

Dataset: Anchovy data of Chesapeake Bay

Project(s): Hypoxia in Marine Ecosystems: Implications for Neritic Copepods (DeZoZoo)

Abstract: These data represent a merging of electronic data collected from the MOCNESS sensor systems and the bay anchovy counts and abundance from the samples collected with the MOCNESS net tows. For a complete list of measurements, refer to the supplemental document 'Field_names.pdf', and a full dataset description is included in the supplemental file 'Dataset_description.pdf'. The most current version of this dataset is available at: <http://www.bco-dmo.org/dataset/563428>

Description: Anchovies from hypoxic waters of the Chesapeake Bay

These data represent a merging of electronic data collected from the MOCNESS sensor systems and the count data from the samples collected with the net tows. Some nets were used for zooplankton samples (see <http://www.bco-dmo.org/dataset/564755>), while others were collected specifically to estimate bay anchovy concentrations. These are contained on different sheets, and the count data was merged individually. This dataset represents the bay anchovy counts and abundance.

Acquisition Description: These data were collected with the MOCNESS system from the ship.

Processing Description: Electronic data was post-processed by PI Pierson. Zooplankton sorting data was analyzed, processed, and quality controlled in PI Pierson's lab. Bay Anchovy sorted data was analyzed, processed, and quality controlled in co-PI Houde's lab

DMO adjustments: removed station latitude and longitude because MOCNESS tow start latitudes and longitudes are better. Removed MOCNESS-recorded times and used GPS times instead, which is much more accurate. Removed MOCNESS min and max depths due to occasional blocked pressure sensor. (PI, personal communication)

Deployment Information

Deployment description for R/V Hugh R. Sharp HRS100524JP

Cruise in Main Channel of Chesapeake Bay

Deployment description for R/V Hugh R. Sharp HRS100819JP

Cruise in main channel of Chesapeake Bay to collect zooplankton samples.

Deployment description for R/V Hugh R. Sharp HRS100920JP

One of a series of cruises in the main channel of the Chesapeake Bay to collect gelatinous zooplankton.

Deployment description for R/V Hugh R. Sharp HRS110525JP

One of six week-long cruises in the main channel of Chesapeake Bay to collect gelatinous zooplankton.

Deployment description for R/V Hugh R. Sharp HRS110719JP

One of six week-long cruises in the main channel of the Chesapeake Bay to collect gelatinous zooplankton

Deployment description for R/V Hugh R. Sharp HRS110922JP

One of 6 week-long cruises in the main channel of the Chesapeake Bay, collecting gelatinous zooplankton.

Instrument Information

Instrument	1/4 Meter MOC
Description	Had trouble communicating with the 1/4 m2 MOCNESS in the beginning of the first cruise. Picked up replacement parts and were able to get it working again with an underwater unit borrowed from BESS, the manufacturer of the MOCNESS system. (Subsequent analysis by BESS, Inc. showed that some damage to the underwater unit was caused when it was plugged into the sea cable with some charge still in the cable -- most likely from the Seabird deck unit still turned on.) -- from the Cruise Report
Generic Instrument Name	MOCNESS.25

**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.