

Data Management Plan

This project includes both field and laboratory components, and will generate a variety of datasets from DNA sequence to plankton abundance and oceanographic data. Data produced from this project are summarized below. In compliance with the NSF OCE Data and Sample Policy (<http://www.nsf.gov/pubs/2011/nsf11060/nsf11060.pdf>), these data will be submitted within 2 years of collection to the Biological and Chemical Oceanography Data Management Office (BCO-DMO; <http://bco-dmo.org/contact/>) at WHOI and/or to the National Center for Biotechnology Information (DNA sequence data; <http://www.ncbi.nlm.nih.gov/>). All oceanographic data generated by the AMT programme is made publicly available within 1 year of collection through the British Oceanographic Data Centre (BODC, United Kingdom, see http://www.bodc.ac.uk/projects/uk/amt/data_policy/ for a detailed description of the AMT data management policy).

Data Products from this project:

Variable & Description

1. Molecular Data:
 - a. Shotgun genomic DNA sequence for 3 copepod species (1/16th of a 454 Roche picotiterplate).
 - b. Species-specific microsatellite markers for 3 species (ca. 10 markers per species), and optimized amplification conditions for routine genotyping using these marker sets.
2. Plankton Abundance Data:
 - a. Adult abundance data and presence/absence data for copepodites of 3 target copepod species.
 - b. Flow cytometry, fluorometry and microscopy-based data for the abundance of pico-, nano-, and microplankton, as well as ciliate microzooplankton along the AMT transect. These data may need to be submitted to the BODC.
3. Copepod egg production and physiological data:
 - a. Egg production rate (EPR) data for 3 species, collected at >20 stations along the AMT transect.
 - b. Physiological data, including prosome length, dry weight, condition index, and water, carbon, nitrogen and ash content, for 3 copepod species.
4. Oceanographic and Environmental Data:
 - a. *In situ* data on temperature, conductivity, pressure, fluorescence, photosynthetically active radiation (PAR), transmissometry (particle abundance) with depth (0 - 500m) from 2X daily CTD casts, as well as hull-mounted flow-through sensors. These data are handled by the AMT staff, and will be submitted to the BODC.