

VERNAL POOL MACROINVERTEBRATES DATA PLAN

Data Plan Executive Summary

To ensure data quality, students will complete training as part of their school curriculum and participate in peer review in the field. Project owners will confirm or question all incoming data. Representative samples will be sent to UMO lab.

Data Plan

Data Quality Assurance

Teachers have access to resources for developing data collection and identification skills in the classroom prior to data collection. Students review identification resources and practice identification prior to fieldwork. Students will peer review all identifications in the field.

Data Quality Control

Project owners will review data upon the completion of each trip. Only confirmed data will be included in the project database.

Data Quality Validation

Representative photos of all caddisflies and fairy shrimp found will be used to validate identification. Photos of the field site will provide habitat information and confirm the appropriate habitat for data collection.

Planned Data Analysis

Data will be used to map distribution of fairy shrimp in the state in addition to providing invaluable information on species of fairy shrimp by location. Eventually, we will use the fairy shrimp data-base as a foundation for a graduate student research project looking at fairy shrimp distribution and preferred habitat. We may be able to predict whether or not an existing vernal pool may be a suitable fairy shrimp habitat.

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Project Metadata

The Ecosystem Investigation Network has a defined data model and metadata structure for project data that includes global elements common to all projects and specific data elements unique to the individual projects. These data include date, time, location, and selected project. The Ecosystem Investigation Network does not have a global data schema that conforms to one common standard, but leverages elements of existing standards used by scientific communities based on the nature of the project (e.g. OBIS, EML, FGDC, Darwin Core, CF, ISO 19115, etc.).

Data, observations, comments, photographs, and associated metadata submitted by users to individual projects are retained in the Ecosystem Investigation Network database and follow data management and retention policies established by the program. Specific data that is collected during this project will be stored in the Ecosystem Investigation Network during the life of the project.

Project Data Management

The Ecosystem Investigation Network utilizes basic catalog and filter functionality to enable users to discover specific projects and associated data. Publicly accessible data contributed by individuals will be available for download, with limited fields based on the requirements of individual projects. For example, the data export functionality for a project may be limited to a public view summary that does not include demographic or personal data. The public view of the data will not include personally identifiable data, unless that information was knowingly shared by the participant through open ended comments or discussion threads. Data will be downloaded in .csv format, a non-proprietary file type, and it can be opened by numerous spreadsheet software programs, including free and open ones.

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