CTD data from the PULSE project, 2003-2008, Gulf of Maine from F/V Lady Regena NEC-JR2001-1 in the Gulf of Maine from 2003-2008 (NEC-CoopRes project)

Website: https://www.bco-dmo.org/dataset/2791
Data Type: Cruise Results
Version: 1
Version Date: 2010-10-14

Project
» Northeast Consortium: Cooperative Research (NEC-CoopRes)

Program
» NorthEast Consortium (NEC)

Contributors	Affiliation	Role
Runge, Jeffrey A.	University of New Hampshire (UNH)	Principal Investigator
Jones, Rebecca J.	University of New Hampshire (UNH)	Scientist, Data Manager
Allison, Dicky	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager
Copley, Nancy	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

Abstract
CTD data from the PULSE project, 2003-2008, Gulf of Maine from F/V Lady Regena NEC-JR2001-1 in the Gulf of Maine from 2003-2008 (NEC-CoopRes project)

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Coverage

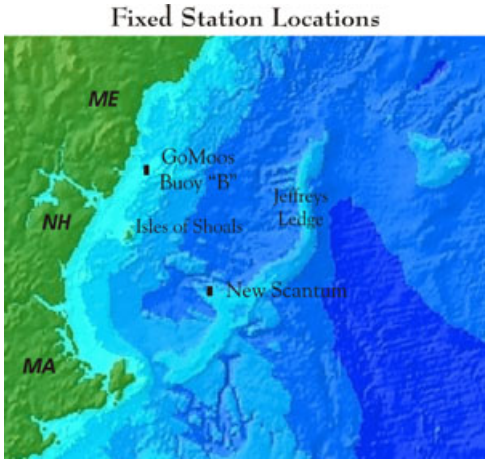
Spatial Extent: **N**:43.1798 **E**:-70.312 **S**:42.4112 **W**:-70.615
Temporal Extent: 2003-01-17 - 2008-12-29

Dataset Description

"Cooperative Long-term Ecosystem Monitoring in the Gulf of Maine"

Project leader: Jeffrey Runge (UNH)
Project assistant: Rebecca Jones (UNH)
Industry participants: Yankee Fisherman's Coop and Portsmouth Fisherman's Coop.
Monitoring Advisory Panel: R.Barnaby (UNH), C.Goudey (MIT Sea Grant), S.Meeker (UNH Sea Grant Extension), L. Mercer (Maine, DNR), D. Mountain (NMFS, Woods Hole), C. Pendleton (NAMA), D. Townsend (UMaine)

The overall goal of this project is the design and development of a cooperative, industry-based contribution to monitoring of the pelagic ecosystem in the Gulf of Maine. The need for long-term biological data collection in the Gulf of Maine becomes critical in light of increasing evidence for change in New England's climate. It becomes increasingly important for the fishing industry as decisions about fishery management shift from a single or multi-species to an ecosystem-based approach. By involving the expertise and resources of the local fishing community, we hope to learn more about the natural and man-made variability of the Gulf of Maine marine ecosystem.



courtesy of USGS

Sampling took place on a weekly schedule with the cooperation of Portsmouth Fishermen's COOP and Seabrook Yankee Fishermen's COOP fishermen. Each week we visited the two stations shown on the above map, GoMOOS Buoy "B" and New Scantum at the southern edge of Jeffreys Ledge.

Updated Sept 05, 2006; gfh;
Updated Oct. 14, 2010, njc

Methods & Sampling

Data collected during time series, 2003-2005: temperature, salinity, chlorophyll a (at 6 depths), nutrients (phosphate, nitrate, ammonium), zooplankton biomass, abundance and composition at each station (total of 93 stations at Buoy "B" and 87 stations at Jeffreys Ledge over 3 years). The "P" stations were all within Ipswich Bay, MA and the "G" stations were out of Gloucester, MA.

Samples taken are a CTD (SeaCat 19 plus) cast for salinity, temperature, density, and fluorescence; 2 vertical ring net tows with a 200 micron mesh for zooplankton and ichthyoplankton assemblages and abundance; and water samples taken from every 10 meter depth from 0-50 meters for nutrient and chlorophyll-a profiling as well as phytoplankton assemblages.

Data Processing Description

Please see the PULSE sampling protocols pdf.

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Data Files

File
ctd_pulse.csv (Comma Separated Values (.csv), 1.99 MB) MD5:f02b16867de04ab64508c534ad79e930 Primary data file for dataset ID 2791

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Related Publications

J. Runge Lab. Laboratory and Field Sampling Protocols, 2010-10-13.
http://nec.whoi.edu/pdf/Pulse_Sampling_Protocols.pdf
Methods

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Related Datasets

IsRelatedTo

Runge, J., Jones, R. (2010) **Chlorophyll data collected in the Gulf of Maine on F/V Lady Regena (NEC-JR2001-1) from 2003-2005 (NEC-CoopRes project).** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2010-10-14 doi:10.1575/1912/bco-dmo.2795.1 [view at BCO-DMO]

Runge, J., Jones, R. (2010) **Nutrients: Cooperative Long-term Ecosystem Monitoring in the Gulf of Maine (PULSE) collected from the F/V Lady Regena NEC-JR2001-1 from the Gulf of Maine (NEC-CoopRes project).** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2010-10-14 doi:10.1575/1912/bco-dmo.2794.1 [view at BCO-DMO]

Runge, J., Jones, R. (2010) **Zooplankton dry weights: Cooperative Long-term Ecological Monitoring Project (PULSE), Gulf of Maine collected from the F/V Lady Regena NEC-JR2001-1 from the Gulf of Maine, 1999-2004 (NEC-CoopRes project).** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2010-10-15 doi:10.1575/1912/bco-dmo.2793.1 [view at BCO-DMO]

Runge, J., Jones, R. (2010) **Zooplankton species abundance: Cooperative Long-Term Ecological Monitoring Project (PULSE), Gulf of Maine from the F/V Lady Regena NEC-JR2001-1 from the Gulf of Maine, 1999-2004 (NEC-CoopRes project).** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2010-10-14 doi:10.1575/1912/bco-dmo.2792.1 [view at BCO-DMO]

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Parameters

Parameter	Description	Units
year	year reported as a four digit number	
station	station number/identification, see chart above: B = GoMoos buoy B location S = New Scantum at the southern edge Jefferys Ledge	
month_local	month of year, local time, reported as a two digit number	
day_local	day of month, local time; reported as a two digit number	
lat	latitude in decimal degrees N	
lon	longitude in decimal degrees, negative = West	
depth	depth of the observation in meters	
fluor	fluorescence in mg/m^3	
temp	temperature in degrees C	
cond	conductivity	
sal	salinity (PSU)	
density	density in kg/m^3	
yrday_local	Julian day of the year. Jan 1 = 001	
date_local	date, local time	

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Instruments

Dataset-specific Instrument Name	CTD profiler
Generic Instrument Name	CTD - profiler
Generic Instrument Description	The Conductivity, Temperature, Depth (CTD) unit is an integrated instrument package designed to measure the conductivity, temperature, and pressure (depth) of the water column. The instrument is lowered via cable through the water column. It permits scientists to observe the physical properties in real-time via a conducting cable, which is typically connected to a CTD to a deck unit and computer on a ship. The CTD is often configured with additional optional sensors including fluorometers, transmissometers and/or radiometers. It is often combined with a Rosette of water sampling bottles (e.g. Niskin, GO-FLO) for collecting discrete water samples during the cast. This term applies to profiling CTDs. For fixed CTDs, see https://www.bco-dmo.org/instrument/869934.

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Deployments

NEC-JR2001-1

Website	https://www.bco-dmo.org/deployment/57764
Platform	F/V Lady Regena
Report	http://northeastconsortium.org/ProjectFileDownload.pm?report_id=544&table=project_report
Start Date	2003-01-17
End Date	2005-11-09
Description	**Methods & Sampling** 1. Interactions with a Steering Committee (the Monitoring Panel) to guide the design, implementation, and analysis of industry participation in a pilot program. 2. Create a process to encourage broad industry participation, and to select fishermen and fishing vessels for participation in the collection of time series samples. 3. Establish a laboratory at the University of New Hampshire for the analysis of oceanographic field samples for ecosystem monitoring, using standard biological oceanographic procedures. Obtain necessary field and laboratory equipment for data and sample analysis. Provide training workshops to provide general and hands-on experience for commercial fishermen in the laboratory protocols 4. Establish procedures for data collection, quality control, database management, and analysis of results. 5. Coordinate with ongoing research and monitoring efforts by local, state, regional, and national programs. 6. Organization of training workshops and seminars for commercial fishermen. 7. The scientific results: Implementation of a two-year project to collect and analyze samples at the two fixed stations **Processing Description** The overall goal of this project is the design and development of a cooperative, industry-based contribution to monitoring of the pelagic ecosystem in the Gulf of Maine. The need for long-term biological data collection in the Gulf of Maine becomes critical in light of increasing evidence for change in New England's climate. It beomes increasingly important for the fishing industry as decisions about fishery management shift from a single or multi-species to an ecosystem-based approach. By involving the expertise and resources of the local fishing community, we hope to learn more about the natural and man-made variability of the Gulf of Maine marine ecosystem. Sampling takes place on a weekly schedule with the cooperation of Portsmouth Fishermen's COOP and Seabrook Yankee Fishermen's COOP fishermen. Each week we visit the two stations shown on the above map, GoMOOS Buoy "B" and New Scantum at the southern edge of Jeffreys Ledge. Samples taken are a CTD (SeaCat 19 plus) cast for salinity, temperature, density, and fluorescence; 2 vertical ring net tows with a 200 micron mesh for zooplankton and ichthyoplankton assemblages and abundance; and water samples taken from every 10 meter depth from 0-50 meters for nutrient and chlorophyll-a profiling as well as phytoplankton assemblages.

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Project Information

Northeast Consortium: Cooperative Research (NEC-CoopRes)

Website: http://northeastconsortium.org/

Coverage: Georges Bank, Gulf of Maine

The Northeast Consortium encourages and funds cooperative research and monitoring projects in the Gulf of Maine and Georges Bank that have effective, equal partnerships among fishermen, scientists, educators, and marine resource managers.

The Northeast Consortium seeks to fund projects that will be conducted in a responsible manner. Cooperative research projects are designed to minimize any negative impacts to ecosystems or marine organisms, and be consistent with accepted ethical research practices, including the use of animals and human subjects in research, scrutiny of research protocols by an institutional board of review, etc.

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Program Information

NorthEast Consortium (NEC)

Website: http://northeastconsortium.org/

Coverage: Georges Bank, Gulf of Maine

The Northeast Consortium encourages and funds
cooperative research and monitoring projects in the Gulf of Maine and Georges Bank that have effective, **equal partnerships** among fishermen, scientists, educators, and marine resource managers.

At the 2008 Maine Fisheremen's Forum, the Northeast Consortium organized a session on data collection and availability. Participants included several key organizations in the Gulf of Maine area, sharing what data are out there and how you can find them.

The Northeast Consortium has joined the Gulf of Maine Ocean Data Partnership. The purpose of the GoMODP is to promote and coordinate the sharing, linking, electronic dissemination, and use of data on the Gulf of Maine region.

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 consists of four research institutions (University of New Hampshire, University of Maine, Massachusetts Institute of Technology, and Woods Hole Oceanographic Institution), which are working together to foster this initiative.

The Northeast Consortium administers nearly $5M annually from the National Oceanic and Atmospheric Administration for cooperative research on a broad range of topics including gear selectivity, fish habitat, stock assessments, and socioeconomics. The funding is appropriated to the National Marine Fisheries Service and administered by the University of New Hampshire on behalf of the Northeast Consortium. Funds are distributed through an annual open competition, which is announced via a Request for Proposals (RFP). All projects must involve partnership between commercial fishermen and scientists.

The Northeast Consortium seeks to fund projects that will be conducted in a responsible manner. Cooperative research projects should be designed to minimize any negative impacts to ecosystems or marine organisms, and be consistent with accepted ethical research practices, including the use of animals and human subjects in research, scrutiny of research protocols by an institutional board of review, etc.

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Funding

Funding Source	Award
NorthEast Consortium (NEC)	unknown NEC-CoopRes NEC

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