Ecological Metadata Language

EML is a community-maintained machine-readable metadata schema that provides a comprehensive vocabulary and XML markup syntax for documenting research data and related outputs. It is widely used in the Earth and Environmental Sciences and sibling disciplines to meet researchers' needs for sharing, preserving, discovering, and reusing data.

Adopts much of its syntax from the other standards for better compatibility.

Balances the tradeoff of too much detail with enough detail for better processing.

Offers backward compatibility, allowing interoperability over time.

The EML schema is modularized to facilitate its growth in both breadth and depth.

Each EML record is wrapped in a metadata container, the eml-module, which holds the structured description for one or more of the following resources:

datasets
Describes elements of a data set, which can include one or more data entities such as data tables and spatial images.

citations
Describes a literature citation that one might find in a bibliography in a variety of document types.
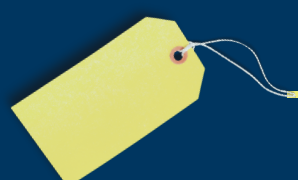
software
Describes a software package as well as data processing programs.

protocols
Describes a scientific protocol, which can include one or more descriptions of methods and procedures.

The schema also includes Data Structure, Discovery & Interpretation, and Utility modules and sub-modules with specific entities to describe resources' attributes in more detail.
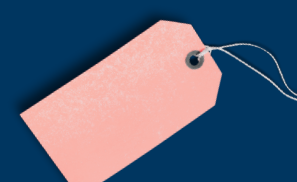
Examples of EML entities and elements that can enhance your dataset's description, making it more findable and understandable:

coverage
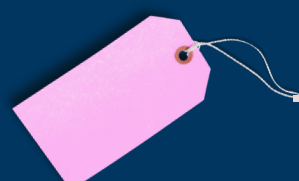- geographicCoverage
- temporalCoverage
- taxonomicCoverage

Provides granular and detailed spatial, temporal, and taxonomic specifications.

methodStep
- description
- protocol
- instrumentation
- software

Describes procedures followed to produce data objects, along with instruments and software.

dataTable
- entityName
- entityDescription
- physical
- attributeList

Describes logical characteristics of each tabular set in a dataset and its attributes (i.e., columns, fields, variables).

Learn more: eml.ecoinformatics.org

Have a question about metadata standards?
Contact us: rds@library.ucsb.edu

Repositories using EML

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