## **Plan Overview**

A Data Management Plan created using DMP Tool

DMP ID: https://doi.org/10.48321/D1C42A99f0

Title: Macro-Algae Analysis

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Funder: Tetiaroa Society

Template: Tetiaroa Field Station

#### **Project abstract:**

Determine the abundance and biomass of the invasive macroalgae species, Turbinaria and Sargassum. Then, identify marine species located on random samples of each species. Turbinaria decreases fish abundance and biodiversity, competing with native algae and coral for space and resources. Determine the effect on biodiversity if Turbinaria were to be removed from an ecosystem entirely. Under the guidance of Maya Lin, the ISP class will conduct transect data collection in Baie Vaiori, located in Mo'orea. The objective is to gather data on the spatial occupancy of algae. Additionally, algae will be gathered to bring back to the lab where they will be examined for any residing organisms.

Start date: 03-05-2024

End date: 03-05-2024

Last modified: 07-08-2024

#### **Copyright information:**

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## **Macro-Algae Analysis**

## Methodology

### How will data be collected or produced?

https://www.protocols.io/view/macroalgae-analysis-dahf2b3n

## Access, Data Sharing and Reuse

**Will you require an embargo period prior to making your prepublication data available?** If requested, an embargo period may be granted for up to [1 year] after the end date of the Project as specified in its Data Management Plan.

• No

Do you agree to share all prepublication data contributed to the Tetiaroa Data Trust under the CC-0 license?

• Yes

Will your project include the collection of material samples? For example, archeological, geochemical (geosamples), and biological (biosamples) materials.

• Yes

**Please describe standards you will utilize to** register sampling events, apply unique identifiers, implement relevant metadata standards, and track derived material samples, data, and outputs.

Algae identification

### What are the further intended and/or foreseeable research uses for the completed dataset(s)?

Turbinaria removal across multiple sites

# State any expected difficulties in data sharing, along with causes and possible measures to overcome these difficulties.

Falsified data

## **Documentation and Metadata**

### What documentation and metadata will accompany the data?

Spreadsheet of visual field analysis (number of times each category appeared along each transect), spreadsheet of critter information, and algae weight and stem length, photographs of critters and stem sizes

## **Ethics and Intellectual Property**

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues? Demonstrate that you have sought advice on and addressed all copyright and rights management issues that apply to the resource.

N/A

How will you handle sensitive data. Make explicit mention of consent, confidentiality, anonymization and other ethical considerations, where appropriate.

N/A

Are any restrictions on data sharing required – for example to safeguard research participants or to gain appropriate intellectual property protection?

• No

Describe restrictions on data sharing required due to privacy or IP protection.

N/A

## Short-Term Storage, Security, and Data Management

Describe the planned quality assurance and back-up procedures, including security/storage and any use of encryption.

Storage on Google Drive cloud.

#### How will you manage access and security?

Share with participants and researchers

# Specify the responsibilities for data management and curation within research teams participating in your project at all participating institutions.

Share findings with local fishermen, and discuss the relevance of data and conclusions with involved and affected parties.

### **Selection and Preservation**

#### Which data are of long-term value and should be retained, shared, and/or preserved?

Biodiversity associated with each macroalgae type, abundance of macroalgae at the time of research.

### What is the long-term preservation plan for the dataset?

Zenodo

## **Planned Research Outputs**

## Dataset - "Macroalgae Abundance, Size, and Biodiversity Data"

Spreadsheets including the field survey information of all transects, the weight and length of macroalgae sample collections, and the biodiversity (species, size of individuals, etc.) associated with each type of algae collected from the field.

# Planned research output details

| Title   | Туре    | Anticipated<br>release<br>date | access | Intended       | Anticipated<br>file size | License  | Metadata<br>standard(s) | May<br>contain<br>sensitive<br>data? | May<br>contain<br>PII? |
|---|---------|--------------------------------|--------|----------------|--------------------------|--|-------------------------|--------------------------------------|------------------------|
| Macroalgae<br>Abundance,<br>Size, and<br>Biodiversity<br>Data | Dataset | 2024-03-11                     | Open   | None specified |                          | Creative<br>Commons<br>Attribution<br>4.0<br>International | None<br>specified       | No                                   | No                     |