Data Management Plan

RUI: EVALUATING SELECTION VIA OCEAN ACIDIFICATION AND EVOLUTIONARY RESPONSES OF TWO COASTAL FISHES

The project investigator will comply with the data management and dissemination policies described in the NSF Award and Administration Guide (AAG, Chapter VI.D.4) and the NSF Division of Ocean Sciences Sample and Data Policy.

The project will produce several observational and experimental datasets, described in the list below.

Observational Datasets:

1. Seawater chemistry. Data will include bottle samples collected regularly within our study region (Seal Beach Pier, Los Alamitos Breakwater, Los Alamitos Bay). Measurements will include temperature, pH, total alkalinity, salinity, and derived attributes such as pCO_2 and DIC. Metadata will include collection date and location, as well as dates of in-lab analyses. Excel files will be converted to .csv. Repository: BCO-DMO

2. Fish fecudity data. Data will include measurements of fish length, weight, egg number, age, date collected, temperature and pH of regional seawater (averaged over 1-3 month intervals), species ID. Excel files will be converted to .csv. Repository: BCO-DMO

Experimental Datasets:

1. Breeding experiments. Data will include characteristics of both the spawning adults (length, weight, age, date of collection) and their offspring. Offspring data will include sizes of eggs and larvae, experimental treatment, sire ID, dam ID. Files will also include data collected during the course of the experiments, including mortality rate, growth rate, respiration rate, and measurements of behavior. Excel files will be converted to .csv. Repository: BCO-DMO
2. Transgenerational plasticity experiments. Data will include values of seawater salinty, pH, temperature, alkalinty, and pCO_2 experienced by parents in the experimental tratments. Data will also include measurements of parent size. Data on offspring will include sizes of eggs and larvae, experimental treatment, sire ID, dam ID. Files will also include data on mortality rate, growth rate. Excel files will be converted to .csv. Repository: BCO-DMO

Data will be stored as .csv files. Metadata will include species ID and collection dates, and will be included in the data files.

The investigators will store project data (including spreadsheets, ASCII files, images, and PDFs of scanned logs) on laboratory computers that are backed up by the University's central IT organization.

Data sets will be made available through the BCO-DMO data system within two-years from the date of collection. The project investigators will work with BCO-DMO data managers to make project data available online in compliance with the NSF OCE Sample and Data Policy. Data, samples, and other information collected under this project can be made publically available without restriction once submitted to the public repositories.
Data produced by this project may be of interest to both marine biologists and biological oceanographers.

The PI will work with BCO-DMO to ensure data are archived appropriately and that proper and complete documentation are archived along with the data.

The sole PI (Johnson) will be responsible for all aspects of data management