Metadata for Data from Functional Ecology Paper

Mike Fox

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Please **revise and fill in** as much information as possible. Fields highlighted in yellow must be completed.

The information in this document will be used to create the EML of the data package to be published on the [Environmental Data Initiative (EDI) repository](https://portal.edirepository.org/nis/home.jsp).

## 1. Data Package Title

Metadata from: Trophic plasticity in a common reef-building coral: Insights from δ13C analysis of essential amino acids

## 2. Dataset Title

*Include what, where, and when in the dataset title*

| Data set Title | Description | File type | File name |
| --- | --- | --- | --- |
| Bulk d13C and d15N data | This file contains all bulk tissue d13C and d15N values to create the biplot in figure 2b | csv | Bulk\_13C\_15N\_Palmyra.csv |
| LDA and Dd13C values for correlation | This file contains the data required to reproduce figure 4C | csv | LDA\_Dd13C\_corr\_sites.csv |
| Confidence interval estimates | This file contains the data required to reproduce figure 2C | csv | mean\_CI\_boostrap\_for\_plotting.csv |
| Raw Amino Acid d13C data from Palmyra Atoll | This file contains all amino acid d13C measurements made on P. meandrina host and endosymbiont tissue and heterotrophic resources (POM and zooplankton) from Palmyra Atoll. | csv | Palmyra\_AAd13C.csv |
| R code for analyses | This script will open all data files and reproduce the analyses and main text figures for the manuscript. | R Script | Fox et al. FE\_code.R |

## 3. Abstract

*Please provide an abstract* ***specifically of the dataset****. This is different from the abstract of an associated publication. Include what, why, where, when, and how*

[See example here](https://docs.google.com/document/d/1KdHJObHl5Bxxr9t0LISTwX0cCSVvx7NPUjz5T_P9JEc/edit#)

## 4. Creators

*These are the people who will show up as authors in the dataset citation. These are the individuals who have provided intellectual or other significant contributions to the creation of this dataset.* ***Please add a row with the information of each individual that should be part of the authorship of this dataset.***

**We highly encourage you to create an ORCID if you don’t already have one.** [Find more information here.](https://info.orcid.org/what-is-orcid/)

| **First Name** | **Middle Initial** | **Last Name** | **Organization** | **Email** | **ORCID ID** |
| --- | --- | --- | --- | --- | --- |
| Michael | D | Fox | Woods Hole Oceanographic Institution | mfox@whoi.edu | https://orcid.org/0000-0002-5004-1025 |
| Emma |  | Elliott Smith | University of New Mexico |  | https://orcid.org/0000-0002-3221-0737 |
| Jennifer |  | Smith | Scripps Institution of Oceanography |  |  |
| Seth |  | Newsome | University of New Mexico |  | https://orcid.org/0000-0002-4534-1242 |

## 5. Other personnel names and roles

*Who should a data user contact with questions about this data?* *There must be at least one person or organization name to serve as the contact for this dataset.* *You may also list other personnel who participated in the project (such as field crew, lab tech, data entry, etc.) in this table with optional fields, email addresses, organization, and ORCID ID.*

**We highly encourage you to create an ORCID if you don’t already have one.** [Find more information here.](https://info.orcid.org/what-is-orcid/)

| First Name | Last Name | Organization | Email | ORCID ID | Role in Project |
| --- | --- | --- | --- | --- | --- |
| Michael | Fox | Woods Hole Oceanographic Institution | mfox@whoi.edu | https://orcid.org/0000-0002-5004-1025 | Contact |
|  |  |  |  |  |  |
| Camila | Vargas Poulsen | PADL Data Manager, University of California Santa Barbara | camilavargas@ucsb.edu |  | associated party |

## 6. License

***Please highlight*** *the license for the release of your data. Click on the license name for more information.*

[CCO](https://creativecommons.org/publicdomain/zero/1.0/) - RECOMENDED

Public Domain Dedication, aka “No Rights Reserved.” This one means, “If I hold copyright in this, I waive it.”

Consultation with the original investigators is strongly encouraged but not necessary. Publications and data products that make use of the dataset should include proper acknowledgment.

or

[CC BY](https://creativecommons.org/licenses/by/4.0/)

Data user is required to cite it appropriately in any publication that results from its use.

## 7. Keywords

*Using keywords from a controlled vocabulary (CV) will improve your data’s future discovery and reuse. The LTER CV is a good source for keywords. Access the* [*LTER CV here*](https://vocab.lternet.edu/vocab/vocab/index.php)*. Also, please determine one or two keywords that best describe your lab, station, and/or project (e.g., Trout Lake Station, NTL LTER).). Add as many rows to this table as needed*

| Keywords |
| --- |
| Palmyra Atoll |
|  |
|  |
|  |

## 8. Funding of this work

*List only the main PI of a grant that supported this project, starting with the main grant first. Add rows to the table if several grants were involved.*

| PI First Name | PI Last Name | PI Email | PI ORCID ID | Title of Grant | Funding Agency | Funding ID Number |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## 9. Timeframe

| Begin Date | End Date | Is data collection ongoing or completed? |
| --- | --- | --- |
| 2015-09 | 2015-09 | Yes |

## 10. Geographic location

*Use decimal degrees to define a point or a bounding box.* Every point you add will be displayed on a map once the data package is published. [See example here](https://portal.edirepository.org/nis/mapbrowse?scope=knb-lter-sbc&identifier=108)

**Verbal description:** Palmyra Atoll National Wildlife Refuge

| Directions | Coordinate |
| --- | --- |
| Northbound | 5.88333 |
| Southbound | 5.87100 |
| Eastbound | -162.04300 |
| Westbound | -162.08300 |

**Copy this block to add multiple points or areas.**

**Verbal description:**

| Directions | coordinate |
| --- | --- |
| Northbound |  |
| Southbound |  |
| Eastbound |  |
| Westbound |  |

## 11. Methods

*Be specific about the study design and field and lab methods for collecting and processing the data. Include instrument descriptions and protocol citations.*

Find an example [in this link](https://docs.google.com/document/d/1KdHJObHl5Bxxr9t0LISTwX0cCSVvx7NPUjz5T_P9JEc/edit#)

## 12. Data Provenance

*Is this data derived from other data? If so, you will want to document this information, so users know where this data came from. Please specify the source datasets used in the below provenance table, preferably with their DOI or URL.* [*Here is an example of a dataset derived from several others*](https://portal.edirepository.org/nis/mapbrowse?packageid=edi.101.3)*.*

| Dataset Title | Dataset DOI or URL | Creator Name | Contact Email |
| --- | --- | --- | --- |
| Data from: Trophic plasticity in a common reef-building coral: Insights from δ13C analysis of essential amino acids | <https://doi.org/10.5061/dryad.tv8v6k3> | Fox, Michael | mfox@whoi.edu |

## 13. Data Table

Each row in the below table describes one column in your data table. Complete each row as follows:

* **Description:** Please give a specific definition of the column name. This can be lengthy.
* **Unit:** Identify units for all numeric variables. All rows where there is an \* under the unit column must be filled in with a unit.
* **Date format:** Please tell us exactly how the date and time are formatted: e.g., mm/dd/yyyy hh:mm:ss, plus the time zone and whether daylight savings were observed. ISO date format of YYYY-MM-DD or YYYY-MM-DD hh:mm:ss is preferred.
* **Missing value code:** If a code for ‘no data’ is used, please specify: e.g., -99999, NA
* **Missing value code Explanation:** Why are these values missing? e.g.: value not available, value not recorded.

Bulk\_13C\_15N\_Palmyra

| attributeName | attributeDefinition | class | unit | dateTimeFormatString | missingValueCode | missingValueCodeExplanation |
| --- | --- | --- | --- | --- | --- | --- |
| Site |  | categorical |  |  |  |  |
| Site.specific |  | character |  |  |  |  |
| Coast |  | categorical |  |  |  |  |
| Zone |  | categorical |  |  |  |  |
| replicate |  | numeric | !Add units here! |  |  |  |
| Species |  | categorical |  |  |  |  |
| Tissue |  | categorical |  |  |  |  |
| 15N |  | numeric | !Add units here! |  |  |  |
| 13C |  | numeric | !Add units here! |  |  |  |
| Dd13C |  | numeric | !Add units here! |  |  |  |
| Dd15N |  | numeric | !Add units here! |  |  |  |

LDA\_Dd13C\_corr\_sites

| attributeName | attributeDefinition | class | unit | dateTimeFormatString | missingValueCode | missingValueCodeExplanation |
| --- | --- | --- | --- | --- | --- | --- |
| Site |  | character |  |  |  |  |
| Rep |  | numeric | !Add units here! |  |  |  |
| Dd13C |  | numeric | !Add units here! |  |  |  |
| LD1 |  | numeric | !Add units here! |  |  |  |
| Heterotrophy |  | numeric | !Add units here! |  |  |  |
| E\_Ile13C |  | numeric | !Add units here! |  |  |  |
| E\_Leu13C |  | numeric | !Add units here! |  |  |  |
| E\_Lys13C |  | numeric | !Add units here! |  |  |  |
| E\_Phe13C |  | numeric | !Add units here! |  |  |  |
| E\_Thr13C |  | numeric | !Add units here! |  |  |  |
| E\_Val13C |  | numeric | !Add units here! |  |  |  |

mean\_CI\_boostrap\_for\_plotting

| attributeName | attributeDefinition | class | unit | dateTimeFormatString | missingValueCode | missingValueCodeExplanation |
| --- | --- | --- | --- | --- | --- | --- |
| Tissue |  | character |  |  |  |  |
| mean |  | numeric | !Add units here! |  |  |  |
| lower CI |  | numeric | !Add units here! |  |  |  |
| upper CI |  | numeric | !Add units here! |  |  |  |

Palmyra\_AAd13C

| attributeName | attributeDefinition | class | unit | dateTimeFormatString | missingValueCode | missingValueCodeExplanation |
| --- | --- | --- | --- | --- | --- | --- |
| SampleID |  | character |  |  |  |  |
| RunID |  | numeric | !Add units here! |  |  |  |
| Ala13C |  | numeric | !Add units here! |  |  |  |
| Ala13C.SD |  | numeric | !Add units here! |  |  |  |
| Gly13C |  | numeric | !Add units here! |  |  |  |
| Gly13C.SD |  | numeric | !Add units here! |  |  |  |
| Thr13C |  | numeric | !Add units here! |  |  |  |
| Thr13C.SD |  | numeric | !Add units here! |  |  |  |
| Ser13C |  | numeric | !Add units here! |  |  |  |
| Ser13C.SD |  | numeric | !Add units here! |  |  |  |
| Val13C |  | numeric | !Add units here! |  |  |  |
| Val13C.SD |  | numeric | !Add units here! |  |  |  |
| Leu13C |  | numeric | !Add units here! |  |  |  |
| Leu13C.SD |  | numeric | !Add units here! |  |  |  |
| Ile13C |  | numeric | !Add units here! |  |  |  |
| Ile13C.SD |  | numeric | !Add units here! |  |  |  |
| Pro13C |  | numeric | !Add units here! |  |  |  |
| Pro13C.SD |  | numeric | !Add units here! |  |  |  |
| Asp13C |  | numeric | !Add units here! |  |  |  |
| Asp13C.SD |  | numeric | !Add units here! |  |  |  |
| Glu13C |  | numeric | !Add units here! |  |  |  |
| Glu13C.SD |  | numeric | !Add units here! |  |  |  |
| Phe13C |  | numeric | !Add units here! |  |  |  |
| Phe13C.SD |  | numeric | !Add units here! |  |  |  |
| Tyr13C |  | numeric | !Add units here! |  |  |  |
| Tyr13C.SD |  | numeric | !Add units here! |  |  |  |
| Lys13C |  | numeric | !Add units here! |  |  |  |
| Lys13C.SD |  | numeric | !Add units here! |  |  |  |
| InjCom |  | character |  |  |  |  |
| Site |  | categorical |  |  |  |  |
| group |  | categorical |  |  |  |  |
| group2 |  | categorical |  |  |  |  |

## 14. Attributes code

*If you use codes in your column, please define each code in the following table.* ***Fill in only if necessary***

Bulk\_13C\_15N\_Palmyra

| attributeName | code | definition |
| --- | --- | --- |
| Coast | E |  |
| Coast | N |  |
| Coast | S |  |
| Coast | W |  |
| Site | FR |  |
| Site | FR\_13 |  |
| Site | FR\_132 |  |
| Site | FR\_14 |  |
| Site | FR\_239 |  |
| Site | FR\_3 |  |
| Site | FR\_36 |  |
| Site | FR\_37 |  |
| Site | FR\_38 |  |
| Site | FR\_39 |  |
| Site | FR\_4 |  |
| Site | FR\_40 |  |
| Site | FR\_5 |  |
| Site | FR\_69 |  |
| Site | FR\_7 |  |
| Site | FR\_9 |  |
| Site | FR\_Fox |  |
| Site | FR\_Strawn |  |
| Site | Lag |  |
| Species | Coral |  |
| Species | Lag-PLKT |  |
| Species | Lag-POM |  |
| Species | PLKT |  |
| Species | POM |  |
| Tissue | PLKT |  |
| Tissue | POM |  |
| Tissue | T |  |
| Tissue | Z |  |
| Zone | N |  |
| Zone | NE |  |
| Zone | NW |  |
| Zone | S |  |
| Zone | SE |  |
| Zone | SW |  |

Palmyra\_AAd13C

| attributeName | code | definition |
| --- | --- | --- |
| group | Animal |  |
| group | Plankton |  |
| group | POM |  |
| group | Zoox |  |
| group2 | Animal |  |
| group2 | Source |  |
| group2 | Zoox |  |
| Site | FR13 |  |
| Site | FR239 |  |
| Site | FR3 |  |
| Site | FR4 |  |
| Site | FR7 |  |
| Site | FR9 |  |
| Site | LAG |  |

## 15. Scripts/code (software)

*List any software scripts/code you would like to archive along with your data. These may include processing scripts you wrote to create, clean, or analyze the data.*

| Filename | Description | Scripting Language |
| --- | --- | --- |
| Fox et al. FE\_code.R | This script will open all data files and reproduce the analyses and main text figures for the manuscript. | R |
|  |  |  |
|  |  |  |

## 16. Articles

*List articles citing this dataset. Add as many rows as necessary*

|  |  |  |
| --- | --- | --- |
| **Article DOI or URL (DOI is preferred)** | Article title | Journal title |
| <https://doi.org/10.1111/1365-2435.13441> | Trophic plasticity in a common reef-building coral: Insights from δ13C analysis of essential amino acids | Functional Ecology |
|  |  |  |
|  |  |  |

## Notes, Comments, and Questions

*Please let us know if you have any additional comments or questions about your data or the EML information. THANK YOU!*