

Class or Category	Field name	Definition	Details	Requirement	Vocab or Standard	Recommendation	Used By	DCN Notes
Event	day	The integer day of the month on which the Event occurred.	numeric.	Standard	Must be a value between 1 and 31.	Required	All	
Event	endDayOfYear	The latest integer day of the year on which the Event occurred (1 for January 1, 365 for December 31, except in a leap year, in which case it is 366).	numeric (1-366)			Optional	All	This field and the corresponding <i>startDayOfYear</i> are useful for tracking changes in annual or seasonal occurrences.
Event	eventDate	The date-time or interval during which an Event occurred. For <b>occurrences</b> , this is the date-time when the event was recorded. Not suitable for a time in a geological context.	Recommended best practice is to use a date that conforms to ISO 8601-1:2019	Standard	<a href="https://en.wikipedia.org/wiki/ISO_8601">https://en.wikipedia.org/wiki/ISO_8601</a>	Required	All	
Event	eventID	An identifier for the set of information associated with an Event (something that occurs at a place and time). May be a global unique identifier or an identifier specific to the data set.		URI or ID		Situational	All	
Event	eventRemarks	Comments or notes about the Event.				Optional	All	Open text field; can be used to input event info that does not fit elsewhere.
Event	eventTime	The time or interval during which an Event occurred.	Recommended best practice is to use a date that conforms to ISO 8601-1:2019.	Standard	<a href="https://en.wikipedia.org/wiki/ISO_8601">https://en.wikipedia.org/wiki/ISO_8601</a>	Recommended	All	
Event	fieldNotes	One of a) an indicator of the existence of, b) a reference to (publication, URI), or c) the text of notes taken in the field about the Event.				Situational	PrimarySource	Formatting could be in the form of citation(s), URI/URL, or free-text notes.
Event	fieldNumber	An identifier given to the event in the field. Often serves as a link between field notes and the Event.		URI or ID		Situational	PrimarySource	Used when referencing original field notes or other primary sources against the other data.
Event	habitat	A category or description of the habitat in which the Event occurred.				Situational	Sampling	
Event	month	The integer month in which the Event occurred.	numeric.	Standard	Must be a value between 1 and 12.	Required	All	
Event	parentEventID	An identifier for the broader Event that groups this and potentially other Events.	Use a globally unique identifier for a <i>dwc:Event</i> or an identifier for a <i>dwc:Event</i> that is specific to the data set.	URI or ID		Situational		Can be used to nest related events Ex: Location Alpha (A) has a transect with 3 plots (A1, A2, A3) which were sampled independently.
Event	sampleSizeUnit	The unit of measurement of the size (time duration, length, area, or volume) of a sample in a sampling event.	A <i>sampleSizeUnit</i> must have a corresponding <i>sampleSizeValue</i> , e.g., `5` for <i>sampleSizeValue</i> with `metre` for <i>sampleSizeUnit</i> .	Related		Situational	Sampling	Related to <i>sampleSizeValue</i> ; only used when sampling method is quantitatively measurable using standard units.
Event	sampleSizeValue	A numeric value for a measurement of the size (time duration, length, area, or volume) of a sample in a sampling event.	A <i>sampleSizeValue</i> must have a corresponding <i>sampleSizeUnit</i> .	Related		Situational	Sampling	Related to <i>sampleSizeUnit</i> ; only used when sampling method is quantitatively measurable using standard units.
Event	samplingEffort	The amount of effort expended during an Event.				Situational	Sampling	A unit of measurement for how much effort was expended by the sampling effort. Units will be determined by the type of sampling. Ex: 6 day pitfall trap
Event	samplingProtocol	The names of, references to, or descriptions of the methods or protocols used during an Event.	Recommended best practice is to describe an Event with no more than one sampling protocol. In the case of a summary Event with multiple protocols, in which a specific protocol cannot be attributed to specific Occurrences, the recommended best practice is to separate the values in a list with space vertical bar space (   ).			Situational	Sampling	If describing multiple protocols then format as a list.
Event	startDayOfYear	The earliest integer day of the year on which the Event occurred (1 for January 1, 365 for December 31, except in a leap year, in which case it is 366).	numeric.	Standard	Must be a value between 1 and 366.	Optional	All	This field and the corresponding <i>endDayOfYear</i> are useful for tracking changes in annual or seasonal occurrences.

<b>Event</b>	verbatimEventDate	The verbatim original representation of the date and time information for an Event.				Optional	All	Can be used for quality control. Best practice is to include this when the original date format doesn't match ISO 8601-1:2019 or is uncertain; this lets users re-interpret the date as needed.
<b>Event</b>	year	The four-digit year in which the Event occurred, according to the Common Era Calendar.	numeric	Standard	Dates must be formatted with four digits (i.e., YYYY)	Required	All	
<b>GeologicalContext</b>	All fields	<a href="https://dwc.tdwg.org/terms/#geologicalcontext">Reference: https://dwc.tdwg.org/terms/#geologicalcontext</a> for information about the fields in this class which relates to geologic time and context				Recommended	FossilSpecimen	The geologicalContext class supports the cataloging of fossils by adding fields that describe rocks (ex: <i>formation</i> ) and geologic time period (ex: <i>lowestBiostratigraphicZone</i> ). This class is omitted from this sheet because the authors are not knowledgeable enough to make recommendations. The fields seem straightforward and do not use controlled vocabularies.
<b>Identification</b>	dateIdentified	The date on which the subject was identified as representing the Taxon.	Recommended best practice is to use a date that conforms to ISO 8601-1:2019.	Standard	<a href="https://en.wikipedia.org/wiki/ISO_8601">https://en.wikipedia.org/wiki/ISO_8601</a>	Optional	Specimen	Used if the date of the identification is known; this can be used for quality control purposes.
<b>Identification</b>	identificationID	An identifier for the Identification (the body of information associated with the assignment of a scientific name). May be a global unique identifier or an identifier specific to the data set.		URI or ID		Optional	Specimen	An identifier (ex: number) to which all Identification fields link.
<b>Identification</b>	identificationQualifier	A brief phrase or a standard term ("cf.", "aff.") to express the determiner's doubts about the Identification.				Situational	Specimen	<a href="https://en.wikipedia.org/wiki/Open_nomenclature">These are common abbreviations used by taxonomists to indicate a level of uncertainty regarding their identifications. See https://en.wikipedia.org/wiki/Open_nomenclature</a> for some examples.
<b>Identification</b>	identificationReferences	A list (concatenated and separated) of references (publication, global unique identifier, URI) used in the Identification.	Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ).	List		Situational	Specimen	Citations to taxonomic keys or other resources used to make the identification. May be useful for difficult IDs as a way to document the identification methodology or justification.
<b>Identification</b>	identificationRemarks	Comments or notes about the Identification.				Optional	Specimen	Open text field; can be used to input info related to the identification that does not fit elsewhere.
<b>Identification</b>	identificationVerificationStatus	A categorical indicator of the extent to which the taxonomic identification has been verified to be correct.	Recommended best practice is to use a controlled vocabulary such as that used in HISPID (Herbarium Information Standards and Protocols for Interchange of Data) or Access to Biological Collection Data (ABCD) are recommended.	Vocab	<a href="http://plantnet.rbgsvd.nsw.gov.au/HISCOM/HISPID/HISPID3/H3.html#_Toc366998637">HISPID:Verification Level Flag: http://plantnet.rbgsvd.nsw.gov.au/HISCOM/HISPID/HISPID3/H3.html#_Toc366998637</a>	Optional	All	Likely only needed if the identification is, or will be, changed or challenged.
<b>Identification</b>	identifiedBy	A list (concatenated and separated) of names of people, groups, or organizations who assigned the Taxon to the subject.	Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ).	Related		Optional	Specimen	Names of the person(s) who identified the specimen. Relates to <i>identifiedByID</i> .
<b>Identification</b>	identifiedByID	A list (concatenated and separated) of the globally unique identifier for the person, people, groups, or organizations responsible for assigning the Taxon to the subject.	Recommended best practice is to provide a single identifier that disambiguates the details of the identifying agent. If a list is used, the order of the identifiers on the list should not be assumed to convey any semantics. Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ).	URI or ID		Optional	Specimen	URI or IDs that represent the person(s) who identified the specimen. This could be an ORCID for an individual, or a list of ORCIDs for a group of researchers, separated as recommended.
<b>Identification</b>	typeStatus	A list (concatenated and separated) of nomenclatural types (type status, typified scientific name, publication)	Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ).	List		Situational	Specimen	<a href="#">Include when known and needed. The last item to include is a citation to the corresponding publication where the type specimen was first described. If you are</a>
<b>Identification</b>	verbatimIdentification	A string representing the taxonomic identification as it appeared in the original record.	This term is meant to allow the capture of an unaltered original identification/determination, including identification qualifiers, hybrid formulas, uncertainties, etc. This term is meant to be used in addition to `scientificName` (and `identificationQualifier` etc.), not instead of it.			Recommended	Specimen	Useful for error checking
<b>Location</b>	continent	The name of the continent in which the Location occurs.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Recommended	All	

Location	coordinatePrecision	A decimal representation of the precision of the coordinates given in the <i>decimalLatitude</i> and <i>decimalLongitude</i> .						Ex: numeral indicating nearest degree, nearest minute, etc.
Location	coordinateUncertaintyInMeters	The horizontal distance (in meters) from the given <i>decimalLatitude</i> and <i>decimalLongitude</i> describing the smallest circle containing the whole of the Location. Leave the value empty if the uncertainty is unknown, cannot be estimated, or is not applicable (because there are no coordinates). Zero is not a valid value for this term.						Authors lack experience to annotate.
Location	country	The name of the country or major administrative unit in which the Location occurs.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names. Recommended best practice is to leave this field blank if the Location spans multiple entities at this administrative level or if the Location might be in one or another of multiple possible entities at this level. Multiplicity and uncertainty of the geographic entity can be captured either in the term <i>higherGeography</i> or in the term <i>locality</i> , or both.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Recommended	All	country > stateProvince > county > municipality > locality
Location	countryCode	The standard code for the country in which the Location occurs.	Recommended best practice is to use an ISO 3166-1-alpha-2 country code.	Standard	<a href="https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2">https://en.wikipedia.org/wiki/ISO_3166-1_alpha-2</a>	Recommended	All	
Location	county	The full, unabbreviated name of the next smaller administrative region than <i>stateProvince</i> (county, shire, department, etc.) in which the	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Recommended	All	country > stateProvince > county > municipality > locality
Location	decimalLatitude	The geographic latitude (in decimal degrees, using the spatial reference system given in <i>geodeticDatum</i> ) of the geographic center of a Location. Positive values are north of the Equator, negative values are south of it.	Latitude: Legal values lie between -90 and 90, inclusive.	Standard	<a href="https://en.wikipedia.org/wiki/Decimal_degrees">https://en.wikipedia.org/wiki/Decimal_degrees</a>	Recommended		Adds the ability to geo-locate the location on maps to the dataset
Location	decimalLongitude	The geographic longitude (in decimal degrees, using the spatial reference system given in <i>geodeticDatum</i> ) of the geographic center of a Location. Positive values are east of the Greenwich Meridian, negative values are west of it.	Longitude: Legal values lie between -180 and 180, inclusive.	Standard	<a href="https://en.wikipedia.org/wiki/Decimal_degrees">https://en.wikipedia.org/wiki/Decimal_degrees</a>	Recommended		Adds the ability to geo-locate the location on maps to the dataset
Location	footprintSpatialFit	The ratio of the area of the footprint ( <i>footprintWKT</i> ) to the area of the true (original, or most specific) spatial representation of the Location. Legal values are 0, greater than or equal to 1, or undefined. A value of 1 is an exact match or 100% overlap. A value of 0 should be used if the given footprint does not completely contain the original representation. The <i>footprintSpatialFit</i> is undefined (and should be left empty) if the original representation is a point without uncertainty and the given georeference is not that same point (without uncertainty). If both the original and the given georeference are the same point, the <i>footprintSpatialFit</i> is 1.	<a href="#">Detailed explanations with graphical examples can be found in the Georeferencing Best Practices, Chapman and Wiczorek, 2020. https://doi.org/10.15468/doc-gg7h-s853</a>					Authors lack experience to annotate

Location	footprintSRS	The ellipsoid, geodetic datum, or spatial reference system (SRS) upon which the geometry given in <i>footprintWKT</i> is based.	Recommended best practice is to use the EPSG code of the SRS, if known. Otherwise use a controlled vocabulary for the name or code of the geodetic datum, if known. Otherwise use a controlled vocabulary for the name or code of the ellipsoid, if known. If none of these is known, use the value 'unknown'. It is also permitted to provide the SRS in Well-Known-Text, especially if no EPSG code provides the necessary values for the attributes of the SRS. Do not use this term to describe the SRS of the <i>decimalLatitude</i> and <i>decimalLongitude</i> , nor of any verbatim coordinates - use the <i>geodeticDatum</i> and <i>verbatimSRS</i> instead.					Authors lack experience to annotate
Location	footprintWKT	A Well-Known Text (WKT) representation of the shape (footprint, geometry) that defines the Location. A Location may have both a point-radius representation (see <i>decimalLatitude</i> ) and a footprint representation, and they may differ from each other.						Authors lack experience to annotate
Location	geodeticDatum	The ellipsoid, geodetic datum, or spatial reference system (SRS) upon which the geographic coordinates given in <i>decimalLatitude</i> and <i>decimalLongitude</i> are based.	Recommended best practice is to use the EPSG code of the SRS, if known. Otherwise use a controlled vocabulary for the name or code of the geodetic datum, if known. Otherwise use a controlled vocabulary for the name or code of the ellipsoid, if known. If none of these is known, use the value 'unknown'.	Standard				Authors lack experience to annotate
Location	georeferencedBy	A list (concatenated and separated) of names of people, groups, or organizations who determined the georeference (spatial representation) for the Location.	Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ).	List				
Location	georeferencedDate	The date on which the Location was georeferenced.	Recommended best practice is to use a date that conforms to ISO 8601-1:2019.	Standard	<a href="https://en.wikipedia.org/wiki/ISO_8601">https://en.wikipedia.org/wiki/ISO_8601</a>			
Location	georeferenceProtocol	A description or reference to the methods used to determine the spatial footprint, coordinates, and uncertainties.						Ex: Citation of Georeferencing Quick Reference Guide
Location	georeferenceRemarks	Notes or comments about the spatial description determination, explaining assumptions made in addition or opposition to the those formalized in the method referred to in <i>georeferenceProtocol</i> .						
Location	georeferenceSources	A list (concatenated and separated) of maps, gazetteers, or other resources used to georeference the Location, described specifically enough to allow anyone in the future to use the same resources.	Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ).	List				
Location	higherGeography	A list (concatenated and separated) of geographic names less specific than the information captured in the locality term.	Recommended best practice is to separate the values in a list with space vertical bar space ( `   ` ), with terms in order from least specific to most specific.	List		Optional		Seems to only be needed when a location detail does not fit into any other field. If unique identifier(s) are available for this information they should be added to <i>higherGeographyID</i> .
Location	higherGeographyID	An identifier for the geographic region within which the Location occurred.	Recommended best practice is to use a persistent identifier from a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	URI or ID	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Optional		relates to <i>higherGeography</i> .
Location	island	The name of the island on or near which the Location occurs.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Situational	All	
Location	islandGroup	The name of the island group in which the Location occurs.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Situational	All	



Location	locality	The specific description of the place.	Less specific geographic information can be provided in other geographic terms ( <i>higherGeography, continent, country, stateProvince, county, municipality, waterBody, island, islandGroup</i> ). This term may contain information modified from the original to correct perceived errors or standardize the description.			Recommended	All	For adding specifics related to location not contained in other fields. May be a relational distance to known landmarks or towns. For example: 25 mi NW of What Cheer, IA, USA.
Location	locationAccordingTo	Information about the source of this Location information. Could be a publication (gazetteer), institution, or team of individuals.						Ex: Getty Thesaurus of Geographic Names, collector, etc.
Location	locationID	An identifier for the set of location information (data associated with dterms:Location). May be a global unique identifier or an identifier specific to the data set.		URI or ID		Situational	All	Can be used to link with another database or data set describing the location with different details or in a different schema.
Location	locationRemarks	Comments or notes about the Location.				Optional		Open text field; can be used to input informationa about location that does not fit elsewhere.
Location	maximumDepthInMeters	The greater depth of a range of depth below the local surface, in meters.						Authors lack experience to annotate.
Location	maximumDistanceAboveSurfaceInMeters	The greater distance in a range of distance from a reference surface in the vertical direction, in meters. Use positive values for locations above the surface, negative values for locations below. If depth measures are given, the reference surface is the location given by the depth, otherwise the reference surface is the location given by the elevation.						Authors lack experience to annotate.
Location	maximumElevationInMeters	The upper limit of the range of elevation (altitude, usually above sea level), in meters.				Optional		
Location	minimumDepthInMeters	The lesser depth of a range of depth below the local surface, in meters.						Authors lack experience to annotate.
Location	minimumDistanceAboveSurfaceInMeters	The lesser distance in a range of distance from a reference surface in the vertical direction, in meters. Use positive values for locations above the surface, negative values for locations below. If depth measures are given, the reference surface is the location given by the depth, otherwise the reference surface is the location given by the elevation.						Authors lack experience to annotate.
Location	minimumElevationInMeters	The lower limit of the range of elevation (altitude, usually above sea level), in meters.				Optional		
Location	municipality	The full, unabbreviated name of the next smaller administrative region than <i>county</i> (city, municipality, etc.) in which the Location occurs. Do not use this term for a nearby named place that does not contain the actual location.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Recommended	All	country > stateProvince > county > municipality > locality

Location	pointRadiusSpatialFit	The ratio of the area of the point-radius ( <i>decimalLatitude</i> , <i>decimalLongitude</i> , <i>coordinateUncertaintyInMeters</i> ) to the area of the true (original, or most specific) spatial representation of the Location. Legal values are 0, greater than or equal to 1, or undefined. A value of 1 is an exact match or 100% overlap. A value of 0 should be used if the given point-radius does not completely contain the original representation. The <i>pointRadiusSpatialFit</i> is undefined (and should be left empty) if the original representation is a point without uncertainty and the given georeference is not that same point (without uncertainty). If both the original and the given georeference are the same point, the <i>pointRadiusSpatialFit</i> is 1.	<a href="https://doi.org/10.15468/doc-gg7h-s853">Detailed explanations with graphical examples can be found in the Georeferencing Best Practices, Chapman and Wieczorek, 2020. https://doi.org/10.15468/doc-gg7h-s853</a>	Standard				Authors lack experience to annotate.
Location	stateProvince	The name of the next smaller administrative region than <i>country</i> (state, province, canton, department, region, etc.) in which the Location occurs.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Recommended	All	country > stateProvince > county > municipality > locality
Location	verbatimCoordinates	The verbatim original spatial coordinates of the Location. The coordinate ellipsoid, <i>geodeticDatum</i> , or full Spatial Reference System (SRS) for these coordinates should be stored in <i>verbatimSRS</i> and the coordinate system should be stored in <i>verbatimCoordinateSystem</i> .				Recommended	All	Can be useful for quality control or when you don't want to convert to the formats required by the other fields.
Location	verbatimCoordinateSystem	The coordinate format for the <i>verbatimLatitude</i> and <i>verbatimLongitude</i> or the <i>verbatimCoordinates</i> of the Location.	Recommended best practice is to use a controlled vocabulary.	Vocab	Not provided	Optional	All	Vocab will be defined by which systems are used.
Location	verbatimDepth	The original description of the depth below the local surface.				Optional	All	Can be useful for quality control or when you don't want to convert to the formats required by the other fields.
Location	verbatimElevation	The original description of the elevation (altitude, usually above sea level) of the Location.				Optional	All	Can be useful for quality control or when you don't want to convert to the formats required by the other fields.
Location	verbatimLatitude	The verbatim original latitude of the Location. The coordinate ellipsoid, <i>geodeticDatum</i> , or full Spatial Reference System (SRS) for these coordinates should be stored in <i>verbatimSRS</i> and the coordinate system should be stored in <i>verbatimCoordinateSystem</i> .				Optional	All	Can be useful for quality control or when you don't want to convert to the formats required by the other fields.
Location	verbatimLocality	The original textual description of the place.				Recommended	All	Can be useful for quality control or when you don't want to convert to the formats required by the other fields.

Location	verbatimLongitude	The verbatim original longitude of the Location. The coordinate ellipsoid, <i>geodeticDatum</i> , or full Spatial Reference System (SRS) for these coordinates should be stored in <i>verbatimSRS</i> and the coordinate system should be stored in <i>verbatimCoordinateSystem</i> .				Optional	All	Can be useful for quality control or when you don't want to convert to the formats required by the other fields.
Location	verbatimSRS	The ellipsoid, geodetic datum, or spatial reference system (SRS) upon which coordinates given in <i>verbatimLatitude</i> and <i>verbatimLongitude</i> , or <i>verbatimCoordinates</i> are based.	Recommended best practice is to use the EPSG code of the SRS, if known. Otherwise use a controlled vocabulary for the name or code of the geodetic datum, if known. Otherwise use a controlled vocabulary for the name or code of the ellipsoid, if known. If none of these is known, use the value `unknown`.	Vocab				Authors lack experience to annotate.
Location	verticalDatum	The vertical datum used as the reference upon which the values in the elevation terms are based.	Recommended best practice is to use a controlled vocabulary.	Vocab				Authors lack experience to annotate.
Location	waterBody	The name of the water body in which the Location occurs.	Recommended best practice is to use a controlled vocabulary such as the Getty Thesaurus of Geographic Names.	Vocab	<a href="https://www.getty.edu/research/tools/vocabularies/tgn/">https://www.getty.edu/research/tools/vocabularies/tgn/</a>	Situational	All	
MaterialSample	materialSampleID	An identifier for the MaterialSample (as opposed to a particular digital record of the material sample). In the absence of a persistent global unique identifier, construct one from a combination of identifiers in the record that will most closely make the <i>materialSampleID</i> globally unique.	Recommended best practice is to use a persistent, globally unique identifier.	URI or ID		Situational	All	The only field in this class; likely only needed to track samples that do not fall into other categories of DwC. Ex: An ID for a DNA sample vial containing the genetic code of an organism associated with Event and Locality information.
Occurrence	associatedMedia	A list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of media associated with the Occurrence.		List		Recommended	PrimarySource	Links to media such as: images of a specimen, sound recording of bird calls, a scanned image from a field notebook, etc.
Occurrence	associatedOccurrences	A list (concatenated and separated) of identifiers of other Occurrence records and their associations to this Occurrence.	This term can be used to provide a list of associations to other Occurrences. Note that the ResourceRelationship class is an alternative means of representing associations, and with more detail. Recommended best practice is to separate the values in a list with space vertical bar space (   ).	List		Situational		
Occurrence	associatedReferences	A list (concatenated and separated) of identifiers (publication, bibliographic reference, global unique identifier, URI) of literature associated with the Occurrence.	Recommended best practice is to separate the values in a list with space vertical bar space (   ). Note that the ResourceRelationship class is an alternative means of representing associations, and with more detail. Note also that the intended usage of the term <i>dcterms:references</i> in Darwin Core when applied to an Occurrence is to point to the definitive source representation of that Occurrence if one is available. Note also that the intended usage of <i>dcterms:bibliographicCitation</i> in Darwin Core when applied to an Occurrence is to provide the preferred way to cite the Occurrence itself.	List		Situational	PrimarySource	
Occurrence	associatedSequences	A list (concatenated and separated) of identifiers (publication, global unique identifier, URI) of genetic sequence information associated with the Occurrence.		List		Situational	Molecular	

Occurrence	associatedTaxa	A list (concatenated and separated) of identifiers or names of taxa and the associations of this Occurrence to each of them.	This term can be used to provide a list of associations to Taxa other than the one defined in the Occurrence. Note that the ResourceRelationship class is an alternative means of representing associations, and with more detail. This term is not apt for establishing relationships between Taxa, only between specific Occurrences of an Organism with other Taxa. Recommended best practice is to separate the values in a list with space vertical bar space (   ).	Relationship		Situational	All	Used to identify relationships between organisms such as predator/prey, parasitoid/host, etc.
Occurrence	behavior	The behavior shown by the subject at the time the Occurrence was recorded.				Situational	LivingSpecimen	
Occurrence	catalogNumber	An identifier (preferably unique) for the record within the data set or collection.		URI or ID		Situational	Specimen	An identifier for the metadata record, not the occurrence it describes (i.e. not the specimen's ID number)
Occurrence	degreeOfEstablishment	The degree to which an Organism survives, reproduces, and expands its range at the given place and time.	<a href="https://dwc.tdwg.org/doi/">Recommended best practice is to use controlled value strings from the controlled vocabulary designated for use with this term, listed at https://dwc.tdwg.org/doi/</a> . For details, refer to <a href="https://doi.org/10.3897/biss.3.38084">https://doi.org/10.3897/biss.3.38084</a> .	Vocab	<a href="https://dwc.tdwg.org/doi/">https://dwc.tdwg.org/doi/</a>	Situational	Specimen	Used when monitoring organism populations (i.e. native, established, colonising, invasive, etc.). Can be used with <i>establishmentMeans</i> to provide more details.
Occurrence	disposition	The current state of a specimen with respect to the collection identified in <i>collectionCode</i> or <i>collectionID</i> .	Recommended best practice is to use a controlled vocabulary.	Vocab	Not provided	Situational	Specimen	Can be used to indicate the status of a specimen in the collection (e.g., dataset). Ex: duplicate, missing, destroyed, stored elsewhere, etc.
Occurrence	establishmentMeans	Statement about whether an organism or organisms have been introduced to a given place and time through the direct or indirect activity of modern humans.	<a href="http://rs.tdwg.org/dwc/doc/em/">Recommended best practice is to use controlled value strings from the controlled vocabulary designated for use with this term, listed at http://rs.tdwg.org/dwc/doc/em/</a> . For details, refer to <a href="https://doi.org/10.3897/biss.3.38084">https://doi.org/10.3897/biss.3.38084</a> .	Vocab	<a href="http://rs.tdwg.org/dwc/doc/em">http://rs.tdwg.org/dwc/doc/em</a>	Situational	Specimen	Used when monitoring human introduced organism populations (i.e. colonising, invasive, established, etc.). Can be used with <i>degreeOfEstablishment</i> to provide more details. Controlled vocab will depend on a species' management status (i.e. introduced, invasive, etc.).
Occurrence	georeferenceVerificationStatus	A categorical description of the extent to which the georeference has been verified to represent the best possible spatial description for the Location of the Occurrence.	Recommended best practice is to use a controlled vocabulary.			Situational		
Occurrence	individualCount	The number of individuals present at the time of the Occurrence.				Recommended	LivingSpecimen	The number of observers/witnesses, not the number of organisms.
Occurrence	lifeStage	The age class or life stage of the Organism(s) at the time the Occurrence was recorded.	Recommended best practice is to use a controlled vocabulary. Controlled vocab will depend on type of organism.	Vocab	Varies	Situational	Specimen	
Occurrence	occurrenceID	An identifier for the Occurrence (as opposed to a particular digital record of the occurrence). In the absence of a persistent global unique identifier, construct one from a combination of identifiers in the record that will most closely make the occurrenceID globally unique.	Recommended best practice is to use a persistent, globally unique identifier.	URI or ID		Recommended	All	Remember: this is an URI for the <b>occurrence</b> not the record/metadata of the occurrence. This ID is usually in the form of a museum inventory number, image number etc., many of which may not be online.
Occurrence	occurrenceRemarks	Comments or notes about the Occurrence.				Optional	All	Open text field; can be used to input occurrence information that does not fit elsewhere.
Occurrence	occurrenceStatus	A statement about the presence or absence of a Taxon at a Location.	For Occurrences, the default vocabulary is recommended to consist of "present" and "absent", but can be extended by implementers with good justification.	Vocab	present', 'absent', etc.	Situational	LivingSpecimen	This field can be used to create negative occurrence records which can be important data points for tracking populations over time.
Occurrence	organismQuantity	A number or enumeration value for the quantity of organisms.	An <i>organismQuantity</i> must have a corresponding <i>organismQuantityType</i> .	Related		Recommended	Specimen	May be a discrete number, a percentage, etc. as defined by <i>organismQuantityType</i>
Occurrence	organismQuantityType	The type of quantification system used for the quantity of organisms.	A <i>dwc:organismQuantityType</i> must have a corresponding <i>dwc:organismQuantity</i>	Related		Recommended	Specimen	Relates to <i>organismQuantity</i> .



Occurrence	otherCatalogNumbers	A list (concatenated and separated) of previous or alternate fully qualified catalog numbers or other human-used identifiers for the same Occurrence, whether in the current or a previous Occurrence.	Recommended best practice is to separate the values in a list with space vertical bar space (   ).	List		Situational	All	Used for cross listing if the Occurrence is included in multiple collections or data sets.
Occurrence	pathway	The process by which an Organism came to be in a given place at a given time.	<a href="http://rs.tdwg.org/dwc/doc/pw/">Recommended best practice is to use controlled value strings from the controlled vocabulary designated for use with this term, listed at http://rs.tdwg.org/dwc/doc/pw/. For details, refer to https://doi.org/10.3897/biss.3.38084</a>			Situational	Specimen	
Occurrence	preparations	A list (concatenated and separated) of preparations and preservation methods for a specimen.	Recommended best practice is to separate the values in a list with space vertical bar space (   ).	List		Situational	Specimen	
Occurrence	recordedBy	A list (concatenated and separated) of names of people, groups, or organizations responsible for recording the original Occurrence. The primary collector or observer, especially one who applies a personal identifier (recordNumber), should be listed first.	Recommended best practice is to separate the values in a list with space vertical bar space (   ).	List		Recommended	All	i.e. whomever was present when the species was observed at the specific time and place; synonymous with "collector" for many purposes. Related to <i>recordedByID</i> .
Occurrence	recordedByID	A list (concatenated and separated) of the globally unique identifier for the person, people, groups, or organizations responsible for recording the original Occurrence.	Recommended best practice is to provide a single identifier that disambiguates the details of the identifying agent. If a list is used, it is recommended to separate the values in the list with space vertical bar space (   ). The order of the identifiers on any list for this term can not be guaranteed to convey any semantics.	URI or ID		Situational	All	Can be a list of URI/IDs. Relates to <i>recordedBy</i> .
Occurrence	recordNumber	An identifier given to the Occurrence at the time it was recorded. Often serves as a link between field notes and an Occurrence record, such as a specimen collector's number.		URI or ID		Situational	PrimarySource	ID numbers assigned in the field are often temporary and differ from IDs assigned by a museum (e.g. specimen) or a database (e.g. observation), however they're the key that ties the specimen to the original record.
Occurrence	reproductiveCondition	The reproductive condition of the biological individual(s) represented in the Occurrence.	Recommended best practice is to use a controlled vocabulary. Controlled vocab will depend on type of organism.	Vocab	Varies	Situational	Specimen	
Occurrence	sex	The sex of the biological individual(s) represented in the Occurrence.	Recommended best practice is to use a controlled vocabulary. Controlled vocab will depend on type of organism.	Vocab	Varies	Situational	Specimen	
Organism	associatedOrganisms	A list (concatenated and separated) of identifiers of other Organisms and the associations of this Organism to each of them.	This term can be used to provide a list of associations to other Organisms. Note that the ResourceRelationship class is an alternative means of representing associations, and with more detail. Recommended best practice is to separate the values in a list with space vertical bar space (   ).	List		Situational	Specimen	Can be used to record relationships between organisms. Ex: parent of, sibling of, etc.
Organism	organismID	An identifier for the Organism instance (as opposed to a particular digital record of the Organism). May be a globally unique identifier or an identifier specific to the data set.		URI or ID		Situational	Specimen	
Organism	organismName	A textual name or label assigned to an Organism instance.				Situational	Specimen	Used when the organism instance is assigned a "nickname". For example, the wolf packs of Yellowstone Nat'l Park all have assigned nicknames (ex: Druid Peak Pack, Wapiti Lake Pack, 8 mile pack, etc.).
Organism	organismRemarks	Comments or notes about the Organism instance.				Optional	Specimen	Open text field; can be used to input organism information that does not fit elsewhere.

Organism	organismScope	A description of the kind of Organism instance. Can be used to indicate whether the Organism instance represents a discrete organism or if it represents a particular type of aggregation.	Recommended best practice is to use a controlled vocabulary. This term is not intended to be used to specify a type of taxon. To describe the kind of <i>Organism</i> using a URI object in RDF, use <code>rdf:type</code> ( <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#type">http://www.w3.org/1999/02/22-rdf-syntax-ns#type</a> ) instead.	Vocab	Not provided	Situational	Specimen	Needed when the record is for a group instead of an individual. Ex: pack, virus, colony, hive, etc.
Organism	previousIdentifications	A list (concatenated and separated) of previous assignments of names to the Organism.	Recommended best practice is to separate the values in a list with space vertical bar space (   ).	List		Situational	Specimen	Can be used to record old identifications (such as nicknames).
Record-Level	accessRights	Information about who can access the resource or an indication of its security status.	Access Rights may include information regarding access or restrictions based on privacy, security, or other policies.			Situational	All	If a license has not been assigned then this field can be used to outline usage restrictions, if any, instead.
Record-Level	basisOfRecord	The specific nature of the data record.	Recommended best practice is to use the standard label of one of the Darwin Core classes.	Vocab	DwC Classes, see <a href="https://dwc.tdwg.org/terms/#dwc:basisOfRecord">https://dwc.tdwg.org/terms/#dwc:basisOfRecord</a> for current list	Required	All	This value should describe the type of 'thing' you are working from. Accepted values include: PreservedSpecimen, FossilSpecimen, LivingSpecimen, MaterialSample, Event, HumanObservation, MachineObservation, Taxon, Occurrence, MaterialCitation
Record-Level	bibliographicCitation	A bibliographic reference for the resource as a statement indicating how this record should be cited (attributed) when used.	Taken from DublinCore, see term for full definition.		<a href="http://purl.org/dc/terms/bibliographicCitation">http://purl.org/dc/terms/bibliographicCitation</a>	Recommended	All	A citation for dataset, image, etc.
Record-Level	collectionCode	The name, acronym, coden, or initialism identifying the collection or data set from which the record was derived.				Optional	Specimen	The human readable name of the collection. Most useful for large established collections such as those found at museums and universities, online collections/projects, etc. Ex: "Vascular Plants", "EBird", etc.
Record-Level	collectionID	An identifier for the collection or dataset from which the record was derived.	For physical specimens, the recommended best practice is to use an identifier from a collections registry such as the Global Registry of Biodiversity Repositories ( <a href="http://grbio.org/">http://grbio.org/</a> ).	URI or ID	<a href="https://www.gbif.org/grscicoll/collection/search">https://www.gbif.org/grscicoll/collection/search</a>	Recommended	Specimen	Preferably a machine-readable ID; used for discrete "collections" of specimens or records originating from the same institution (ex: "SMNH Mammal Collection"). <code>dwc:collectionID</code> should not be the same value as <code>dwc:InstitutionID</code> .
Record-Level	dataGeneralizations	Actions taken to make the shared data less specific or complete than in its original form. Suggests that alternative data of higher quality may be available on request.			DublinCore	Situational	All	A note to indicate when data have been changed to make something less precise or identifiable, such as when protecting threatened or endangered species or landscapes. Use <code>dwc:informationWithheld</code> if data have been removed, not just changed.
Record-Level	datasetID	An identifier for the set of data. May be a global unique identifier or an identifier specific to a collection or institution.		URI or ID		Situational	Data	Preferably a machine-readable ID or URI.
Record-Level	datasetName	The name identifying the data set from which the record was derived.				Situational	Data	
Record-Level	dynamicProperties	A list of additional measurements, facts, characteristics, or assertions about the record. Meant to provide a mechanism for structured content.	Recommended best practice is to use a key:value encoding schema for a data interchange format such as JSON.	List	key:value encoding	Situational	All	<a href="https://dwc.tdwg.org/simple/#71-structured-content-using-dynamicproperties">A catch-all field for recording structured information not captured by other DwC fields. Ex: {"tailLength":"10cm", "dorsalLength":"16cm"}. See https://dwc.tdwg.org/simple/#71-structured-content-using-dynamicproperties for more information.</a>
Record-Level	informationWithheld	Additional information that exists, but that has not been shared in the given record.				Situational	All	Similar to <code>dwc:dataGeneralizations</code> , if information has been omitted, not just generalized, make a note briefly describing the removed information here.
Record-Level	institutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record.				Recommended	All	Human-readable name or acronym. <code>dwc:InstitutionCode</code> and <code>dwc:InstitutionID</code> should represent the same institution.
Record-Level	institutionID	An identifier for the institution having custody of the object(s) or information referred to in the record.	For <b>physical specimens</b> , the recommended best practice is to use an identifier from a collections registry such as the Global Registry of Biodiversity Repositories ( <a href="http://grbio.org/">http://grbio.org/</a> ).	URI or ID	<a href="https://www.gbif.org/grscicoll/institution/search">https://www.gbif.org/grscicoll/institution/search</a>	Recommended	Specimen	Preferably a machine-readable ID for physical specimens; <code>dwc:InstitutionID</code> and <code>dwc:InstitutionCode</code> should represent the same institution.
Record-Level	language	A language of the resource.	Recommended best practice is to use a controlled vocabulary such as RFC 5646.	Vocab	<a href="https://www.iana.org/assignments/language-subtag-registry/language-subtag-registry">https://www.iana.org/assignments/language-subtag-registry/language-subtag-registry</a>	Recommended	All	<a href="https://datatracker.ietf.org/doc/html/rfc5646">Information about RFC 5646 can be found at: https://datatracker.ietf.org/doc/html/rfc5646</a>

Record-Level	license	A legal document giving official permission to do something with the resource.		URI or ID		Recommended	All	Use a hyperlink to the legal code for the license rather than the name of the license when possible. Human-readable notes about the license can be filed under <i>dwc:accessrights</i> if needed.
Record-Level	modified	The most recent date-time on which the resource was changed.	Recommended best practice is to use a date that conforms to ISO 8601-1:2019.	Standard	<a href="https://en.wikipedia.org/wiki/ISO_8601">https://en.wikipedia.org/wiki/ISO_8601</a>	Situational	All	Only needed if the dataset has been updated.
Record-Level	ownerInstitutionCode	The name (or acronym) in use by the institution having ownership of the object(s) or information referred to in the record.				Optional		Unclear on how often this would be different from the other institutional identifiers.
Record-Level	references	A related resource that is referenced, cited, or otherwise pointed to by the described resource.	From Dublin Core, "This property is intended to be used with non-literal values. This property is an inverse property of Is Referenced By." The intended usage of this term in Darwin Core is to point to the definitive source representation of the resource (e.g., Taxon, Occurrence, Event in Darwin Core), if one is available. Note that the intended usage of <i>dcterms:bibliographicCitation</i> in Darwin Core, by contrast, is to provide the preferred way to cite the resource itself.			Situational		A citation to the original resource the data is derived from. While this term originates from DublinCore, its usage is slightly different in Dwc.
Record-Level	rightsholder	A person or organization owning or managing rights over the resource.				Recommended	All	Use this field to describe the rights of the evidence/specimen and <b>not the dwc metadata</b> . This may be the same as the institution fields.
Record-Level	type	The nature or genre of the resource.	Must be populated with a value from the DCMI type vocabulary	Vocab	<a href="https://www.dublincore.org/specifications/dublin-core/dcmi-type-vocabulary/2010-10-11/">https://www.dublincore.org/specifications/dublin-core/dcmi-type-vocabulary/2010-10-11/</a>	Required	All	This field has the same purpose as a Dublin Core type field. Ex: A record for a museum specimen would be "PhysicalObject" while a digital image of the same specimen would be "StillImage" or "Image".
Taxon	acceptedNameUsage	The full name, with authorship and date information if known, of the currently valid (zoological) or accepted (botanical) taxon.	The full scientific name, with authorship and date information if known, of the accepted (botanical) or valid (zoological) name in cases where the provided <i>scientificName</i> is considered by the reference indicated in the <i>accordingTo</i> property, or of the content provider, to be a synonym or misapplied name. When applied to an Organism or Occurrence, this term should be used in cases where a content provider regards the provided <i>scientificName</i> to be inconsistent with the taxonomic perspective of the content provider. For example, there are many discrepancies within specimen collections and observation datasets between the recorded name (e.g., the most recent identification from an expert who examined a specimen, or a field identification for an observed organism), and the name asserted by the content provider to be taxonomically accepted.	Related		Do Not Use		Can be used when the assigned scientific name is no longer valid and a different name is currently valid/accepted. Not likely to work well in Simple Dwc. Relates to <i>acceptedNameUsageID</i> .
Taxon	acceptedNameUsageID	An identifier for the name usage (documented meaning of the name according to a source) of the currently valid (zoological) or accepted (botanical) taxon.	This term should be used for synonyms or misapplied names to refer to the taxonID of a Taxon record that represents the accepted (botanical) or valid (zoological) name. For Darwin Core Archives the related record should be present locally in the same archive.	URI or ID		Do Not Use		DNU for most simple Dwc applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.). Relates to <i>acceptedNameUsage</i> .
Taxon	class	The full scientific name of the class in which the taxon is classified.				Recommended	Specimen	A mid-level taxonomic rank (i.e. Aves, Mammalia, Reptilia, etc.). If the data have multiple classes or phyla then this field must be used.



Taxon	cultivarEpithet	Part of the name of a cultivar, cultivar group or grex that follows the scientific name.	According to the Rules of the Cultivated Plant Code, a cultivar name consists of a botanical name followed by a cultivar epithet. The value given as the <i>cultivarEpithet</i> should exclude any quotes. The term <i>taxonRank</i> should be used to indicate which type of cultivated plant name (e.g. cultivar, cultivar group, grex) is concerned. This epithet, including any enclosing apostrophes or suffix, should be provided in <i>scientificName</i> as well.			Situational		Cultivars are an intentionally bred variety of plant and are often called hybrids. Ex: <i>Rosa</i> 'Charles Austin' is a cultivated rose hybrid bred by crossing a tea and English rose. "Charles Austin" is the <i>cultivarEpithet</i> and would be entered without the quotes.
Taxon	family	The full scientific name of the order in which the taxon is classified.				Recommended	Specimen	Ex: Felidae
Taxon	genericName	The genus part of the <i>scientificName</i> without authorship.	For synonyms the accepted genus and the genus part of the name may be different. The term <i>genericName</i> should be used together with <i>specificEpithet</i> to form a binomial and with <i>infraspecificEpithet</i> to form a trinomial. The term <i>genericName</i> should only be used for combinations. Uninomials of generic rank do not have a <i>genericName</i> .			Recommended		Used in place of <i>genus</i> when the full scientific name includes a <i>infraspecificEpithet</i> . Ex: <i>Canis lupus floridanus</i> , the Florida black wolf, has a trinomial, three-part name, because it is a subspecies and would be represented in DwC as: <i>genericName</i> : Canis <i>specificEpithet</i> : lupus <i>infraspecificEpithet</i> : floridanus
Taxon	genus	The full scientific name of the genus in which the taxon is classified.				Recommended	Specimen	A taxonomic rank that forms the first half of the binomial for a specific species. Ex: <i>Canis lupus</i> , the gray wolf, has a binomial, two-part name, that is represented in DwC as: <i>genus</i> : Canis <i>specificEpithet</i> : lupus
Taxon	higherClassification	A list (concatenated and separated) of taxa names terminating at the rank immediately superior to the taxon referenced in the taxon record.	Recommended best practice is to separate the values in a list with space vertical bar space (   ), with terms in order from the highest taxonomic rank to the lowest.	List		Do Not Use		DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	infragenericEpithet	The infrageneric part of a binomial name at ranks above species but below genus.	The term <i>infragenericEpithet</i> should be used in conjunction with <i>genericName</i> , <i>specificEpithet</i> , <i>infraspecificEpithet</i> , <i>taxonRank</i> and <i>scientificNameAuthorship</i> to represent the individual elements of the complete <i>scientificName</i> . It can be used to indicate the subgenus placement of a species, which in zoology is often given in parentheses. Can also be used to share infrageneric names such as botanical sections (e.g., 'Vicia sect. Cracca').			Situational		Similar to <i>infraspecificEpithet</i> and <i>cultivarEpithet</i> , this field can be used to provide an identification that goes beyond species such as indicating sub-genus or botanical sections.
Taxon	infraspecificEpithet	The name of the lowest or terminal infraspecific epithet of the <i>scientificName</i> , excluding any rank designation.	In botany, where there can be more than one infraspecific rank, name strings may be provided, in literature and in identifications, that have more than two epithets. Only the last of these epithets is the <i>infraspecificEpithet</i> and only the first and the last epithets belong to the <i>scientificName</i> . For example: the <i>infraspecificEpithet</i> in the string "Indigofera charlieriana subsp. sessilis var. scaberrima" is `scaberrima` and the <i>scientificName</i> is `Indigophera charlieriana var. scaberrima`.			Recommended	Specimen	Most often used for "subspecies" (animals), as well as "variety" (plants) and "form" (plants). Ex: <i>Canis lupus floridanus</i> , the Florida black wolf, is a subspecies of <i>Canis lupus</i> , the gray wolf and "floridanus" is the <i>infraspecificEpithet</i> denoting the subspecies.
Taxon	kingdom	The full scientific name of the kingdom in which the taxon is classified.				Recommended	Specimen	Very high level of classification (ex: Fungi, Protozoa, Animalia, etc.).



Taxon	nameAccordingTo	The reference to the source in which the specific taxon concept circumscription is defined or implied - traditionally signified by the Latin "sensu" or "sec." (from secundum, meaning "according to"). For taxa that result from identifications, a reference to the keys, monographs, experts and other sources should be given.	This term provides context to the `scientificName`. Together with the `scientificName`, separated by 'sensu' or 'sec.', it forms the taxon concept label, which may be seen as having the same relationship to `taxonConceptID` as, for example, `acceptedNameUsage` has to `acceptedNameUsageID`. When not provided, in Taxon Core data sets the `nameAccordingTo` can be taken to be the data set. In this case the data set mostly provides sufficient context to infer the delimitation of the taxon and its relationship with other taxa. In Occurrence Core data sets, when not provided, `nameAccordingTo` can be an underlying taxonomy of the data set, e.g. Plants of the World Online ( <a href="http://powo.science.kew.org/">http://powo.science.kew.org/</a> ) for vascular plant records in iNaturalist (in which case it should be provided), or, which is the case for most `PreservedSpecimen` data sets, the `Identification`, in which case there is no further context.	Related		Situational	Specimen	Used in conjunction with <i>nameAccordingToID</i> . Can be used to track how a species was identified by providing links/citations to taxonomic keys, DNA verification, an expert in the field, etc. Links/URIs to the resource should be placed in <i>nameAccordingToID</i> .
Taxon	nameAccordingToID	An identifier for the source in which the specific taxon concept circumscription is defined or implied. See <i>nameAccordingTo</i> .		URI or ID		Situational		Used in conjunction with <i>nameAccordingTo</i> ; a link or URI for the source listed in <i>nameAccordingTo</i> .
Taxon	namePublishedIn	A reference for the publication in which the <i>scientificName</i> was originally established under the rules of the associated <i>nomenclaturalCode</i> .		Related		Do Not Use		Used with <i>namePublishedInID</i> . DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	namePublishedInID	An identifier for the publication in which the <i>scientificName</i> was originally established under the rules of the associated <i>nomenclaturalCode</i> .		URI or ID		Do Not Use	Specimen	DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	namePublishedInYear	The four-digit year in which the <i>scientificName</i> was published.				Do Not Use		DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	nomenclaturalCode	The nomenclatural code (or codes in the case of an ambiregnal name) under which the <i>scientificName</i> is constructed.	Recommended best practice is to use a controlled vocabulary.	Vocab	Not provided	Do Not Use	Specimen	DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	nomenclaturalStatus	The status related to the original publication of the name and its conformance to the relevant rules of nomenclature. It is based essentially on an algorithm according to the business rules of the code. It requires no taxonomic opinion.		Standard	Not provided	Do Not Use	Specimen	DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	order	The full scientific name of the order in which the taxon is classified.				Recommended	Specimen	Ex: Carnivora
Taxon	originalNameUsage	The taxon name, with authorship and date information if known, as it originally appeared when first established under the rules of the associated <i>nomenclaturalCode</i> . The basionym (botany) or basonym (bacteriology) of the <i>scientificName</i> or the senior/earlier homonym for replaced names.	The full scientific name, with authorship and date information if known, of the name usage in which the terminal element of the <i>scientificName</i> was originally established under the rules of the associated <i>nomenclaturalCode</i> . For example, for names governed by the ICNafp, this term would indicate the basionym of a record representing a subsequent combination. Unlike basionyms, however, this term can apply to scientific names at all ranks.	Related		Do Not Use		DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.). relates to <i>originalNameUsageID</i> .

Taxon	originalNameUsageID	An identifier for the name usage (documented meaning of the name according to a source) in which the terminal element of the <i>scientificName</i> was originally established under the rules of the associated <i>nomenclaturalCode</i> .	This term should be used to refer to the taxonID of a Taxon record that represents the usage of the terminal element of the <i>scientificName</i> as originally established under the rules of the associated <i>nomenclaturalCode</i> . For example, for names governed by the ICNafp, this term would establish the relationship between a record representing a subsequent combination and the record for its corresponding basionym. Unlike basionyms, however, this term can apply to scientific names at all ranks. For Darwin Core Archives the related record should be present locally in the same archive.	URI or ID		Do Not Use	Specimen	DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.). Relates to <i>OriginalNameUsage</i> .
Taxon	parentNameUsage	The full name, with authorship and date information if known, of the direct, most proximate higher-rank parent taxon (in a classification) of the most specific element of the <i>scientificName</i> .		Related		Do Not Use		DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.). Relates to <i>parentNameUsageID</i> .
Taxon	parentNameUsageID	An identifier for the name usage (documented meaning of the name according to a source) of the direct, most proximate higher-rank parent taxon (in a classification) of the most specific element of the <i>scientificName</i> .	This term should be used for accepted names to refer to the taxonID of a Taxon record that represents the next higher taxon rank in the same taxonomic classification. For Darwin Core Archives the related record should be present locally in the same archive.	URI or ID		Do Not Use	Specimen	DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.). Relates to <i>parentNameUsage</i> .
Taxon	phylum	The full scientific name of the phylum or division in which the taxon is classified.				Recommended	Specimen	Second highest level of classification - if the data set has multiple phyla then this field should be populated.
Taxon	scientificName	The full scientific name, with authorship and date information if known. When forming part of an Identification, this should be the name in lowest level taxonomic rank that can be determined. This term should not contain identification qualifications, which should instead be supplied in the <i>IdentificationQualifier</i> term.	This term should not contain identification qualifications, which should instead be supplied in the <i>IdentificationQualifier</i> term. When applied to an Organism or Occurrence, this term should be used to represent the scientific name that was applied to the associated Organism in accordance with the Taxon to which it was or is currently identified.			Required	Specimen	If this level of identification is known it should be included.
Taxon	scientificNameAuthorship	The authorship information for the <i>scientificName</i> formatted according to the conventions of the applicable <i>nomenclaturalCode</i> .		Standard	Applicable nomenclatural code	Do Not Use	Specimen	DNU for most simple DwC applications; seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
Taxon	scientificNameID	An identifier for the nomenclatural (not taxonomic) details of a scientific name.		URI or ID		Optional	Specimen	Used for linked data for scientific taxa; can help track species or taxa with complicated histories;
Taxon	specificEpithet	The name of the first or species epithet of the <i>scientificName</i> .				Required	Specimen	For most identifications this will be the "species" of the "genus species" part of a scientific name. Ex: <i>Canis lupus floridanus</i> , the Florida black wolf, is a subspecies of <i>Canis lupus</i> , the gray wolf. Both species have "lupus" as their <i>specificEpithet</i>
Taxon	subfamily	The full scientific name of the subfamily in which the taxon is classified.				Situational	Specimen	Use when applicable or important.
Taxon	subgenus	The full scientific name of the subgenus in which the taxon is classified. Values should include the genus to avoid homonym confusion.				Situational	Specimen	Use when applicable or important.
Taxon	taxonConceptID	An identifier for the taxonomic concept to which the record refers - not for the nomenclatural details of a taxon.		URI or ID		Situational		Use when applicable or important.

<b>Taxon</b>	taxonID	An identifier for the set of taxon information (data associated with the Taxon class). May be a global unique identifier or an identifier specific to the data set.		URI or ID		Situational	Specimen	Use when applicable or important. Used for linked data for scientific taxa; can help track species or taxa with complicated name histories or to validate linked data.
<b>Taxon</b>	taxonomicStatus	The status of the use of the <i>scientificName</i> as a label for a taxon. Requires taxonomic opinion to define the scope of a taxon. Rules of priority then are used to define the taxonomic status of the nomenclature contained in that scope, combined with the expert's opinion. It must be linked to a specific taxonomic reference that defines the concept.	Recommended best practice is to use a controlled vocabulary.	Vocab	Not provided	Do Not Use	Specimen	DNU for most simple DwC applications; Seems most applicable in relational databases (ex: Darwin Core Archive format, GBIF, etc.).
<b>Taxon</b>	taxonRank	The taxonomic rank of the most specific name in the <i>scientificName</i> .	Recommended best practice is to use a controlled vocabulary.	Vocab	Not provided	Recommended	Specimen	The most specific level of identification reached for the specimen. Ex: if only the family is known then you would enter "family" but if it has been identified to species you would enter "species".
<b>Taxon</b>	taxonRemarks	Comments or notes about the taxon or name.				Optional	Specimen	Open text field; can be used to input info related to the taxon that does not fit elsewhere.
<b>Taxon</b>	verbatimTaxonRank	The taxonomic rank of the most specific name in the <i>scientificName</i> as it appears in the original record.				Situational	Specimen	The most specific level of identification as transcribed from the documented identification. Type out exactly what was written, even if it's misspelled, slang, abbreviated, or inaccurate. Ex: "species" is often abbreviated to "sp." on labels, "subspecies" to "sub sp." and so on.
<b>Taxon</b>	vernacularName	A common or vernacular name for the organism's species.		List		Optional	Specimen	As a species can have more than one common name, this entry may need to be formatted as a list. Common names can make data easier to use for some types of organisms (ex: birds) but it's bad practice to only provide a common name.