

# EBV Metadata EML Profile

<b>Name</b>	EBV Metadata EML Profile
<b>DOI</b>	<a href="https://doi.org/10.5281/zenodo.3362351">https://doi.org/10.5281/zenodo.3362351</a>
<b>License</b>	<a href="#">Creative Commons Attribution 4.0 International</a>
<b>Citation</b>	Christian Langer, Martin Hohmuth, John Wieczorek, Robert Guralnick, Néstor Fernández, & Markus Döring. (2019, August 7). ChristianLanger/eml-profile: EBV-EML-Schema (Version v0.5). Zenodo. <a href="https://doi.org/10.5281/zenodo.3362351">https://doi.org/10.5281/zenodo.3362351</a>
<b>Github</b>	<a href="https://github.com/ChristianLanger/eml-profile">https://github.com/ChristianLanger/eml-profile</a>
<b>Contributors</b>	Christian Langer (iDiv), Martin Hohmuth (iDiv), John Wieczorek (UC Berkeley), Robert Guralnick (UF), Néstor Fernández (iDiv), Markus Döring (GBIF)
<b>Description</b>	<p>Version v0.5 of the EBV Metadata EML Profile</p> <p>Version v0.5 is focused on species-level EBVs, especially on the species populations EBV class, and maybe equally applicable to the species traits EBV class.</p> <p>However, this version doesn't cover other EBV classes related to ecosystem function/structure or community composition and genetic composition. These classes will need some additional terms as well as have no need for some current terms (e.g. taxonomic coverage). For instance, ecosystem function and ecosystem structure EBVs will need some other dimension than taxonomy, e.g. fields related to what type of ecosystems and habitats are captured.</p> <p>This PDF file was automatically generated from the XSD file. For a detailed description of the individual classes and properties, please refer to the source code of the XSD profile schema (<a href="#">eml-ebv-profile.xsd</a>).</p>

## dataset

The dataset element is a wrapper for all other elements relating to a single

## dataset

### alternateIdentifier

This is the only identifier issued by the EBV resource for the metadata document; it

is a UUID

-

+ alternateIdentifier

### title

-

The 'title' field provides a description of the resource that is being documented that is long enough to differentiate it from other similar resources.

Multiple titles may be provided, particularly when trying to express the title in more than one language.

+ title

### ebv

-

**The detailed information about the EBV candidate in the domain of the GEO BON List of Essential Biodiversity Variables.**

#### ebvClass

Genetic composition



A class name in the domain of the GEO BON List of Essential Biodiversity Variables.

#### ebvName

Co-ancestry



A name of the Essential Biodiversity Variable, preferably in the domain of the GEO BON List of Essential Biodiversity Variables.

+ ebv

creator

-

**The creator is the person who created the resource (not necessarily the author of this metadata about the resource).**

**This is the person or institution to contact with questions about the use, interpretation of a dataset.**



### **organizationName**

The full name of the organization that is associated with the resource.

This field is intended to describe which institution or overall organization is associated with the resource being described.



### **individualName**

The individualName field contains subfields so that a person's name can be broken down into parts.

givenName

The given name field can be used for first name of the individual associated with the resource, or for any other names that are not intended to be alphabetized, (as appropriate).

-

+ givenName

surName

The surname field is used for the last name of the individual associated with the resource.

This is typically the family name of an individual, for example, the name by which s/he is referred to in citations.



### **positionName**

This field is intended to be used instead of a particular person or full organization name.

If the associated person who holds the role changes frequently, then Position Name would be used for consistency. E.g., Data Manager.

## address

-

The address field is a container for multiple subfields that describe the physical or electronic address of the responsible party for a resource.

### deliveryPoint

The delivery point field is used for the physical address for postal communication, e.g., GEO BON Secretariat,

Deutscher Platz 5e

-

+ deliveryPoint

### city

The city field is used for the city name of the contact associated with a particular resource.

-

+ city

### administrativeArea

The administrative area field is the equivalent of a 'state' in the U.S., or Province in Canada. This field is intended to accommodate the many types of international administrative areas.

-

+ administrativeArea

### postalCode

The postal code is equivalent to a U.S. zip code, or the number used for routing to an international address.

-

+ postalCode

### country

The country field is used for the name of the contact's country.

-

+ country

+ address

### phone

The phone field describes information about the responsible party's telephone, be it a voice phone, fax.

-

+ phone

### email

The electronic mail address is the email address for the party. It is intended to be an Internet SMTP email address, which should consist of a username followed by the @ symbol, followed by the email server domain name address.

-

+ email

### homepage

A link to associated online information, usually a web site. When the party represents an organization, this is the URL to a website or other online information about the organization. If the party is an individual, it might be their personal web site or other related online information about the party.

-

+ homepage

+ creator

metadataProvider

-

### The party responsible for the creation of the metadata document

☐

#### organizationName

The full name of the organization that is associated with the resource.

This field is intended to describe which institution or overall organization is associated with the resource being described.

☐

#### individualName

The individualName field contains subfields so that a person's name can be broken down into parts.

##### givenName

The given name field can be used for first name of the individual associated with the resource, or for any other names that are not intended to be alphabetized, (as appropriate).

-

+ givenName

##### surName

The surname field is used for the last name of the individual associated with the resource.

This is typically the family name of an individual, for example, the name by which s/he is referred to in citations.

☐

#### positionName

This field is intended to be used instead of a particular person or full organization name.

If the associated person who holds the role changes frequently, then Position Name would be used for consistency. E.g., Data Manager.

## address -

The address field is a container for multiple subfields that describe the physical or electronic address of the responsible party for a resource.

### deliveryPoint

The delivery point field is used for the physical address for postal communication, e.g., GEO BON Secretariat,

Deutscher Platz 5e -

+ deliveryPoint

### city

The city field is used for the city name of the contact associated with a particular resource. -

+ city

### administrativeArea

The administrative area field is the equivalent of a 'state' in the U.S., or Province in Canada. This field is intended to accommodate the many types of international administrative areas. -

+ administrativeArea

### postalCode

The postal code is equivalent to a U.S. zip code, or the number used for routing to an international address.

-

+ postalCode

### country

The country field is used for the name of the contact's country.

-

+ country

+ address

### phone

The phone field describes information about the responsible party's telephone, be it a voice phone, fax.

-

+ phone

### email

The electronic mail address is the email address for the party. It is intended to be an Internet SMTP email address, which should consist of a username followed by the @ symbol, followed by the email server domain name address.

-

+ email

### homepage

A link to associated online information, usually a web site. When the party represents an organization, this is the URL to a website or other online information about the organization. If the party is an individual, it might be their personal web site or other related online information about the party.

-

.



+ homepage

+ metadataProvider

## associatedParty -

**A party associated with the resource. Parties have particular roles.**

☐

### organizationName

The full name of the organization that is associated with the resource. This field is intended to describe which institution or overall organization is associated with the resource being described.

☐

### individualName

The individualName field contains subfields so that a person's name can be broken down into parts.

#### givenName

The given name field can be used for first name of the individual associated with the resource, or for any other names that are not intended to be alphabetized, (as appropriate).

-

+ givenName

#### surName

The surname field is used for the last name of the individual associated with the resource.  
This is typically the family name of an individual, for example, the name by which s/he is referred to in citations.

☐

### positionName

This field is intended to be used instead of a particular person or full organization name.

If the associated person who holds the role changes frequently, then Position Name would be used for consistency. E.g., Data Manager.

## address -

The address field is a container for multiple subfields that describe the physical or electronic address of the responsible party for a resource.

### deliveryPoint

The delivery point field is used for the physical address for postal communication, e.g., GEO BON Secretariat,

Deutscher Platz 5e -

+ deliveryPoint

### city

The city field is used for the city name of the contact associated with a particular resource. -

+ city

### administrativeArea

The administrative area field is the equivalent of a 'state' in the U.S., or Province in Canada. This field is intended to accommodate the many types of international administrative areas. -

+ administrativeArea

### postalCode

The postal code is equivalent to a U.S. zip code, or the number used for routing to an international address.

number used for routing to an international address.

-

+ postalCode

### country

The country field is used for the name of the contact's country.

-

+ country

+ address

### phone

The phone field describes information about the responsible party's telephone, be it a voice phone, fax.

-

+ phone

### email

The electronic mail address is the email address for the party. It is intended to be an Internet SMTP email address, which should consist of a username followed by the @ symbol, followed by the email server domain name address.

-

+ email

### homepage

A link to associated online information, usually a web site. When the party represents an organization, this is the URL to a website or other online information about the organization. If the party is an individual, it might be their personal web site or other related online information about the party.

-

+ homepage

### role

Use this field to describe the role the party played with respect to the resource. Some potential roles include technician, reviewer, principal investigator, and many others.

+ associatedParty

### pubDate

YYYY-MM-DD

The date on which the resource was published

### license

CCO



A legal document giving official permission to do something with the dataset.

### citation

**A reference for the dataset as a statement indicating how this data should be cited (attributed) when used.**

#### citation

A single citation for use when citing the dataset

#### identifier

A URI, DOI or other persistent identifier for the citation

## language

The language in which the resource (not the metadata document) is written

-

+ language

## abstract

-

**A brief overview describing the dataset**

+ abstract

## keywordSet

-

**A wrapper element for the keyword and keywordThesaurus elements**

### keyword

This field names a keyword or key phrase that concisely describes the resource or is related to the resource.

Each keyword field should contain one and only one keyword

-

+ keyword

## keywordThesaurus

The name of the official keyword thesaurus from which keyword was derived

+ keywordSet

## additionalInfo -

**Any information that is not characterized by the other resource metadata fields**

+ additionalInfo

## intellectualRights -

**Contain a rights management statement for the resource, or reference a service providing such information.**

+ intellectualRights

## distribution

-

**This element provides information on how the resource is distributed.**

**When used at the resource level, this element can provide only general information, but elements for describing connections to online systems are provided.**

**url**

The URL of the resource that is available online.

**protocol**

OGC:WFS



The connection protocol to be used

**name**

The name of the online resource

**description**

A detailed text description of what the online resource is/does

A detailed text description of what the online resource is/does

+ distribution

## coverage -

**Describes the extent of the coverage of the resource in terms of its spatial extent, temporal extent, and taxonomic extent**

### geographicCoverage -

**A container for spatial information about a resource (e.g. of grid cells, sampling locations, satellites, etc.) allows a bounding box for the overall coverage (in lat long), and also allows description of arbitrary polygons with exclusions.**

#### geographicDescription



A short text description of a dataset's geographic areal domain.

A text description is especially important to provide a geographic setting when the extent of the dataset cannot be well described by the "boundingCoordinates".

-

+ geographicDescription

### boundingCoordinates



Bounding Coordinates are the four margins (N, S, E, W) of a bounding box, or when considered in lat-lon pairs, the corners of the box.

#### **westBoundingCoordinate**

The westBoundingCoordinate field defines the longitude of the western-most point of the bounding box that is being described.

#### **eastBoundingCoordinate**

The eastBoundingCoordinate field defines the longitude of the eastern-most point of the bounding box that is being described.

#### **northBoundingCoordinate**

The northBoundingCoordinate field defines the latitude of the northern-most point of the bounding box that is being described.

#### **southBoundingCoordinate**

The southBoundingCoordinate field defines the latitude of the southern-most point of the bounding box that is being described.

+ geographicCoverage

temporalCoverage

-

**This field specifies temporal coverage (e.g. length of time series, continuous recording, time period of collection of records, etc.), and allows coverages to be a single point in time or a range of dates.**



### rangeOfDates

The 'RangeOfDates' field is intended to be used for describing a range of dates and/or times. It may be used multiple times to document multiple date ranges. It allows for two 'singleDateTime' fields, the first to be used as the beginning dateTime, and the second to be used as the ending dateTime of the range.

#### beginDate

A single time stamp signifying the beginning of some time period.

#### endDate

A single time stamp signifying the end of some time period.



### singleDateTime

The SingleDateTime field is intended to describe a single date and time for an event.

+ temporalCoverage

## taxonomicCoverage

-

**Taxonomic Coverage (e.g. how many and which species are documented) is a container for taxonomic information about a resource. It includes a list of species names (or higher level ranks) from one or more classification systems.**

### generalTaxonomicCoverage

A general description of the range of taxa addressed in the data set or collection

-

+ generalTaxonomicCoverage

## taxonomicClassification

-

**Information about the range of taxa addressed in the dataset or collection**

### taxonRankName

The name of the taxonomic rank for which the Taxon rank value is provided, e.g., Phylum, Class, Genus, Species

-

+ taxonRankName

### taxonRankValue

The name representing the taxonomic rank of the taxon being described

### commonName

Applicable common names; these common names may be general descriptions of a group of organisms if appropriate, e.g., invertebrates, waterfowl

-

+ commonName

+ taxonomicClassification

+ taxonomicCoverage

+ coverage

## layers

-

**Describes the layers of the resource in terms of the spatial, temporal and taxonomic extent of each layer incl. the measurement type of the layer.**

The layer field is a container that describe the layer for a resource.

### measurementType

State



**State:** an absolute measurement on the condition and status of aspects of biodiversity;

**RelativeState:** a measurement of aspects of biodiversity relative to a spatial (??) or temporal reference, such as a arbitrary area or baseline;

**Pressure:** A measurement of a proximate cause of biodiversity change, such as fire, flood, etc;

**Benefit:** Ecosystem service variables

## geographic

**A container for spatial information about a layer (e.g. of grid cells, sampling locations, satellites, etc.).**

### resolution

Spatial resolution (e.g. grid cell size, polygons, resolution of satellite sensors, volume, etc.)

### measurementUnit

Meters, cubic meters, kilometers, degrees, etc.

### uncertainty

Precision and accuracy of coordinates and volumes, wrongly recorded coordinates, imprecise sampling locations

## temporal

**A container for temporal information about a layer (e.g. length of time series, continuous recording, time period of collection of records, etc.)**

### resolution

Temporal grain (e.g. date or time window of sampling, sampling frequency)

### measurementUnit

e.g. Hours, days, weeks, months, years, decades, etc.

### measurementBaseline

The baseline year on which the measurement was made (Recommended best practice is to use a date that conforms to ISO 8601:2004(E), e.g. 1900)

### uncertainty

Variation in length of time series, precision of time of collection, etc.

## taxonomic

**A container for temporal information about a layer (e.g. how many and which species are**

documented).

### resolution

e.g. Species, genus, higher taxonomic level,  
etc.

### measurementUnit

Taxonomic entity for which species distribution  
and abundance data are sampled (e.g. Areca).

### uncertainty

Identification and observation uncertainty,  
ambiguous scientific names, synonyms,  
differences in taxon concepts, etc.

+ layer

+ layers

## purpose

-

**A description of the purpose of the resource/dataset**

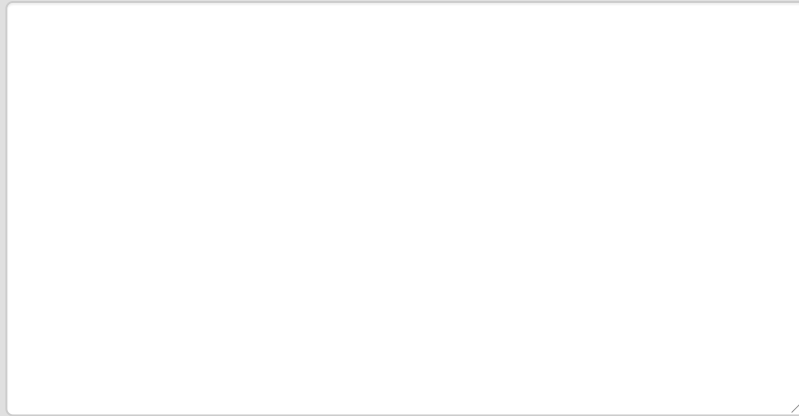
+ purpose

maintenance

-

description

-



The field Description contains general textual descriptions.

+ description

**maintenanceUpdateFrequency**

annually

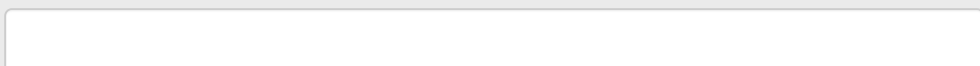


+ maintenance

contact

-

**organizationName**





The full name of the organization that is associated with the resource. This field is intended to describe which institution or overall organization is associated with the resource being described.



### **individualName**

The individualName field contains subfields so that a person's name can be broken down into parts.

givenName

The given name field can be used for first name of the individual associated with the resource, or for any other names that are not intended to be alphabetized, (as appropriate).

-

+ givenName

surName

The surname field is used for the last name of the individual associated with the resource.

This is typically the family name of an individual, for example, the name by which s/he is referred to in citations.



### **positionName**

This field is intended to be used instead of a particular person or full organization name.

If the associated person who holds the role changes frequently, then Position Name would be used for consistency. E.g., Data Manager.

address

-

The address field is a container for multiple subfields that describe the physical or electronic address of the responsible party for a resource.

**deliveryPoint**

The delivery point field is used for the physical address for postal communication, e.g., GEO BON Secretariat,

Deutscher Platz 5e

-

+ deliveryPoint

### city

The city field is used for the city name of the contact associated with a particular resource.

-

+ city

### administrativeArea

The administrative area field is the equivalent of a 'state' in the U.S., or Province in Canada. This field is intended to accommodate the many types of international administrative areas.

-

+ administrativeArea

### postalCode

The postal code is equivalent to a U.S. zip code, or the number used for routing to an international address.

-

+ postalCode

### country

The country field is used for the name of the contact's country.

-

+ country

+ address

### phone

The phone field describes information about the responsible party's telephone, be it a voice phone, fax.

### email

The electronic mail address is the email address for the party. It is intended to be an Internet SMTP email address, which should consist of a username followed by the @ symbol, followed by the email server domain name address.

### homepage

A link to associated online information, usually a web site. When the party represents an organization, this is the URL to a website or other online information about the organization. If the party is an individual, it might be their personal web site or other related online information about the party.

## contact



### organizationName

The full name of the organization that is associated with the resource. This field is intended to describe which institution or overall organization is associated with the resource being described.



### individualName

The individualName field contains subfields so that a person's name

can be broken down into parts.

givenName

The given name field can be used for first name of the individual associated with the resource, or for any other names that are not intended to be alphabetized, (as appropriate).

-

+ givenName

surName

The surname field is used for the last name of the individual associated with the resource.  
This is typically the family name of an individual, for example, the name by which s/he is referred to in citations.



**positionName**

This field is intended to be used instead of a particular person or full organization name.  
If the associated person who holds the role changes frequently, then Position Name would be used for consistency. E.g., Data Manager.

address

-

The address field is a container for multiple subfields that describe the physical or electronic address of the responsible party for a resource.

**deliveryPoint**

The delivery point field is used for the physical address for postal communication, e.g., GEO BON Secretariat,  
Deutscher Platz 5e

-

+ deliveryPoint

### city

The city field is used for the city name of the contact associated with a particular resource.

-

+ city

### administrativeArea

The administrative area field is the equivalent of a 'state' in the U.S., or Province in Canada. This field is intended to accommodate the many types of international administrative areas.

-

+ administrativeArea

### postalCode

The postal code is equivalent to a U.S. zip code, or the number used for routing to an international address.

-

+ postalCode

### country

The country field is used for the name of the contact's country.

-

+ country

+ address

### phone

The phone field describes information about the responsible party's telephone, be it a voice phone, fax.

-

+ phone

## email

The electronic mail address is the email address for the party. It is intended to be an Internet SMTP email address, which should consist of a username followed by the @ symbol, followed by the email server domain name address.

-

+ email

## homepage

A link to associated online information, usually a web site. When the party represents an organization, this is the URL to a website or other online information about the organization. If the party is an individual, it might be their personal web site or other related online information about the party.

-

+ homepage

+ contact

## methods

-

**The methods field documents scientific methods used in the collection of this dataset. It includes information on items such as tools, instrument calibration and software.**

### methodDescription

-

A broader description of how the method is produced.

+ methodDescription

### datasetDependencies

A detailed listing of the input datasets needed to produce the dataset. The list (concatenated and separated) should contain names of people, groups, or organizations responsible for the original input.

The primary creator should be listed first.

-

+ datasetDependencies

### models

dataset models...

-

+ models

## qualityControl

-

The qualityControl field provides a location for the description of actions taken to either control or assess the quality of data resulting from the associated method step.

+ qualityControl

+ methods

## project

-

**The project field contains information on the project in which this dataset was collected. It includes information such as project personnel, funding, study area, project design and related projects.**

### title

The 'title' field provides a description of the resource that is being documented that is long enough to differentiate it from other similar resources.

Multiple titles may be provided, particularly when trying to express the title in more than one language.

### personnel

-

**The Personnel field extends ResponsibleParty with role information and is used to document people involved in a research project by providing contact information and their role in the project.**

☐

#### organizationName

The full name of the organization that is associated with the resource. This field is intended to describe which institution or overall organization is associated with the resource being described.

☐

#### individualName

The individualName field contains subfields so that a person's name can be broken down into parts.

#### givenName



The given name field can be used for first name of the individual associated with the resource, or for any other names that are not intended to be alphabetized, (as appropriate).

-

+ givenName

surName

The surname field is used for the last name of the individual associated with the resource. This is typically the family name of an individual, for example, the name by which s/he is referred to in citations.



**positionName**

This field is intended to be used instead of a particular person or full organization name. If the associated person who holds the role changes frequently, then Position Name would be used for consistency. E.g., Data Manager.

address

-

The address field is a container for multiple subfields that describe the physical or electronic address of the responsible party for a resource.

**deliveryPoint**

The delivery point field is used for the physical address for postal communication, e.g., GEO BON Secretariat, Deutscher Platz 5e

-

+ deliveryPoint

### city

The city field is used for the city name of the contact associated with a particular resource.

-

+ city

### administrativeArea

The administrative area field is the equivalent of a 'state' in the U.S., or Province in Canada. This field is intended to accommodate the many types of international administrative areas.

-

+ administrativeArea

### postalCode

The postal code is equivalent to a U.S. zip code, or the number used for routing to an international address.

-

+ postalCode

### country

The country field is used for the name of the contact's country.

-

+ country

+ address

### phone

The phone field describes information about the

responsible party's telephone, be it a voice phone, fax.

-

+ phone

### email

The electronic mail address is the email address for the party.

It is intended to be an Internet SMTP email address, which should consist of a username followed by the @ symbol, followed by the email server domain name

address.

-

+ email

### homepage

A link to associated online information, usually a web site. When the party represents an organization, this is the URL to a website or other online information about the organization. If the party is an individual, it might be their personal web site or other related online information about the party.

-

+ homepage

### role

Use this field to describe the role the party played with respect to the resource. Some potential roles include technician, reviewer, principal investigator, and many others.


+ personnel

## abstract

-

A brief overview describing the dataset

After creating the dataset



+ abstract

## funding

-

The funding field is used to provide information about funding sources for the project such as: grant and contract numbers; names and addresses of funding sources.



+ funding

## studyAreaDescription

-

**The studyAreaDescription field documents the physical area associated with the research project. It can include descriptions of the geographic, temporal, and taxonomic coverage of the research location and**

**descriptions of domains (themes) of interest such as climate, geology, soils or disturbances.**

## descriptor

The descriptor field is used to document domains (themes) of interest such as climate, geology, soils or disturbances.

### descriptorValue

The descriptorValue field contains a general description, either thematic or geographic, of the study area.

☐ citableClassificationSystem

### name

+ studyAreaDescription

## designDescription

-

The field designDescription contains general textual descriptions of research design.  
It can include detailed accounts of goals, motivations, theory, hypotheses, strategy, statistical design, and actual work.

+ designDescription

**id**

A unique identifier for the project. This can be used to link multiple datasets that are associated in some way with the same project.

+ project