Zooplankton counts from R/V Albatross IV, R/V Endeavor, and R/V Oceanus in the Gulf of Maine and Georges Bank from 1995-1999 (GB project)

Website: https://www.bco-dmo.org/dataset/3523
Version: 2012-09-28

Project
» U.S. GLOBEC Georges Bank (GB)

Program
» U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Contributors	Affiliation	Role
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Dataset Description

Zooplankton Meter^3 Data from GSO/URI - Bongo Nets only

The Zooplankton Meter^3 Database for the Georges Bank GLOBEC project was originally located in the laboratory of Ted Durbin at the Graduate School of Oceanography, University of Rhode Island. It was accessed via the U.S. GLOBEC Georges Bank data management system using SQLPlus network access to the data base management system at URI. Data were cached and are served from the local computer.

A description of the original URI database is available online and includes the design and variable definitions. A version of this document is shown here.

Note: Our program's Data Acknowledgement Policy requires that any person making substantial use of a data set must communicate with the investigators who acquired the data prior to publication and anticipate that the data collectors will be co-authors of published results.

The following documentation applies to the data found locally on the WHOI GLOBEC Data Server:
The data is served as a hierarchy. The least changing variables are in higher order levels (e.g., cruise id, year, month, etc.), while variables that change the most are in the lower order levels (e.g., time of collection, net number, taxon collected, etc.). There are six levels within the data; variable names and descriptions are given in the metadata.

Most column variable names and instrument names were taken from the U.S. GLOBEC Georges Bank data thesaurus; those that were not follow the GLOBEC data protocols. The taxonomic code variable (taxon_code) is from the National Oceanographic Data Center's Taxonomic List, version 8. Taxonomic information is built into these ten-digit codes as they reflect the systematic nomenclature.

You may contact BCO-DMO for additional help.

Data Processing Description

28 Sept 2012 - BCO-DMO re-formatted data, adding the stage and count columns.

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Data Files

File
zoo_cb_meter_bongo.csv (Comma Separated Values (.csv), 3.91 MB) MD5:2981c38f086567d633d13aeb3eea16cd Primary data file for dataset ID 3523

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Parameters

Parameter	Description	Units
station	Consecutive station number during cruise.	unitless
station_std	Standard Broad scale station number.	unitless
depth_w	Water depth, in meters	meters
cruiseid	Cruise Identifier. (e.g., AL9607, EN276, OC275)	unitless
year_cruise_begin	4-digit year the cruise began.	YYYY
month_cruise_begin	2-digit month the cruise began.	mm (01 to 12)
day_cruise_begin	2-digit day of the month when the cruise began.	dd (01 to 31)
year_cruise_end	4-digit year the cruise ended.	YYYY
month_cruise_end	2-digit month when the cruise ended.	mm (01 to 12)
day_cruise_end	2-digit day of the month when the cruise ended.	dd (01 to 31)
event	Event or operation number. Unique ID.	unitless
inst	Instrument used to collect or process data. MOC1 - 1 meter square MOCNESS Bongo - 61 cm diameter Bongo Pump - zooplankton pump	unitless
tow	Tow or haul number.	unitless
lat_begin	Latitude at Beginning of measurement, in decimal degrees. (south is negative)	decimal degrees
lon_begin	Longitude at Beginning of measurement, in decimal degrees. (west is negative)	decimal degrees
year_utc_begin	Year (UTC) at the beginning of the measurement	YYYY
month_utc_begin	2-digit month (UTC) at the beginning of the measurement.	mm (01 to 12)
day_utc_begin	2-digit day (UTC) at the beginning of the measurement.	dd (01 to 31)
time_utc_begin	Time (UTC) at the beginning of the measurement	HHMM

year_utc_end	Year (UTC) at the end of the measurement	YYYY
month_utc_end	2-digit month (UTC) at the end of the measurement.	mm (01 to 12)
day_utc_end	2-digit day (UTC) at the end of the measurement.	dd (01 to 31)
time_utc_end	Time (UTC) at the end of the measurement	HHMM
allsort_flag	Flag for sorting. Default = 'n'. When all nets for particular tow are sorted, flag = 'y'.	unitless
net	Net number	unitless
vol_net	Volume of water filtered by net, in cubic meters.	cubic meters
depth_begin	Depth of sampler at beginning of measurement, meters.	meters
depth_end	Depth of sampler at end of measurement, meters.	meters
gearcode	Gear Code - used by NMFS. Three digit code that specifies gear and mesh size of net. 1M1 - 1 meter square MOCNESS, 150 um mesh 1M3 - 1 meter square MOCNESS, 335 um mesh P35 - Pump, 35 um mesh P50 - Pump, 50 um mesh 6B2 - 61 cm diameter Bongo, 200 um mesh 6B3 - 61 cm diameter Bongo, 335 um mesh	unitless
count_flag	Counting method flag for sorting. Default ='none'. none = not sorted at present time all = All species/taxa enumerated Top_Five = Cal_only = only Calanus spp. counted stemple = subsampled with Henson-Stemple pipette. (Only Calanus finmarchicus counted.)	unitless
counter	Initials of sorter and date sorted.	text
taxon	Taxon name.	text
taxon_code	Taxonomic Code. Ten digit number from NODC Taxonomic List, v. 8.	
stage	Taxon stage: m3_fem = copepod females. m3_mal = copepod males. m3_cop = Total Copepodites. m3_c1 = Copepodite stage 1 (C1). m3_c2 = Copepodite stage 2 (C2). m3_c3 = Copepodite stage 3 (C3). m3_c4 = Copepodite stage 4 (C4). m3_c5 = Copepodite stage 5 (C5). m3_npl = Total Nauplii (N1-N6). m3_n1 = Nauplius stage 1 (N1). m3_n2 = Nauplius stage 2 (N2). m3_n3 = Nauplius stage 3 (N3). m3_n4 = Nauplius stage 4 (N4). m3_n5 = Nauplius stage 5 (N5) m3_n6 =Nauplius stage 6 (N6). m3_not = non-copepod taxa.	unitless
count	Count of taxa per stage per cubic meter.	unitless

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Instruments

Dataset-specific Instrument Name	Bongo Net
Generic Instrument Name	Bongo Net
Generic Instrument Description	A Bongo Net consists of paired plankton nets, typically with a 60 cm diameter mouth opening and varying mesh sizes, 10 to 1000 micron. The Bongo Frame was designed by the National Marine Fisheries Service for use in the MARMAP program. It consists of two cylindrical collars connected with a yoke so that replicate samples are collected at the same time. Variations in models are designed for either vertical hauls (OI-2500 = NMFS Pairovet-Style, MARMAP Bongo, CalVET) or both oblique and vertical hauls (Aquatic Research). The OI-1200 has an opening and closing mechanism that allows discrete "known-depth" sampling. This model is large enough to filter water at the rate of 47.5 m3/minute when towing at a speed of two knots. More information: Ocean Instruments, Aquatic Research, Sea-Gear

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Deployments

AL9506

Website	https://www.bco-dmo.org/deployment/57372
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9506/al9506new.html
Start Date	1995-06-05
End Date	1995-06-15
Description	broad-scale

AL9605

Website	https://www.bco-dmo.org/deployment/57375
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9605/al9605.html
Start Date	1996-05-06
End Date	1996-05-17
Description	broad-scale

AL9705

Website	https://www.bco-dmo.org/deployment/57379
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9705/al9705.html
Start Date	1997-05-19
End Date	1997-05-27
Description	broad-scale

AL9801

Website	https://www.bco-dmo.org/deployment/57382
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9801/al9801.html
Start Date	1998-01-07
End Date	1998-01-19
Description	broad-scale

AL9806

Website	https://www.bco-dmo.org/deployment/57384
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9806/al9806.html
Start Date	1998-05-13
End Date	1998-05-22
Description	broad-scale

AL9808

Website	https://www.bco-dmo.org/deployment/57385
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9808/al9808.html
Start Date	1998-06-16
End Date	1998-06-26
Description	broad-scale

AL9901

Website	https://www.bco-dmo.org/deployment/57386
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9901/al9901.html
Start Date	1999-01-12
End Date	1999-01-24
Description	broad-scale

AL9904

Website	https://www.bco-dmo.org/deployment/57387
Platform	R/V Albatross IV
Start Date	1999-05-19
End Date	1999-05-27
Description	broad-scale

EN261

Website	https://www.bco-dmo.org/deployment/57401
Platform	R/V Endeavor
Start Date	1995-02-10
End Date	1995-02-20
Description	broad-scale

EN263

Website	https://www.bco-dmo.org/deployment/57403
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en263/EN263.pdf
Start Date	1995-03-13
End Date	1995-03-24
Description	broad-scale

EN265

Website	https://www.bco-dmo.org/deployment/57405
Platform	R/V Endeavor
Start Date	1995-04-11
End Date	1995-04-22
Description	broad-scale

EN276

Website	https://www.bco-dmo.org/deployment/57413
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en276/EN276.pdf
Start Date	1996-01-10
End Date	1996-01-22
Description	broad-scale

EN278

Website	https://www.bco-dmo.org/deployment/57414
Platform	R/V Endeavor
Start Date	1996-02-13
End Date	1996-02-25
Description	broad-scale

EN282

Website	https://www.bco-dmo.org/deployment/57415
Platform	R/V Endeavor
Start Date	1996-04-08
End Date	1996-04-20
Description	broad-scale

EN320

Website	https://www.bco-dmo.org/deployment/57427
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en320new/en320mda.htm
Start Date	1999-03-10
End Date	1999-03-23
Description	broad-scale

EN322

Website	https://www.bco-dmo.org/deployment/57429
Platform	R/V Endeavor
Start Date	1999-04-17
End Date	1999-05-02
Description	process

OC275

Website	https://www.bco-dmo.org/deployment/57440
Platform	R/V Oceanus
Start Date	1996-03-11
End Date	1996-03-22
Description	broad-scale

OC298

Website	https://www.bco-dmo.org/deployment/57444
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc298/cruisereport.html
Start Date	1997-02-11
End Date	1997-02-23
Description	broad-scale

OC300

Website	https://www.bco-dmo.org/deployment/57446
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc300/oc300rpt.mr7.html
Start Date	1997-03-16
End Date	1997-03-28
Description	broad-scale

OC301

Website	https://www.bco-dmo.org/deployment/57447
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc301/oc301.html
Start Date	1997-04-05
End Date	1997-04-17
Description	process fish vital rates

OC302

Website	https://www.bco-dmo.org/deployment/57448
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc302/oce302.html
Start Date	1997-04-22
End Date	1997-05-02
Description	broad-scale

OC303

Website	https://www.bco-dmo.org/deployment/57449
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc303/oc303.html
Start Date	1997-05-06
End Date	1997-05-23
Description	process

OC317

Website	https://www.bco-dmo.org/deployment/57451
Platform	R/V Oceanus
Start Date	1998-02-06
End Date	1998-02-19
Description	broad-scale

OC319

Website	https://www.bco-dmo.org/deployment/57452
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc319/oc319new/oc319rpt.8april98.htm
Start Date	1998-03-15
End Date	1998-03-27
Description	broad-scale

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Project Information

U.S. GLOBEC Georges Bank (GB)

Website: http://globec.whoi.edu/globec_program.html

Coverage: Georges Bank, Gulf of Maine, Northwest Atlantic Ocean

The U.S. GLOBEC Georges Bank Program is a large multi- disciplinary multi-year oceanographic effort. The proximate goal is to understand the population dynamics of key species on the Bank - Cod, Haddock, and two species of zooplankton (*Calanus finmarchicus* and *Pseudocalanus*) - in terms of their coupling to the physical environment and in terms of their predators and prey. The ultimate goal is to be able to predict changes in the distribution and abundance of these species as a result of changes in their physical and biotic environment as well as to anticipate how their populations might respond to climate change.

The effort is substantial, requiring broad-scale surveys of the entire Bank, and process studies which focus both on the links between the target species and their physical environment, and the determination of fundamental aspects of these species' life history (birth rates, growth rates, death rates, etc).

Equally important are the modelling efforts that are ongoing which seek to provide realistic predictions of the flow field and which utilize the life history information to produce an integrated view of the dynamics of the populations.

The U.S. GLOBEC Georges Bank Executive Committee (EXCO) provides program leadership and effective communication with the funding agencies.

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Program Information

U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Website: http://www.usglobec.org/

Coverage: Global

U.S. GLOBEC (GLOBal ocean ECosystems dynamics) is a research program organized by oceanographers and fisheries scientists to address the question of how global climate change may affect the abundance and production of animals in the sea.

The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest Atlantic Region, and the Northeast Pacific (with components in the California Current and in the Coastal Gulf of

Alaska). U.S. GLOBEC was a major contributor to International GLOBEC efforts in the Southern Ocean and Western Antarctic Peninsula (WAP).

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Funding

Funding Source	Award
National Oceanic and Atmospheric Administration (NOAA)	unknown GB NOAA
NSF Division of Ocean Sciences (NSF OCE)	OCE-9313677

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