to assess the need for, and utility of, seamount-specific management measures. It requires the assessment of:

- 1- the impacts of seamounts on aggregation and movement of pelagic species
- 2- the pelagic fisheries impacts on the seamount (biodiversity and habitat)

Activities within the OFM project

- 1- review of historical fisheries data to determine historical patterns of fishing in relation to seamounts
- 2- extensive data collection programme by observers and dedicated research cruises to determine the ecological characteristics of seamount, including the determination of benthic biodiversity and the study of trophic relationships
- 3- tagging of tunas and other pelagic species in the vicinity of seamounts to determine the impact on aggregation, movements and residence characteristics

Objectives of the Seamount Planning Workshop

This workshop will gather experts involved in the study of Pacific seamounts and/or fisheries both from the benthic and pelagic perspective.

The objective of the workshop is to plan the research activities associated with the study of the ecology of seamounts in relation to pelagic fisheries in the western tropical Pacific. The main subject of discussion should be the design of a sampling programme to collect benthic and pelagic samples to characterize the seamounts and the pelagic ecosystem around seamounts and to try and determine:

- seamount impacts on pelagic ecosystems and fisheries as well as
- pelagic fisheries impacts on seamount ecosystems.

We will have to discuss very technical questions such as: which seamounts need to be sampled, which data / samples should be collected, what equipment is necessary (boat, sampling gear), and who will conduct the sampling-analysis of the data/samples.

This workshop will be a unique opportunity to establish strong collaboration between the different scientific institutions of the region and partners in the OFMP.

The outcomes of this workshop will be presented at the 5th SPC Heads of Fisheries meeting on the 31st of March 2006, giving the opportunity to the countries involved in the GEF project to comment on the plan.

THE GEF PACIFIC ISLANDS OCEANIC FISHERIES MANAGEMENT PROJECT (OFM)

