Data Management Progress and Solutions: Updates

IOOS Program Office Staff:
Gabrielle Canonico - MBON Program Manager
Jennifer Bosch, PhD - Marine Ecologist/Oceanographer
Biological Data Training Workshop

February 8-9 2018
Seattle, Washington

Scope

• IOOS and OBIS standards and tools for biological data
  • Darwin Core, WoRMS (taxonomy) and metadata standards
• Web services for data access
  • MBON Portal, iOBIS
• Hands-on data exercises
  • Aligning Data
  • Working with ERDDAP
Outcomes

• Expanded IOOS and OBIS network of collaborators
• Increased awareness of standards and best practices for marine biological data
• Increased amount of marine biological data published through IOOS and OBIS
• Increased availability of marine biological data for science, species conservation and ecosystem-based management
Outcomes

- A collection of software and scripts available on a [GitHub repository](https://github.com/ioos/BioData-Training-Workshop) to aid in the curation and use of biological data

- Course Materials found on

Updates to Biological Data & Access Tools

The IOOS MBON Portal

- Built by Sanctuaries MBON and Axiom teams
- Sustained by U.S. IOOS
- Interactive visualizations of and access to biological data
- **Version 2.0** updates and new features based on user input
- Ready for more data!
Data tools targeting different audiences

**Infographics**
Audience: public, managers, educators

**MBON Curated Data Views**
Audience: Advisory groups, researchers, teams

**MBON Data portal**
Audience: Scientists, technical experts
Updates to Biological Data Access and Tools

IOOS MBON Portal
Version 2.0

- Interactive Map
- Catalog of data layers
- Curated and Customizable Data Views

With these features, this portal will allow users to explore:

- What’s going on in the environment?
- Is it the same or changing?
- How are changes impacting the biology?
Impacts of ocean climate variability on biodiversity of pelagic forage species in an upwelling ecosystem

MEPS Vol 580: 205-220, DOI: 10.10.3354/meps12278

• 1995 and 2015 heat waves (ENSO events) show high coastal diversity. Species richness follows temperature.

• These changes lead to major changes in the diversity and production of life in the sea, affecting fisheries and coastal water quality.