

1. Checklist data
 2. Occurrence data
 3. Sampling Event data
- Metadata
-

2. OCCURRENCE DATA

Primary biodiversity data

Primary occurrence data

Species occurrence data

Primary species data

Data transcribed from museum labels

Opportunistic point source observations of
organisms



Calif: Butte Co.
3 mi. E. Cresta Power-
house Hwy. 70
4-10-65 P. Weller
Zauschneria

U.C. Berkeley
EMEC 331,731

J.M.Garg CC-BY-SA



WHO?

Who collected or observed it and/or
who identified it?

recordedBy, identifiedBy

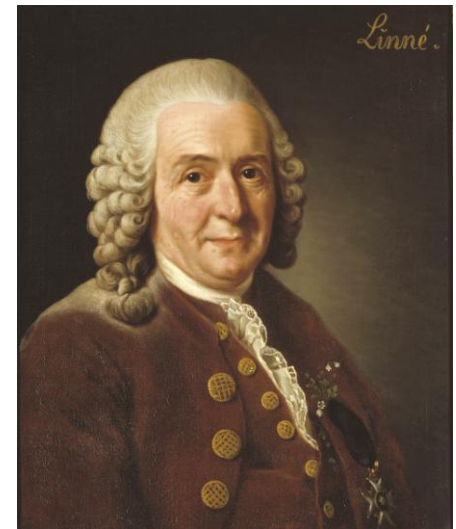


WHAT?

What is it?

scientificName

scientificNameAuthorship	kingdom	genus
specificEpithet	phylum	subgenus
infraspecificEpithet	class	higherClassification
vernacularName	order	
taxonRank	family	
	order	



WHERE?

Where was it observed, harvested or collected?

decimalLatitude, decimalLongitude

continent

« elevation »

coordinatePrecision

country

« depth »

locationRemarks

stateProvince

footprintWKT

verbatimLocality

county

georeferencedBy

locality

municipality

geodeticDatum



WHEN?

When was it observed, harvested or collected
and when was it identified?

eventDate, dateIdentified

georeferencedDate

measurementDeterminedDate



OCCURRENCE DATA CORE TERMS

recordedBy, identifiedBy, scientificName,
decimalLatitude, decimalLongitude, eventDate,
dateIdentified

individualCount

institutionCode, datasetName
informationWithheld

WHAT OCCURRENCE DATA IS NOT

Secondary products [that may have significant intellectual, creative property rights]

e.g. ArcView shapefiles, maps, figures, charts

Processed data

e.g. Summary data such as used as input for species richness calculations or ordinations

3. SAMPLING EVENT DATA

- Sample-based data typical of environmental, ecological, natural resource investigations, monitoring programmes
- Usually quantitative, calibrated, and follow certain protocols
- Goal is to evaluate changes and trends in populations



EVENT DATA CORE TERMS

eventID, parentEventID, eventDate, locality,
samplingProtocol, sampleSizeValue, sampleSizeUnit,
organismQuantity, organismQuantityType



METADATA

Generalized, human-readable cover sheet
for the dataset as a whole

Title, Description, Contacts, Data License, Data
Language, Geographic Coverage, Taxonomic
Coverage, Temporal Coverage, Associated Parties,
Sampling Methods, External Links, Keywords

ECOLOGICAL METADATA LANGUAGE (EML)

Metadata standard developed by and for ecologists

Subset of EML used for checklist, occurrence, and event data



EXAMPLES OF METADATA-ONLY

Museum qualitative inventories

Complex, multi-dimensional datasets

Secondary data products

Embargoed research data

Data of high commercial value

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