Global Ocean Biodiversity Initiative

Working Towards High Seas Conservation

High Seas in urgent need of international attention

The open oceans and deep seas represent 95 percent of the global biosphere in volume. They play an important regulating role in the Earth's climate and are home to a major part of the world's biodiversity, containing some of the most productive ecosystems, vast natural resources, unique habitats and globally rare species yet to be discovered. However, mounting pressures from intensifying human uses, climate change and ocean acidification threaten to undermine these ecosystems' biodiversity, balance and resilience. Due to their remoteness and the logistic difficulties linked to their exploration, the open oceans and deep seas remain the least known and least protected places on the planet. Currently, only about five percent has been explored, mostly near coastal areas where the continental shelf drops off abruptly into the deep sea. Open oceans and deep seas often fall outside of national jurisdiction and hence future conservation efforts in these areas will depend on international cooperation and coordination.

Activities

The Global Ocean Biodiversity Initiative is an international partnership advancing the scientific basis for conserving biological diversity in the deep seas and open oceans. It aims to help countries, as well as regional and global organisations, to use existing and develop new data, tools, and methodologies to identify ecologically significant areas in the oceans, with an initial focus on areas beyond national jurisdiction. This initiative began in late 2008 as a collaboration between the German Federal Agency for Nature Conservation (BfN), IUCN, UNEP World Conservation Monitoring Centre, Marine Conservation Biology Institute, Census of Marine Life, Ocean Biogeographic Information System and the Marine Geospatial Ecology Lab of Duke University. The initiative continues to seek additional collaborators to help bring the best science and data to bear on the identification of ecologically significant areas in areas beyond national jurisdiction. GOBI is facilitated by IUCN with core support from the BfN. The work under this initiative builds on the scientific criteria adopted by the Parties to the Convention on Biological Diversity (CBD) in 2008 to identify ecologically and biologically significant areas (EBSAs) in the global marine realm. It ultimately aims to help countries meet the goals adopted under the CBD and at the 2002 World Summit on Sustainable Development. These global goals relate to reducing the rate of biodiversity loss, applying ecosystem approaches, and establishing representative marine protected area networks by 2012.

Objectives

1. To establish and support an international scientific collaboration to assist States and relevant regional and global organisations to identify ecologically significant areas using the best available scientific data, tools, and methods
2. To provide guidance on how the CBD's scientific criteria can be interpreted and applied towards management, including representative networks of marine protected areas
3. To assist in developing regional analyses with relevant organisations and stakeholders

Future work

The first report of this initiative, *Defining ecologically or biologically significant areas in the open oceans and deep seas: Analysis, tools, resources and illustrations*, was presented at the CBD scientific expert workshop in October 2009 in Ottawa, Canada. It provides a general overview of scientific tools, technologies and data sources that can inform the application of the CBD EBSA criteria as well as a number of illustrations on how these techniques can be applied to individual EBSA criteria. Ongoing work includes the involvement of a larger number of experts from science, governments, international and non-governmental organisations, as well as industry and traditional communities to improve the capacity to evaluate and identify EBSAs. From this broad set of areas, multiple criteria analyses will need to be applied in order to arrive at options for coherent representative networks of protected areas on the high seas.

www.GOBI.org

The high seas are the least known and least protected places on Earth

Initiative partners include:

German Federal Agency for Nature Conservation

The German Federal Agency for Nature Conservation (BfN), which is an advisory agency of the German Ministry of Environment, Nature Conservation and Nuclear Safety (BMU), is Germany's central scientific authority for both national and international nature conservation. It has key enforcement functions under international species, biotopes and area conservation agreements, marine conservation law and the Antarctic Treaty. *www.bfn.de*

IUCN

IUCN (International Union for Conservation of Nature) brings together States, government agencies and a diverse range of NGOs in a unique world partnership which seeks to assist societies throughout the world to conserve the diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.
www.iucn.org

Convention on Biological Diversity

The Convention on Biological Diversity (CBD) came into force on December 29, 1993 with the objectives to conserve biological diversity, use it in a sustainable fashion, and to share its benefits fairly and equitably.
www.cbd.int/

Census of Marine Life

The Census of Marine Life 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. The Census aims to make a global list of all forms of life in the sea, produce species range maps, and measure their abundance. *www.coml.org/*

Ocean Biogeographic Information System

Established by the Census of Marine Life, OBIS' mission is to make worldwide marine biogeographic data freely available over the World Wide Web. OBIS provides taxonomically and geographically resolved data on marine life and environments as well as software tools for data exploration and analysis. *www.iobis.org/*

UNEP World Conservation Monitoring Centre

The mission of the United Nations Environment Programme – World Conservation Monitoring Centre (UNEP-WCMC) is to evaluate and highlight the many values of biodiversity and put authoritative biodiversity knowledge at the centre of decision-making. *www.unep-wcmc.org/*

Duke University Marine Geospatial Ecology Lab

The Duke University Marine Geospatial Ecology Lab (MGEL) applies geospatial technologies to issues in marine ecology, resource management and ocean conservation. *http://mgel.env.duke.edu/*

Marine Conservation Biology Institute

Advancing the science of marine conservation biology and securing protection for ocean ecosystems. *www.mcbi.org/*

UNU-IAS

The United Nations University Institute of Advanced Studies (UNU-IAS) conducts research, postgraduate education and capacity development globally with a focus on the interaction of social and natural systems. *www.ias.unu.edu*

AquaMaps

Creating standardised range maps for (eventually) all marine species. *www.aquamaps.org*

BirdLife International

BirdLife International is a global Partnership of conservation organisations that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. BirdLife Partners operate in over 100 countries worldwide. *www.birdlife.org*

CSIRO

CSIRO is Australia's national science agency. Through its Wealth from Oceans Flagship, CSIRO works nationally and internationally to provide solutions for enduring social, environmental and economic wealth from our oceans.
www.csiro.au

CenSeam

Established by the Census of Marine Life, CenSeam's mission is to determine the role of seamounts in the biogeography, biodiversity, productivity, and evolution of marine organisms, and to evaluate the effects of human exploitation on seamounts.
http://censeam.niwa.co.nz

Tagging of Pacific Predators

A Census of Marine Life program using electronic tagging technologies to study migration patterns and habitat use of Pacific Ocean predators. *www.topp.org*

Intergovernmental Oceanographic Commission of UNESCO

IOC promotes international cooperation and coordinates programmes to learn more about the nature and resources of the ocean and applies that knowledge for the improvement of management, sustainable development and protection of the marine environment. *http://ioc-unesco.org*

Hermione

The HERMIONE (Hotspot Ecosystem Research and Man's Impact on European Seas) project is a collaborative project designed to make a major advance in our knowledge of the functioning of deep-sea ecosystems and their contribution to the production of goods and services. www.eu-hermione.net/

For more information about the *Global Ocean Biodiversity Initiative*, please contact:

Patricio Bernal, GOBI Project Coordinator: **patricio.bernal@iucn.org**

Carole Durussel, GOBI Project Officer, GIS: **carole.durussel@iucn.org**

The Global Ocean Biodiversity Initiative is supported by the German Federal Agency for Nature Conservation with funds from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety