

## Abstract

The Northeast Consortium was created in 1999 to encourage and fund effective, equal partnerships among commercial fishermen, scientists, and other stakeholders to engage in cooperative research and monitoring projects in the Gulf of Maine and Georges Bank. The Northeast Consortium administers funds from the National Oceanic and Atmospheric Administration for cooperative research on a broad range of topics including gear selectivity, fish biology, stock assessments, Oceanography/ecosystems monitoring, and socioeconomic/outreach studies. Funds are distributed through an annual open competition, which is announced via a Request for Proposals (RFP). All projects must involve a partnership between commercial fishermen and scientists.

A key aspect of the Northeast Consortium approach to data management is the sharing of all data collected by the many funded projects and their commercial fishermen and scientist participants via a web-based data and information distribution system (<http://www.northeastconsortium.org/data.shtml>). This sharing fosters the cooperative research approach, strengthens existing partnerships, and leads to higher data quality, which is essential if the data are to be effectively used in resource assessment and management. In addition, more and better kinds of analyses are possible when related data sets can be considered and analyzed together.

To accomplish the data sharing and outreach activities, the Northeast Consortium uses the JGOFS/GLOBEC data management system<sup>[1,2]</sup> developed to handle multi-disciplinary data sets in a unique way. The software is open source and is available to everyone. Data can be viewed via any standard browser, such as Internet Explorer, Mozilla, Safari, and Netscape and includes such features as data downloads, basic X-Y data plotting, data selection (e.g., show all the data where the water depth is less than 150 meters), and data projection (e.g., only show the latitude, longitude, depth, and sea surface temperature values.) Data contributors are encouraged to serve their data from their own computers (with software that enables them to become an integral part of the distributed data management system) so that the most up-to-date version is always available. If the data contributor is not able to do this, the data are served by the Northeast Consortium's data server located at Woods Hole Oceanographic Institution.



List oriented, text-based interface

## Plotting and Other Operations Menu

Current object is: /globec.whoi.edu/globec/dir/almtrack

- Listing and downloading data
  - List at this level
  - Other data links/commands
  - Make the format of all data at this level and further in
  - Download table
- Manipulating data
  - Math operations for calculating values from existing parameters
  - Data subsets having at least 1 parameter in common
- Plotting data
  - Simple XY plot
  - Mapview of data locations (JGOFS software)
  - Subsetting data

## Simple XY Plot

Current object is: /nec.whoi.edu/NEC/Stock\_Assessment/inshore\_catch

Select this link, if the form looks incomplete

Select an X variable (lat)

Select a reverse or log X axis (none)

Select a Y variable (weight\_kg\_total)

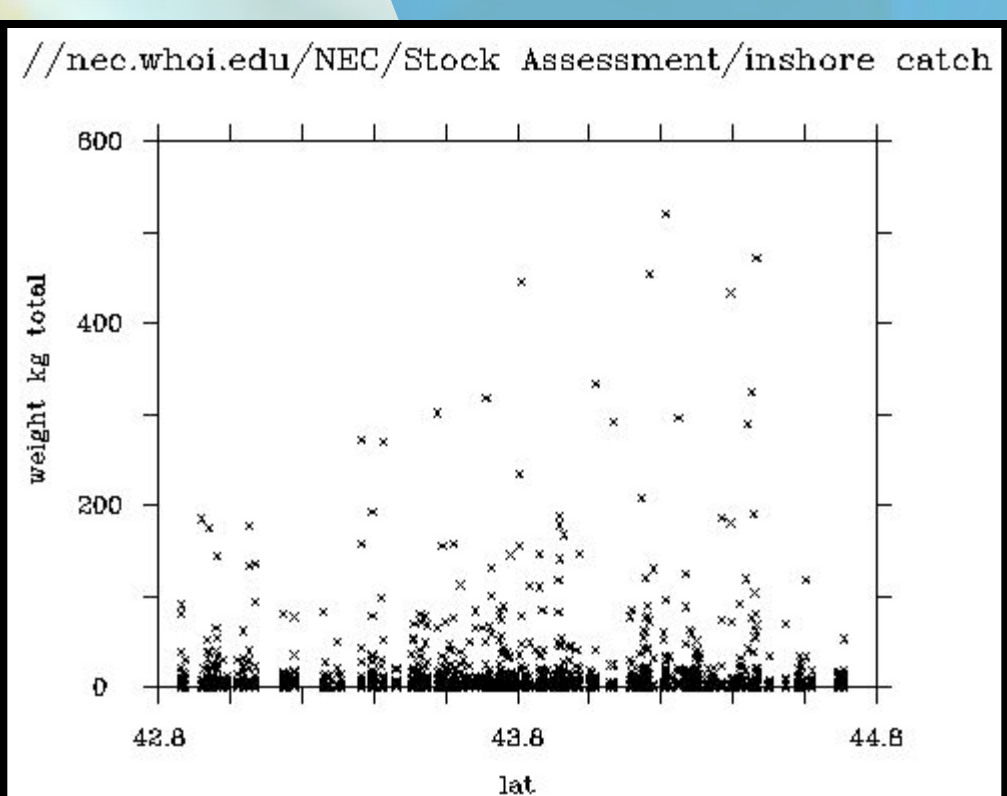
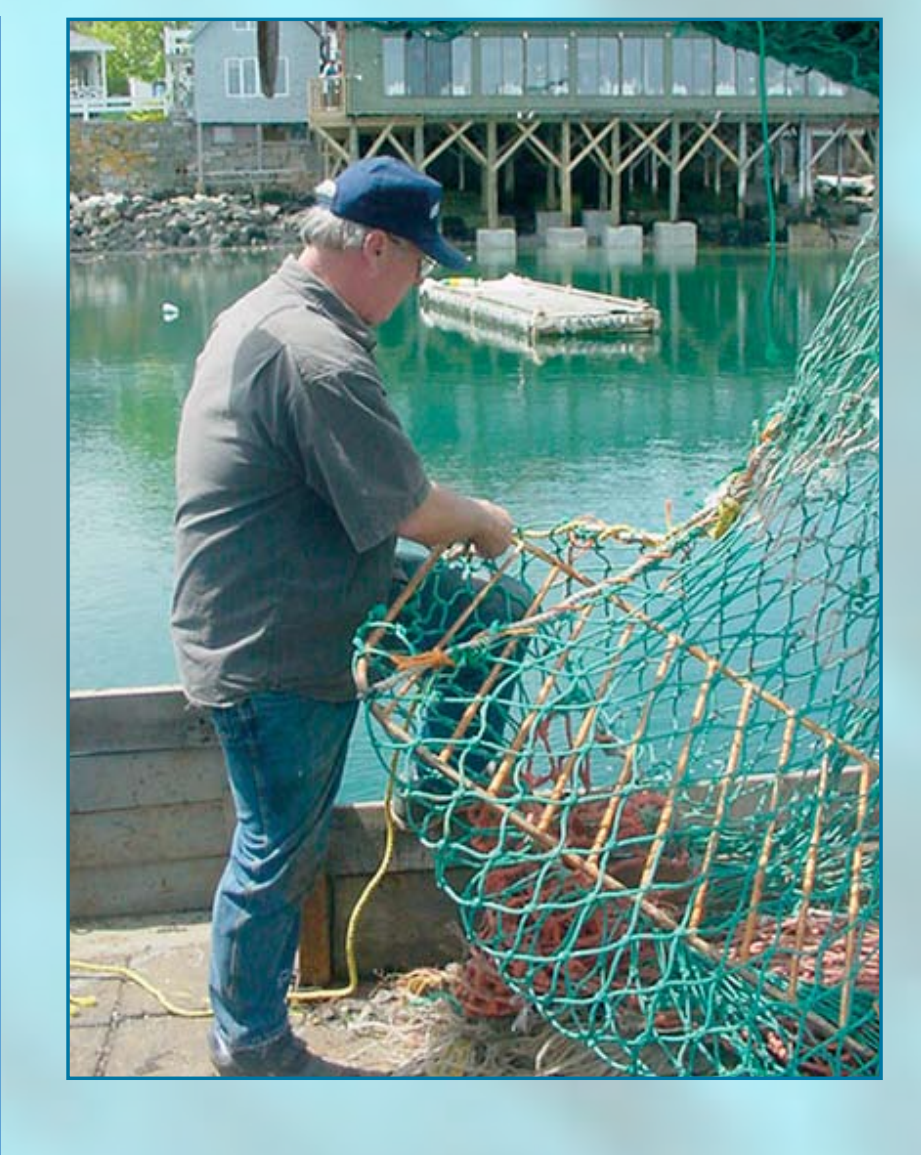
Select a reverse or log Y axis (none)

Select a symbol for plotting the values (x)

Make the Plot if the selected options are satisfactory.

## /NEC/Stock Assessment/inshore\_catch --year eq 2004,season eq Spring,region eq 5,towid eq SP04\_98-- Level 4

level	name	depth_m	weight_kg_total
0002	Alion, Janine	76.00	2.45
0003	Alion, Janine	39.00	0.48
0004	Alion, Janine	5.00	0.42
0005	Alion, Janine	18.00	0.45
0006	Alion, Janine	11.00	0.41
0007	Alion, Janine	15.00	0.42
0008	Alion, Janine	7.00	0.44
0009	Alion, Janine	1.00	0.43
0010	Alion, Janine	1.00	0.04
0011	Alion, Janine	1.00	0.00
0012	Alion, Janine	1.00	0.00
0013	Alion, Janine	1.00	0.00
0014	Alion, Janine	1.00	0.00
0015	Alion, Janine	1.00	0.00
0016	Alion, Janine	1.00	0.00
0017	Alion, Janine	1.00	0.00
0018	Alion, Janine	1.00	0.00
0019	Alion, Janine	1.00	0.00
0020	Alion, Janine	1.00	0.00
0021	Alion, Janine	1.00	0.00
0022	Alion, Janine	1.00	0.00
0023	Alion, Janine	1.00	0.00
0024	Alion, Janine	1.00	0.00
0025	Alion, Janine	1.00	0.00
0026	Alion, Janine	1.00	0.00
0027	Alion, Janine	1.00	0.00
0028	Alion, Janine	1.00	0.00
0029	Alion, Janine	1.00	0.00
0030	Alion, Janine	1.00	0.00
0031	Alion, Janine	1.00	0.00
0032	Alion, Janine	1.00	0.00
0033	Alion, Janine	1.00	0.00
0034	Alion, Janine	1.00	0.00
0035	Alion, Janine	1.00	0.00
0036	Alion, Janine	1.00	0.00
0037	Alion, Janine	1.00	0.00
0038	Alion, Janine	1.00	0.00
0039	Alion, Janine	1.00	0.00
0040	Alion, Janine	1.00	0.00
0041	Alion, Janine	1.00	0.00

Preliminary version. Not all projects are currently available via the MapServer.

The JGOFS/GLOBEC system makes these inherently geographically based data accessible via a map-based interface, using MapServer<sup>[3]</sup> software

Map-based interface



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.

The data acknowledgment policy insures that data are used for scholarly purposes by the academic, management, industry, and scientific communities, with the understanding that any such use will properly advise and acknowledge the originating investigators. Use of these data for commercial purposes is prohibited without prior written permission from the Northeast Consortium Data Management Office.

## References and Acknowledgments

1. Flierl, G.R., James K.B. Bishop, David M. Glover, and Satish Paranjpe 2004. JGOFS Data System Overview, <http://globec.whoi.edu/globec-dir/doc/datasys/jgfs.html>
  2. Groman, R.C. and P.H. Wiebe, 1997. Management of Biological, Physical, and Chemical Data Within the U.S. GLOBEC Program, in Proceedings of the International Workshop on Oceanographic Biological and Chemical Data Management, May 20-23, 1996, NOAA Technical Report NESDIS 8, February, 1997.
  3. Lime, S. 2006. MapServer, <http://mapserver.gis.umn.edu/>, University of Minnesota.
  4. OGC, 2006. Welcome to the OGC Website, Open Geospatial Consortium, <http://www.opengis.org/>.
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