

ASSOCIATING EDI DATA PACKAGES WITH THE JOURNAL ARTICLES THAT USE THEM

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INTRODUCTION: OUTLINE

1. Why associate data packages with journal articles? (Mark Servilla)
2. Viewing and creating associations in the EDI Data Portal
3. PASTA+ Journal Citation Web Services
 - a. *Create Journal Citation*
 - b. *Delete Journal Citation*
 - c. *Get Journal Citation*
 - d. *List Data Package Citations*
 - e. *List Principal Owner Citations*
4. How PASTA+ records associations in DataCite
5. Discussion and Q&A

INTENDED AUDIENCE

- Information Managers
 - Anyone who uses PASTA+ web services or the Data Portal to manage data packages in the EDI Data Repository
- Anyone who'd like additional insight into how data packages are managed in the EDI Data Repository

TERMS USED

- PASTA+
 - The servers and software that drive/manage/power the EDI Data Repository
 - Exposed to the outside world through a suite of RESTful web services, as documented by the PASTA+ Web Services API (<http://pastaplus-core.readthedocs.io>)
 - PASTA+ is the latest incarnation of PASTA
 - Continues to support the LTER community (as PASTA has since 2013)
 - Supports additional communities: LTREB, MSB, OBFS, others (since 2016)
- EDI Data Repository
 - The curated content, primarily in the form of metadata (EML, Dublin Core) and data
- EDI Data Portal (<https://portal.edirepository.org>)
 - A web applications that interacts with (but is separate from) the EDI Data Repository
 - Using the data portal, end users can interact with the EDI Data Repository without concerning themselves with PASTA+ web services, though the data portal code makes extensive use of those web services
- DataCite
 - DataCite is a leading global non-profit organization that provides persistent identifiers (DOIs) for research data.
 - EDI is a DataCite member organization. EDI can mint DOIs for the data package resources in its data repository.

Part 1

Why associate data packages with journal articles?

Part 2

Viewing and creating associations in the EDI Data Portal

JOURNAL CITATIONS APPEAR ON THE DATA PACKAGE "LANDING PAGE" IN THE DATA PORTAL

<https://portal.edirepository.org/nis/mapbrowse?packageid=edi.181.1>

Portion of landing page for
edi.181.1



EDI Data Portal

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Data Package Summary [View Full Metadata](#)

Title: Demographic measures of *Hypericum cumulicola* (Hypericaceae) in 15 populations in Florida Rosemary Scrub patches with different time-since-fire, at Archbold Biological Station, Highlands County, Florida from 1994-2015

Creators: Quintana-Ascencio, Pedro F; University of Central Florida
Menges, Eric S; Archbold Biological Station

Publication Date: 2018-03-22

Citation: Quintana-Ascencio P. F., E. S. Menges. 2018. Demographic measures of *Hypericum cumulicola* (Hypericaceae) in 15 populations in Florida Rosemary Scrub patches with different time-since-fire, at Archbold Biological Station, Highlands County, Florida from 1994-2015. Environmental Data Initiative.
<https://doi.org/10.6073/pasta/fb8661cc0af964a4c5caace85b72b036>. Dataset accessed 11/08/2018.

Abstract: We collected demographic data comprising 38,313 unique observations from a sample of 10,910 individuals of *H. cumulicola*, from 15 independent Florida rosemary scrub patches with different time-since-fire at Archbold Biol...
[Show more >](#)

SCROLL TO THE BOTTOM OF THE LANDING PAGE TO VIEW JOURNAL CITATIONS

Journal Citations:

This data package has been cited in, or used as a data source for, the following journal articles:

1. [Ability of Matrix Models to Explain the Past and Predict the Future of Plant Populations](https://doi.org/10.1111/cobi.12049) (<https://doi.org/10.1111/cobi.12049>), Conservation Biology
2. [Matrix population models from 20 studies of perennial plant populations](https://doi.org/10.1890/11-1052.1) (<https://doi.org/10.1890/11-1052.1>), Ecology
3. [IPMpack: an R package for integral projection models](https://doi.org/10.1111/2041-210x.12001) (<https://doi.org/10.1111/2041-210x.12001>), Methods in Ecology and Evolution
4. [Sensitivity of the population growth rate to demographic variability within and between phases of the disturbance cycle](https://doi.org/10.1111/j.1461-0248.2006.00988.x) (<https://doi.org/10.1111/j.1461-0248.2006.00988.x>), Ecology Letters
5. [Comparative demography of a rare species in Florida scrub and road habitats](https://doi.org/10.1016/j.biocon.2007.02.009) (<https://doi.org/10.1016/j.biocon.2007.02.009>), Biological Conservation
6. [Predicting landscape-level distribution and abundance: Integrating demography, fire, elevation and landscape habitat configuration](https://doi.org/10.1111/1365-2745.12985) (<https://doi.org/10.1111/1365-2745.12985>), Journal of Ecology

Wow, with six citations, `edi.181.1` seems to be a real hit!

Add Journal Citation

Clicking here takes you to the form where you can add a new journal citation entry for the data package. You'll need to be logged in.

CREATING A NEW JOURNAL CITATION ENTRY IN THE DATA PORTAL



EDI Data Portal

HOME

DATA

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▶ DATA PACKAGES:

Preview Your Metadata

Evaluate/Upload Data Packages

View Evaluate/Upload Results

▶ CITATIONS AND PROVENANCE:

Journal Citations

Provenance Generator

▶ EVENTS:

Event Subscriptions

▶ REPORTS:

Audit Reports

Data Package Access Reports

▶ RESERVATIONS:

Data Package Identifier Reservations

From anywhere in the data portal, Select

Tools →
Journal Citations

from the main menu bar. Again, you'll need to be logged in.

Welcome to the EDI Data Portal

Data are one of the most valuable products curated by the Environmental Data Initiative (EDI). Data and metadata derived from publicly funded research are made available through this website with as few restrictions as possible, and on a non-discriminatory basis. In return, EDI expects users of data to act ethically by contacting the data provider prior to using it in any published research. In accordance with professional etiquette, data accessed from this website should be cited appropriately when used in a publication. A digital object identifier (DOI) is provided for each dataset to facilitate citation.

The EDI Data Portal contains environmental and ecological data packages contributed by a number of participating organizations. Data providers make every effort to release data in a timely fashion and with attention to accurate, well-designed and well-documented data. To understand data fully, please read the associated metadata and contact data providers if you have any questions. Data may be used in a manner conforming with the license information found in the "Intellectual Rights" section of the data package metadata or defaults to the EDI Data Portal. The Environmental Data Initiative shall not be liable for any damages resulting

CREATING A NEW JOURNAL CITATION ENTRY IN THE DATA PORTAL

Journal Citations

Enter a journal citation for data package

You may enter the DOI or URL of a journal article that cites a data package by supplying the information in the fields below. At minimum, you will need to enter the package ID of the data package and the DOI or the URL of the journal article that cites it. This information will be recorded in the EDI Data Repository and displayed on the summary page for the data package.

*Package Id **

*Article DOI ***

*Article URL ***

Article Title (Optional)

Journal Title (Optional)

** Indicates required field*

*** Indicates at least one of these fields required*

Current journal article citations recorded by dcosta

Journal Citation ID	Package ID	Journal Article DOI	Journal Article URL	Journal Article Title	Journal Title
11	knb-Iter-nwk.2.3	doi: 10.1242/jeb.146381		An article title	A journal title

Delete

Delete a journal citation entry you previously entered using the journal citation ID.

Journal Citation ID

Some form fields are required, as indicated by the little red asterisks

This table displays all entries currently stored in PASTA+ under your user name--in other words, all the entries that you've created thus far

You can delete one of your existing entries by selecting its ID from the list and clicking the Delete button

Sorry, there's no way to edit an existing entry. If you made a mistake, you'll need to delete it and re-enter.



Part 3

PASTA+ Journal Citation Web Services

PASTA+ WEB SERVICES API: JOURNAL CITATIONS

Create Journal Citation—Creates a new journal citation entry in PASTA+. An XML document containing metadata for the journal citation must be supplied in the HTTP request body.

Delete Journal Citation—Deletes the journal citation entry with the specified ID from the journal citation table. Requires authentication by the owner of the journal citation entry.

Get Journal Citation—Returns an XML metadata document for the journal citation with the specified integer ID value.

List Data Package Citations—Returns a list of journal citations as an XML metadata document based on the specified data package identifier value.

List Principal Owner Citations—Returns journal citations metadata for all entries owned by the specified principal owner.

"principal owner" is just another way of saying "the user who created the citation in PASTA+"

All the nitty gritty details with examples can be found here

PASTA+ Documentation - <http://pastaplus-core.readthedocs.io>

Part 4

How PASTA+ records associations in DataCite

WHAT HAPPENS AFTER I ADD A NEW JOURNAL CITATION ENTRY?

1. PASTA+ inserts the entry into its database table of journal citation entries; and,
2. PASTA+ sends a web service request to DataCite, updating the DataCite metadata for the data package with the new journal citation metadata.

DATA CITE METADATA

This is a small portion of the DataCite metadata stored for edi.181.1

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<resource xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://datacite.org/schema/kernel-4" xsi:schemaLocation="http://datacite.org/schema/kernel-4
http://schema.datacite.org/meta/kernel-4.1/metadata.xsd">
```

```
<identifier identifierType="DOI">10.6073/PASTA/FB8661CC0AF964A4C5CAACE85B72B036</identifier>
```

```
<creators>
```

```
<creator>
```

```
<creatorName>Quintana-Ascencio, Pedro F</creatorName>
```

```
</creator>
```

```
<creator>
```

```
<creatorName>Menges, Eric S</creatorName>
```

```
</creator>
```

The DOI for edi.181.1

Q: So where did I get this DataCite metadata from?

A: Using an account that EDI has with DataCite, I ran a DataCite web service that asks DataCite for the metadata it has stored for edi.181.1 based on its DOI.

DATA CITE METADATA

Scrolling further down, we can see the six journal citation entries stored as `<relatedIdentifier>` elements in the DataCite metadata for `edi.181.1`

```
<relatedIdentifiers>
```

```
  <relatedIdentifier relatedIdentifierType="DOI"
  relationType="IsCitedBy">https://doi.org/10.1111/cobi.12049</relatedIdentifier>
```

```
  <relatedIdentifier relatedIdentifierType="DOI"
  relationType="IsCitedBy">https://doi.org/10.1890/11-1052.1</relatedIdentifier>
```

```
  <relatedIdentifier relatedIdentifierType="DOI"
  relationType="IsCitedBy">https://doi.org/10.1111/2041-210x.12001</relatedIdentifier>
```

```
  <relatedIdentifier relatedIdentifierType="DOI"
  relationType="IsCitedBy">https://doi.org/10.1111/j.1461-0248.2006.00988.x</relatedIdentifier>
```

```
  <relatedIdentifier relatedIdentifierType="DOI"
  relationType="IsCitedBy">https://doi.org/10.1016/j.biocon.2007.02.009</relatedIdentifier>
```

```
  <relatedIdentifier relatedIdentifierType="DOI"
  relationType="IsCitedBy">https://doi.org/10.1111/1365-2745.12985</relatedIdentifier>
```

```
</relatedIdentifiers>
```

All six journal citation entries present and accounted for in DataCite!

Note the `relationType="IsCitedBy"` attribute value pair. This translates as, "The data package described by this metadata (`edi.181.1`) is cited by the journal article that has this DOI."

RESOURCES

PASTA+ Documentation - <http://pastaplus-core.readthedocs.io>

Email for EDI General Questions - info@environmentaldatainitiative.org

Email for EDI Technical Issues - support@environmentaldatainitiative.org

Part 5

Discussion and Q&A