



Ocean Biogeographic Information System - USA and U.S. Marine Species on the NBII

About OBIS-USA

OBIS-USA is being developed as a one-stop source for data on marine species in U.S. waters and oceanic regions – the Arctic, the Atlantic and Pacific oceans, the Caribbean Sea, the Gulf of Mexico, and the Great Lakes. The OBIS-USA database brings together highly distributed marine species data sets, documenting where and when species were observed or collected, and allows them to be searched and mapped by geographic location. Results will include species occurrence data in the form of customizable, dynamically generated tables or maps.

OBIS-USA is the U.S. regional node of the global Ocean Biogeographic Information System (OBIS). Established in June 2006, OBIS-USA began with collections featuring marine life of the Hawaiian Islands and the Gulf of Maine. Currently, its database incorporates over 1.7 million records from 17 data providers. OBIS-USA is specifically designed for use by managers, researchers, and students.

What Is OBIS?

OBIS is an evolving strategic alliance of people and organizations sharing a vision to make marine biogeographic data from around the world freely available over the Web. OBIS, which was established by the Census of Marine Life program

(CoML) <<http://www.coml.org/>>, is not limited to data from CoML-related projects. Any organization, consortium, project, or researcher may contribute to OBIS. OBIS provides, on an “open access” basis through its international Web portal at <<http://www.iobis.org/>>:

- taxonomically and geographically resolved data on marine life and the ocean environment,
- interoperability with similar databases, and
- software tools for data exploration and analysis.

Partnerships and Affiliations Census of Marine Life (CoML)

– an international initiative to assess and explain the diversity, distribution, and abundance of life in the oceans. OBIS was created by CoML to serve as an international infrastructure for marine data sharing.

National Biological Information Infrastructure (NBII) – a broad, collaborative program for providing increased access to data and information on U.S. biological resources. The NBII hosts OBIS-USA, which serves as an access point to marine biodiversity data for U.S. waters and research programs. The NBII makes OBIS-USA available through its Marine Theme portal.

OBIS-USA Data Providers – U.S. institutions from all sectors of the marine science community. All of the data retrievable in the OBIS-USA system were collected by the data providers and remain their property. For a complete list of data providers and more information about them, visit the Data Providers page, which is accessible through the OBIS-USA



A pair of beautiful Moorish idols (Zanclus cornutus) graze their way along a reef near Ailinganae, Marshall Islands.

Photo credit: James E. Maragos

Web site (see URL below, right).

Underlying Principles

1. The primary activity of OBIS-USA is to publish (via interactive Web services) data and information to support research, education, management, and policy leading to a greater knowledge of biodiversity.
2. The highest priority is the provision of valuable biological data that are inaccessible or not usefully organized and disseminated.
3. OBIS-USA is a system dependent on its providers, participants, and users, and guided by its sponsors and other U.S. regional priority-setting bodies.
4. OBIS-USA will lead the way in innovative design and implementation of distributed Web services for sharing marine biodiversity data.
5. The system will be designed to interoperate with existing schemas in the NBII, OBIS, GBIF, and other information enterprises as appropriate.
6. The main development priorities are to build effective and useful content; and improve quality, interoperability, accuracy, and accessibility through data conventions and standards.

Focus on the Future

Since the recent launch of OBIS-USA, much has been achieved – but much remains to be done. Its success rests on a network of partners, which includes government agencies, universities, and coastal and ocean science



Photo credit: James E. Maragos

The poisonous red lionfish (Pterois volitans) -- shown here near the Solomon Islands -- is one of the most colorful of all coral reef fishes.

and management communities. To achieve its goal of providing comprehensive data coverage for the U.S. marine regions, OBIS-USA is committed to expanding its partnerships and contributor base.

Future development plans include the incorporation of additional environmental marine data to improve our understanding of species abundance and distribution for all marine areas of interest to the United States.

For More Information

To learn more about OBIS-USA, please contact:

John Mosesso
U.S. Geological Survey
Biological Informatics Office
Phone: 703-648-4079
Fax: 703-648-4224
E-mail: john_mosesso@usgs.gov

Dr. Mark Fornwall
U.S. Geological Survey
Biological Informatics Office
Phone: 808-984-3724
Fax: 808-242-1128
E-mail: mark_fornwall@usgs.gov

Dr. Toral Patel-Weynand
U.S. Geological Survey
Biological Informatics Office
Phone: 703-648-4217
Fax: 703-648-4224
E-mail: tpatel-weynand@usgs.gov

Find us on the Web at: <[<http://www.nbii.gov/portal/community/Communities/Habitats/Marine/Marine_Data_\(OBIS-USA\)>.](http://www.nbii.gov/portal/community/Communities/Habitats/Marine/Marine_Data_(OBIS-USA))