# Data Management Plan - DECISION22

# Matthew Grainger

#### 1 2 2022

### **Project Information**

Project: [DECISION22: Advancing Evidence Synthesis Toolchains for Conservation Decision Making]

Website: [Website of the project]

PI: [Principal investigator of the project]

#### Table of Contents:

Data Management Plan and other Documentation

Data Management Units

Data Collection

Data Documentation

Quality Control

File Organization

Formats

Storage

Backup

Workflow Internal Data Sharing

Data Use

Protection for Sensitive and Confidential Data

Management of Physical Samples

Data Publication

Data Archival

Roles and Responsibilities

### Data Management Plan and other Documentation

#### Instructions

[Include a reference to all the documents that may affect decision making about datasets in this project.] ##### Text

- The data management plan that was submitted with the grant proposal for this project can be found in  $\lceil blank \rceil$
- Data Sharing Agreement between [blank] and [blank] can be found in [blank] Contracts between [blank] and [blank] that involve data management can be found in [blank]
- Department and college policies with data management consequences [blank]
- Oregon State University Open Access policy can be found here. The policy directs faculty to submit an electronic copy of the author's accepted (post-peer review, pre-typeset) manuscript of their articles to OSU Libraries for dissemination via the ScholarsArchive@OSU institutional repository.
- Oregon State University's University Data Managmeent, Classification, and Incident Response policy can be found here. It classifies data into Unrestricted, Sensitive and Confidential and defines standards of care for each kind to protect confidentiality, integrity, and availability of data. All the researchers and collaborators in this research project strive to work with data in an ethical manner, and will use the Community Principles on Ethical Data Practices as a guiding code of ethics.

# **Data Management Units**

Instructions

[Define datasets that will be created during this project, and group them according to different management needs. Describe relevant general information about the data groups: are they observational, experimental, simulation, model output or assimilation datasets; How will they be collected? How much data is expected?] ####### Text

[blank] groups of datasets will be generated during the course of this project.

1. Dataset Group 1 [change name to more informative name]

Type of dataset: [observational, experimental, simulation, model output, assimilation...]

Collection strategy: [blank]

Amount of data expected: [blank]

2. Dataset Group 2 [change name to more informative name]

 $\label{thm:condition} {\it Type of dataset: [observational, experimental, simulation, model output, assimilation...] }$ 

Collection strategy: [blank]

Amount of data expected: [blank]

### **Data Collection**

Instructions

[Information relevant to how data will be collected, captured or created]

**Sampling sites:** [Include information with description of sampling sites including important data about them such as location, official names to be referred to, instrumentation in each sampling site, etc.]

**Existing protocols:** [Include the location of protocols relevant to the research that already exist, like lab safety protocols, sampling protocols, instrument installation protocols, etc. Include here all the contextual information relevant for the use of the protocol that is not explained in the protocol itself ]

- 1. Name: [name of protocol]
- 2. Location: [where to find the protocol]
- 3. Expected use: [who should use the protocol, when]
- 4. Training: [who will train new researchers. Who to ask when there are questions about the protocol.]

**New protocols:** [For projects that involve the creation of routinely creating new protocols, describe the process of creating new protocols.]

- 1. Process [Defines the process to create the protocol]
- 2. Approval [Process to approve the protocol, and who should approve it]
- 3. Tools [If special tools will be used to create the protocol, specify]
- 4. Storage [Where it should be saved, with which file naming strategy]
- 5. Update /How to update the protocol/
- 6. Expected use [Who should use the protocol, and for which circumstances]

**Instrumentation:** [Include relevant information about the instruments that will be used to collect data, like where to find instructions, maintenance to ensure that the sensors will work correctly, etc.]

**Software:** [Include relevant information about the software that will be used to generate data. Where to access the documentation. Intellectual property information about the software to be aware of. ]

### **Data Documentation**

Instructions

[Describe how data will be documented throughout the project]

Text

Data will be documented throughout the research process using the following tools:

**Lab notebooks:** [If the project will use lab notebooks to document their lab procedures, include here best practices to keep them in the lab]

Details about experiments and work in a lab are quickly forgotten unless they are written down. Be diligent in writing information into notebooks. Follow best practices:

- Lab notebooks will always be bound notebooks. Blank notebooks can be found in [blank]. Number and date the notebook when you begin with a new one.
- Pages should always be numbered. Write legibly and in a language understood by everybody in the lab. Error correction: incorrect information should be visible, but clearly marked as incorrect. Date, sign and explain the correction. Do not erase entries or blot them out. Printed documentation added to the lab notebook should be attached permanently. Note where all electronic files associated with the experiment are located. All entries should be consecutive. Always record dates. Backup: at the end of the day [blank] [scan, photograph...] the pages of the notebook that you worked on, and store them in [blank]

**Templates:** [If the project will use templates to document datasets, include here instructions about where to find the templates and how to use them]

**Readme:** [If the project will be documented using readme files, include expectations about where they will be created, and which information will be recorded in them.]

### Quality Control

Instructions

[Most data need to go through a quality control process. Describe the process here, and describe how it will be documented. For ideas around defining levels of quality control, see the Guidance Document.]

# File Organization

Instructions

[Details about the organization of data files in shared or privatefolders. What name to give to folders? What kind of filesshould be savedin each folder? Design file naming techniques so that file names are informative for all files, and consistent throughout the folders, regardless of the person creating the file.]

#### **Formats**

Instructions

[Describe preferred formats save information and data. Describe situations in which files should be changed from one format to a different one. See the guidance document for a list of preferred formats for long term preservation.]

Storage

**Backup** 

Workflow Internal Data Sharing

Data Use

Protection for Sensitive and Confidential Data

Management of Physical Samples

**Data Publication** 

**Data Archival** 

## Roles and Responsibilities

Role definitions: [adapt the definition of each of the roles for the Project. These roles are defined so that this document will not need to be adapted every time that there are changes within the Project team. These definitions should reflect as accurately as possible the roles in the project. For example, if the project will have Postdocs but not technicians, rename the Researcher role to Postdoc. For example, if there are going to be two kinds of students (field students and lab students) that will have different data management roles, these should be outlined here. For example, if the project is going to have a data manager, outline the role here.]

**Principal Investigator (PI):** leads the Project. It is usually designated by the funder. If there is no funder or the funder does not designate the principal investigator, it will be person providing leadership to the Project.

**Faculty Investigator:** they actively perform research on all or a part of the research Project. They may provide active mentorship to students.

**Team member:** they contribute to the scientific development or execution of a study in a substantive, measurable way (research/postdoctoral fellows, technicians, associates and consultants).

Student: member of the Project pursuing a degree. Undergraduate, master, PhD or others %% ##### Responsibilities [adapt the definition of each of these responsibilities to the Project. Add more, or remove if necessary. Decide who (which role) is going to be responsible for each of these]

**DMP Implementation:** responsible for ensuring Data Management Plan and the Internal Data Sharing Plan move from planning into implementation; ensure that any practices, responsibilities, policies outlined in the plan are followed; ensure that new members of the Project will receive data management training; responsible for maintaining the Data Management Plan and the Internal Data Sharing Plan up to date, and making sure that all members of the Project understand and are prepared to apply the changes.

Responsibility of: [complete with one of the roles defined above]

**Protection of sensitive and protected data:** responsible for complying with applicable laws and regulations, institutional policies, and ethical principles governing the conduct of human subjects research, sensitive and protected data.

Responsibility of: [complete with one of the roles defined above]

**Instrumentation maintenance:** responsible for conducting tasks related to instruments such as installation, calibration, testing, and performing maintenance of instrumentation equipment.

Responsibility of: [complete with one of the roles defined above]

**Data collection/ data generation:** responsible for data collection and creation (research, locate, identify, and measure), data entry, information processing (transcribing and manipulation), data generation (prototyping, models, and database).

Responsibility of: [complete with one of the roles defined above]