

The effects of diatom-produced polyunsaturated aldehydes on the microbial food web in temperate and polar waters

DATA MANAGEMENT PLAN

Types of data to be produced: A variety of data types will be produced during this project, including:

- Data from net tows and Niskin bottle samples
- Grazing rates from microzooplankton dilution experiments and copepod grazing experiments
- Electronic hydrographic data: Electronic from profiling CTD equipment with environmental sensors from field collections of water and plankton for experiments
- Data from chemical analyses of field and experimental samples to measure nutrients and polyunsaturated aldehydes

Standards that would be applied for format, metadata content, etc.: We will work closely with the proprietors of the data and the Biological-Chemical Oceanography Data Management Office (BCO-DMO: <http://www.bco-dmo.org/>) to ensure that data we collect and use in our analyses and outcomes from our syntheses are publicly available according to federal, NSF and institutional guidelines. Further, all data made available will be accompanied by FGDC compliant metadata.

Provisions for archiving and preservation: Microzooplankton and phytoplankton samples will be stored in 2% Lugol's iodine and 0.5% buffered formaldehyde. Zooplankton samples will be stored in 4% buffered formaldehyde in climate controlled storage facilities. Electronic hydrographic data will be archived and backed up locally and then submitted to BCO-DMO. These data and associated metadata will include all calibration information necessary for post-processing. Additionally, a database containing the location of all materials, including electronic and physical samples, will be maintained for use by all PIs and eventually submitted with the data to BCO-DMO.

Access policies and provisions: Access to data will be given once the data is quality controlled and published. Availability will be in accordance with federal, NSF and institutional guidelines for data accessibility.

Plans for eventual transition or termination of the data collection after the NSF funding period: All data will be written up and submitted for publication. Publication costs will be used to make the article freely available for download. All electronic and plankton data will be submitted to BCO-DMO for archival in public databases (e.g. NODC: <http://www.nodc.noaa.gov/> and OBIS: <http://www.iobis.org/>).