

Data Management Plan

Metadata collected during this NSF RAPID project will be posted so that it is available to the public in a timely fashion in compliance with the Division of Ocean Science Sample and Data policy (NSF 2011). This will be accomplished by creating a website with the assistance of WHOI's Biological and Chemical Oceanography Data Management Office (BCO-DMO) <https://www.bco-dmo.org/data> for this specific project.

1. Expected Data. Generally, all of the different types of data will be obtained from the 14 study sites. (Figure 1 of Project Description). The principal types of expected data from this 12 month project include the following components:

- a. Subtidal temperature data from 28 locations (14 sites, 6 and 15 m depths per site)
- b. Data on the abundance, sizes and diversity of reef fish species from the 50 x 5 m Underwater Visual Census transects
- c. Data on the behavior of reef fish (FID, aggression, predation, cleaning behavior) from the analysis of the fish cam and long term video cameras
- d. Survivorship of sea urchins at the sites from the urchin tethering experiments
- e. Biomass of algae consumed by fish in the herbivory experiments
- f. Rates of fish herbivory (bites) on algal communities on subtidal rocky substrates
- g. Acoustic data files from the hydrophone deployments

2. Data Format. Data will be distributed in the common format *.csv files. All files will be accompanied with metadata indicating the location, time and depth of data collection. Multiple backups of all data will be made prior to uploading it on the BCO-DMO website. This involves copying each file onto three 5 TB external hard drives which are stored in waterproof Pelican cases in Witman's Lab and office at Brown University. This includes the QuickTime video files, which are discoverable by file date and site.

3. Access to Data and Data Sharing Practices and Policies. Data collected under the project will be made widely available to the public according to the BCO-DMO guidelines.

4. & 5 Policies for Re-Use, Re-Distribution and Archiving. Data will be archived and stored as Excel .csv files to ensure long-term readability via WHOI's Biological and Chemical Oceanography Data Management Office. In addition, some of the data will be published as appendices accompanying scientific journal publications. These additional data sets will be maintained according to the archiving standards of journals (i.e. <http://esapubs.org/archive/default.htm>)