

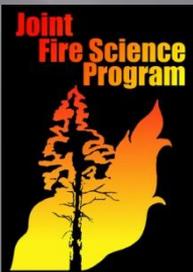
JOINT FIRE SCIENCE PROGRAM

Data Management Plans and Requirements

John Cissel (JFSP)

Dave Rugg (FS, Archivist)

Laurie Porth (FS, Archivist)

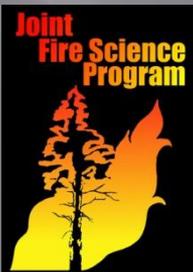


Agenda

- ▣ JFSP goals
- ▣ Overview of new requirements
- ▣ Dataset archival RFA
- ▣ Data Management Plan (DMP) components
- ▣ Metadata overview
- ▣ Data repository overview
- ▣ Q & A

JFSP Goals

- ▣ Ensure datasets collected with JFSP funds are:
 - Uniformly of high quality
 - Consistently well-documented
 - Made available for future investigations
 - Securely stored
- ▣ Facilitate access to and use of JFSP datasets



Data Management Plan (DMP) Requirement Overview

- ▣ All proposals submitted for RFA-1, RFA-2, and RFA-4 require a DMP
- ▣ DMP is ≤ 2 pages (template and example)
- ▣ Funded proposals for these RFAs will need to:
 - Document research data via formal metadata
 - Deposit data in long-term repository
 - Provide data + metadata to JFSP with final report
- ▣ Data will be made public no later than two years after final report submission

DMP Requirement Overview

- ▣ Be sure to include funding for this new deliverable in your proposal!
- ▣ New requirement comparable to new NSF DMP requirement
- ▣ DMP will be considered as part of review process, but there are no DMP review criteria
- ▣ DMP must be satisfactory to JFSP prior to actual funding
- ▣ JFSP is creating a data catalog – contains a copy of every metadata document

Dataset Archival RFA

- ▣ Separate RFA, requires a DMP
- ▣ Existing or ongoing JFSP projects
- ▣ Completed within 12 months
- ▣ Limited to \$10,000

Agenda

- ▣ JFSP goals
- ▣ Overview of new requirements
- ▣ Dataset archival RFA
- ▣ **Data Management Plan (DMP) components**
- ▣ Metadata overview
- ▣ Data repository overview
- ▣ Q & A

DMP Components

Project Data Management

- ▣ Describe data types produced by project
- ▣ Describe processing and QA steps
 - QA = Quality Assurance = how do you know that the value of the observation is (a) as accurate as you think it is and (b) repeatable
 - Applies to both lab and field measurements
- ▣ Describe data security system
- ▣ Describe storage and backup system

DMP Components

Long-term Data Management

- ▣ Specify metadata language to be used
 - Opportunity for JFSP to influence (best practices)
 - Make sure the data catalog can support (directly or via translation)
- ▣ Specify long-term data repository
- ▣ Describe long-term data security needs

Metadata Overview

Many standards available; 4 important ones:

- ▣ Content Standard for Digital Geospatial Metadata
 - Developed by Federal Geographic Data Committee (FGDC)
- ▣ **Biological Data Profile (BDP)**
 - Very flexible for handling field or lab measurements
 - Superset of FGDC standard
- ▣ **ISO 19115**
 - Next generation standard for spatial data
 - Likely to get a version of the BDP
- ▣ Data Documentation Initiative (DDI)
 - Tailored for social science data

Metadata Overview

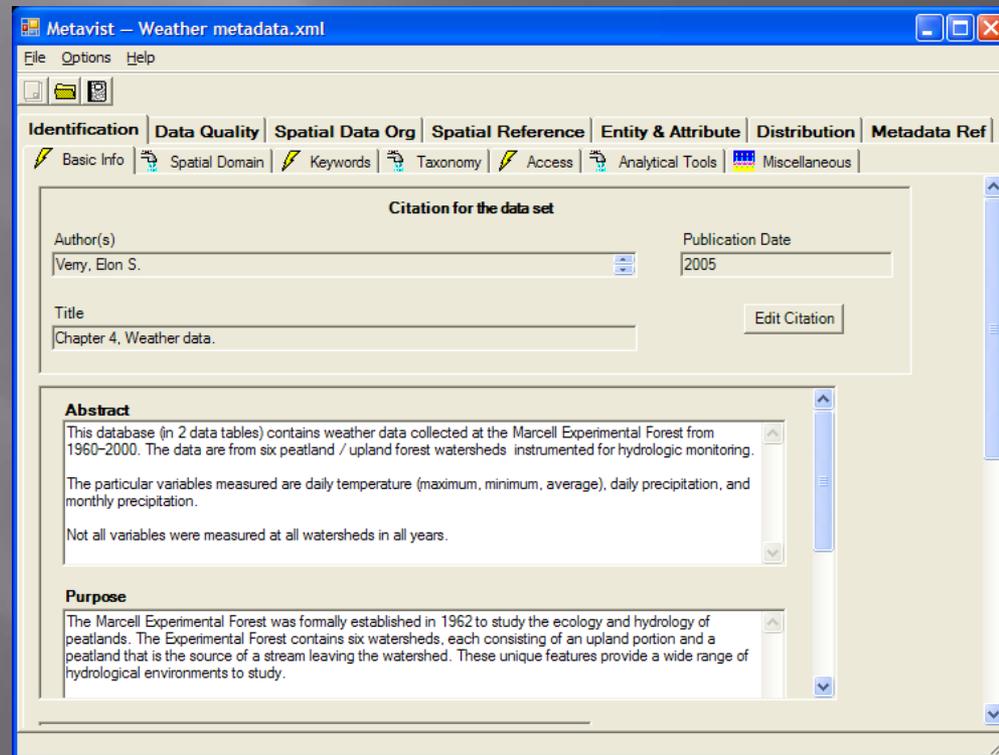
Not familiar with metadata? Recommendation for your DMP = Biological Data Profile (BDP)

- ▣ There is a widely used free software tool for creating BDP metadata
- ▣ We will offer webinars on use of BDP (next year for proposals to archive past data sets)
- ▣ Fairly easy transition to ISO 19115

Metadata Overview

Interested in BDP? Suggested tool: Metavist

<http://www.nrs.fs.fed.us/pubs/2737>



The screenshot shows the Metavist application window titled "Metavist - Weather metadata.xml". The window has a menu bar with "File", "Options", and "Help". Below the menu bar is a toolbar with icons for file operations. The main area is divided into several tabs: "Identification", "Data Quality", "Spatial Data Org", "Spatial Reference", "Entity & Attribute", "Distribution", and "Metadata Ref". Under the "Identification" tab, there are sub-tabs: "Basic Info", "Spatial Domain", "Keywords", "Taxonomy", "Access", "Analytical Tools", and "Miscellaneous". The "Citation for the data set" section contains the following information:

Author(s)	Publication Date
Very, Elon S.	2005

Title: Chapter 4, Weather data. [Edit Citation]

Abstract

This database (in 2 data tables) contains weather data collected at the Marcell Experimental Forest from 1960-2000. The data are from six peatland / upland forest watersheds instrumented for hydrologic monitoring. The particular variables measured are daily temperature (maximum, minimum, average), daily precipitation, and monthly precipitation. Not all variables were measured at all watersheds in all years.

Purpose

The Marcell Experimental Forest was formally established in 1962 to study the ecology and hydrology of peatlands. The Experimental Forest contains six watersheds, each consisting of an upland portion and a peatland that is the source of a stream leaving the watershed. These unique features provide a wide range of hydrological environments to study.

Choosing a Data Repository

Criteria:

- ▣ Stability and longevity
- ▣ Long-term preservation and access capability
- ▣ Focus on your research's needs
- ▣ Extra features

Choosing a Data Repository

JFSP recommends: FS Research Data Archive

- ▣ FS RDA will be providing the JFSP data catalog
- ▣ FS R&D has data over 60 years old
- ▣ Has worked with disciplines across biological, physical, and social sciences
- ▣ Can provide advice and assistance
- ▣ Multiple access options
- ▣ Provides citation tracking for data sets

Contact Us

- ▣ Dave Rugg
 - drugg@fs.fed.us
 - 608.231.9234

- ▣ Laurie Porth
 - lporth@fs.fed.us
 - 970.498.1206

Q & A