Data Management Policy

We are committed to making environmental and biological data available in as timely a fashion as possible, subject to the need to embargo some classes of data prior to publication and the limitations of existing data repositories. The following plan is based on our understanding of existing services, but data archives are expanding and new repositories are being developed. Consequently, we may modify our plans as more appropriate repositories become available. Proposed archiving and access plans are outlined by data type.

1) Hydrographic data from CTD surveys and ADCP data. All CTD and ADCP data will be archived with the NSF-funded Biological and Chemical Oceanography Data Management Office (BCO-DMO) within 2 years of collection, with metadata posted within 90 days of collection. We will work with BCO-DMO to assure that the data and metadata will be submitted in a format acceptable to BCO-DMO. CTD metadata from recent projects are already available through this archive (access appears to be most effective by searching under the project name "MuLTI"), with actual data submission in process as this proposal is being prepared.

3) Larval data. Mussel larval densities from pump samples will similarly be archived with BCO-DMO on the same time schedule. However, because of the time and effort involved in species identification, availability of biological data will lag significantly behind the environmental data. We also reserve the right to embargo the biological data for a reasonable period of time to permit publication of the results. The actual physical samples will be partially destroyed in the course of analysis (i.e., we have to homogenize larvae to extract DNA for molecular analyses or coat them with gold for SEM analyses). If larval densities are sufficiently high to permit sub-sampling, the remainder of each sample will be archived within our labs until the results are published, at which time samples will be discarded. There does not appear to be sufficient justification to incur the costs of archiving these specimens long term.

3) Elemental analysis data. Elemental data along with all metadata will be submitted to BCO-DMO shortly after they are collected and analyzed. We reserve the right to embargo the elemental data for a reasonable period of time to permit publication of the results, but all should be submitted by the completion of the project. In addition, we will make data available to the community post-publication through peer-reviewed journal articles, serving to alert the community to the existence of the data. If a more appropriate data portal develops, we will submit the pertinent data to that archive as well.

4) Predicted larval trajectories from models. Model output including gridded sea level, temperature, salinity, velocity, and mixing coefficients as well as predicted larval trajectories, derived settlement density and connectivity matrices, all in NetCDF format and Open Source Network Data Access Protocol (OPeNDAP) compliant, will be submitted to BCO-DMO. BCO-DMO will archive all the data they manage at the appropriate national archive facility, such as NODC and NGDC. In addition, model results will be available locally at http://rocky.uemoce.maine.edu/ via a THREDDS server.

5) Drifter data. Drifter location data will be made available to the community in near real-time via NOAA's Northeast Fisheries Science Center's website for drifters in the Gulf of Maine

(http://www.nefsc.noaa.gov/epd/ocean/MainPage/DrifterUpdates.html). Time delays will only be those imposed by NOAA and the satellite download process. Data are served according to the "Open Source Network Data Access Protocol (OPeNDAP)" and "Sensor Observation Services" standards for ocean observation systems. We released all of the drifter data collected in recent projects in real time (see entries under “UNE” and “Mussel Spat” on the above website).