

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/3456>

Version: 2012-09-07

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 meter² counts from GSO/URI - Pump data only

The Zooplankton Meter² 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

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

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Data Files

File
zoo_sq_meter_pump.csv (Comma Separated Values (.csv), 42.88 MB) MD5:a21511e3a1002a2a1df4a2c1b8119646
Primary data file for dataset ID 3456

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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
cruise_type	Type of cruise. BSS - Broad scale Survey; PRO - Process Cruise; MOR - Mooring Cruise	unitless
year_cruise_begin	4-digit year at start of cruise.	YYYY
month_cruise_begin	2-digit month at start of cruise.	mm (01 to 12)
day_cruise_begin	2-digit day of month at start of cruise.	dd (01 to 31)
year_cruise_end	4-digit year at end of cruise.	YYYY
month_cruise_end	2-digit month at end of cruise.	mm (01 to 12)
day_cruise_end	2-digit day of month at end of cruise.	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	Month (UTC) at the beginning of the measurement	mm (01 to 12)

day_utc_begin	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	Month (UTC) at the end of the measurement	mm (01 to 12)
day_utc_end	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	text
count_flag	Counting method flag. 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.	unitless
taxon	Taxon name.	text
taxon_code	Taxonomic Code. Ten digit number from NODC Taxonomic List, v. 8.	
stage	Taxon stage: m2_fem = copepod females. m2_mal = copepod males. m2_cop = Total Copepodites. m2_c1 = Copepodite stage 1 (C1). m2_c2 = Copepodite stage 2 (C2). m2_c3 = Copepodite stage 3 (C3). m2_c4 = Copepodite stage 4 (C4). m2_c5 = Copepodite stage 5 (C5). m2_npl = Total Nauplii (N1-N6). m2_n1 = Nauplius stage 1 (N1). m2_n2 = Nauplius stage 2 (N2). m2_n3 = Nauplius stage 3 (N3). m2_n4 = Nauplius stage 4 (N4). m2_n5 = Nauplius stage 5 (N5) m2_n6 =Nauplius stage 6 (N6). m2_not = non-copepod taxa.	unitless
count	Count of taxa per stage per square meter.	unitless

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Instruments

Dataset-specific Instrument Name	Zooplankton Pump - gas powered diaphragm
Generic Instrument Name	Zooplankton Pump - gas powered diaphragm
Dataset-specific Description	Gas-powered single diaphragm pump was used in earlier cruises. The diaphragm provided the suction. It didn't work very well and was replaced by a double diaphragm pump. Earlier, a centrifugal pump was attempted with in impeller, possibly manufactured by Pacer, but it didn't work well either.
Generic Instrument Description	This kind of diaphragm pump, manufactured by Homelite and run on gasoline, is called a positive displacement pump because it pumps a specific volume for each pump cycle. Diaphragm pumps move fluids more slowly than centrifugal pumps but treat the animals more gently and they can handle thicker mud and larger amounts of solids. They also tolerate air being drawn into the pump and can be run dry without damage. In 2002, Homelite was acquired and became Riverside Pump Manufacturing, Inc. Diaphragm pumps feature a straight through self priming design and the rubber elastomer diaphragm and flapper valves are easily replaced on site.

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Deployments

AL9505

Website	https://www.bco-dmo.org/deployment/57371
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9505/al9505rot.pdf
Start Date	1995-05-09
End Date	1995-05-18
Description	broad-scale

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

AL9508

Website	https://www.bco-dmo.org/deployment/57373
Platform	R/V Albatross IV
Report	http://globec.who.edu/globec-dir/reports/al9508/a9508rp2.HTM
Start Date	1995-07-10
End Date	1995-07-20
Description	broad-scale

AL9605

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

AL9607

Website	https://www.bco-dmo.org/deployment/57376
Platform	R/V Albatross IV
Report	http://globec.who.edu/globec-dir/reports/al9607/AL9607.pdf
Start Date	1996-06-03
End Date	1996-06-13
Description	broad-scale

AL9701

Website	https://www.bco-dmo.org/deployment/57378
Platform	R/V Albatross IV
Report	http://globec.who.edu/globec-dir/reports/al9701/cral9701.htm
Start Date	1997-01-13
End Date	1997-01-20
Description	broad-scale

AL9801

Website	https://www.bco-dmo.org/deployment/57382
Platform	R/V Albatross IV
Report	http://globec.who.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.who.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.who.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.who.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

AL9906

Website	https://www.bco-dmo.org/deployment/57388
Platform	R/V Albatross IV
Report	http://globec.who.edu/globec-dir/reports/al9906/al9906rpt.html
Start Date	1999-06-14
End Date	1999-06-24
Description	broad-scale

EN259

Website	https://www.bco-dmo.org/deployment/57399
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en259.html
Start Date	1995-01-10
End Date	1995-01-22
Description	process zoology

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

EN262

Website	https://www.bco-dmo.org/deployment/57402
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en262/EN262.pdf
Start Date	1995-02-23
End Date	1995-03-10
Description	process zoology

EN263

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

EN264

Website	https://www.bco-dmo.org/deployment/57404
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en264.html
Start Date	1995-03-26
End Date	1995-04-08
Description	process zoology

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

EN266

Website	https://www.bco-dmo.org/deployment/57406
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en266/EN266.pdf
Start Date	1995-04-26
End Date	1995-05-08
Description	process zoology

EN267I

Website	https://www.bco-dmo.org/deployment/57407
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en267/EN267.pdf
Start Date	1995-05-22
End Date	1995-06-05
Description	process zoology

EN267II

Website	https://www.bco-dmo.org/deployment/57408
Platform	R/V Endeavor
Report	http://globec.who.edu/globec-dir/reports/en267L2/EN267L2.pdf
Start Date	1995-06-08
End Date	1995-06-19
Description	process

EN276

Website	https://www.bco-dmo.org/deployment/57413
Platform	R/V Endeavor
Report	http://globec.who.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

EN319

Website	https://www.bco-dmo.org/deployment/57426
Platform	R/V Endeavor
Report	http://globec.whoi.edu/globec-dir/reports/en319/en319rept.html
Start Date	1999-02-21
End Date	1999-03-04
Description	process zooplankton vital rates

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/oc302.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

OC322

Website	https://www.bco-dmo.org/deployment/57454
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc322/oc322.html
Start Date	1998-04-15
End Date	1998-04-27
Description	broad-scale

OC336

Website	https://www.bco-dmo.org/deployment/57459
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc336/oc336cruise-report.html
Start Date	1999-02-11
End Date	1999-02-23
Description	broad-scale

OC341

Website	https://www.bco-dmo.org/deployment/57464
Platform	R/V Oceanus
Report	http://globec.whoi.edu/globec-dir/reports/oc341/reptoc341.html
Start Date	1999-04-16
End Date	1999-04-27
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

AL9707

Website	https://www.bco-dmo.org/deployment/57380
Platform	R/V Albatross IV
Report	http://globec.whoi.edu/globec-dir/reports/al9707/al9707.html
Start Date	1997-06-18
End Date	1997-06-28
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
NSF Division of Ocean Sciences (NSF OCE)	OCE-9313677

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