

Event log from the Krill CT2010 cruise from R/V Connecticut CT2010 in the Southern New England Shelf and Slope Water from 2010-2010 (Krill GoME project)

Website: <https://www.bco-dmo.org/dataset/3467>

Version: 3

Version Date: 2011-04-25

Project

» [Biological and Physical Determinants of Euphausiid Aggregation, Behavior, and Interaction with Higher Predators at an Abrupt Topographical Feature in the Gulf of Maine](#) (Krill GoME)

Contributors	Affiliation	Role
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Coverage

Spatial Extent: N:41.5234 E:-69.2843 S:39.7411 W:-70.7707

Temporal Extent: 2010-07-08 - 2010-07-16

Dataset Description

Scientific sampling event log from the Krill project CT2010 cruise to the southern New England Shelf and nearby slope waters.

Methods & Sampling

The log includes a record of all scientific sampling events from the cruise.

Data Processing Description

Revisions:

2011-04-19: Event CT10192.036: Changed MOCNESS Tow 6 start longitude from -69.9472 to -69.6439, the start value in M006.PRO.

2011-04-21: Event CT10196.007: Corrected longitude from -70.0827 to -70.7493.

2019-02-04: In the data, corrected day_local and day_gmt in final record, event CT10196.029 from 15 to 16;

on this landing page, changed version from '25 April 2011' to '3' and version date from '2011-04-25' to 2019-02-04.

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Data Files

File
eventlog_CT2010.csv (Comma Separated Values (.csv), 25.55 KB) MD5:f9365e386e11f17b024f5ee3c0588d80
Primary data file for dataset ID 3467

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Parameters

Parameter	Description	Units
cruiseid	cruise identifier, e.g. lmg0103 = Laurence M. Gould cruise 0103	
year	year, e.g. 2001.	
platform	ship, mooring, fixed location name	
event	event or sampling operation number	
inst	Instrument used to collect data, see: instrument list	
cast	cast number	
station	consecutive station number	
day_local	day of month, local time	
month_local	month of year, local time	
time_local	time of day, local time, using 2400 clock format	
se_flag	sampling operation start (s) or end (e) flag	
lat	latitude, negative = South	
lon	longitude, negative = West	

depth_w	depth of water	meters
depth	depth of sample	meters
si	scientific investigator's name	
day_gmt	day of month, gmt time	
month_gmt	month of year, gmt time	
time_gmt	time of day, GMT	
comments	free text comments	

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Deployments

CT2010

Website	https://www.bco-dmo.org/deployment/58661
Platform	R/V Connecticut
Start Date	2010-07-08
End Date	2010-07-16
Description	The CT2010 cruise was supported by funds from Woods Hole Sea Grant, and field work was done on the southern New England Shelf and in nearby slope waters. This is a different study area from the sites visited by the other Krill project cruises that sampled in the Gulf of Maine.

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Project Information

Biological and Physical Determinants of Euphausiid Aggregation, Behavior, and Interaction with Higher Predators at an Abrupt Topographical Feature in the Gulf of Maine (Krill GoME)

Coverage: Gulf of Maine; Georges Bank

from the NSF award abstract:

Distribution, Aggregation, and Ecological Importance of Euphausiids in the Gulf of Maine Region

Zooplankton are key members of marine ecosystems, but the biological and physical factors governing their distribution and aggregation are not fully understood, especially at the continental shelf break and margins of the deep basins of the shelf. Euphausiids are an important group of crustacean zooplankton in North Atlantic

pelagic food webs and represent an interesting model species for the study of zooplankton aggregation due to their strong swimming capabilities and active aggregative behaviors. This project will address the hypotheses that the formation and variability of euphausiid aggregations along the northern flank of Georges Bank and the southern portion of the Gulf of Maine during fall relate to the interaction of physical concentration mechanisms with local topography and with plasticity in diel vertical migration and active aggregative behaviors, and that this plasticity arises from variability in food availability and predation by herring. These hypotheses will be addressed through a field program employing a comprehensive array of sensors, including both conventional narrowband and recently-developed broadband acoustic systems to sample the euphausiids, and a variety of other acoustic, optical, net, and other sampling devices to quantify their physical and biological environment. These sensors will be used in an inventive combination of (1) coarse-scale grid surveys to characterize along- and across-slope variability in the distribution of euphausiids, their predators, other zooplankton, phytoplankton, and physical conditions (e.g., the flow field), and (2) fine-scale adaptive surveys used to track individual euphausiid aggregations and observe how their three-dimensional structure and vertical position vary with changing environmental conditions. Repeat surveys will be timed to capitalize on known or likely variations in the flow field, food availability, light levels, and predation.

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Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-0928801

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