

Glossary of EOL Data Schema Terms

AGENT <agent>

Definition: Includes the person, organization, and/or software agent which has contributed to the creation of the resource.

Comment: Strongly recommended to include the role the agent played in the creation of the resource. Agents should appear in the order they are to be displayed. For example, the primary author should be listed first with all subsequent authors following.

Roles:

- **Animator**: The person who created multiple images (frames) that form the illusion of movement (animation) when rapidly displayed.
- **Author**: The person who created the content.
- **Compiler**: The person who gathers together existing information but does not add to or change that information in substantive ways.
- **Composer**: The person who created the sound, or musical art, which was then interpreted and performed by musicians.
- **Creator**: The person or corporate body responsible for the intellectual or artistic content of the resource.
- **Director**: The person who supervises the creators and directs the action in the production of audio or video.
- Editor: The person who prepared for publication a work not primarily his/her own, such as by
 elucidating text, adding introductory or other critical matter, or technically directing an editorial
 staff.
- Illustrator: The person who conceived, and perhaps also implemented, the design or illustration.
- Photographer: The person who took the photograph.
- Project: The organizational unit responsible for creating and/or making available the resource.
- Publication
- **Publisher**: The entity responsible for making the resource available.
- **Recorder**: The person responsible for recording the sound or video.
- **Source**: The project or organization responsible for providing the resource to the provider.

AUDIENCE <audience>

Definition: A class of entity for whom the resource is intended or useful.

Comment: Include all that are applicable. If no audiences are specified, it will be assumed the resource is intended for all audiences.

Controlled Vocabularies:

- Children
- General Public
- Expert Users

BIBLIOGRAPHIC CITATION <dcterms:bibliographicCitation>

Definition: A bibliographic reference for the resource.

Comment: Sufficient bibliographic detail should be included to identify the resources as unambiguously as possible.

CLASS

Definition: The name of the class in which the taxon is classified.

COMMON NAME <commonName>

Definition: A common (vernacular) name by which the taxon is known.

Comment: Strongly recommended to include a language. Recommended to use ISO 639-2 or ISO 639-1 codes for languages. See http://www.loc.gov/standards/iso639-2/ for more information on these language standards.

CREATED <dcterms:created>

Definition: Date of creation of the resource or taxon record.

DATA OBJECT <dataObject>

Definition: A text description or multimedia resource which describes the taxon.

DATA TYPE <dataType>

Definition: Describes the nature of the resource using the DCMI Type Vocabulary [DCMITYPE]. See http://dublincore.org/documents/dcmi-terms/ for more information on this controlled list of data types.

Controlled Vocabularies:

- Moving Image: A series of visual representations imparting an impression of motion when shown in succession. Examples include animations, movies, television programs, videos, zoetropes, or visual output from a simulation. Instances of the type Moving Image must also be describable as instances of the broader type Image.
- Sound: A resource primarily intended to be heard. Examples include a music playback file format, an audio compact disc, and recorded speech or sounds.
- Still Image: A static visual representation. Examples include paintings, drawings, graphic designs, plans and maps. Recommended best practice is to assign the type Text to images of textual materials. Instances of the type Still Image must also be describable as instances of the broader type Image.
- *Text:* A resource consisting primarily of words for reading. Examples include books, letters, dissertations, poems, newspapers, articles, archives of mailing lists. Note that facsimiles or images of texts are still of the genre Text.

DESCRIPTION <dc:description>

Definition: An account of the resource.

Comment: For text descriptions, the entire account should be located here. For media resources, captions should be included here. Recommended to remove all embedded HTML tags pertaining to text styling. Strongly recommended to remove references to images, unless the images are referenced by their full, absolute, URL and harvesters can 'hotlink' to them. Hyperlinks should use absolute rather than relative URLs. Recommended to use ISO 639-2 or ISO 639-1 codes for languages. See http://www.loc.gov/standards/iso639-2/ for more information on these language standards.

FAMILY <dwc:Family>

Definition: The name of the family in which the taxon is classified.



GEOPOINT <geo:Point>

Definition: Location of the entity in decimal WGS84 latitude and longitude (and optional altitude) as

defined by the W3C Basic Geo Vocabulary.

Comment: See http://www.w3.org/2003/01/geo/ for more information on this standard.

IDENTIFIER <dc:identifier>

Definition: An unambiguous reference to the resource within a given context.

Comment: Recommended to use a globally unique identifier to unambiguously refer to the resource or

taxon.

KINGDOM <dwc:Kingdom>

Definition: The name of the kingdom in which the taxon is classified.

LANGUAGE <dc:language>

Definition: Language of the resource.

Comment: Recommended to use ISO 639-2 or ISO 639-1 codes for languages. See

http://www.loc.gov/standards/iso639-2/ for more information on these language standards.

LICENSE < license>

Definition: License under which the resource is provided.

Comment: To the greatest extent possible, the Encyclopedia of Life promotes an open-source, open-

access approach. Review the EOL Licensing Policy at

http://www.eol.org/files/pdfs/docs/EOL_Licensing_Policy.pdf and see http://creativecommons.org for more information on this controlled list of Creative Commons licenses.

Controlled Vocabularies:

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- CC-BY-NC (Attribution Non-commercial) This license lets others remix, tweak, and build upon
 your work non-commercially, and although their new works must also acknowledge you and be
 non-commercial, they don't have to license their derivative works on the same terms.
 http://creativecommons.org/licenses/by-nc/3.0/
- CC-BY-NC-SA (Attribution Non-commercial Share Alike) This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms. Others can download and redistribute your work as well as translate, make remixes, and produce new stories based on your work. All new work based on



yours will carry the same license, so any derivatives will also be non-commercial in nature. http://creativecommons.org/licenses/by-nc-sa/3.0/

LOCATION < location>

Definition: Natural language description of the locality where the resource was collected or created. *Comment:* Not recommended for use with text descriptions. Recommended to use ISO 639-2 or ISO 639-1 codes for languages. See http://www.loc.gov/standards/iso639-2/ for more information on these language standards.

MEDIA URL <mediaURL>

Definition: A URL reference directly to the media resource.

MIME TYPE <mimeType>

Definition: Describes the file format of the resource.

Comment: Recommended for use with media resources, but not needed for text descriptions.

Controlled Vocabularies:

Audio

- audio/mpeg
- audio/x-ms-wma
- audio/x-pn-realaudio
- audio/x-realaudio
- audio/x-wav

Images

- image/bmp
- image/gif
- image/jpeg
- image/png
- image/svg+xml
- image/tiff

Text

- text/html
- text/plain
- text/richtext
- text/rtf
- text/xml

Video

- video/mp4
- video/mpeg
- video/quicktime
- video/x-flv
- video/x-ms-wmv

MODIFIED <dcterms:modified>

Definition: Date on which the resource or taxon record was changed.

ORDER <dwc:Order>

Definition: The name of the order in which the organism is classified.



PHYLUM <dwc:Phylum>

Definition: The name of the phylum (or division) in which the taxon is classified.

REFERENCE <reference>

Definition:

- (Primary Element) A related resource that references, cites, or otherwise points to the taxon.
- (Data Object Element) A related resource that is referenced, cited, or otherwise pointed to by the described resource.

Comment: Recommended to use well-formed bibliographic citations. Strongly recommended to include identifiers which unambiguously refer to the specified resource when available.

Examples:

- bici
- coden
- doi
- eissn
- handle
- issn
- isbn
- Isid
- oclc
- sici
- url
- urn

RIGHTS <dc:rights>

Definition: Statement of rights associated with the resource.

Comment: Creative Commons licenses require the resource to be attributed "in the manner specified by the author or licensor", and this is where the attribution statement should be specified.

RIGHTS HOLDER <dcterms:rightsHolder>

Definition: A person or organization owning or managing rights over the resource.

SCIENTIFIC NAME <dwc:ScientificName>

Definition: The full name of the lowest level taxon to which the organism has been identified in the most recent accepted determination, specified as precisely as possible, including name-author, year or authorship, sensu or sec. (according to or following) author, and indication of uncertainty.

Comment: Conceptually equivalent to a full taxonomic identification as given by the identifier (verbatim). Does not include the identifier name or date of identification. See http://wiki.tdwg.org/twiki/bin/view/DarwinCore/DarwinCoreDraftStandard for more information on this and other Darwin Core elements.

Examples:

- "Coleoptera" (an Order)
- "Vespertilionidae" (a Family)
- "Manis" (a Genus)
- "Ctenomys sociabilis" (Genus + SpecificEpithet)
- "Ambystoma tigrinum diaboli" (Genus + SpecificEpithet + SubspecificEpithet)



• "Quercus agrifolia var. oxyadenia (Torr.) J.T. Howell" (Genus + SpecificEpithet + InfraspecificRank + InfraspecificEpithet + AuthorYearOfScientificName)

SOURCE <dc:source>

Definition: The URL of a web page which describes the taxon or resource.

SUBJECT <subject>

Definition: The topic of the resource.

Comment: Very strongly recommended for use with text descriptions, and not needed for media. Subject will be used to map the description to a table of contents. The controlled list of subject headings comes from the BIS (TDWG) ontology of Infoltems used in the developing standard Species Profile Model. See http://rs.tdwg.org/ontology/voc/SPMInfoltems for more information on this list and http://rs.tdwg.org/ontology/voc/SpeciesProfileModel for more information on the Biodiversity Information Standards (TDWG) group.

Controlled Vocabularies:

- Associations: Predator-prey; host-parasite, pollinators, symbiosis, mutualism, commensalism; hybridisation, ...
- Behaviour: Covers actions and reactions of organism in relation to its biotic and abiotic environment.
- Conservation Status: A description of the likelihood of the species becoming extinct in the present day or in the near future.
- Cyclicity: A state or condition characterised by regular repetition in time.
- Cytology: Cell biology: formation, structure and function of cells.
- Diagnostic Description: Distinguishing feature of this taxon from its closest relatives.
- Diseases: Diseases of organisms.
- Dispersal: Dispersal strategies and mechanisms.
- Distribution: Covers ranges, e.g., a global range, or a narrower one; may be biogeographical, political or other (e.g., managed areas like conservencies); endemism; native or exotic; ref:
 Darwin Core Geospatial extension
- Evolution: Phylogenetic information relating to the taxon
- General Description: A comprehensive description of the characteristics of the taxon.
- *Genetics:* Including karyotypes.
- Growth: Rate; parameters; allometries.
- *Habitat:* Includes realm (e.g. Terrestrial etc) and climatic information (e.g. Boreal); also includes requirements and tolerances; horizontal and vertical distribution.
- Legislation: Legal regulations or statutes relating to the taxon.
- Life Cycle: Obligatory developmental transformations.
- Life Expectancy: The average period an organism can be expected to survive.
- Look Alikes: Other taxa that this taxon may be confused with. Common in invasive species communities.
- *Management:* A statement about the level of need to manage a taxon which can be related to a piece of legislation, e.g., a CITES list.
- Migration: Periodic movement of organisms from one locality to another (e.g., for breeding).
- Molecular Biology: Includes genomic, proteomic and biochemistry (e.g. Toxicity).



- *Morphology:* The appearance of the taxon; e.g. Habit; anatomy (the branch of morphology that deals with structure of animals).
- Physiology: An account of the physiological processes.
- Population Biology: Includes abundance information.
- *Procedures*: Deals with how you go about managing this taxon; what are the known threats to this taxon?
- Reproduction: Reproduction cues, strategies, restraints.
- Risk Statement: Includes invasiveness, impacts.
- Size: Average size, max, range; type of size (perimeter, length, volume, weight ...)
- Taxon Biology: An account of the biology of the taxon.
- Threats: The threats to which this taxon is subject.
- Trends: An indication of whether a population is stable, or increasing or decreasing.
- Trophic Strategy: Include nutritional aspects, diet, position in food network.
- Uses: Relationships to humans; ref: Cook "Economic Botany"

THUMBNAIL URL <thumbnailURL>

Definition: A URL reference directly to a thumbnail image associated with the media resource.

TITLE <dc:title>

Definition: A name given to the resource.

Comment: Recommended for use with all text descriptions as well as sound and video media. Detailed captions for media should be included in the description element below. For text descriptions, this title will appear above the text in preference to the subject element below. Recommended to use ISO 639-2 or ISO 639-1 codes for languages. See http://www.loc.gov/standards/iso639-2/ for more information on these language standards.

References

- DCMI Type Vocabulary: http://dublincore.org/documents/dcmi-type-vocabulary/
- TDWG Species Profile Model Infoltems Ontology: http://rs.tdwg.org/ontology/voc/SPMInfoltems
- TDWG Darwin Core Wiki: http://wiki.tdwg.org/DarwinCore

