



# Fisheries and Ocean Data Management System

Bob Groman and Dicky Allison  
Northeast Consortium Data Management Office



Research Steering Committee  
Meeting - May 30, 2007



# What is the Fisheries and Ocean Data Management system?

- A way for the public, researchers, educators, commercial fisherman, and managers to access data from the Northeast Consortium's cooperative research projects.

# How does it work?

- The system is accessed through the Northeast Consortium website at the University of New Hampshire using any standard web browser.

<http://www.northeastconsortium.org>

The screenshot shows the homepage of the Northeast Consortium. At the top, the logo "Northeast Consortium" is displayed with the names of member institutions: University of New Hampshire, Woods Hole Oceanographic Institution, University of Maine, and Massachusetts Institute of Technology. A navigation menu includes links for HOME, ABOUT US, FUNDING, FOR PARTICIPANTS, PROJECTS, DATA, and RESOURCES. A search bar is located on the left side. The main content area is divided into two columns. The left column features a "Feature Story" titled "Western Gulf of Maine Closure Area: 2007 Symposium" with a map of the Gulf of Maine and a red box highlighting the closure area. Below this is a list of "Previous Feature Stories" including "ICES 2006 Boston", "Shrimp Size Sorting", "Consortium Projects at Maine Fishermen's Forum", "Interview with Chris Glass", "Urchin Escape Panel Study", "Improving Size Selectivity of Northern Shrimp", "Red Crab Stock Assessment Project", and "Trawl Gear Workshop 2004". The right column contains "Announcements" for the "International Haddock Symposium" on October 25-26, 2007, with a call for abstracts and a submission deadline of May 31, 2007. Below this is a notice about a congressional freeze on earmarks affecting research projects in 2007. At the bottom of the right column is a "Funding Opportunity" for the "2007 WWF Smart Gear Competition" with a submission deadline of July 31st, 2007. The footer of the page contains copyright information for 2006 and contact details.

**This is the  
Northeast  
Consortium  
home page.**



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# Where are the data?



Click on the [DATA menu link](#) to access the data.

n

# Geospatial and Tabular Access to the Data

You can enter the data system using a **map interface** or a **text interface**.

Using the **text interface**, you can look for a specific project or browse by general topic area.

**Northeast Consortium**  
University of New Hampshire · Woods Hole Oceanographic Institution · University of Maine · Massachusetts Institute of Technology

HOME ABOUT US FUNDING FOR PARTICIPANTS PROJECTS DATA RESOURCES

**Fisheries and Ocean Data Management System**

**NEW! Data Mapping Utility!**

Welcome to the Fisheries and Ocean Data Management System. The purpose of this database is to provide online access to data generated by projects funded by the Northeast Consortium.

To view data, click on one of the links on the left. You may look for a specific project in the Database Inventory, or browse by general topic areas.

If you are looking for data from a specific project and it is not yet in the database, please contact the Project Leader (contact information can be found in the [Project Information Database](#)), or contact [Chris Manning](#) at the Northeast Consortium (603-862-4034).

Use this map-based interface to view data! This system is still in development so please provide feedback to [Dicky Allison](#).

**View the Database Inventory:**

[Inventory](#)

**Or browse by topic area:**

[Fish Biology](#) [Gear Technology](#)

Using the **map interface**, you can look for data by the name of the project leader.

Just click on the map.

# Data Organization

- Data are managed using the [JGOFS/GLOBEC Data Management System](#)
- Tabular data organization is flexible and has undergone several changes over the years. Currently, there are six (6) major categories:
  - Fish Biology (7/3)
  - Gear Technology (35/8)
  - Habitat Ecology (24/19)
  - Outreach (8/0)
  - Stock Assessment (24/14)
  - Whale Studies (0/0)

Many 2000-2005 data sets are on-line, as of May 23, 2007. Getting data “into the system” does take time.

Placeholders are used as an incentive for more contributions.

# Access via JGOFS/GLOBEC

- Data sets shown as simple directory lists
- Six broad categories are defined
- Select a data set (data object) to view
- Data are displayed, as text, on web site
- Browse through the data by clicking on the links
- Select data to plot and plot them
- Download data as ASCII tables, CSV, and as Matlab binary files.
- One can review the on-line metadata



# Access via the MapServer interface

## Northeast Consortium Fisheries and Ocean Data OGC Interface

Welcome to the NEC Fisheries and Ocean Data OGC Interface. Detailed instructions and a tutorial are available [here](#).

**Principal Investigators**

Cowan, Diane  
Dionne, Michele  
Incze, Lewis  
Kelly, Kevin  
Monosson, Emily  
Pol, Mike  
Rosen, Shale  
Runge, Jeff  
Sowles, John  
Wahle, Richard

Show selected  
- OR -  
Show all

**Time Window**

2000 to 2006

Start and end times may be changed at any time. Clicking a map-it link in a Results window popup will bind the mapped points to the above date range.

Show Data

**Interactive Map**

Zoom to Scale  
1x | 3x | 5x | 10x | 25x

39°40'48" N 63°10'12" W

Scale-it legend  1 - 2  3 - 10  11 - 100  101 - 1000  above 1000

**Map Controls**

Zoom in  
 Zoom out  
 Original zoom  
 Pan map

**Data Layers**

Show bathy?  
 Show grid?

**Map Size**

Small  
 Medium  
 Large

**OGC Info**

[Get Capabilities](#)  
[Map WMS](#)  
Show Data WFS

Pick one, then click, then click again

[Move BESIDE map](#)

Show Data Results

[Move BESIDE map](#)

Choose the **Get info** function and highlight an area on the map to view detailed pi information.

Northeast Consortium Fisheries and Ocean Data OGC Interface - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://mapservice.whoi.edu/maps-bin/nec/map

### Northeast Consortium Fisheries and Ocean Data OGC Interface

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- Rosen, Shale
- Runge, Jeff
- Sowles, John

Show selected

- OR -

Show all

#### Time Window

2000 to 2005

Start and end times may be changed at any time. Clicking a map-it link in a Results window popup will bind the mapped points to the above date range.

Show Data

#### Interactive Map

You are in the QUERY mode. Results appear in the Show Data Results window below.

39°27'36" N 68°27'36" W

○ 1 - 2 ○ 3 - 10 ○ 11 - 100 ○ 101 - 1000 ○ above 1000

#### Map Controls

- Zoom in
- Zoom out
- Original zoom
- Pan map

#### Data Layers

- Show bathy?
- Show grid?

#### Map Size

- Small
- Medium
- Large

#### OGC Info

[Get Capabilities](#)

[Map WMS](#)

[Show Data WFS](#)

narrow search by...

- Acadian\_Redfish
- Aesop\_Shrimp
- Alewife
- Alligatorfish
- American\_Lobster
- AmericanPlaice
- American\_Sand\_Lance
- American\_Shad
- Anemone
- Atlantic\_Cod
- Atlantic\_Hagfish
- Atlantic\_Haibut
- Atlantic\_Herring
- Atlantic\_Mackerel
- Atlantic\_Menhaden
- Atlantic\_Moonfish
- Atlantic\_Silverside
- Atlantic\_Torpedo
- Ax\_Head\_Clam
- Atlantic\_Cod

#### Show Data Results

Click on a link for more info.

green links indicate on-line data are available.

004-06-08 16:23 UTC)

summary info

num\_caught scale it?  map it

Pick an animal,

then map it.



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Northeast Consortium Fisheries and Ocean Data OGC Interface - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://mapservice.whoi.edu/maps-bin/nec/map

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- OR -  
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#### Time Window

2000 to 2005

Start and end times may be changed at any time. Clicking a map-it link in a Results window popup will bind the mapped points to the above date range.

Show Data

#### Interactive Map

Mouseover map-it obs. sites to view more info. Hold down the Z key to lock in on an obs. site.

Zoom to Scale: 1x | 3x | 5x | 10x | 25x

44°07'48" N 68°08'24" W

Scale-it legend: 1 - 2, 3 - 10, 11 - 100, 101 - 1000, above 1000

John\_Sowles Gulf\_of\_Maine\_Inshore\_Trawl\_Survey inshore\_catch xscale num\_caught Atlantic\_Cod 2000\_2005

#### Map Controls

- Zoom in
- Zoom out
- Original zoom
- Pan map

#### Data Layers

- show bathy?
- Show grid?

#### Map Size

- Small
- Medium
- Large

#### OGC Info

- [Get Capabilities](#)
- [Map WMS](#)
- [Show Data WFS](#)

John\_Sowles, Gulf\_of\_Ma. inshore\_ca.xscale num\_caught Atlantic\_C. 2000\_2005

44 12 48 N 68 04 03 W

Available on-line data num\_caught 7

Move the cursor over the dot and see the result.

Link to information about the data

Link to the data themselves

#### Show Data Results

Click on a link for more info. Green links indicate on-line data are available.

**PI John Sowles** (2000-01-01 00:00 UTC to 2004-06-08 16:23 UTC)

[Gulf\\_of\\_Maine\\_Inshore\\_Trawl\\_Su...](#)

Gulf\_of\_Maine\_Inshore\_Trawl\_Su... View Gulf\_of\_Maine\_Inshore\_Trawl\_Su... summary info

Available on-line data

[inshore\\_station](#) map it

[inshore\\_catch](#) Atlantic\_Cod num\_caught scale it?  map it

javascript:void(0);



# Access Data via the [Inventory](#)

Using the **inventory**, you can look for a specific project.

The inventory is organized by year and within year by one or more of the 3 project types:  
**Cooperative Research  
Outreach & Education  
Project Development**

**Northeast Consortium**  
University of New Hampshire · Woods Hole Oceanographic Institution · University of Maine · Massachusetts Institute of Technology

HOME ABOUT US FUNDING FOR PARTICIPANTS PROJECTS DATA RESOURCES

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**View the Database Inventory:**

[Inventory](#)

**Or browse by topic area:**

[Fish Biology](#) [Gear Technology](#)



# Access from the Project Inventory

View the Database Inventory:



**/nec/inventory\_rs2 --year\_start eq 2002,project\_type eq Coop\_Res-- Level 2**

Directory... Documentation Plotting and Other Operations...

Level 0 Next level Flat listing

# Northeast Consortium Project Data Inventory

year\_start

2002

project\_type

Coop\_Res

principal\_investigator completed project\_title

principal_investigator	completed	project_title
<a href="#">Diane Cowan</a>	yes	<a href="#">Mapping Spawning and Hatching Grounds of American Lobster</a>
<a href="#">Patrice McCarron</a>	yes	<a href="#">Environmental Monitors on Lobster Traps: Phase III</a>
<a href="#">Christopher Glass</a>	no	<a href="#">Continuation Reduction of Bycatch and Discard in Gulf of Maine Groundfish Fisheries: The effect of compos</a>
<a href="#">Cliff Goudey</a>	no	<a href="#">Identification of Cod and Haddock Spawning Habitat Using Passive Acoustics</a>
<a href="#">Raymond Grizzle</a>	yes	<a href="#">Intensive Study of Western Gulf of Maine Closure Area</a>
<a href="#">Pingguo He</a>	no	<a href="#">Reducing Seabed Contact of Trawling: Semi-Pelagic Trawl for Gulf of Maine Shrimp Fishery</a>
<a href="#">Pingguo He</a>	no	<a href="#">Reducing Cod Bycatch in Flounder Nets in the Gulf of Maine by Using Shallower Gillnets</a>
<a href="#">Hunt Howell</a>	yes	<a href="#">Determining Groundfish Movement Patterns In and Around Western Gulf of Maine Area Closure</a>
<a href="#">Theodore Ligenza</a>	yes	<a href="#">Continuation Trophic Ecology of Atlantic Cod: Insights from Tri-Monthly Localized Scales of Sampling Year</a>
<a href="#">M Cameron McLellan</a>	no	<a href="#">Assessment of Bottom Habitat Community Recovery in Western Gulf of Maine Closed Area</a>
<a href="#">Don Perkins</a>	yes	<a href="#">Continuation Fishing Vessel Survey and Migration Study of Coastal Herring Spawning Aggregations in Gulf o</a>
<a href="#">Jeffrey Runge</a>	no	<a href="#">PULSE: Cooperative Partnership for Pelagic Ocean Ecosystem Monitoring in Gulf of Maine</a>
<a href="#">Dan Schick</a>	no	<a href="#">Abund Migration and Recruitment of Northern Shrimp in Gulf of Maine: Industry-Initiated Verification Surv</a>
<a href="#">Dan Schick</a>	no	<a href="#">Improving the Size Selectivity for Northern Shrimp Through Use of Modified Nordmore Grate</a>
<a href="#">John Sowles</a>	yes	<a href="#">Continuation Maine-NH Inshore Trawl Survey</a>
<a href="#">Win Watson</a>	yes	<a href="#">Continuation Implementation of a Monitoring Program for the Atlantic Offshore Lobster Fishery</a>
<a href="#">Carl Wilson</a>	no	<a href="#">Distribution and Abundance of Jonah Crabs Cancer borealis in Near-Shore Gulf of Maine</a>

Pick one



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## The Northeast Consortium has established submission of data as a condition of the grant.

- Scientists, fishermen, educators and fisheries managers can evaluate and consider data for use in fisheries and ocean science and management.
- Data can be compared, integrated, and synthesized from many different projects.
- Cooperative research participants can learn about the results of projects and avoid repeating experiments or observations that have already been made.
- Cooperative research data are archived.
- Federal guidelines are met for public access to data resulting from federally funded programs and activities.

# In what formats can the data be submitted to the database?†

†The reality is we have to accept almost any format, but don't tell anyone.

# Data formats

- Spreadsheet format

	A	B	C	D	E	F	G	H	I	J	K
1	Stomach ID	Collect Date	Drift	Cod Length (cm)	Sex	Maturity	Prey name	Prey Weight (g)	Prey #	Digestion	Location
2	3	10/09/01	2	54	M	I	Fish	0.04		W	Lemons
3	3	10/09/01	2	54	M	I	Cancer borealis	7.12	1	P	Lemons
4	3	10/09/01	2	54	M	I	Cancer irroratus	1.33	2	P	Lemons
5	3	10/09/01	2	54	M	I	Ophiopholis aculeata	6.37		P	Lemons
6	4	10/09/01	2	54	M	I	Ophiuroidea	0.03	1	P	Lemons
7	4	10/09/01	2	54	M	I	Cancer sp	0.41	1	P	Lemons
8	4	10/09/01	2	54	M	I	Holothuroidea	2.42	1	P	Lemons
9	5	10/09/01	3	65	F	X	Cancer borealis	6.39		P	Lemons
10	5	10/09/01	3	65	F	X	Anonyx sarsi	0.18		P	Lemons
11	5	10/09/01	3	65	F	X	Bryozoa	0.15		P	Lemons
12	5	10/09/01	3	65	F	X	Ophiopholis aculeata	7.24		P	Lemons
13	6	10/09/01	3	47	F	I	Eualus pusiolus	0.03	1	P	Lemons
14	6	10/09/01	3	47	F	I	Eualus fabricii	0.59	3	P	Lemons
15	6	10/09/01	3	47	F	I	Cancer irroratus	1.69	1	P	Lemons
16	6	10/09/01	3	47	F	I	Cancer borealis	7.73	2	P	Lemons
17	6	10/09/01	3	47	F	I	Decapoda shrimp	0.64	2	P	Lemons
18	7	10/09/01	4	52	M	D	Decapoda shrimp	0.01		P	Crab Ledge
19	7	10/09/01	4	52	M	D	Bryozoa	0.06		P	Crab Ledge
20	7	10/09/01	4	52	M	D	Nereidae	0.98		P	Crab Ledge
21	7	10/09/01	4	52	M	D	Ophiuroidea	0.85		P	Crab Ledge
22	7	10/09/01	4	52	M	D	Mollusca shell	0.44		P	Crab Ledge
23	7	10/09/01	4	52	M	D	Caprellidae	0.01		P	Crab Ledge
24	7	10/09/01	4	52	M	D	Cancer irroratus	0.72	2	P	Crab Ledge
25	7	10/09/01	4	52	M	D	Cancer borealis	0.13		P	Crab Ledge



- Word processing tabular format
- Images (GIF, TIFF, JPEG and PNG)



*(Photo by Bill Lee)*



*(Movie by Kelo Pinkham)*

- Movies (AVI, MPG, MOV)
- Any computer readable file (except PDF) in ASCII or binary format

- Data can be served directly from other database systems including Oracle and other systems that support Internet access.
- The Fisheries and Ocean Data Management system uses the U.S. Joint Global Ocean Flux Study/U.S. GLOBal ocean ECosystem dynamics (JGOFS/GLOBEC) software to serve data. This software is publicly available via ftp.  
([ftp://globec.whoi.edu/pub/software/JGOFS\\_GLOBEC/](ftp://globec.whoi.edu/pub/software/JGOFS_GLOBEC/))

# The data belong to the contributors.

- Data are the intellectual property of the collecting investigators.
- The time and effort committed to the collection of a data set entitles the investigator team to the benefits of it.
- Publication of results derived directly from the data is the privilege and responsibility of the investigators who collected the data.
- The Data Management Office can remove from the display any sensitive fields.

# What if I want to publish the data first?

- The Northeast Consortium Data Management Office respects the desires of researchers who would like to publish data prior to making the data publicly available.
- Researchers are strongly encouraged to submit all data as soon as possible after the completion of their project.
- The Data Management Office will work with researchers on a case-by-case basis to allow a grace period for publication purposes.
- The Data Management Office, in consultation with data librarians, will also work with researchers to assist in contract negotiations with journal publishers.

The federal government mandates public access to data resulting from federally funded programs.



# What if someone else wants to use your data?

- The data are intended for scholarly use by the industry, management, and academic and scientific communities, with the express understanding that any such use will properly **acknowledge** the originating investigator, the Northeast Consortium, and NOAA Fisheries.
- Use or reproduction of any data or images for any commercial purpose is **prohibited** without prior written permission from the Northeast Consortium Data Management Office.

# What if someone else wants to use your data (continued)?

- Any person making substantial use of a data set **must communicate with the investigators** who acquired the data prior to publication and anticipate that the data collectors may expect to be co-authors of the published results. This extends to model results and to data organized for retrospective studies.

# Notes

- Not all data are able to be mapped. Latitude and longitude are needed. Relative position or the geographic area specification won't do it.
- Large data sets take long to load; this is the down side of “data driven” and “on the fly plotting.”
- “i” means information; on-line metadata (human readable) are available now but eventually machine readable metadata will be accessible.
- Rubber banding an area doesn't yet provide downloadable access to all the data in the area but does enable one to separate closely spaced stations to single out individual sites.
- The pan feature works like Google Earth

# Interoperability Features

- Open Geospatial Consortium standards are followed
- Web Mapping Service (WMS) is supported
- Web Feature Service (WFS) is supported
- OBIS/DiGIR interface will be available by implementing and supporting basic SQL commands within the JGOFS/GLOBEC data management software



THE  
END

from the map...

# The INFORMATION about the DATA.

# The DATA!

Directory... Documentation Plotting and Other Operations...

Level 0 Next level Flat listing

```
# Inshore Trawl Catch data
# P.I. John Sowles
=====
year
-----
2003
=====
season
-----
Fall
=====
region
-----
4
=====
towid  lat      lon      grid  depth_strata
-----
FLO3_53  44.21350  -68.06767  165  3
=====
fishid  taxa      num_caught  common_name  depth_fm  weight_kg_total
-----
073    Gadus_morhua  7           Atlantic_Cod  41.5     0.27
```

(Only those data that contain latitudes and longitudes are available via the MapServer.)

Directory... Data display...

### inshore\_catch

Maine New Hampshire Inshore Trawl Survey  
Trawl Catch Data

**Project Leader:** John Sowles, Maine Department of Marine Resources  
**Additional Participants:**  
Julie Sherman, Maine Department of Marine Resources  
Yang Chen, University of Maine  
Jeff Flagg, Portland Transfer Supply  
Sam Gull, FV Tara Lynn  
Doug Oros, New Hampshire Fish and Game  
Harold Smith, Maine Department of Marine Resources  
Florent Mayfield, Maine Department of Marine Resources  
Keri Szepanek, Maine Department of Marine Resources  
Robert Tetsuhl, FV Tara Lynn  
Curt Rice, FV Robert Michael

This project is a fishery independent multi-species stock assessment along the Maine and New Hampshire inshore waters. The overall goal of the project is to establish a solid foundation for long-term fishery-independent monitoring of the Gulf of Maine inshore waters, filling an information gap on the status and trends of groundfish and other species in this area for which assessment data would otherwise be absent. Funded in part by the Northeast Consortium and in part by the NOAA Fisheries Cooperative Research Partners Program, the survey began in the fall of 2000 and consists of annual, spring and fall stratified random surveys, each covering approximately 115 stations from New Hampshire to Canada. The project is a close partnership with commercial fishermen and the two state agencies charged with managing the inshore state waters. Data is being provided for the management of a number of species including lobster, shrimp, crab, scallop, chick, herring, and groundfish. The project is contributing to stock abundance, structure, and recruitment indices for the area and complements data from the NOAA Fisheries bottom trawl survey in the Gulf of Maine and the Massachusetts Department of Marine Fisheries inshore trawl survey.

In August 2005, an independent peer review of the project was facilitated by the Northeast Consortium. It was conducted to determine the validity of using the data in regional stock assessments and to improve the project for the future. The project received funding again in 2005 from the Northeast Consortium and the participants are incorporating many of the panel's recommendations in current and future surveys. *extracted from Summary of Completed Cooperative Research Projects Funded by the Northeast Consortium, January 2006*

**Companion support files:**  
[Survey List](#)  
[Station Meta Data](#)  
[Length Frequency Data](#)  
[Lobster Catch Data](#)  
[Bycatch Data](#)

For a detailed description of the sampling scheme see [Final Report](#) starting on page 3.

#### Data Elements Parameter Names and Descriptions Trawl Catch Data

Parameter	Description
year	year, 4 digit year
season	season of year, i.e. spring, fall
region	One of five geographic regions. For more detail see <a href="#">Final Report</a> starting on page 4 1 = NH-Southern ME 2 = Casco Bay - Midcoast 3 = Penobscot Bay 4 = Penobscot-Frenchmans Bay 5 = Downeast ME
towid	Unique identifier for each tow. FL indicates Fall, SP indicates Spring, followed by a two digit year designation and a consecutive tow number
depth_fm	water depth at start or end of tow in fathoms
grid	grid number. A one square nautical mile grid system was placed over the survey area. For more detail see <a href="#">Final Report</a> page 5
depth_strata	depth strata code (years 2000-2002) where: 1 = 5-20 fathoms, 2 = 21-35 fathoms, 3 = 36-50+ fathoms depth strata code (years 2003-2004) where: 1 = 5-20 fathoms, 2 = 21-35 fathoms, 3 = 36-55 fathoms, 4 = 55-85+ fathoms
fishid	Numeric code for species "id_codes" (from inshore_Anhlat object) is incorporated into "fishid" after 2004
taxa	Scientific name of animal
weight_kg_total	Total weight of specified species (per fishid), in kilograms
num_caught	Number of specified species (per fishid) caught
common_name	Common name of animal

**nk:** All catch data have been adjusted to a standard tow of 20 minutes duration.

Project website: <http://www.state.me.us/inshoreandward/>

Questions regarding the data should be directed to:  
John Sowles  
Maine Department of Marine Resources  
P.O. Box 8  
West Boothbay Harbor, ME  
04575-0008

Phone: 207 633 9510  
E-mail: [john.sowles@maine.gov](mailto:john.sowles@maine.gov)

Last modified: 10/26/05: gjh



# The Inventory shows the data status of the project chosen.

```
/nec/inventory_rs2 --year_start eq 2002,project_type eq  
Coop_Res,principal_investigator eq Hunt_Howell-- Level 3
```

Directory... Documentation Plotting and Other Operations...

Level 0 Next level Flat listing

```
# Northeast Consortium Project Data Inventory  
=====
```

year_start
2002

```
=====
```

project_type
Coop_Res

```
=====
```

principal_investigator	completed	project_title
Hunt_Howell	yes	Determining_Groundfish_Movement_Patterns_In_and_Around_Western_Gulf_of_Maine_Area_Closure

```
=====
```

data_type	month	year	siname	description
Final_Report	July	2005	Hunt_Howell	<a href="#">pdf</a>
data	May	2004	Hunt_Howell	<a href="#">cod and haddock tagging data</a>

Click here to see the data.



# Cod Tagging Data

**/nec/HabitEco/codhad\_tag ---- Level 0**

Directory...

Documentation

Plotting and Other Operations...

Level 0

Next level

Flat listing

```
# Hunt Howell's Cod Tagging Data
# All tagids start with 'A' and are 5 digit numbers.
# **These data do not include any recapture data.**
# See documentation for explanations of variables, including units.
```

```
=====
date_local
```

```
-----
07/08/02
07/11/02
07/12/02
07/13/02
07/14/02
07/17/02
07/19/02
07/22/02
07/25/02
07/28/02
08/01/02
07/28/02
08/01/02
08/02/02
08/09/02
08/12/02
08/13/02
```

Click here



# The Data!

```
/nec/HabitEco/codhad_tag --date_local eq  
07/22/02,tow eq 1-- Level 3
```

Directory... Documentation Plotting and Other Operations...

Level 0 Next level Flat listing

```
# Hunt Howell's Cod Tagging Data  
# All tagids start with 'A' and are 5 digit numbers.  
# **These data do not include any recapture data.**  
# See documentation for explanations of variables, including units.  
=====
```

date_local			
-----			
07/22/02			
=====			
tow area			
-----			
1	124		
=====			
species			
-----			
cod			
=====			
tagid	length	repro_status	depth_w
-----			
950	76	nd	50
951	92	nd	50
952	68	nd	50
=====			
species			
-----			
dab			
=====			
tagid	length	repro_status	depth_w
-----			
953	37	nd	50
954	35	nd	50
955	33	nd	50
956	30	nd	50
957	36	nd	50
958	35	nd	50
960	35	nd	50
961	31	nd	50
962	37	nd	50
964	36	nd	50
=====			
species			
-----			
yellowtail			
=====			
tagid	length	repro_status	depth_w
-----			
959	41	nd	50

# This is the entrance to the data via the general topic area.

Click here

**Northeast Consortium**  
University of New Hampshire · Woods Hole Oceanographic Institution · University of Maine · Massachusetts Institute of Technology

HOME ABOUT US FUNDING FOR PARTICIPANTS PROJECTS DATA RESOURCES

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SUBMIT DATA  
ABOUT THE DATABASE

### Fisheries and Ocean Data Management System

**NEW! Data Mapping Utility!**

Use this map-based interface to view data! This system is still in development so please provide feedback to [Dicky Allison](#).

**View the Database Inventory:**

[Inventory](#)

**Or browse by topic area:**

 <a href="#">Fish Biology</a>	 <a href="#">Gear Technology</a>
 <a href="#">Habitat/Ecosystem/ Monitoring</a>	 <a href="#">Socioeconomic/ Education/Outreach</a>
 <a href="#">Stock Assessment/ Enhancement</a>	 <a href="#">Right Whale Research</a>

Welcome to the Fisheries and Ocean Data Management System. The purpose of this database is to provide online access to data generated by projects funded by the Northeast Consortium.

To view data, click on one of the links on the left. You may look for a specific project in the Database Inventory, or browse by general topic areas.

If you are looking for data from a specific project and it is not yet in the database, please contact the Project Leader (contact information can be found in the [Project Information Database](#)), or contact [Chris Manning](#) at the Northeast Consortium (603-862-4034).

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# Entrance from a Specific Topic area

## Northeast Consortium Data System



### Fisheries and Ocean Data Management System

#### Data Acknowledgment Policy

The data available here are intended for scholarly use by the academic, management, industry and scientific community, with the express understanding that any such use will properly acknowledge the originating investigator. Use or reproduction of any material herein for any commercial purpose is prohibited without prior written permission from the [Northeast Consortium Data Management Office](#). Please read the complete [data acknowledgment policy](#).

[NEC data HOME](#) →

#### Directory of Data in /nec/HabitEco/

<i>Data</i>	<i>Investigator</i>	<i>Description and Documentation</i>
<a href="#">chl a JR</a>	Runge, Jeff	<a href="#">Chlorophyll data - Coop.Long-term Ecosystem Monitoring Proj.</a>
<a href="#">codhad tag</a>	Howell, Hunt	<a href="#">groundfish tag data from WGMAC and surrounding areas</a>
<a href="#">comm recovery</a>	McLellan, Cameron	<a href="#">Assessment of bottom habitat community recovery in W. GoM Closure Area</a>
<a href="#">contaminants M</a>	Monosson, Emily	<a href="#">Environ. Contaminants on Georges and Stellwagon Banks - Metals</a>
<a href="#">contaminants PP</a>	Monosson, Emily	<a href="#">Environ. Contaminants on Georges and Stellwagon Banks - PCBs + Pesticides</a>
<a href="#">ctd LI</a>	Inceze, Lew	<a href="#">CTD data from F/V Tenacious</a>
<a href="#">ctd JR</a>	Runge, Jeff	<a href="#">CTD data - Coop.Long-term Ecosystem Monitoring Proj.</a>
<a href="#">drywt JR</a>	Runge, Jeff	<a href="#">Zooplankton dry weights - Coop.LT Eco.Mon.Proj</a>
<a href="#">emolt</a>	Manning, Jim	<a href="#">Temperature (and Salinity) from Lobster Traps</a>
<a href="#">gillnet survey</a>	Kelly, Kevin	<a href="#">Pilot gillnet survey of Cashes Ledge Closed Area</a>
<a href="#">inverts MD</a>	Dionne, Michelle	<a href="#">Benthic habitat correlates of Juvenile fish - Invertebrates</a>

Click here →



Research Steering Committee  
Meeting - May 30, 2007



# Cod Tagging Data, again.

**/nec/HabitEco/codhad\_tag ---- Level 0**

Directory...

Documentation

Plotting and Other Operations...

Level 0

Next level

Flat listing

```
# Hunt Howell's Cod Tagging Data
# All tagids start with 'A' and are 5 digit numbers.
# **These data do not include any recapture data.**
# See documentation for explanations of variables, including units.
```

```
=====
date_local
-----
```

```
07/08/02
07/11/02
07/12/02
07/13/02
07/14/02
07/17/02
07/19/02
07/22/02
07/25/02
07/28/02
08/01/02
07/28/02
08/01/02
08/02/02
08/09/02
08/12/02
08/13/02
```

Click here





# The Data, again!

```
/nec/HabitEco/codhad_tag --date_local eq  
07/22/02,tow eq 1-- Level 3
```

Directory... Documentation Plotting and Other Operations...

Level 0 Next level Flat listing

```
# Hunt Howell's Cod Tagging Data  
# All tagids start with 'A' and are 5 digit numbers.  
# **These data do not include any recapture data.**  
# See documentation for explanations of variables, including units.  
=====
```

date_local			
-----			
07/22/02			
=====			
tow area			
-----			
1	124		
=====			
species			
-----			
cod			
=====			
tagid	length	repro_status	depth_w
-----			
950	76	nd	50
951	92	nd	50
952	68	nd	50
=====			
species			
-----			
dab			
=====			
tagid	length	repro_status	depth_w
-----			
953	37	nd	50
954	35	nd	50
955	33	nd	50
956	30	nd	50
957	36	nd	50
958	35	nd	50
960	35	nd	50
961	31	nd	50
962	37	nd	50
964	36	nd	50
=====			
species			
-----			
yellowtail			
=====			
tagid	length	repro_status	depth_w
-----			
959	41	nd	50

# Send data

- Email
- Floppy Disk
- CD-ROM
- DVD
- FTP