# Data Paper Guidelines

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## What are Data Papers?

Data Papers are a unique type of manuscript published in Ecology, used to present large or expansive data sets, accompanied by metadata which describe the content, context, quality, and structure of the data. Metadata may contain limited statistical analysis of the data; more detailed analysis of data sets could, however, form the core of a companion paper. There is no length limit for Data Papers.

Data Papers are subject to full peer-review. The review process will evaluate ecological significance and overall quality first, with further technical review to ensure a high standard of usability, especially with respect to associated metadata.

Only the Abstract document will be typeset for published Data Papers. The Metadata document and data folder are made available as supporting information. Because of this structure, all Data Papers are posted as "Freely Available" with the Metadata document and data folder freely available for all readers.

# Open Research Policy requirements

In accordance with our <u>Open Research Policy</u>, the data being presented in a Data Paper must be:

- 1) Archived with the Metadata by providing it as "Supporting Information for review and publication" at the time of submission.
- 2) Deposited in an external repository if the manuscript is accepted.

# Licensing Options and Fees

Standard licensing options and publication fees apply, as outlined in <u>the journal's author</u> guidelines.

Please note: Publication fees apply only to the typeset portions (i.e. the Abstract document) of the Data Paper.

Choosing an "Open Access" license for a Data Paper is an option, but the Abstract document is the only part of the paper that would be affected, since the Metadata document and data folder will be freely available by default.

# Organizing Your Data Paper files

The files associated with a Data Paper are separated into three categories: Data files, the Metadata document, and the Abstract document.

#### Data files

- Data files are published as supporting information.
- Data files must also be archived in an external repository upon publication.
- These files should be consistently formatted in non-proprietary file formats (such as comma-separated values [.csv] or tab-delimited ASCII text [.txt]).
- Each file must be given a unique and descriptive file name.
- Files must be uploaded within a single compressed folder (.zip or .rar) named
   "DataS1", with no other characters in the file name.
  - Within the compressed folder, you can use any folder directory you wish to organize your files.
- If your data files are too large to be submitted via ScholarOne, please include a note in the "Open Research" section of the ScholarOne online submission form and contact <a href="the-journal's editorial staff">the-journal's editorial staff</a> to explain the situation.

#### Metadata document

- The Metadata document is published as supporting information.
- This file should be named "MetadataS1", with no other characters in the file name.
- This document is not copy edited or typeset and should be formatted for publication by the author.
- The Metadata document must be put together using the Class system. See the "Metadata formatting" section for more information.

#### Abstract document

- The Abstract document is the only typeset part of the Data Paper and is submitted as the "Main Document".
- See the "Abstract Formatting" section for complete instructions.

# Uploading Your Data Paper Files

When uploading your files to ScholarOne, use the following file designations:

- Both the compressed folder holding data files ("Data S1") and the Metadata document ("Metadata S1") should be designated as "Supporting Information for review and publication".
- The Abstract document should be designated as the "Main Document".
- If your data files are too large to be submitted via ScholarOne, please include a note in the "Open Research" section of the ScholarOne online submission form and contact the journal's editorial staff to explain the situation.

# Data formatting guidelines

Data should be logically and consistently formatted. Our primary goal is to ensure that your files will be accessible and legible to every user, on every platform, for the foreseeable future - as such, we avoid posting files in a proprietary format.

- Excel spreadsheets should be converted to a plain text format, such as commaseparated values (.csv) or tab-delimited ASCII text (.txt).
- Data files should be given unique and descriptive file names.
- Software should be submitted both as source code and compiled (executable)
  code. Submitting compiled code without accompanying source code is not
  acceptable.
- Generally, synthetic data (e.g., figures) can accompany, but not substitute for, raw data in Data Papers.
  - o Synthetic results should be placed within the accompanying metadata text.
- All data files should be placed in a single compressed folder (.zip or .rar file)
   named "DataS1", with no other characters in the file name.
  - Within the compressed folder, you can use any folder directory you wish to organize your files.

# Metadata formatting guidelines

Metadata fully describe the content, context, quality, and structure of the data. The Metadata document should be put together using our <u>template document (.docx)</u>). All Classes (Class I-Class V) and appropriate fields must be completed. Questions about relevance of specific fields should be directed to <u>the journal's editorial staff</u>.

- The metadata should be submitted in a single .doc or .docx file.
- Metadata text should generally adhere to the typesetting guidelines described in the journal's author guidelines.

## General Guidelines for Metadata Sections

## Research Origin Descriptors

The motivation or purpose of your research should appear here. State the questions you sought to answer, and the background of those questions.

#### Methods

The methods section should include the following:

- A clear description of the experimental design, sampling procedures, and statistical procedures is especially important in metadata describing field studies, simulations, or experiments.
- If you list a product (e.g., animal food, analytical device), provide the name and location of the manufacturer.
- Give the model number for equipment used.
- Provide complete citations, including author (or editor), title, year, publisher, and version number, for computer software mentioned in the metadata.

#### Data Documentation

Particular attention should be paid to providing comprehensive documentation of the physical structure of the data, known data anomalies, and quality assurance and quality control procedures employed. Contributors are encouraged to provide comprehensive documentation of supplemental descriptors that would facilitate secondary data use and interpretation. Before submitting the Data Paper, contributors should thoroughly review the metadata and verify that physical structure descriptors are enough to permit secondary usage of the data.

## Statistical Analysis

This can appear in the Metadata document, but it should be kept to a minimum. Such detailed analyses of data sets could, however, form the core of a companion paper submitted to an ESA journal. If you plan on submitting a companion paper, you must clearly state this in your cover letter.

## Acknowledgments

Acknowledgments should be brief.

#### References section

Before submitting the metadata, check each citation in the text against the References section to see that they match exactly.

## Tables and figures

Tables and figures should be embedded in the metadata where appropriate.

#### **Appendices**

Data Papers can not include appendices.

# Abstract ("Main Document") Formatting Guidelines

The Abstract document is the only part of a Data Paper that is typeset. It includes the title, author list, Abstract, key words/phrases, and the Open Research statement and is designated as the "Main Document" in the file list.

The Abstract document must be put together using our template (.docx).

#### **Title**

- Titles should be concise and informative. The maximum length is 120 characters (including spaces).
  - ScholarOne enforces this limit in the "Title" field of the ScholarOne online submission form.
  - If your title does not fit into this field, it must be shortened, and the manuscript should be changed to reflect the shortened title
- Use sentence case, capitalizing only the first word and proper nouns.

## Authors and data compilers

- For each author, state the relevant address--usually the institutional affiliation of the author during the period when all or most of the data were collected.
  - The authors' present address(es), if different from this, should appear in parentheses.
- Note the corresponding author on the title page.

- Provide a current, corresponding e-mail address to which questions regarding the data set can be directed.
- o There can be only one corresponding author on a manuscript.
- Due to the large number of authors found on many Data Papers, checking author names takes up a significant amount of time for the journal's editorial staff. To expedite the review process, please make sure to check the following:
  - Author names should match between the manuscript and in the ScholarOne online submission form.
  - Author names should be provided in the same order between the manuscript and the ScholarOne online submission form.

#### Abstract

• The abstract can be a maximum of 500 words.

## Key words/phrases

- Please supply up to 12 key words/phrases for indexing purposes.
- The list of key words/phrases should match between the Abstract document, the Metadata document, and the ScholarOne online submission form.
- The list of key words/phrases should be in alphabetical order in all locations.

## Open Research statement

- You must include an Open Research statement with your submission.
- See our Open Research policy for full instructions and requirements.
- The Open Research statement in your Abstract document must match your Open Research statement in the "Open Research" section of the ScholarOne online submission form.
- You must state the external repository you will be using to archive your material, should the manuscript be accepted. After acceptance, this section will include all details for accessing the data externally.