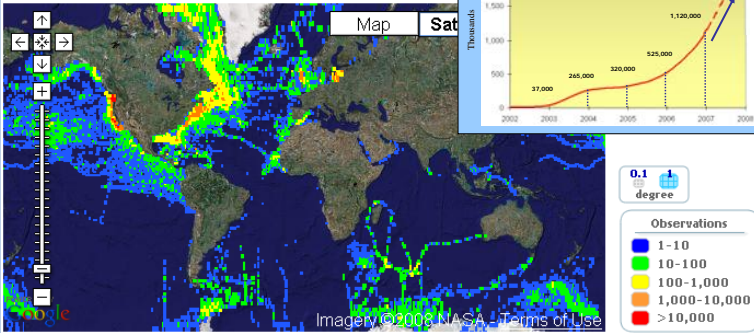


Introduction

OBIS-SEAMAP (Ocean Biogeographic Information System - Spatial Ecological Analysis of Megavertebrate Populations) is a publicly accessible digital information system on the distribution of marine megavertebrates (marine mammals, seabirds and sea turtles), designed to make high-quality data sets, state-of-the-art mapping tools, expert knowledge, and ecological models available to scientists, managers, educators, and the public.



Facts

- 215 datasets to date comprising >1,135,000 records, spanning 1935-2007
- Observations of 511 species, >130 detailed species profiles
- ~70 different providers worldwide
- Current data types - 1) surveys: ship, aerial, shore-based, 2) telemetry data, 3) opportunistic

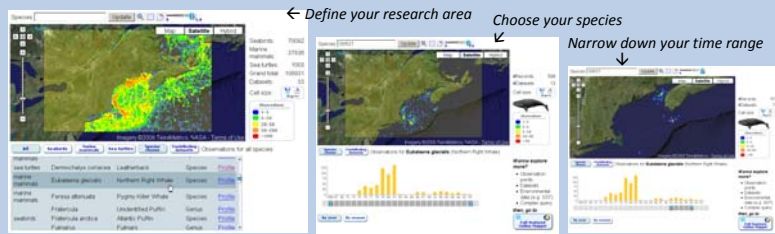
What makes OBIS-SEAMAP unique?

- Contributors clearly identified, credited and protected by Terms of Use
- Data archived and accessible
- Complete metadata in exchangeable format
- Effort/telemetry trackline data available
- State-of-the-art mapping features provided
- More than 2TB of environmental data available

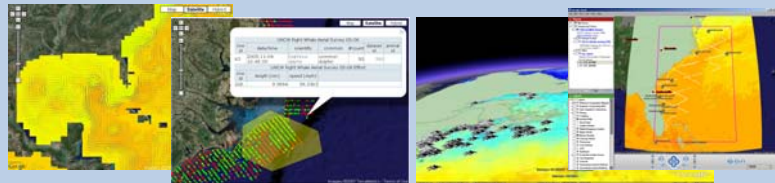


SEAMAP 2.0 - User Benefits & Applications

- New Experiences in Visualization and Data Search
 - Entire SEAMAP holdings can be searched spatially and temporally
 - Search results are visualized with an interactive map and graph



- Powerful Online Mapper
 - Combine various layers (species, datasets, shapefiles, KML, WMS)
 - Define your areas and/or set criteria (species, time periods, season, etc)
 - Add multiple oceanographic layers (SST, SSH, CHL,...)



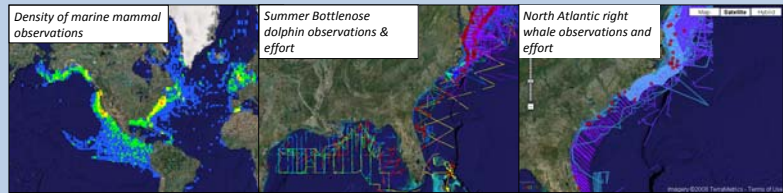
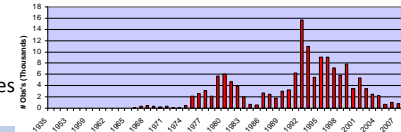
- Map with Google Earth
 - Any data type can be displayed including effort/telemetry lines
 - Markers can be identified with an informative pop-ups
 - Date-synchronous environmental data are available (e.g. monthly sea surface temperature over the period of a survey).

Marine Mammal Spatial and Temporal Coverage

Spatial: Global with North America (US EEZ) and east central Pacific dominant
Temporal: Data rich in summer months (summer > fall > spring > winter) and 1990s

Southeast Atlantic

- >40 datasets, >140,000 observations
- Endangered species including:
 - humpback, fin, sei, northern right whales
- Many observations of *T. truncatus*



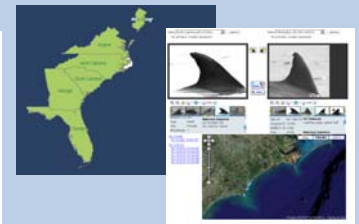
Gap Analysis

- Comprehensive inventory and data exploration to systematically identify:
 - gaps between our holdings and existing datasets.
 - true data gaps in data holdings vs. known species distributions.

New Data Types

Photo ID

- Online Fin Matching Interface and Match Verification Workflow.
- Will facilitate collaboration across institutional and geographic boundaries.
- Mid-Atlantic Bottlenose Dolphin Photo-ID Catalog (MABDC) in Beta testing.



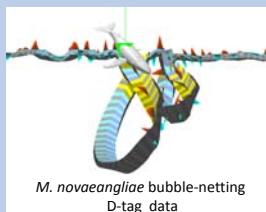
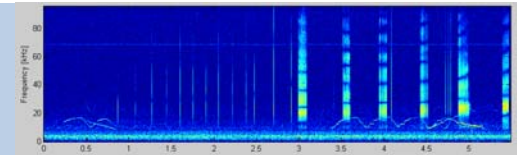
Sea Turtle Nesting Sites

- More than 1,000 sea turtle nesting sites across 43 Caribbean countries/territories.
- Nearly 200 contributors properly credited.



Passive Acoustics

- Working to incorporating these important but complicated location data.
- Sources: moored single stations (pop-up ocean bottom recorders, ARPs and HARPs); bottom-mounted fixed arrays; towed arrays, and autonomous gliders.

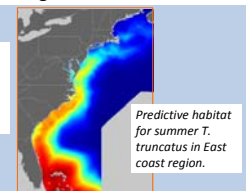


Advanced Telemetry

- Currently capable of representing 2D telemetry tracking data
- Working toward capacity for integrating more sophisticated 3D behavioral tag data.

Model Outputs

- Expanding capabilities to include display of ecological model results



Conclusion

OBIS-SEAMAP is a multi-functional geodatabase that is continually being enhanced. The benefits are greatest with widespread participation. We encourage you to contribute your data sets and welcome suggestions on how to refine and improve this valuable resource.

Sponsors

