Deep-Sea High Seas News
Summer 2013

Introducing our first newsletter!

FAO's Fisheries and Aquaculture Department is pleased to share the first newsletter of the Deep-Sea High Seas (DSHS) Programme. Twice a year, we will spotlight programme activities that are made possible through the generous funding from the governments of France, Japan and Norway.

On Board Testing of FAO's Deep-Sea Shark ID Guide

FAO is collaborating with the Southern Indian Ocean Deepsea Fishers Association (SIODFA) and the Will Watch, a fishing vessel operating in the high seas of the Indian Ocean, to test FAO's forthcoming field guide to identify deep-sea sharks of the Indian Ocean. On-board scientists, crew members, or observers can use the guide to identify shark species caught accidentally to improve management and conservation efforts.

Species ID builds ecosystem knowledge

The recent discovery of ten new deep-sea shark species in the Indian Ocean by shark ecologist, Paul Clerkin, while on the Will Watch, has highlighted the need for improved species identification and for increased information about deep-sea sharks, particularly in areas with little data or information.

This type of collaboration between researchers and the industry is crucial in the high seas where specialized research is expensive and difficult to fund. SIODFA, an industry association of vessel operations in the high seas of the Indian Ocean (of which the Will Watch is a member), has been promoting this kind of collaboration in order to facilitate their objective of "sustained harvests to the benefit of mankind while conserving biodiversity, especially deepwater benthos in the area of the fishery and associated and dependent species."

"Unidentified species are unmanaged species . . . In order to effectively manage deep-sea ecosystems, policy makers and environmental managers need a better understanding of the life-history characteristics of deep-sea shark fauna," Clerkin said. Identification is an important first step in beginning to understand the role different species might play in maintaining balance within an ecosystem.

FAO is addressing this significant knowledge gap thanks to funding from the governments of Norway and Japan. The deep-sea shark guide is the first in a set of species ID guides about deep-sea only species.

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Factory Manager, Rodrigo Somosot, identified this kitefin shark (Dalatias licha) using FAO's forthcoming Deep-Sea Shark ID Guide.

In this issue:

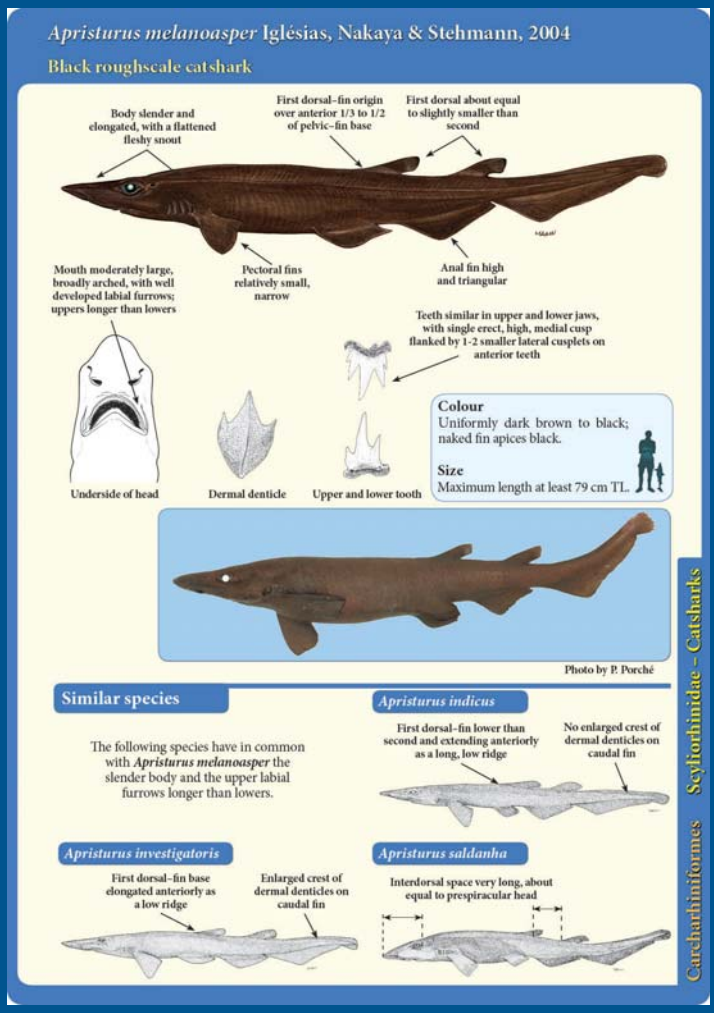
Designing the Guide with Fishers in Mind

FAO organized a regional meeting in Mauritius last January to decide on the best format for the guide. The goal: a guide with maximum usability for the fisheries in the region—from Indian Ocean trawlers with onboard factories to smaller long-liners.

Designing a guide that is appealing to fishers was a major consideration. This meant **paying attention to the size, language, and visuals** used to describe the species. For example, **including color pictures** of the species in addition to drawings is **especially helpful for users with little formal scientific training.**

In attendance were taxonomists, onboard observers, and industry representatives from most of the major fishing companies operating in the deep-sea high seas of the Indian Ocean. Their feedback was incorporated into the design of the guide. Initial testing suggests that it has paid off.

The guide is just what the crew members hoped for.



A sample page from FAO's forthcoming deep-sea shark ID guide

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FAO's new ID guide "just what we wanted"

The Will Watch crew is testing out sample pages of the new guide. According to the onboard observer, the guide has hit the mark, "The factory manager finds this easy to use especially with multiple species belonging to the same genus, which are represented on the same page for ease of use. **This is exactly what we wanted with a more in depth ID process to be used by factory managers and observers."**

The captain and crew want more pages to be sent as soon as they are ready and will continue to provide additional input to finalize the design of the guide that is slated for publication in the fall of 2013.

FAO will also be developing training programs for crew members so they can use the guides effectively and a companion manual that would provide one standard procedure for recording data on found species. Additional guides focusing on deep-sea species of corals and sponges are under discussion and will be developed in the future for specific regional areas.

Vulnerable Marine Ecosystem Activities

Building Capacity to Conserve Vulnerable Marine Ecosystems

FAO has conducted **two regional workshops on Vulnerable Marine Ecosystems** (VMEs) to raise awareness and build capacity on the issues related to the identification and management of VMEs. The first took place in the Indian Ocean and the second in the SE Atlantic.

Most of the Regional Fisheries Management Organizations (RFMOs) that manage deep-sea fisheries have gone through a process to identify and establish VMEs, though they are at different stages of development. Those **RFMOs** that have already made significant progress on establishing VMEs **shared their field-tested approaches and practical experiences** with those less experienced, helping them devise appropriate options for VMEs in their regions.

Developing a Prototype for the VME Database

FAO continues to meet with stakeholders on the design and development of the VME database, thanks to funding support from the government of France. After initial consultations and extensive input gathered at a global meeting in Rome in December 2011, the development of a platform is taking shape that will **integrate publicly available information on VMEs and present it in an accessible way.**

Information already made available by a few RFMOs provides the initial data for a prototype database. Based on this initial data, developers are designing a visually appealing map interface that will allow users to **select a geographical area and display detailed information** on currently existing VMEs in that location.

Bridging Communities—Fostering Collaboration

Collaborating with biodiversity and conservation groups

On multiple occasions in the past two years, FAO and the Convention on Biological Diversity (CBD) held **back-to-back workshops so that fisheries and biodiversity conservation experts could attend both meetings.**

These concerted efforts are increasing scientific and technical cooperation on related processes like Ecologically or Biologically Significant Areas (EBSA) and Vulnerable Marine Ecosystems (VMEs).

FAO staff also attended CBD's Conference of the Parties and **contributed to and helped facilitate a training course on Marine Protected Areas and the Ecosystem Approach to Fisheries Management** under the CBD's Sustainable Ocean Initiative.

Creating opportunities for data harmonization

FAOs participation in the European-funded **iMarine** initiative is creating new opportunities and spurring creative thinking about how to share data from fisheries and biodiversity conservation groups to improve overall understanding of deep-sea ecosystems and species. The iMarine platform now has more capacity to **pull together different globally available data sources on marine biodiversity** and environment to create a broad body of available data that is expected to enhance species prediction and habitat modeling.

Working together with RFMOs

FAO continues to work closely with Regional Fisheries Management Organizations (RFMOs) drawing on their expertise to inform the development of programme activities. FAO has presented its work at more than ten commission meetings where discussions took place about **RFMO participation in FAO's project activities, such as implementing the deep-sea guidelines, developing global best practices on the use of VME criteria and conducting global assessments of some deep-sea species**. Many are keen to be involved and FAO looks forward to future collaboration.

Increasing Impact

FAO's Collaborative Programme Approach

FAO established a cross-disciplinary task force to carry out its deep-sea high seas programme activities. The task force includes FAO specialists in trade, law, policy, fisheries management, statistics, biology and gear technology. This coordinated programmatic approach unites complementary technical expertise and leverages cross-funding from the three current deep-sea high seas projects to broaden the impact of the interconnected activities funded by France, Japan and Norway.

Deep-sea high seas programme to participate in Common Oceans

FAO's deep-sea high seas task force is helping to build a project that is part of **a new global initiative** called the **Areas Beyond National Jurisdiction (ABNJ) Program.** Comprised of four projects, the Program aims at achieving efficient and sustainable management of fisheries resources and biodiversity conservation in marine areas that don't fall under the responsibility of any one country. The Global Environment Facility is the main funder of the Program including the deep-seas project, *Sustainable Fisheries Management and Biodiversity Conservation of Deep-Sea Living Resources and Ecosystems in ABNJ*. Participation in this global effort will expand the impact of current FAO activities and add additional on-the-ground actions to **further strengthen the implementation of the International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.** FAO hopes to begin project activities in 2014.

For more info on FAO's DSHS programme contact:
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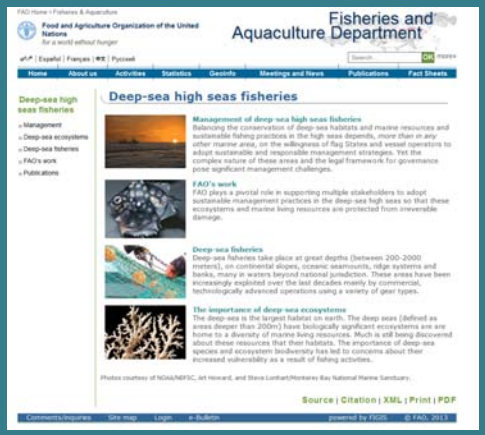
What's New

New DSHS website

Visit at www.fao.org/fishery/deepsea-highseas/en



Recent reports

Click the report name to find it online

Report of the FAO Workshop for the Development of a Global Database for Vulnerable Marine Ecosystems (VMEs) Italy, Rome, 7-9 December 2011

Regional Workshop on Vulnerable Marine Ecosystems (VMEs) in the Indian Ocean

Fishing vessels execution of acoustic surveys for deep-sea species: main issues and way forward