CTD data from F/V Tenacious, Gulf of Maine, 2001-2003, associated with lobster larvae study from F/V Shearwater NEC-LI2001-1 in the between Cape Small and Lubec Maine from July to August 2001 (NEC-CoopRes project)

Website: https://www.bco-dmo.org/dataset/2784
Version: final
Version Date: 2006-02-01

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

Program
» NorthEast Consortium (NEC)

Contributors	Affiliation	Role
Incze, Lewis	University of Southern Maine (USM)	Principal Investigator
Thomson, Mathew		Captain
Wells, Proctor		Captain
Wolff, Nicholas		Data Manager

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Dataset Description

"Inshore/Offshore Patterns of Lobster (Homarus americanus) Larvae and Postlarvae in the Northern Gulf of Maine, with Implications for Spatial Relationships Between Egg Production and Settlement"

Project Leader: *Lewis Incze,* University of South Maine - Bioscience Research Institute
Additional Participants:
Proctor Wells, F/V Tenacious
Mathew Thomson, Cape Cod Commerical Hook Fisherman's Association
Eric Annis, Rugters University
Nicholas Wolff, University of South Maine - Bioscience Research Institute

This hydrography is from a sampling of the entire coastal current system (Boothbay to the Hague Line) during a two-week cruise in early to middle August 2001. Data is being analyzed using computer models of the flow field (collaborations with Drs. Huijie Xue, University of Maine and Christopher Naimie, Dartmouth College) and will be combined with a number of other, ongoing studies of postlarval abundance and settlement. Our long-term goal is to derive a mechanistic model of spatial and temporal lobster recruitment dynamics, an effort that ultimately will be coordinated with Canadian and other U.S. colleagues.

Note:
This hydrographic data complements the larval lobster data also located on this site (see "Related Datasets" section).

Questions should to directed to:

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last updated February 1, 2006; gfh

Methods & Sampling

Our research has shown that the settled abundance of Young-of-Year lobsters is determined to a significant degree by the abundance and delivery of postlarvae to appropriate settlement habitats (Incze et al. 1997, 2000b). Settlement densities and the productivity of the lobster fishery in Maine are distinctly different east and west of Penobscot Bay (Steneck and Wilson 2000; R. Wahle et al., unpubl. Data, in prep.). We want to understand the mechanisms behind these differences, the connections between lobster populations in the northern and central coastal Gulf (that is, transboundary connections in the stock), and the factors that might cause patterns of recruitment to vary (that is, interannual and decadal patterns of change). The data collected with NEC support and other grants is documenting the postlarval supply patterns between the east and west, and those data are being used in a current synthesis effort that includes egg production, circulation modeling, settlement, growth and fisheries production (under a grant from NOAA's Coastal Ocean Program to L. Incze and ten Co-PIs, 2003-2004). The goal is to understand the spatial and physical relationships between egg production and the patterns (spatial and temporal) of recruitment and production in the lobster population. The current synthesis effort is being carried out by U.S. and Canadian scientists (contact L. Incze for further. A paper on postlarval distributions is in prep by Eric Annis (who just completed his Ph.D. at the Uiversity of Maine), L. Incze and others

Data Processing Description

This hydrography is from a sampling of the entire coastal current system (Boothbay to the Hague Line) during a two-week cruise in early to middle August 2001. Data is being analyzed using computer models of the flow field (collaborations with Drs. Huijie Xue, University of Maine and Christopher Naimie,

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Data Files

File
ctd_LI.csv (Comma Separated Values (.csv), 775.79 KB) MD5:4645d3c7c421c78355edd37120f69a75 Primary data file for dataset ID 2784

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Related Datasets

IsRelatedTo

Incze, L. (2003) **Lobster larvae abundance, Gulf of Maine, 2001-2003 from F/V Shearwater NEC-LI2001-1 between Cape Small and Lubec Maine from July to August 2001 (NEC-CoopRes project).** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version final) Version Date 2003-01-01 http://lod.bco-dmo.org/id/dataset/2785 [view at BCO-DMO]
Relationship Description: This lobster_larvae data set is complemented by a CTD hydrographic survey at the same site.

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Parameters

Parameter	Description	Units
year	year, four digit year i.e. 2001	
transect	transect number	
station	station number	
cast	CTD cast number	
month_local	month of year, local time, (1-12)	
day_local	day of month, local time, (1-31)	
yrday_local	year day, local time, (year day 1.5 = Jan 1 at 1200 hrs)	YYY.Y
lat	latitude, negative = South	decimal degrees
lon	longitude, negative = West	decimal degrees
temp_sst	sea surface temperature, vessel intake	degrees C
depth	depth of observation	meters
sal	salinity, ppt	
temp	temperature	decimal degrees C
sigma_t	sigma_t, density	kg/m<sup3</sup>-1000

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Deployments

NEC-LI2001-1

Website	https://www.bco-dmo.org/deployment/57759
Platform	F/V Shearwater
Report	http://northeastconsortium.org/ProjectFileDownload.pm?report_id=320&table=project_report
Start Date	2001-07-30
End Date	2001-08-13
Description	Other vessels were also used in this project: F/V Tenacious was one. See final report for others. **Methods & Sampling** Our research has shown that the settled abundance of Young-of-Year lobsters is determined to a significant degree by the abundance and delivery of postlarvae to appropriate settlement habitats (Incze et al. 1997, 2000b). Settlement densities and the productivity of the lobster fishery in Maine are distinctly different east and west of Penobscot Bay (Steneck and Wilson 2000; R. Wahle et al., unpubl. Data, in prep.). We want to understand the mechanisms behind these differences, the connections between lobster populations in the northern and central coastal Gulf (that is, transboundary connections in the stock), and the factors that might cause patterns of recruitment to vary (that is, interannual and decadal patterns of change). The data collected with NEC support and other grants is documenting the postlarval supply patterns between the east and west, and those data are being used in a current synthesis effort that includes egg production, circulation modeling, settlement, growth and fisheries production (under a grant from NOAAï¿½s Coastal Ocean Program to L. Incze and ten Co-PIs, 2003-2004). The goal is to understand the spatial and physical relationships between egg production and the patterns (spatial and temporal) of recruitment and production in the lobster population. The current synthesis effort is being carried out by U.S. and Canadian scientists (contact L. Incze for further. A paper on postlarval distributions is in prep by Eric Annis (who just completed his Ph.D. at the Uiversity of Maine), L. Incze and others **Processing Description** This hydrography is from a sampling of the entire coastal current system (Boothbay to the Hague Line) during a two-week cruise in early to middle August 2001. Data is being analyzed using computer models of the flow field (collaborations with Drs. Huijie Xue, University of Maine and Christopher Naimie, Dartmouth College) and will be combined with a number of other, ongoing studies of postlarval abundance and settlement. Our long-term goal is to derive a mechanistic model of spatial and temporal lobster recruitment dynamics, an effort that ultimately will be coordinated with Canadian and other U.S. colleagues.

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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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