

UC Irvine
LAUC-I and Library Staff Research

Title

Research Data Management: Tools & Services

Permalink

<https://escholarship.org/uc/item/0817m7mq>

Author

Tsang, Daniel C

Publication Date

2013-01-07

Research Data Management Tools & Services

Daniel C. Tsang

FASRC Member

Data Librarian, UCI Libraries

Research Data Management

Many academic libraries worldwide are now helping manage and provide stewardship for research data generated by faculty:

- Data are organized, elements identified, and the dataset is made retrievable
- Allows eventual deposit in secure repositories
- Facilitates subsequent data sharing

Data Sharing

Data Sharing occurs when, upon the agreement of a researcher, research data are made available to the research community for further, secondary analysis. Potential benefits include:

- Greater impact on the field
- Credit and citations

Data Sharing Mandates

Participation in data sharing varies by discipline but recent federal mandates have placed the onus on researchers to come up with Data Management Plans indicating how you would manage your research data during your research project and beyond.

Your subject librarians at the UCI Libraries are here to help.

DMPTool

DMPTool, or Data Management Plan Tool, is a tool developed by the University of California Curation Center (UC3) at the California Digital Library (CDL) to help researchers prepare sponsored research grant applications that require data management plans.

Almost 3,000 plans have been drafted using this tool since Fall 2011.

DMPTool ...

- Helps users create ready-to-use data management plans to meet specific funding agencies' requirements
- Provides step-by-step instructions and guidance for how to manage data
- We encourage you to send the UCI Libraries a copy (to dtsang@uci.edu) of your data management plans so we can help, as in identifying potential data repositories

EZID

EZID is another CDL tool, to create & manage unique, long-term identifiers such as DOIs, for data files or digital objects.

With EZID, one can:

- update current URL locations so citation links are never broken
- facilitate citations to a researcher's data-related work giving it credit

EZID and DataCite

UCI Libraries has licensed EZID so you can get DOIs for no extra charge. For more information, contact dtsang@uci.edu.

Over 246,000 DOIs have been allocated via EZID by CDL, which is a member of Data Cite.

DataCite offers a metadata search function that makes it easy to locate DOIs, including DOIs linked to datasets.

DataCite MetaData Search



Metadata Search beta

DataCite

Filter

allocator
datacentre
prefix
resourceType
contributor
creator
publicationYear
publisher
language
refQuality
has_metadata

No active filters. Use the sidebar to filter search results.

10 documents found in 24ms

Page 1 of 1

[Policing_and_worker_fecundity_data](#)

[doi:10.5061/DRYAD.8042/1](#)

none supplied

title: Policing_and_worker_fecundity_data

[Policing_duration_individual_ant_data](#)

[doi:10.5061/DRYAD.8042/2](#)

none supplied

title: Policing_duration_individual_ant_data

[Data from: Policing effectiveness depends on relatedness and group size](#)

[doi:10.5061/DRYAD.8042](#)

Walter, Bartosz Jerzy • Brunner, Elisabeth • Heinze, Jürgen

title: Data from: Policing effectiveness depends on relatedness and group size

[Crowd Dynamics, Policing and Hooliganism at Euro 2004](#)

[doi:10.5255/UKDA-SN-5300-1](#) Dataset : Computer File

Stott, C.

title: Crowd Dynamics, Policing and Hooliganism at Euro 2004

[Data from: Colony stage and not facultative policing explains pattern of worker reproduction in the Saxon wasp](#)

[doi:10.5061/DRYAD.9PD1Q](#)

Bonckaert, Wim • van Zweden, Jelle S • d'Ettorre, Patrizia • Billen, Johan • Wenseleers, Tom

title: Data from: Colony stage and not facultative policing explains pattern of worker reproduction in the

subject: facultative worker policing



Dryad Data Record

Policing_and_worker_fecundity_data

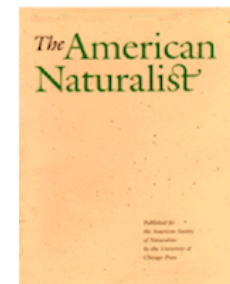
When using this data, please cite the original article:

Walter BJ, Brunner E, Heinze J (2011) Policing effectiveness depends on relatedness and group size. *The American Naturalist* 177(3): 368-376.
doi:10.1086/658396

Additionally, please cite the Dryad data package:

Walter BJ, Brunner E, Heinze J (2011) Data from: Policing effectiveness depends on relatedness and group size. Dryad Digital Repository. doi:10.5061/dryad.8042

[Cite](#) | [Share](#)



Dryad File Identifier

doi:10.5061/dryad.8042/1 9 downloads

Description

Worker policing, queen policing, workers and queens fecundity, survival of worker-laid eggs and queen-laid eggs according to colony size (large colony: 100 workers, small colony: 40 workers) and relatedness among workers in a colony (homogeneous colony: $r = 0.75$, heterogeneous colony: $r = 0.1875$). We observed three behavioral patterns: fertile workers were (1) policed by workers, or (2) not policed but self-restrained from reproduction, or (3) non-policed and continued reproduction. We observed colonies where (1) all fertile workers were policed, (2) all fertile workers were not policed and continued reproduction, (3) all fertile workers were not policed but self-restrained from reproduction, and (4) mixture of policing, continued worker reproduction and self-restraint took place.

Keywords

Behavior: dominance, Behavior: reproductive, Behavior: social, Conflict, Ecology: behavioral, Evolution: social, Kin: conflict, ants, social

Date Deposited

2010-12-06T20:30:46Z

Scientific Names

Temnothorax unifasciatus, Formicidae, Hymenoptera

Spatial Coverage

Garda Lake, Italy

Contained in Data Package

Data from: Policing effectiveness depends on relatedness and group size.

[Show Full Metadata](#)

Files in this item

Files	Size	Format	View	Description
Policing_and_worker_fecundity_data.xls	33.28Kb	Microsoft Excel	View/Open	dataset-file

To the extent possible under law, the authors have waived all copyright and related or neighboring rights to this data.



DataUp

An open source tool to help researchers document, manage, and archive tabular data

- Check for best practices
- Create metadata
- Get credit for data
- Archive & share data

Best Practices check

The DataUp tool will parse your .xlsx or .csv file to detect the presence of potential issues that do not comply with data management best practices, such as embedded charts, embedded comments, columns with mixed data types

Create Metadata

- DataUp will walk you through creating standard metadata using a form that becomes part of your spreadsheet, allowing for future use and sharing.
- When the data file is uploaded to a repository, the metadata generates a metadata file in [Ecological Metadata Language \(EML\)](#), which is a standard form of metadata for many Earth, environmental, and ecological researchers.

Archive & Share Data

Once you have created metadata, you can connect directly to a repository via DataUp and upload your data for archiving.

Currently, DataUp is connected to the *ONE Share*, which is a dedicated DataUp repository that allows anyone to deposit tabular data.

ONE Share is a [DataONE](#) member node, which means datasets deposited there are indexed by DataONE and available for discovery and use by the public.

Merritt Repository

Merritt is a digital repository service that lets the University of California research community manage, archive, and share valuable digital content, including research data

Merritt: DataShare

One example of a data service offered in collaboration with CDL via Merritt is DataShare: Open Data for the Global Scientific Community. The site makes available biomedical datasets from UCSF to the research community online. Some 300 publications have resulted from the data “published” online.

Web Archiving Service (WAS)

Web sites are constantly at risk of disappearing and the Web Archiving Service at CDL allows researchers to crawl and capture websites for research analysis.

At UCI Libraries we are also capturing regularly all web sites mounted on UCI public servers.

WAS: Wildfires Web Archive

2007 Southern California Wildfires
Web Archive

2007 Southern California Wildfires Web Archive

California Digital Library

[Home](#) [About](#) [Site List](#) [Search](#) [Help](#) [Contact Us](#)

Description

In October of 2007, a series of wildfires broke out throughout southern California. This web archive documents that event as it appeared on California State Agency sites, federal government sites, news, blogs, social networking sites.

In addition to providing lasting access to the web's coverage of the fires, this archive may serve as a point of comparison to other web archives of dramatic and quickly unfolding historical events. In particular it may show how people communicated about the fire, ...

[more . . .](#)

Search

Quick Facts

Sites: 152
Oldest site: 10/23/07
Most recent site: 11/06/07

Powered by the [Web Archiving Service](#) from the [California Digital Library](#)

See [all web archives](#) from the CDL

Materials in this web archive are archived copies for private study, scholarship and research.

Copyright © 2007-2013 The Regents of The University of California.

UCISpace

UCISpace is UC Irvine Libraries' digital repository for a variety of digital content including digital files, videos, audio recordings, photographs, text and other digitized content.

A current project: Collaborating with the School of Humanities to archive Vietnamese American oral histories.

Life Cycle of Research

UCI Libraries subject librarians are here to help at all stages of your research project, from at the beginning, during and after your research project has ended, throughout the life cycle of a dataset or research project, as you decide on how to document your research, apply metadata to research files and decide on the disposition of your research data.

Finding Repositories

At UCI Libraries, we have created a subject guide that not only links to the tools and services mentioned in this talk but also to discipline-based subject repositories such as those for digital humanities, social sciences and the sciences.

This resource will help you locate appropriate subject repositories as you develop your data management plans.

Subject Guide



UCI LIBRARIES
UNIVERSITY OF CALIFORNIA • IRVINE

UCI LIBRARIES

Libraries » Subject and Course Guides » Research Data Management

[Admin Sign In](#)

* UC Irvine access only

Research Data Management Tags: [data deposit](#), [data management](#), [data repositories](#), [data sharing](#), [research data](#)

Managing research data: Tools & resources

Last Updated: Sep 25, 2012 | URL: <http://libguides.lib.uci.edu/datamanagement> | [Print Guide](#) | [RSS Updates](#) | [SHARE](#) [f](#) [t](#) [e](#) ...

[Home](#)

[EZID](#)

[DataUp](#)

[Merritt](#)

[Data Management Plans](#)

[Data Repositories: Sciences](#)

[Data Repositories: Social Sciences](#)

[Data Repositories: Humanities](#)

[For Librarians](#)

[Home](#) | [Comments\(0\)](#) | [Print Page](#)

Search: This Guide [Search](#)

Data Management Tools

- [Tools & Services from UC Curation Center](#)

These tools and services include the following:

EZID - a service licensed to UCI researchers for identifying research files
DMPTool - a tool to help grant applicants fill out a concise data management plan geared to specific funding agencies. See tabs on this subject guide for more information.

[Comments \(0\)](#)

Data Management & Sharing: Key Sites

Research Data is data generated in the research process. This subject guide delineates discipline-based research data repositories to help researchers and faculty seeking more information about potential repositories where they may be able to deposit their research data.

Careful Data Management of research data not only ensures preservation of such data but also helps in making such data shareable.

Sharing of research data contributes to scientific knowledge. Such data sharing has been the norm in some disciplines and is increasingly mandated by funding agencies, such as the National Science Foundation.

This guide is compiled by UCI Libraries' bibliographers who serve on the Libraries' Data Team, whose members are listed on the right column.

Listed below are some key resources:

Subject Guide



Daniel C. Tsang

Science Data Repositories

Data Repositories: Sciences

Research Data is data generated in the research process. This subject guide delineates discipline-based research data repositories that maintain and archive research data, to help researchers and faculty who seek more information about potential repositories where they may be able to deposit their research data.

- [DataCite](#)

A compilation of data repositories through a collaboration between the British Library, BioMed Central and the Digital Curation Centre, that aims to capture the growing number of repositories for research data.

- [DataBib](#)

An ongoing list of data repositories prepared by Purdue University Libraries. The list is arranged alphabetically and by subject.

- [3TU Datacentrum](#)

Technical sciences, climate, fluid dynamics, earth sciences.

- [Center for International Earth Science Information Network](#)

CIESIN works at the intersection of the social, natural, and information sciences, and specializes in on-line data and information management, spatial data integration and training, and interdisciplinary research related to human interactions in the environment.

- [DataBasin \(US\)](#)

Centers are focal topics or geographies of special interest to Data Basin. Centers provide experts, datasets, maps, galleries, working groups that facilitate more effective collaboration.

- [Dryad \(US/North Carolina\)](#)

Dryad is an international repository of data underlying peer-reviewed articles in the basic and applied biosciences. Dryad enables scientists to validate published findings, explore new analysis methodologies, repurpose data for research questions unanticipated by the original authors, and perform synthetic studies. Dryad is governed by a consortium of journals that collaboratively promote data archiving and ensure the sustainability of the repository.

Contacts

Send Data Management Plans & queries to:

Daniel C. Tsang, Data Librarian & FASRC
member: dtsang@uci.edu

Your Subject Librarians:

<http://www.lib.uci.edu/about/contact/subject-librarians.html>

Resources: UC Irvine

- UCI Research Data Management Subject Guide: <http://libguides.lib.uci.edu/datamanagement> (tools & data repositories)
- UCI NSF Data Management Plans: <http://nsfdmp.lib.uci.edu/>
- UCISpace: <http://ucispace.lib.uci.edu/>

Resources: CDL

- UC Curation Center: <http://www.cdlib.org/services/uc3>
- UC Curation Center wiki:
<https://confluence.ucop.edu/display/Curation>
- EZID: <http://n2t.net/ezid>
- Web Archiving Service: <http://webarchives.cdlib.org>
- Merritt: <https://merritt.cdlib.org>
- DMPTool: <https://dmp.cdlib.org>
- DataUp: <http://dataup.cdlib.org>
- DataPub Blog: <http://datapub.cdlib.org>
(conversations about data)
- UCSF DataShare: <http://datashare.ucsf.edu/xtf/search>
(example of open data site at Merritt)