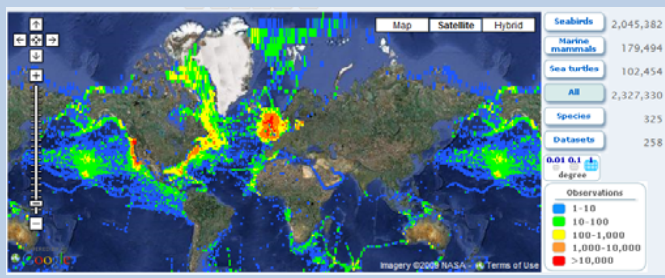




## Abstract

OBIS-SEAMAP, an online information system for marine mammal, seabird and sea turtle data, is an open access repository and web-based data center of high quality observations. OBIS-SEAMAP brings together georeferenced sightings, telemetry and acoustics data with tools to query and assess these species in a dynamic and searchable environment. By combining data from individual research programs at multiple spatial and temporal scales into a global database, we can obtain a more complete picture of the biology, distribution and conservation status of these widely distributed animals. The open-access web-based approach utilized by OBIS-SEAMAP allows a global audience of researchers, students, educators and managers to: 1) map species distributions together with oceanographic information; 2) visualize species distributions with a multi-resolution, spatially and temporally interactive online map interface; and 3) search and download data of interest using multi-faceted criteria. Significantly, data providers benefit from the secure off-site back-up service, the opportunity to reach a global audience and the resultant collaborative potential, increased data quality assurance and quality control, and a suite of visualization tools to examine their own data geographically and temporally.



Global representation of all observations contributed to OBIS-SEAMAP by researchers worldwide.

## Data Types

- Currently there are 5 data types:
- Ship & aerial surveys
  - Satellite telemetry
  - Passive acoustics
  - Colony counts of seabirds, pinnipeds and sea turtles
  - Model outputs derived from survey data (e.g. density)

Surveys

Telemetry

Acoustics

Colony counts

Models

## Data Contributors

Data are provided by a broad range of entities: government agencies, NGO's, universities, etc.

## What Makes OBIS-SEAMAP Unique?

### Explore data in time

Year  
Month  
Day

### And space

1 degree      0.1 degree      0.01 degree

Map and multiple resolution time series of *Grampus griseus* and *Lagenorhynchus obliquidens* click detections from six HARP sites between August 2005 and January 2008. Time series present species detections and sampling effort and can be viewed at multiple resolutions. SEAMAP also allows you to view data at multiple spatial scales, from 1 degree to .01 degree cells.

## Associate Observations with Oceanography

**Visualize:** Survey data are mapped with synchronous oceanographic layers.

**Summarize:** Environmental variables sampled on sightings are graphed by various time scales.

## Download Data

Data can be downloaded as points or polygons, as a whole or based on query, in CSV or ESRI shapefile with sampled oceanographic data.

## Specialized Applications & New Developments

### Photo ID

An online workflow and set of tools to compare images help researchers identify movement patterns of animals. The system has been implemented for the Mid-Atlantic Bottlenose Dolphin Photo-ID catalog.

### New Partnerships

We are nurturing partnerships with major international organizations, such as the State of the World's Sea Turtles (SWOT), and developing visualization tools with them.

## Gap Analysis

We are completing a comprehensive gap analysis to identify areas where greater survey effort is needed. For example, the southern hemisphere is less represented overall and temporal coverage is most lacking in the fall and winter months.

Global representation of marine mammal data contributed by researchers worldwide.

## Why Contribute?

- Secure archive service
- Reach a global audience and raise awareness of your research
- Access to integrated visualization tools and value-added outputs
- All data remain your intellectual property as a data provider

## Conclusion

We hope that the continued collaboration, and data sharing among researchers, managers, and educators enabled by OBIS-SEAMAP will allow us to improve our understanding of the ecology of these animals and better inform management. We encourage you to contribute your data sets and welcome suggestions on how to refine and improve this resource.

## Sponsors

