

# Data management plan

## Research products reuse and redistribution

All research products, including code, data, presentations/posters, and publications will be open access and freely available for reuse without request during all stages of development under a Creative Commons Zero (CC0) license, following the Panton Principles guidelines (<http://pantonprinciples.org>). This license dedicates the research products to the public domain without restriction, allowing for maximum reusability.

## Code

Research products (code) will be available on a publicly available, open access GitHub repository (<http://github.com/embaldrige>), and GitHub issues and wiki will be used as an online lab notebook. The version of code used in final publication will be archived through Zenodo (<https://zenodo.org/>).

## Data

The majority of the data that I will use is publicly available data, so a data management plan (for data) is not necessary for those datasets. However, any scripts written to extract and process the data will be available in the code repository to make the data extraction process fully reproducible, as long as a researcher has access to the datasets.

No new data will be collected; but additional data may be compiled from the literature. Any additional database compilations will be initially compiled openly on GitHub, and versions of the database used for analysis will be archived on figshare prior to ultimate publication in *Ecological Archives* as a data paper, which archives the data and allows the data to be freely accessed. I will write script to make these data, and any other publicly available datasets that I use, directly importable through the EcoData Retriever([www.ecodataretriever.org](http://www.ecodataretriever.org)). The EcoData Retriever is a tool developed to make the reuse of ecological data simpler and more reproducible [morris2013].

## **Presentations/Posters**

Presentations and posters about the research will be archived on GitHub (<http://github.com/embaldrige/posters-pres>) and either figshare (posters) or Slideshare (presentations). Additionally, a pre-talk transcript will be available on the GitHub repository in advance of the presentation to accommodate neurodivergent and hearing impaired colleagues. Ideally, talks will be live-streamed with Google Hangouts on Air or similar software to allow for remote participation. If this is not possible, due to venue or event restrictions, I will record the talk after the fact. In either event, the video of the talk will then be closed captioned and made publicly available on YouTube.

## **Publications**

All publications will first be made available as pre-prints through a preprint server such as arXive, bioRxive, or PeerJ. Final publications will be published in journals that allow for gold open access publication and have rapid review times (e.g., Ecology, PLoS, PeerJ, etc.).

## **Roles and responsibilities**

Elita Baldridge will be primarily responsible for data collection and management, code development and management, and dissemination of research products. Supporting scientists will provide guidance and support in developing, managing, and sharing code. The reproducible workflow and archiving of research products for this project will provide long-term open-access to data, code, and computational tools both during the term of the grant, and after the grant ends.