Zooplankton abundance from the western Gulf of Maine at four repeated stations from 2002-2004 from R/V Gulf Challenger GC2002-4 (REACH project)

Website: https://www.bco-dmo.org/dataset/719645
Data Type: Cruise Results
Version: Final
Version Date: 2007-07-25

Project
» Regional Ecology And Coastal Hydrography (REACH)

Contributors	Affiliation	Role
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Coverage

Spatial Extent: **N**:43.031 **E**:-70.422 **S**:42.994 **W**:-70.569
Temporal Extent: 2002-04-24 - 2004-06-28

Dataset Description

Time-series of zooplankton abundance data from repeat visits to four stations in the Gulf of Maine from 2002 - 2004.

Results and Methodology Descriptions can be found in:

Manning, C.A. and A. Bucklin. 2005. Multivariate analysis of the copepod community of near-shore waters in the western Gulf of Maine (Northwest Atlantic). Mar. Ecol. Prog. Ser. 292: 233-249.

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Data Files

File
allzoo.csv (Comma Separated Values (.csv), 1.94 MB) MD5:8cc5c07ecdb3265bf097264913e061ed Primary data file for dataset ID 719645

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Parameters

Parameter	Description	Units
year	year	numeric
cruiseid	Cruise identifier	text
yrday	Julian day	numeric
date_cruiseid	Date of cruise	text
day	sequential sampling day	numeric
station	where the data was collected	station
lat	Station latitude; N is positive	decimal degrees
lon	Station longitude (West is negative)	decimal degrees
distance_offshore	nautical mile distance from nearest land	nm
net	which net collected the data	numeric
sample	unique identifier for collection from this net	numeric
depth_net_min	minimum depth of the collection	meters
depth_net_max	maximum depth of the collection	meters
depth_net_avg	numerical average depth of the collection	meters
temp_min	Minimum temperature	degrees Centigrade
temp_max	Maximum temperature	degrees Centigrade
temp_avg	Average temperature	degrees Centigrade
salt_min	Maximum salinity	dimensionless(PSU)

salt_max	Minimum salinity	dimensionless(PSU)
salt_avg	Average salinity	dimensionless(PSU)
volume_filtered	volume of water that flowed through the net	cubic meters
aliquot_dilution	fraction of catch actually counted; 1/8 to 1/1024 expressed in decimals	decimal number
taxon	Scientific name of zooplankton species	text
abundance	number of animals per cubic meter	number per cubic meter

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Instruments

Dataset-specific Instrument Name	1/4 m MOC
Generic Instrument Name	MOCNESS.25
Dataset-specific Description	150 micron mesh nets.
Generic Instrument Description	The Multiple Opening/Closing Net and Environmental Sensing System or MOCNESS is a family of net systems based on the Tucker Trawl principle. The MOCNESS-1/4 carries nine 1/4-m2 nets usually of 64 micrometer mesh and is used to sample the larger micro-zooplankton.

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Deployments

GC2002-4

Website	https://www.bco-dmo.org/deployment/58067
Platform	R/V Gulf Challenger
Start Date	2002-05-24
End Date	2004-06-28
Description	This is one deployment designation for all the individual trips to the four stations of the REACH time series. The first visit was on 24 May 2002 and the last one on 28 June 2004. **Methods & Sampling** Hydrography, nutrients, chemistry and phytoplankton data from the western Gulf of Maine

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Project Information

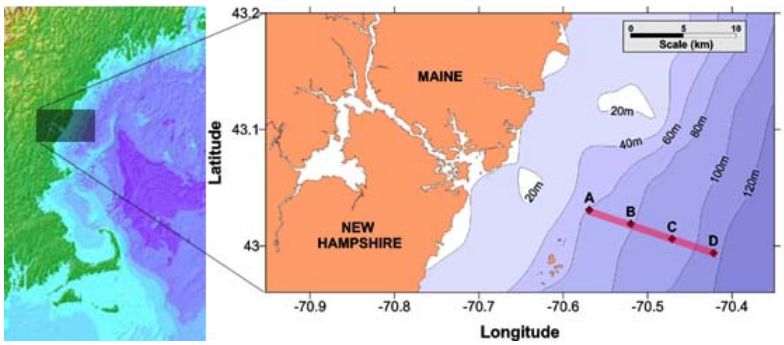
Regional Ecology And Coastal Hydrography (REACH)

Coverage: Western Gulf of Maine

From April 2002 through June 2004, the Regional Ecology and Coastal Hydrography (REACH) project conducted monthly field sampling in the western Gulf of Maine. REACH is one of five seed projects associated with the UNH center of excellence for Coastal Ocean Observing and Analysis (COOA).

The objective of REACH is to document and understand the functional inter-relationships among the major elements of the planktonic assemblage in the waters of western Gulf of Maine. The field program characterized the physical dynamics, nutrient availability, and phytoplankton and zooplankton assemblages. A long-term goal of this effort is to work toward a predictive index of harmful algal bloom (HAB) occurrences in near-shore waters of the western Gulf of Maine based on an integrated assessment of the planktonic community. The comprehensive nature of the study also enables this work to serve as a baseline for the western Gulf of Maine, against which future studies can be compared.

An innovative aspect of this project is the integrated analysis of the entire planktonic assemblage at the species level - including both phytoplankton and zooplankton species abundances in the same samples that are used to determine toxic dinoflagellate counts. In addition, we will ensure detailed examination and characterization of the physical oceanographic and meteorological setting from real-time data derived from satellites, remote sensors on buoys, and commercial fishing boats. (from project website)



The REACH transect runs from 10km to 22km offshore of the coast of Maine and New Hampshire, USA. Sampling stations are marked by letters A, B, C, and D.

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Funding

Funding Source	Award
Coastal Ocean Observing and Analysis (COOA)	unknown REACH COOA

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