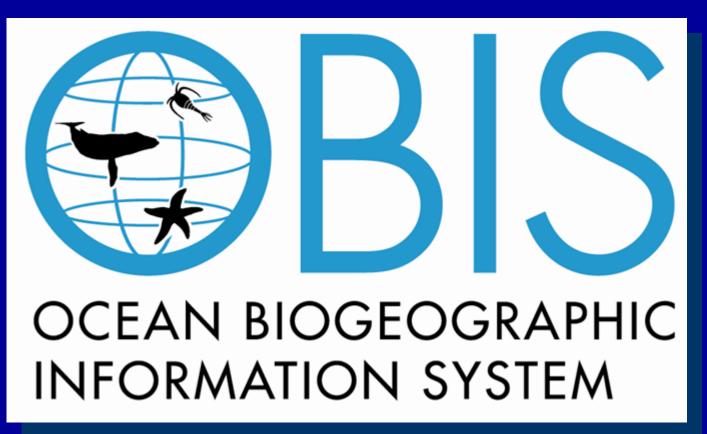
www.iobis.org



The 'Leading Wave' of Worldwide Marine Species Data Integration

Robert M. Branton and Lenore Bajona Bedford Institute of Oceanography brantonb@mar.dfo-mpo.gc.ca

OBIS Provides ...

- Marine species data records from around the world including: museum collections, management agencies, research institutions, etc.
- All locations where an organism was found, and all organisms found at a location.
- Software tools to use these data effectively for research, management and education.





Discovery Metadata

OBIS Portal on Global Change Master Directory

8 Titles Match Your Query

Showing 1 through 8 of 8

1. <u>Bay of Fundy Species Information System (OBIS Canada) [OBIS.BOFETF]</u> <u>PARENT DIF</u> ABSTRACT: The Bay of Fundy Species Information System provides taxonomic, biological and ecological information on diatoms, dinoflagellates, marine algae, most invertebrate groups, ...

2. Electronic Atlas of Ichthyoplankton on the Scotian Shelf of North America (OBIS Canada) [OBIS.AtlasIchthyoplankton] PARENT DIF

The EAISSNA database contains information on location and time of spawning, and abundance and distribution of eggs and larvae of marine fish on the Scotian Shelf of North America. ...

3. Atlantic Reference Centre (OBIS Canada) [OBIS.ARC] PARENT DIF

This is the Atlantic Reference Centre museum database for Canadian Atlantic marine organisms. Specimens represent invertebrates from sponges to tunicates, and fishes. The ichthyoplankton ...

4. <u>Grand Manan Basin Benthos [OBIS.DeepWaterSedimentCom]</u> <u>PARENT DIF</u> Summary: This study investigates the faunal biodiversity of the deep water sediments of Grand Manan Basin in the Bay Fundy on the East Coast of North America. Specimens were collected ...

5. ECNASAP - East Coast North America Strategic Assessment (OBIS Canada) [OBIS.groundfish_atlas]_PARENT DIF

Fishery-independent groundfish data for the east coast of North America from Cape Hatteras to the US/Canadian border and for Bay of Fundy through the Scotian Shelf. Time period ...

6. Canada Maritimes Regional Cetacean Sightings (OBIS Canada) [OBIS.Marwhale] PARENT DIF

This is an OBIS formatted version of the Canadian government's Department of Fisheries and Oceans Maritimes Region database for visual sightings of cetaceans (e.g. whales, dolphins ...

7. <u>Marine Invertebrate Diversity Initiative (OBIS Canada) [OBIS.MIDI]</u> <u>PARENT DIF</u> The goal of Marine Invertebrate Diversity Initiative (MIDI) is to provide information about marine invertebrates (animals without backbones). We hope to engage scientists, educators ...

8. Nova Scotia Museum of Natural History - Marine Birds, Mammals, and Fishes (OBIS Canada) [OBIS.NSMNH] PARENT DIF

This is the Nova Scotia Museum of Natural History database for marine organisms, including birds, mammals, and fishes. It contains mostly Nova Scotia material but there is also ...

Showing 1 through 8 of 8

OBIS Enriched Discovery Metadata

ow to <u>cite OBIS data</u>

<u>Notes</u> to users

ECNASAP - East Coast North America Strategic Assessment (OBIS Canada)

From <u>Global Change Master Directory</u>, last updated on 2006-06-05; * from Ocean Biogeographic Information System, last modified on 2007-04-10.

1	Data Source Name	ECNASAP - East Coast North America Strategic Assessment (OBIS Canada)			
2	Citation	Government of Canada, Fisheries and Oceans Canada, Maritimes Region, Science Branch East Coast North America Strategic Assessment Project, Groundfish Atlas for the East Coast of North America., , . Retrieved 2007-05-10 from http://www.iobis.org			
3	Taxonomic coverage*	Invertebrates: Arthropoda: Crustacea: Malacostraca: Decapoda: "Decapoda (shrimp, lobsters, crabs)" Invertebrates: Mollusca: Cephalopoda: Sepiolida, Spirulida, Teuthida, Vampyromorphida: "Squids" Vertebrates: Agnatha, Chondrichthyes, Osteichthyes: Actinopterygii: "Ray-finned fishes" Vertebrates: Agnatha, Chondrichthyes, Osteichthyes: Cephalaspidomorphi, Myxini: "Lampreys, hagfishes" Vertebrates: Agnatha, Chondrichthyes, Osteichthyes: Elasmobranchii, Holocephali: "Sharks, rays and chimaeras"			
4	Geographic Coverage*	ATLANTIC OCEAN CANADA GULF OF MAINE MID-LATITUDE NORTH AMERICA NORTH ATLANTIC OCEAN NORTHERN HEMISPHERE UNITED STATES OF AMERICA WESTERN HEMISPHERE BAY OF FUNDY NOVA SCOTIA SEA FLOOR MAINE MASSACHUSETTS NEW HAMPSHIRE NORTH CAROLINA DELAWARE PENNSYLVANIA NEW BRUNSWICK MARYLAND Latitude: 5.34N to 69.53N; Longitude: 86.18W to 6.57W			
5	Temporal coverage*	1970 to 1995			
7	Total Distribution Records*	466734			
8	Total Number of Taxa*	274			
11	Abstract	Fishery-independent groundfish data for the east coast of North America from Cape Hatteras to the US/Canadian border and for Bay of Fundy through the Scotian Shelf. Time period is 1970-95. Efforts are underway to extend taxonomic, tempoaral and spatial coverage of data available from OBIS.			

http://gcmd.nasa.gov/KeywordSearch/Home.do?Portal=OBIS&MetadataType=0

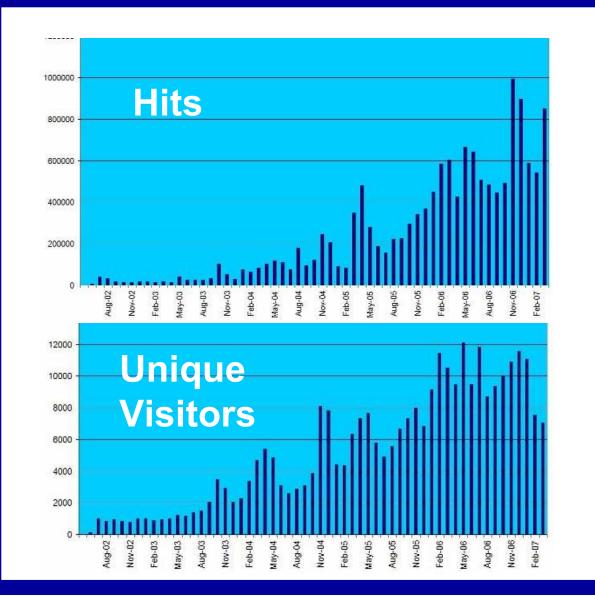
OBIS Technology

- Distributed datasets connected via DiGIR and the OBIS Schema, an extension to the Darwin Core V2.
- Data are regularly crawled and cached locally (and indexed) to improve performance.
- Quality Control
 - Names are matched against the Catalog of Life
 - Questionable points (on land, 0-0) are returned to the data provider for checking
 - Dataset without metadata will not be posted

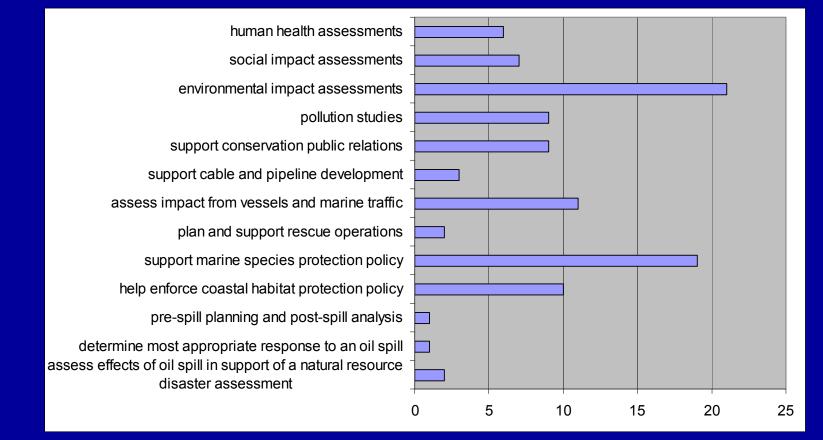
OBIS Record Schema

- What (Taxonomic name): genus, species, subspecies, authority, family, order....
- Where: latitude, longitude, depth, place name, precision
- When: month, day, year, time of collection
- Who: collector, identifier, dataset name, institution serving dataset
- How Many: number caught, number preserved
- Other: source of record, life stage, type status, etc.

Monthly Web Usage Statistics



User Needs Assessment Survey



We will soon conduct a multi-lingual user needs assessment survey as a basis for attaining self sufficiency by 2010. Please visit <u>www.iobis.org</u> and participate.

Regional OBIS Nodes (RONS)



http://marinebiodiversity.ca/OBISCanada

BISCa:	nada
home members	news events groups
you are here: home	
navigation	Three Oceans of Biodiversity by (Bob Branton - last modified 2007-04-25 16:32 OBISCanada is a Regional OBIS Node
 About IOBIS Taxonomic Standardization 	© <u>OBISCanada</u> provides marine species data to the © <u>Ocean Biogeographic Information System</u> (OBIS) which is the data management component of the © <u>Census of Marine Life</u> and main contributor of marine species data to the <u>Global Biodiversity</u> <u>Information Facility</u> . OBISCanada metadata is managed by the © <u>Global Change Master Directory</u> .
 Data Collections Members News Events Groups 	 OBISCanada is hosted by: Centre for Marine Biodiversity © Bedford Institute of Oceanography © Dalhousie University © OBISCanada ensures data are:
log in Login Name	 ODISCANAGA ensures data are: <i>Authoritative</i>- describing specimens and observations using reliable species names and hierarchical classifications. <i>Discoverable</i>- listing data collections and their characteristics in a searchable catalogue system. <i>Accessible</i>- serving data as part of a global geo-referenced ocean information system on marine species. <i>Interoperable</i>- visualizing and analyzing data from several different sources and disciplines.
Password	© Click here or on the logo to go to IOBIS.org
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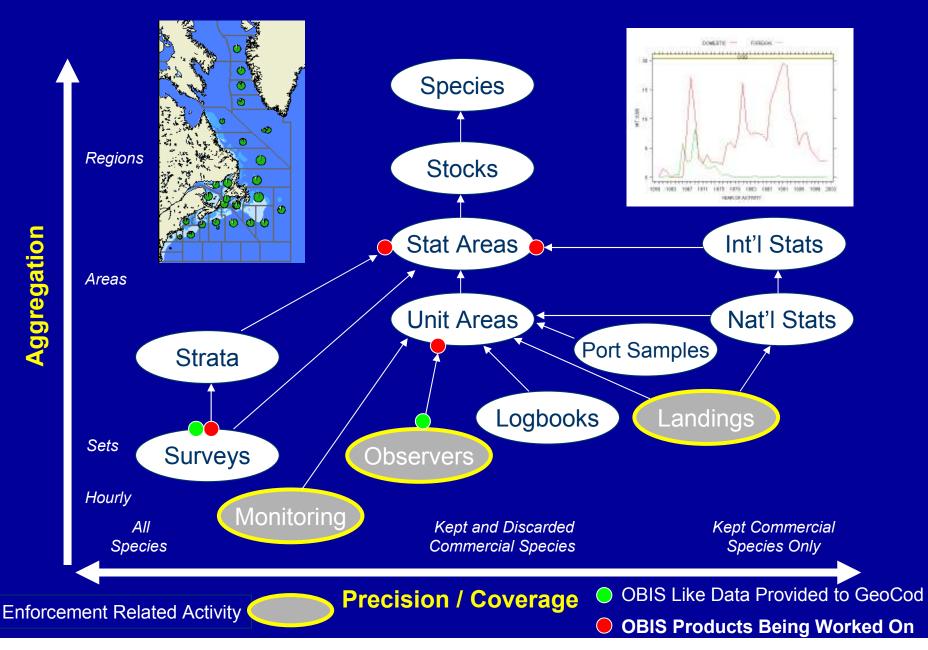
Authoritative, Discoverable, Accessible, Interoperable

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Fasomord	CMN 1.289 L.278 0 0 EA135NA 126 L.25 22 12 ECIMP 11 E 0 0		Measurements of biomass and productivity of from studies in eastern North America from Ne 3. Atlantic Canada Conservation Data Cen	S 210	tergetae.	Data Collections		
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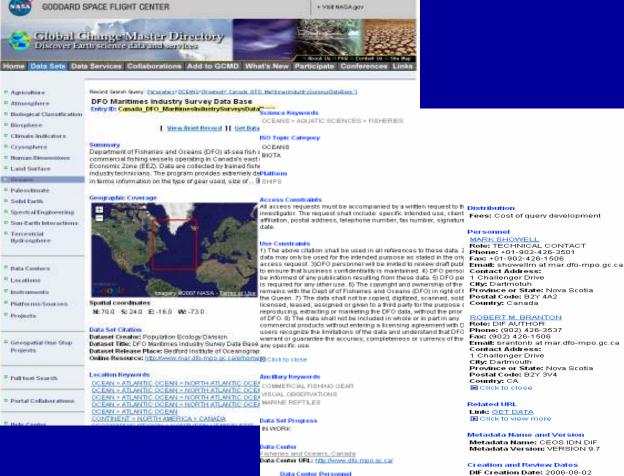
Statistical Environment

9|NODC|Anoplopoma fimbria|NODC|1136527

Overview of Marine Fisheries Data



Observer Discovery Metadata



Name: SHELLY BOND Phone: +01-902-426-4315 Fax: +01-902-426-1506 Email: bonds at mar.dfo-mup.uc.ca Contact Address: 1 Challenger Drive City: Dartmouth Province or State: Nova Scotia

MARKSHOWELL

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ROBERT M. BRANTON Role: DIF AUTHOR

Phone: (902) 426-3537 Fax: (902) 426-1506 Email: brantonb at mar.dfo-mpo.gc.ca Contact Address: Challenger Drive City: Dartmouth Province or State: Nova Scotia Postal Code: B2Y 3V4 Country: CA R Click to close

Related URI Link: GET DATA E Click to view more

Metadata Name and Version Metadata Name: CEOS IDN DIF Metadata Version: VERSION 9.7

ntion and Review Date DIF Creation Date: 2006-08-02 Future DIF Review Date: 2007-05-14

View FGDC Format View Text Only Format

[<u>View Brief Record</u>][<u>Get Data</u>][<u>Update this Record</u>]

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OBIS Usage Agreement

1. Acknowledge use of specific records from contributing databases in the form appearing in 'Citation' field (if any); and acknowledge use of OBIS facility:

For data used: Author, initials. Database title. Retrieved [date accessed] from <u>www.iobis.org</u>, for example:

Stocks, K. SeamountsOnline: an online information system for seamount biology. Version 3.1. Retrieved [date] from www.iobis.org.

For OBIS website: Ocean Biogeographic Information System. [date accessed] www.iobis.org

2. Provide obissupport@marine.rutgers.edu with full citation of any publication (printed or electronic) that cites OBIS or any constituent part.

3. Recognize limitations of data in OBIS

Observer Data Access Request

DFO Maritimes Population Ecology Division Data Use Agreement (Fax Completed Form to Shelley Bond at 1-802-426-1506)

The undersigned acknowledges receiving the following data from the Department of Fisheries and Oceans (DFO) and agrees to the following terms and conditions governing the use of these data.

Dataset Creator: Population Ecology Division.

Dataset Title:

Citation: Dataset Release Date: yyyy _____ mm ____ dd ____

Data Set Release Place Bedford Institute of Oceanography, Dartmouth Nova Scotia, Canada []

Baint Andrews Biological Station, Baint Andrews New Brunswick, Canada |]

1) The above citation shall be used in all references to these data.

- 2) The data may only be used for the following intended purpose.
- 31 [] GFO personnel shall be invited to review draft outlitations to ensure that business confidentiality is realizationed. This condition is only required for some data.
- 4) DFO personnel shall be informed of any publication resulting from these data.
- 5) DFO permission is required for any other use

6) Copyright and ownership of the data remains with DEO in right of her majesty the Queen.

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- The data shall not be included in whole or in part in any commercial products without a licensing agreement with DFO.
- 9) You recognize the invitations of the data and understand that DFO does not warrant or guarantee the accuracy, completeness or currency of the data for any specific use.

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Client Name	Erial	
Address:		
Telephone	Fax.	
Client Signature	Date	

File Number

Date

OBIS is ...

- operated by an international team of data management experts
- based on internationally accepted metadata schemas
- currently serving ~10,000 unique visitors per month
- ready and able to serve the fisheries community

THANK YOU ③

http://www.marinebiodiversity.ca/OBI07/



Ocean Biodiversity Informatics

International Conference on Marine Biodiversity Data Management Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada October 2-4, 2007

members news events home

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navigation (3) Home Members News C Events Links Drganizing Committees 1 st Call for Presenters Close of 1st Call for Presenters Ccean Biodiversity Informatics Conference (OBI'07) Thanks log in Login Name Password og in 🚯 Forgot your password?

Welcome to the OBI'07 conference portal

by @zopemgr - last modified 2007-04-30 21:10 Introduction:

Here are information and resources pertaining to the Ocean Biodiversity Informatics conference being held Oct. 2-4 2007 at the Bedford Institute of Oceanography in Dartmouth, Nova Scotia, Canada. Presenters can register online by clicking Shere. The first call for presenters closes on April 30, 2007.

Background:

At the International Ocean Data and Information Exchange (IODE) XVIII) conference on Apr 26-30, 2005 in Ostende (Belgium) Dr Edward Vanden Berghe reported on the Ocean Biodiversity Informatics conference, Hamburg (Germany), 29/11-1/12/2004 (169 registrants, 37 oral presentations and 33 posters) and the Colour of Ocean Data conference in Brussels (Belgium), 25-27/11/2002 (200



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registrants; 44 oral presentations, 40 posters). A major point of discussion at both conferences was data policy issues, and the advantages of free and open sharing of biodiversity data. Much work however remains to be done. The representative of the International @ Council for Exploration of the Sea (ICES), Ms Julie Gillin suggested a second OBI conference to focus on biological data quality issues and continue the valuable cross-disciplinary interchange. This conference will be co-organized by IODE, ICES and the Ocean Biogeographic Information System (OBIS) and will be jointly hosted by the Ocentre for Marine Biodiversity and the Bedford Institute of Oceanography (BIO) in Dartmouth (Canada) on 2-4/10/2007. If you wish to help organize the OBI'7 conference, please contact one of the leads of the Oorganizing committees.

Programme Plan:

Application topics:

Technical topics:

- conservation of species and habitats; modeling of global change impacts; invasive species; ecosystems based management; ecologically & biologically sensitive areas;
 interacting with ocean observing systems; museum collections: fisheries management: harmful algal blooms;
- data and metadata standards for distributed systems;
 - managing complex data (e.g. images, bioinformatics, ...);
 - species information systems;
 - Inking biological to physical and chemical data;
 - - visualization and mapping;
 - data collection and quality control;
 - decision making and predictive modeling,
 - and annotation schemes for networked information systems.

- & New user?
- and oil and gas exploration.