Emergence of a Regional OBIS Node

A Summary of Present Canadian Contributions to OBIS and GMBIS

Ocean Biodiversity Informatics Conference, Hamburg Germany, November 29, 2004



The Centre for Marine Biodiversity is a non-

profit society established in 2000 to

enhance Canada's scientific capacity in

support of protecting marine biodiversity.

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- 1) Authoritative reliable species names and hierarchical classifications,
- 2) Discoverable listed in searchable online catalogue systems,
- 3) Accessible downloadable via geo-referenced sytems on marine species,
- 4) Interoperable integrated with data from other science disciplines.



BIC

The Bedford Institute of Oceanography was founded in 1962 and is Canada's largest center for ocean research.

Providing open standards based data management services for NW Atlantic, NE Pacific and Arctic Oceans.

OBIS Ocean Biogeographic Information System

'An interface to marine species data from all over the world.'

Program Development

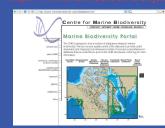
- -Regional OBIS Nodes (RONs)
- ·Chair of OBIS Management Committee (OBISMC)
- Organized and hosted 1st OBISMC mtg, Sept '04

Data Services:

- -North-western North Atlantic Ocean species list
- ·6,314 species
- -DiGIR Data Provider Services
- ·10 data collections (~255,000 records)

Archetype for Regional OBIS Nodes

http://www.marinebiodiversity.c.



Coming Soon: ~1,000,000 research trawl sets from East and West Coasts.

Integrating global biodiversity data with regional content management.

Developing capacity to monitor marine biodiversity discovery, distribution and disturbance.

CGDI

Canadian Geospatial

Data Infrastructure

'Making Canada's geographic data and services accessible.'

tp://www.aeoconnections.or



FGDC/OBIS standard collections:

- -Atlantic Canada Conservation Data Centre,
- -Atlantic Reference Centre Museum of Canadian Atlantic Organisms,
- -Electronic Atlas of Ichthyoplankton on the Scotian Shelf of North America,
- -Eastern Canadian Benthic Macrofauna,
- -DFO Scotian Shelf Summer Trawl Surveys,
- -Gwaii Haanas Invertebrates.
- -Gwaii Haanas Marine Plants,
- -Canadian Museum of Nature Fish Collection.
- -Marine Invertebrate Diversity Initiative,
- -Nova Scotia Museum of Natural History.

GMBIS Gulf of Maine Biogeographic Information System

'A dynamic atlas using knowledge from existing databases.'

Program Development

- -Gulf of Maine Ocean Data Partnership
- ·Co-Chair of Technical Committee
- ·OBIS and FGDC Metadata expertise

Data Services:

- -DiGIR Data Provider Services
- -Web Mapping Services (WMS)
- ·Monthly temperature, salinity and density at 6 depths (216 layers)
- ·Distribution of groundfish(100 layers)
- -FGDC Metadata Services

Web Mapping Services

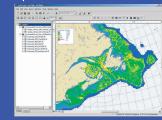
http://bluefin.mar.dfo-mpo.gc.ca/imf/imf.jsp'?site=dataviewer_c

Marine Climatology



Monthly Temperature, Salinity and Density (public now).

Species Distribution



100 species from Cape Hateras to Cape Chidley (coming soon).

Each map is a collection of independently sourced authoritative layers.