Northeast Consortium

University of New Hampshire

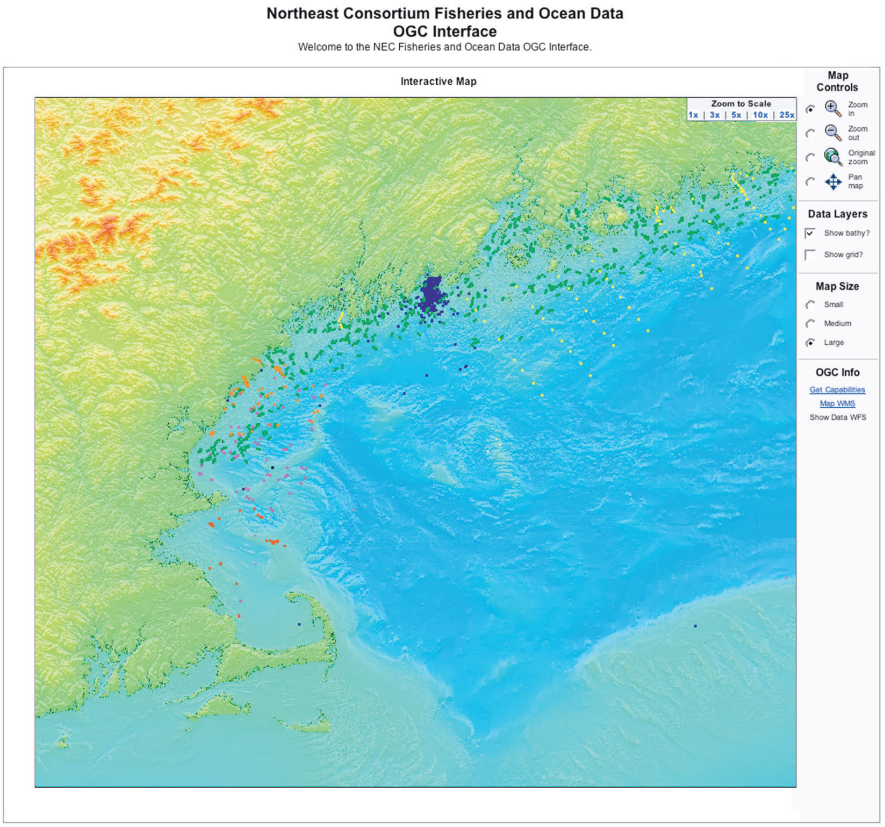
University of Maine

Massachusetts Institute of Technology

Woods Hole Oceanographic Institution

Guidance Document

Fisheries & Ocean Data Management System



http://www.northeastconsortium.org/data.shtml

September 2007

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For more information regarding Northeast Consortium projects and participants, visit the Project Information Database at www.northeastconsortium.org/projects.shtml

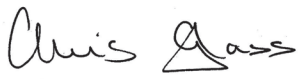
Dear Colleague:

A central goal of the Northeast Consortium is that the data from funded cooperative research be fully accessible to the public. To that end, the Northeast Consortium Fisheries and Ocean Data Management System was created and is maintained and served by the Woods Hole Oceanographic Institution under the supervision of its Northeast Consortium Representative, Dr. Peter Wiebe.

This publication provides general information about the database for the public and should be used by cooperative research project participants as a reference guide to formatting and submitting data.

We encourage timely submission of project data and hope that this document will support our collective effort to utilize cooperative research information in the Northeast region.

Sincerely,



Dr. Chris Glass
Director and UNH Representative

Accessibility of Project Data

The Northeast Consortium requires that all data resulting from funded cooperative research projects be made publicly available to ensure that:

- scientists, fishermen, 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;
- researchers can learn about the results of projects and avoid repeating experiments or observations that have already been made;
- cooperative research data is archived; and
- federal guidelines are met regarding public accessibility to data resulting from federally funded programs and activities.

The Data Management System

The Fisheries and Oceans Data Management System uses the JGOFS/GLOBEC (U.S. Joint Global Ocean Flux Study/GLOBal Ocean ECosystem dynamics) data management software to serve data. The software is designed so the public can look at, manipulate, and retrieve data and is compatible with any computer that has a standard web browser, such as Internet Explorer, Netscape, Firefox, etc.

Data can be added to the system in a variety of forms including tables, spreadsheets, and Matlab files. Data can also be served directly from other data management systems, such as Oracle, and other systems that support Internet access and the SQL interface. Images and movies can also be served, subject to file size/resolution constraints.

The data system displays the data on the web page in a number of ways; typically data are organized hierarchically and actual data values are displayed. In addition, data can be graphed in an X-Y plot format or downloaded in several formats including ASCII tables, and Matlab, zip, and tar files.

Data Ownership

Data are the intellectual property of the collecting investigator(s). The intellectual investment and time committed to the collection of a data set entitles the investigator to the fundamental benefits of the data set. Publication of descriptive or interpretive results derived immediately and directly from the data is the privilege and responsibility of the investigators who collect the data. We respect 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. We will work with researchers on a case-by-case basis to allow a grace period, typically three years from the date of data collection, for publication purposes. Data will be appended to the database, but will not be accessible to third parties until the grace period has expired.

Use of the Data

The data are intended for scholarly use by the industry, management, 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. 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 published results. This extends to model results and to data organized for retrospective studies.

How to Submit Data

Data from completed projects should be submitted to the Northeast Consortium Fisheries and Oceans Data Management System. The submission of data is a simple process; however, investigators are encouraged to contact the Northeast Consortium Data Management Office prior to submission. The data may be in a spreadsheet or in a word processing tabular format. Any computer readable file (except PDF format), in either ASCII or binary format, is acceptable as long as supporting documentation about the file contents is provided. Images may be in several formats, including GIF, TIFF, JPEG, and PNG. The Data Management Office will accept data via e-mail, floppy disk, CD-ROM, DVD, and FTP file transfers.

All data should be accompanied by an explanatory file (see Appendix A) that will be posted in the "Description and Documentation" section of the data system. Note that all project final reports submitted to the Northeast Consortium are accessible via the Data Management System. The explanatory notes should contain all the information necessary to make the dataset understandable. Interpretive information should be contained within the final report.

Data Formats

Data that are ready to serve will be served more quickly than data that require extensive reformatting by the Data Management Office. While each data set is unique, the guidelines below will help in submitting data, but please contact the Northeast Consortium with specific questions. Example dataset formats are given in Appendices B and C.

- Data fields should not be color coded.
- Blank data fields should be identified as either containing no data ('nd') or a zero where zero is a real observed value. Do not use '999's to mean "no data." All cells should contain observed values or "nd." Do not leave blanks in the cells below an entry if it means that the same entry is repeated.
- Relevant dates, vessel names, identification notations, etc. should be repeated in columns, not rows.
- Comments within a data sheet should appear only once and be limited to one column, not several times in several different columns.
- Please try to avoid the characters ' ( ) ‘ ’ ? ° and & in your data. The web interprets these characters very specifically.
- Species should be named in a consistent manner.

Proprietary Information

Cooperative research participants may consider certain information to be proprietary, such as the precise location where fish are caught, especially if the research was conducted using a Day-at-Sea. It is possible to hide certain data fields, and the Northeast Consortium will work with researchers, at their request, on a case-by-case basis.

Web-based Project Data Sets

Researchers may post data to their own website, that is, a website not hosted by the Northeast Consortium. However, the data must also be posted to the Fisheries and Oceans Data Management System.

Contact Information

For all matters relating to data submission and accessibility, please contact Dicky Allison at the Northeast Consortium Data Management Office.

Dicky Allison, Database Manager
Northeast Consortium Data Management Office
Swift House, MS #38
Woods Hole Oceanographic Institution
Woods Hole, MA 02543
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For questions relating to the scientific or technical aspects of cooperative research projects, please contact Rachel Gallant or Chris Manning or at the Northeast Consortium.

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APPENDIX A
Description and Documentation of Data

Along with the data, a one-page description of the data must be submitted including the following information:

Project Title:

Year(s) Funded: (Note if the research was a project development award.)

Principal Investigator(s): (List name, institution and/or F/V name.)

Other Key Participant(s): (List name, institution and/or F/V name.)

Project Abstract/Summary: (500 word max.)

Data Submitted: (List variables and brief descriptions of each variable.)

Other Explanatory Notes: (e.g. data acquisition and processing methodologies.)

APPENDIX B
Examples of data formats easily servable on the Fisheries and Oceans Data Management System.

Example 1

This data is from a cod gut content analysis study. Note that data is listed in columns and each data field is filled in, including "nd" for where there is no data available. Latitude and longitude data allows the dataset to be served on the map interface.

Date	Latitude	Longitude	Stomach ID	Cod Length (cm)	Prey ID	Prey Weight (g)	Digestion
09/20/04	42.4326	-69.2010	4	54	Bryozoa	0.15	W
09/20/04	42.4326	-69.2010	4	54	Nereidae	0.98	P
09/20/04	42.4326	-69.2010	5	47	Eualus	0.59	P
09/20/04	42.4326	-69.2010	5	47	Plants	nd	P
09/21/04	42.4345	-69.1933	6	68	Bryozoa	2.56	W
09/21/04	42.4345	-69.1933	6	68	Eualus	0.05	W
09/21/04	42.4345	-69.1933	6	68	Cancer sp	8.56	P
09/21/04	42.4345	-69.1933	6	68	nd	2.47	P
09/21/04	42.4345	-69.1933	7	40	Plants	0.14	W

Example 2

This data is from a flounder gillnet selectivity study. Note that, for confidentiality purposes, the investigators chose to designate a ship identification number rather than the vessel name. Net configuration "A" is the control net. This dataset could also include parameters such as numbers and lengths caught of individual species.

Trip ID	Ship ID	Latitude	Longitude	Net Config.	Haul	Set Date	Set Time	Haul Date	Haul Time	Flounder (g)	Bycatch (g)
GN002	D2	42.1318	-70.5807	A	1	12/05/2001	1158	12/06/01	0923	60.3	48.9
GN002	D2	42.1318	-70.5807	B	4	12/05/2001	1302	12/06/01	1250	25.6	90.4
GN002	D2	42.1318	-70.5807	C	2	12/05/2001	1218	12/06/01	1024	70.8	18.4
GN002	D2	42.1318	-70.5807	D	3	12/05/2001	1233	12/06/01	1208	65.1	10.2

Example 3

This data is from a shrimp survey, where shrimp were caught at sea, then measured in the lab. The temperature recorder was not working during the sampling, thus the "nd" designation.

Date	Sta.	Transect	Start Lat.	Start Lon.	End Lat.	End Lon.	Surface Temp (°C)	Length (mm)	Weight (kg)
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	55	0.00106
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	64	0.00145
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	64	0.00138
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	79	0.00181
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	56	0.0008
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	66	0.00128
7/21/03	W	2	43 23.397	70 24.164	43 13.141	43 13.126	nd	56	0.00067

APPENDIX C
Examples of data formats NOT easily servable on the Fisheries and Oceans Data Management System.

Example 1

This data is from a scallop dredge selectivity study. Note that the date is missing the day and that there are no units given for the data. It is unknown whether blank cells mean a measurement of "0" or if data was not collected. All data cells should be filled in. Each individual caught should be listed on its own row, with its respective data (species, length, etc.) listed in columns. Since scant location information is given, this data would not be servable on the map interface as is.

Date	11/2005				
Location	Inshore C				
Vessel	Sunshine				
Drag	Chain sweep				
Scallop SH	Total Scallop Volume	Lobster Number	Lobster Volume	Urchin Number	Urchin Volume
114	0.55	2			
103					
106					
110					
119					
120					

Example 2

This data is from a codend selectivity study. Again, all data cells should be filled in. Since no location information is given, this data would not be servable on the map interface as is.

Species:	DAB					
Total Wt.	102					
CONTROL TOWS				EXPERIMENTAL TOWS		
Size (cm)	1	2	3	1	2	3
24						
25						
26		2				
27		1	1	2		
28	2	2	1	1		3
29	2		2	2	1	1
30	1	3	7	3	3	4
31	2	2	8	6	1	2
32	5	8	7	5	2	3
33	3	3	14	9	3	5
34						
Total	15	21	40	28	10	18

NOTE: Investigators should consult with the Data Management Office prior to commencing with data collection to ensure that the data will be recorded in a servable format.

Northeast Consortium

The Northeast Consortium

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Northeast Consortium website:
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Projecct Information Database:
www.northeastconsortium.org/ projects.shtml

Fisheries and Oceans Data Management System:
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