

Information Management

Jornada Basin LTER



Jornada Information management system

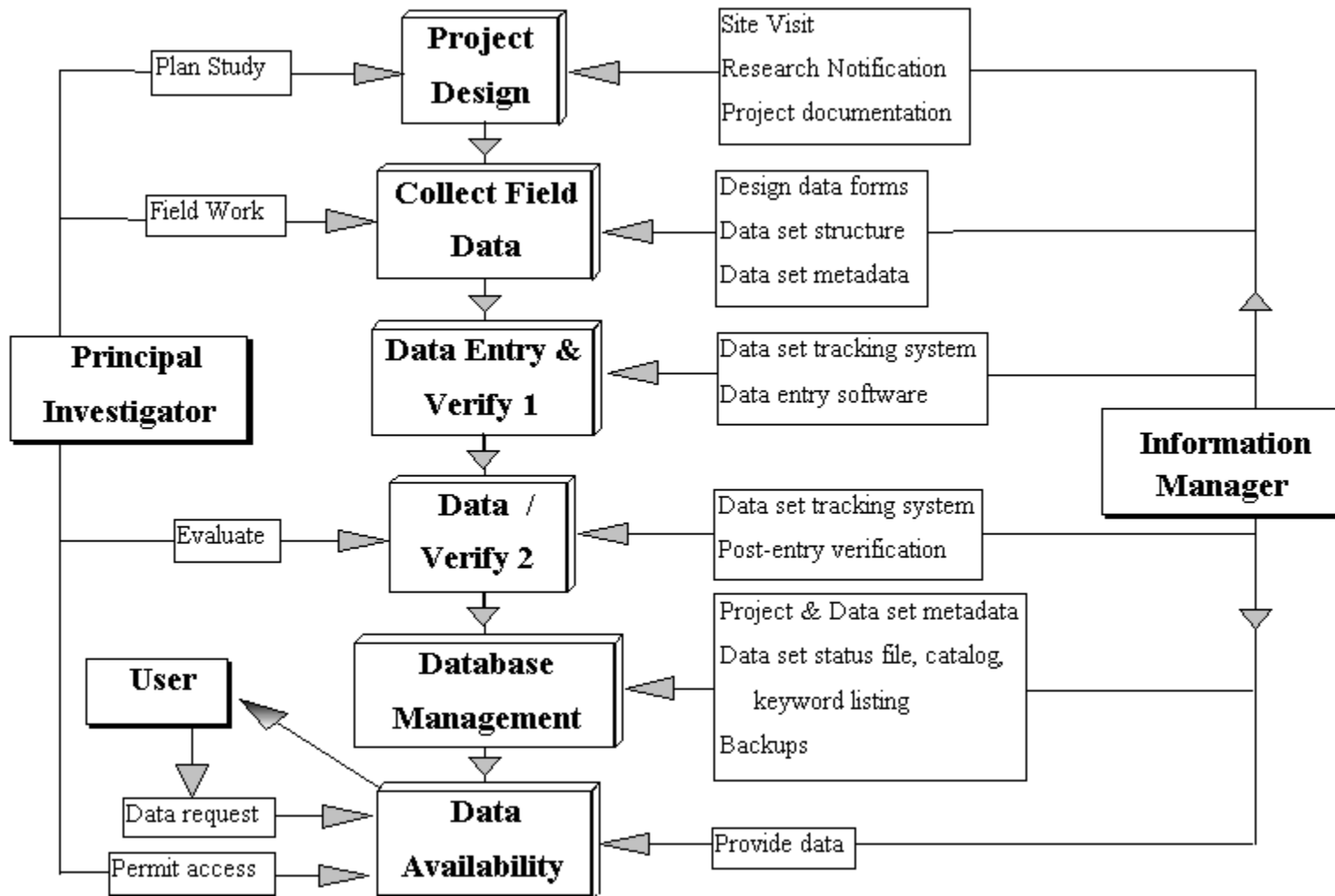
Six major components:

- a) Data management implementation/process
- b) Management of data, spatial maps, and imagery, and associated metadata
- c) Formal data management protocols
- d) Tools and resources dedicated to harvest, document, archive, manage, access, analyze, and download data and metadata
- e) Networking and computing services
- f) Support staff

Information Management

- IM provides protocols and services for data collection, verification, organization, archive, and distribution
- Researchers provide detailed metadata describing the research project and its related datasets to insure long-term usefulness of data and products.

Data Management Process



Data Protocols and Metadata Standards

- Procedures are conducted in accordance with recommendations and guidelines developed by the LTER Network Information Managers Committee.
- Data access, acknowledgement, and data management policies, which are compliant with those developed by the LTER IMC, can be found at:
<http://jornada.nmsu.edu/lter/data/policies>
- Compliant EML (machine readable metadata) is produced for each dataset. Datasets with full metadata are automatically harvested into the LTER Network Data Portal (PASTA).

Website

- Options for users to access, query, and review the datasets online before deciding to download.
- Datasets are delivered to users as downloadable dataset packages or standalone files from the data catalogs through web queries.
- The dataset package includes metadata files, data files, and a shapefile (spatial representation of dataset location) if available.
- We will continue to add data accessibility and analytical tool capabilities as they are made available from our collaborative projects (e.g., EcoTrends, Landscape Toolbox, “Knowledge, Learning, Analysis System”).

All long-term JRN LTER datasets are available online at <http://jornada.nmsu.edu/lter/data>.

A listing is available at <http://jornada.nmsu.edu/lter/data/long-term>.

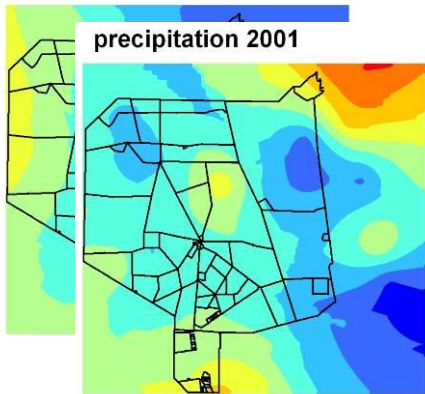
Website - DEIMS

- The website is an implementation of the Drupal Environmental Information Management System (DEIMS).
- This has been adopted by other LTER and ILTER sites (ARC, LUQ, NTL, NWT, PIE, SEV, VCR, European Union, Taiwan) as a common approach to making data available according to LTER best practices.
- Integrates metadata, data, personnel information, publications, research proposals, reports, etc., about the Jornada and its research activities and collaborations.

Geoportal – data access

- Pilot status
- Supports spatial enabled searching
 - searching by keywords and/or spatially within a map bounding box for research data or studies
 - automatically e-mails the files to the user as a zip file.

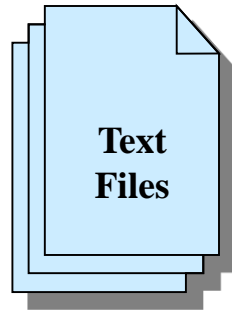
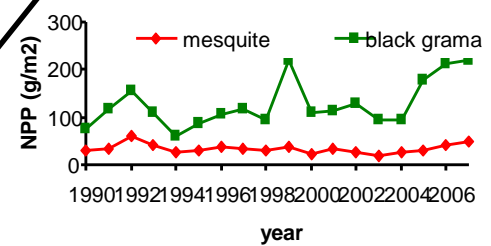
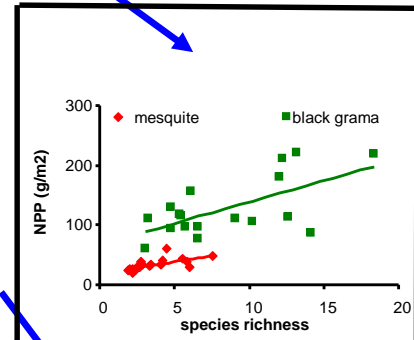
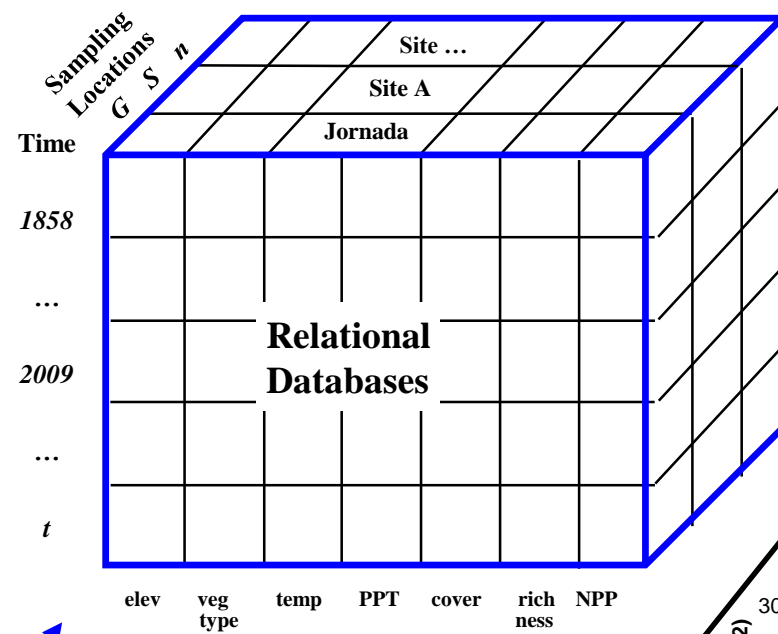
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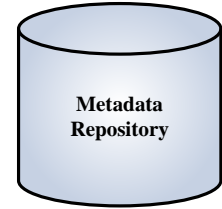
Our Future

spatial data

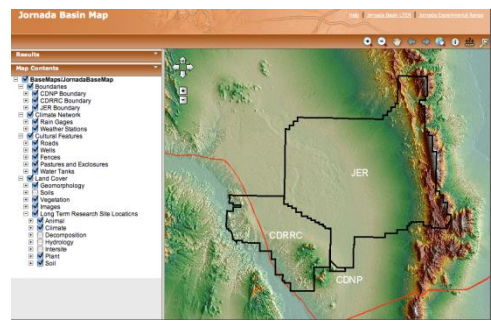
temporal data/metadata



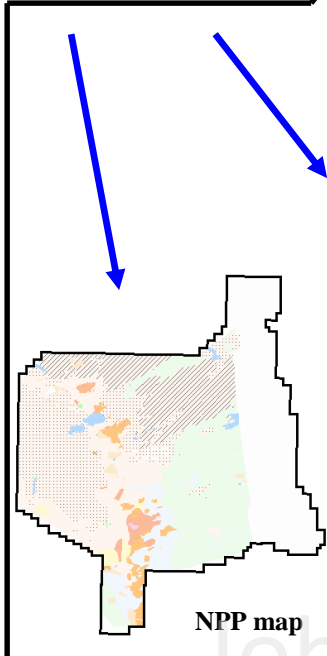
- ### Tasks
- Populate databases with research data
 - Produce project and dataset documentation for GIS data from existing metadata in GIS
 - Associate research site locations (RSL) to data set and project ID numbers in JIMS and import RSL shapefiles into geodatabase
 - Create attribute level EML from databases for:
 - research data
 - GIS data
 - remote sensing data
 - Develop visualization, mapping, animation, and analytical tools



EML metadata



JIMS mapping tools



year	veg type	PPT	richness	NPP
1990	Mesquite	214.5	2.7	28.6
1991	Mesquite	334.9	3.4	32.5
1992	Mesquite	424.4	4.5	60.6
...
1990	Black grama	156.6	6.6	77.2
1991	Black grama	313.8	5.3	118.0
1992	Black grama	386.8	6.1	156.7
...

visualization & analytical tools

Information Management

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