



Ocean Biogeographic Information System

“World’s largest online system for absorbing, integrating, and accessing data about life in the oceans”



OBIS strives to document the ocean's diversity, distribution and abundance of life. We make biogeographic data from all over the world freely available to policy makers, environmental managers, researchers and the public at large, in order to increase our knowledge to better manage and protect our oceans.

From UNESCO’s Major Programme II (2012-2013): “OBIS emanates from the decade long Census of Marine Life, and is now integrated into IOC’s International Oceanographic Data and Information Exchange (IODE) programme and will contribute to the protection of marine ecosystems by assisting in identifying marine biodiversity hotspots and large-scale ecological patterns.”

There are currently 19 OBIS nodes that take responsibility for either a region of the world's ocean, or for a particular kind (theme) of data. Staff at the nodes undertake the work to track down and assemble data suitable for inclusion, and all of the necessary checking and standardization of content so that data from different sources may be easily compared. Coordination of activities is overseen by the Secretariat (IOC project office of IODE, Belgium) and a Steering Group composed of OBIS node managers.

OBIS integrates data from many sources over a wide range of marine themes, from poles to the equator, from microbes to whales. OBIS provides a portal or gateway to many datasets containing information on where and when marine species have been recorded. The datasets are integrated so you can search them all seamlessly by species name, higher taxonomic level, geographic area, depth, and time; and then map and find environmental data related to the locations. The OBIS portal has a large spectrum of users: researchers, fishery scientists and managers, policy maker, educators, amateur naturalists, environmental NGOs, consultants, nature conservation organizations, and students.

OBIS’ contribution to the CBD and the protection of marine living resources

OBIS is explicitly mentioned as one of the best available data sources on marine biodiversity in the decisions report of the tenth meeting of the Conference of the Parties (COP 10) in Nagoya (October 2010) - decision X/29, para 35. In response to this, OBIS has been actively involved in the identification of Ecologically or Biologically Significant Areas (EBSAs).

OBIS Secretariat

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OBIS data portal

<http://www.iobis.org>
33 million distribution records
120,000 marine species
+1,000 datasets
19 OBIS nodes
+100 scientific papers
+7,000 citations



OBIS allows you to ...

- Access a worldwide network of marine biogeographic data instantly.
- Plot species locations on a range of flat and spherical views of the world.
- Explore the diversity and distribution of life in the ocean.
- Explore relationships between species occurrence and environmental data. Compare species distributions with background maps of temperature, salinity, and depth.
- Uncover previously unobserved ecological and evolutionary relationships.
- Identify biodiversity hotspots and large-scale ecological patterns.
- Connect to species genetic data, published literature, and images.
- Export information on the biodiversity in their exclusive economic zones, thereby assisting nations with meeting their obligations to the Convention on Biodiversity.
- Re-use data, acting as a mechanism for data preservation and as a framework for data repatriation.

OBIS ...

- Offers researchers and surveyors and other collectors of data the convenience of a permanent repository for spatially referenced data on all forms of marine life.
- Provides scientists and environmental managers access to a wealth of global data that is not necessarily originating from, but is still relevant to, regional marine biodiversity.
- Enables scientists to study biodiversity at not only a national or regional scale, but also at the global level. Questions that are directly relevant to ecosystem based management, species at risk, or invasive species can be best answered in the context of global biodiversity changes.
- Brings increased global visibility to the very high standard of biodiversity research going on nationally and/or regionally.
- Is the largest primary provider of marine biogeographical information, and one of the main providers of data to the Global Biodiversity Information Facility (GBIF), with all OBIS data compatible with GBIF.
- Serves information about the data, “metadata,” including the original source, purpose of the data collection, and contact information, making proper referencing and acknowledgment possible.
- Shows gaps in our knowledge, *i.e.*, much more data is available from coastal areas than from open waters; more from surface areas than from the deep sea; more on vertebrates and other large animals than on smaller invertebrates; more from the northern hemisphere than from the southern.

OBIS contributors

OBIS accepts data from any organization, consortium, project or individual who wishes to contribute. Contributions typically take the form of publishing data through OBIS, or providing software tools. People, organizations and projects that provide data, software, expertise, or other resources to OBIS can be recognized as “Contributors to OBIS.”