

# Mapping spawning and hatching grounds of the American lobster: individual lobster temperature data from F/V Maureen R NEC-DC2002-1 in the Muscongus Bay, Maine from 2002-2005 (NEC-CoopRes project)

**Website:** <https://www.bco-dmo.org/dataset/3560>

**Version:** final

**Version Date:** 2005-11-28

## Project

» [Northeast Consortium: Cooperative Research](#) (NEC-CoopRes)

## Program

» [NorthEast Consortium](#) (NEC)

Contributors	Affiliation	Role
<a href="#">Cowan, Diane</a>	Wells National Estuarine Research Reserve	Principal Investigator

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## Dataset Description

Project Leader: Diane Cowan, The Lobster Conservancy

Additional Participants: Mathew Thomson, F/V Shearwater  
Win Watson, University of New Hampshire  
Matthew Weber

Andrew Solow, Woods Hole Oceanographic Institution

Mark Wallace, F/V Pamela B

Tim Thompson, F/V Haley & Amy

Bill Rourke, F/V A-Bill

Michael Reny

Richard Nelson, F/V Pescadero

Peter Murphy

Jon Murphy, F/V Redeemed

Steve Lash, F/V Streaker II

Troy Hayes, F/V Gray Ghost

Mark Havener, F/V Sarah Ashley

Philip Genthner, F/V Melinda Kay

Darrell Brazier, F/V Amy Sue

Nick Caloyianis, Caloyianis Productions, Inc.

Clarita Berger, Caloyianis Productions, Inc.

Richard Barter, F/V Tammy Jeane II

Kevin Benner, F/V Wanda Marie

Rex Benner, F/V Sydni & Erik

Denny Benner, F/V Maureen R

Jim Bolen, F/V Finest Kind

Philip Bramhall, F/V Amanda Kate

The Lobster Sonar Tracking Project was launched in late summer 2002, and was implemented for 2 tracking seasons. In September and October of the first season (2002) a total of 191 egg-bearing females were tagged: lobster IDs: 001 - 193. These lobsters were then tracked over the subsequent 13 months. In August and September of 2004 - the second season of the project - 45 egg-bearing females AND 41 males were tagged, a total of 86 lobsters: lobster IDs: 300 - 400.

Project website: <http://www.lobsters.org>

Associated data: [lobster tagging data](#) and [lobster tracking data](#) and [lobster recapture data](#)

## Methods & Sampling

Each lobster was tagged with three pieces of equipment: a sonar transmitter that emits a unique frequency/code combination, a temperature datalogger ("Tidbit") that records the ambient water temperature every hour, and a ribbon tag with the lobster's ID and The Lobster Conservancy (TLC) phone number to identify the lobster in the event of recapture. Participants were equipped with vessel-based hydrophones to periodically "listen" for sonar signals throughout their fishing territory. Frequency and code were recorded from each observed signal and the lobster ID was subsequently looked up. Hence, the tagged lobsters could be tracked any one of three ways: via hydrophone, trap recapture, or SCUBA dive recapture (using an underwater dive receiver). Information on lobster egg state could only be collected upon recapture. Likewise, temperature data collected by the Tidbit was only useful if the logger was recovered upon recapture and the information downloaded. Temperature data on 30 lobsters from the 2002-2003 season and 18 lobsters from the 2003-2004 season were downloaded as well as data from stationery loggers. Each lobster ID in that data object corresponds to lobster IDs in the associated data objects.

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## Data Files

File
<b>lobster_temps.csv</b> (Comma Separated Values (.csv), 18.21 MB) MD5:c67af09bd7772fbbd6aea1a6fc9c65c6
Primary data file for dataset ID 3560

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## Parameters

Parameter	Description	Units
lob_id	identification number assigned to individual lobsters; this number is on the ID tag and TidbiT; the TidbiT is programmed to this number	
date_tagged	date the lobster was tagged	
date_recaptured	date lobster or tag was recaptured/recovered	
comments	words related to the location or the data	
year	year in which the data was recorded, four digit year	
yday_local	day of the year, Julian Day	
day_local	day of the month, (1-31)	
month_local	month of the year, (1-12)	
time_local	time of day, hours and minutes	
temp	water temperature recorded by the TidbiT, centigrade	degrees Celsius

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## Instruments

<b>Dataset-specific Instrument Name</b>	Onset Pro v2 temperature logger
<b>Generic Instrument Name</b>	Onset HOBO Pro v2 temperature logger
<b>Dataset-specific Description</b>	HOBO® TidbiT by Onset Computer; range -4 to +37oC; accuracy +0.2oC; dimensions 30 x 41 x 17 mm. Affixed to the right cheliped with a plastic cable tie recorded hourly temperature.
<b>Generic Instrument Description</b>	The HOBO Water Temp Pro v2 temperature logger, manufactured by Onset Computer Corporation, has 12-bit resolution and a precision sensor for ±0.2°C accuracy over a wide temperature range. It is designed for extended deployment in fresh or salt water. Operation range: -40° to 70°C (-40° to 158°F) in air; maximum sustained temperature of 50°C (122°F) in water Accuracy: 0.2°C over 0° to 50°C (0.36°F over 32° to 122°F) Resolution: 0.02°C at 25°C (0.04°F at 77°F) Response time: (90%) 5 minutes in water; 12 minutes in air moving 2 m/sec (typical) Stability (drift): 0.1°C (0.18°F) per year Real-time clock: ± 1 minute per month 0° to 50°C (32° to 122°F) Additional information ( <a href="http://www.onsetcomp.com/">http://www.onsetcomp.com/</a> ) Onset Computer Corporation 470 MacArthur Blvd Bourne, MA 02532

<b>Dataset-specific Instrument Name</b>	Sonotronics acoustics transmitter
<b>Generic Instrument Name</b>	Sonotronics acoustics transmitter
<b>Dataset-specific Description</b>	Sonotronics® CT-82-2, battery life 14 months, outer diameter 65 x 16 mm, weight 8 g, range 1000 m.
<b>Generic Instrument Description</b>	Individually coded acoustic transmitters generate a unique aural sequence, as well as unique combinations of frequency and ping interval allowing detection by both passive and active receivers. see <a href="http://www.sonotronics.com/?page_id=116">http://www.sonotronics.com/?page_id=116</a>

## Deployments

### NEC-DC2002-1

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/57757">https://www.bco-dmo.org/deployment/57757</a>
<b>Platform</b>	F/V Maureen R
<b>Report</b>	<a href="http://northeastconsortium.org/ProjectFileDownload.pm?report_id=450&amp;table=project_report">http://northeastconsortium.org/ProjectFileDownload.pm?report_id=450&amp;table=project_report</a>
<b>Start Date</b>	2002-09-05
<b>End Date</b>	2005-05-20
<b>Description</b>	<p>Many fishing vessels were used for this dataset. Others include: F/V Finest Kind, F/V Amanda Kate, F/V Sarah Ashley, F/V Steacker, F/V Redeemed, F/V A-Bill, F/V Haley &amp; Amy, F/V Pamela B. Most of these are based in Friendship, Maine, with the exception of F/V Maureen R, which is based in Waldoboro. See Deployment Report for details.</p> <p><b>Methods &amp; Sampling</b></p> <p>Many fishing vessels were used for this dataset, including: F/V Maureen R, F/V Finest Kind, F/V Amanda Kate, F/V Sarah Ashley, F/V Steacker, F/V Redeemed, F/V A-Bill, F/V Haley &amp; Amy, F/V Pamela B. Most of these are based in Friendship, Maine, with the exception of F/V Maureen R, which is based in Waldoboro. See Deployment Report for details.</p>

## 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.

## 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 Fishermen'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)	<a href="#">2002:03-658</a> ; <a href="#">2004:05-952</a>

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