

New Tools and Technologies to Enhance Fisheries Management: Joint CoML/IUCN Event at the FAO Committee on Fisheries Meeting in Rome

IUCN and the Census of Marine Life joined forces in March to hold a joint event at the UN Food and Agriculture Organization in Rome, Italy. The group held their event entitled "Biodiversity, Ecosystems and Fisheries" in conjunction with the Committee on Fisheries (COFI) meeting during the first week in March. The event reached out to fisheries managers with presentations and discussions on new scientific findings and initiatives relevant to fisheries. There was a special focus on the deep seas and new technologies that are being developed to help manage these remote areas.

Ron O'Dor, Senior Scientist for the Census of Marine Life gave an overview of the program and its potential relevancy for managers and policy makers. The Census of Marine Life (CoML) is a global network of researchers in more than 80 nations engaged in a 10 year scientific initiative to assess and explain the diversity, distribution and abundance of life in the oceans. Some of the interesting work coming out of CoML is the development of new technologies. Dr. O'Dor explained how this information can help managers by tagging fish and other ocean life and following their migration patterns and general movements. Importantly in the study of the impacts of climate change, the tags can also monitor marine environmental conditions on a near real time basis. Barcoding of marine animals is another up and coming technology which could help improving species identification and to prevent mislabeled fish species from reaching the marketplace by allowing quick and inexpensive identification.

Jason Hall-Spencer, a CoML scientist at the University of Plymouth, gave a presentation on CenSeam, a Census of Marine Life project that is exploring life on seamounts. Seamounts are an incredible source of biological productivity but are understudied, like most of the ocean. As a result, the CenSeam project has made new discoveries with every survey they've done leading to an improved understanding of seamount ecosystems. However, as the CenSeam project and others have witnessed, the international deep-water fleet is accidentally trawling through vulnerable marine ecosystems that are thousands of years old. Governments and regional fisheries management organizations have responded through a variety of measures, including closures of some seamounts to bottom fishing. Dr. Hall-Spencer noted a closure he had worked on in the NE Atlantic, where industry input had resulted in a win-win situation. Industry profited by helping to design the most accurate and cost-effective closures to protect rich seabed life and in return avoided damaging their gear and could be seen to be doing something positive for the environment. These closures have been mostly successfully enforced by the use of VMS technology.

Kristina Gjerde, High Seas Policy Advisor spoke on behalf of IUCN, emphasizing how science and policy can be put into practice to protect marine biodiversity beyond national jurisdictions. In particular, she focused on the opportunities arising from scientific criteria that were adopted by the Convention on Biological Diversity (CBD) in 2008 for identifying ecologically and biologically significant areas. In order to assist in their implementation, the CBD has invited relevant organizations and governments to submit information to help with the preparation of guidance for applying the criteria. IUCN is facilitating this with support from the German government and in collaboration with the CBD Secretariat, the Census of Marine Life, OBIS, Duke University's Marine Geospatial Ecology Lab, UNEP's World Conservation Monitoring Center, MCBI and others in preparation for a CBD expert workshop taking place in fall 2009. This will offer scientists an important mechanism to provide their information into the policy process.

About 65 people attended the lunch-time event including members from country delegations, regional fisheries managers, FAO staff, and representatives from NGOs. The discussion afterwards highlighted the need for quality science and technologies, such as from the Census of Marine Life, in order to effectively manage fisheries. In particular, the Minister of Fisheries of Tonga noted that his country knows very little about the fisheries potential of the island's surrounding oceans and seamounts. They'd like to put a sustainable management plan in place before fishing begins but are in need of information. The New Zealand delegation agreed, saying that this part of the Pacific is largely a "blackhole" of information and research is urgently needed. Dr. O'Dor added that the CoML tracking technology could be very useful in monitoring migratory species in the area. The session was particularly relevant to the concurrent FAO Committee on Fisheries meeting as members discussed efforts to enhance the management of fisheries both within and beyond national jurisdictions as a major part of their deliberations. To download the presentations and see images from the session, please visit

www.comlsecretariat.org/?anchor=faocofievent.