Occurrence data - template instructions

Overview

Use this template to record occurrence data; that is the presence or absence of an organism at a particular site locality at a point in time.

Templates have been provided to facilitate integration of your data into the Biodiversity Data Repository database. Not all types of data have been catered for in the available templates at this stage; therefore, if you are unable to find a suitable template, please contact bdr-support@gaiaresources.com.au to make us aware of your data needs.

NEED TO KNOW:

For data validation, you will need your data file to:

- be the correct file format,
- have matching template fields to the template downloaded (do not add, remove, or change the order of fields),
- have populated populate the relevant fields using the correct data type (for example dates for date fields),
- have values in mandatory fields,
- comply with data value constraints for example the geographic coordinates are consistent with a <u>geodeticDatum</u> type of the four available options and latitude and longitude values fall within Australia (see <u>Further Information</u> for details), and
- align with existing controlled <u>vocabularies</u> wherever possible (this is mandatory for geodeticDatum), but new terms may be submitted for consideration and will not cause a validation error.

File format

The occurrence data template is a **UTF-8** encoded csv (not Microsoft Excel Spreadsheets). Be sure to save this file with your data as a .csv (UTF-8) otherwise it will not pass the csv validation step upon upload. **Do not include additional columns or empty rows**.

Template fields

The template contains the field names in the top row. Table 1 will assist you in transferring your data to the template with the information:

- **Field name** in the template (and an external link to the <u>Darwin Core standard</u> for that field where relevant);
- Description of the field;
- Required whether the field is mandatory or optional;
- Format required for the data values for example text (string), number (integer, float), or date;
- Example of an entry for that field; and

• **Vocabulary** <u>links</u> within this document (for example pick list values) where relevant. The fields that have suggested values are <u>highlighted</u> in Table 1 and the options for those fields are listed in Table 2 in alphabetical order of field name.

<u>Table 1: Occurrence data template fields with descriptions, conditions, datatype format, and examples.</u>

Field name	Description	Required	Format	Examples / Vocabulary
recordID	The unique identifier allocated to this record by the data provider e.g. when data is provided by an aggregator. It connects the record to the collection and storage of the specimens when these parts of the workflow may have been done by different parties.	Optional	String	89T22FSJM J079c5cf
locality	The specific description of the place.	Optional	String	Cowaramup Bay Road, Margaret River
decimalLatitude	The geographic latitude (in decimal degrees, using the spatial reference system given in geodeticDatum) of the geographic centre of a Location. Positive values are north of the Equator, negative values are south of it. Valid coordinate ranges for the BDR system apply - see Further Information section.	Mandatory	Float	-33.812314
decimalLongitu de	The geographic longitude (in decimal degrees, using the spatial reference system given in geodeticDatum) of the geographic centre of a Location. Positive values are east of the Greenwich Meridian, negative values are west of it. Valid coordinate ranges for the BDR system apply - see Further Information section.	Mandatory	Float	115.231512
geodeticDatum	The acronym for the ellipsoid, geodetic datum, or spatial reference system (SRS) upon which the geographic (non-projected) coordinates given in decimalLatitude and	Mandatory	String	WGS84 (Vocabulary link)

	decimalLongitude as based.			
coordinateUncert aintyInMeters	The horizontal distance (in metres) from the given decimalLatitude and decimalLongitude 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.	Optional	Float	50
dataGeneralizatio ns	Actions taken to make the shared data less specific or complete than in its original form, due to restrictions around identifying locations of particular species. Suggests that alternative data of higher quality may be available on request.	Optional	String	Coordinates rounded to the nearest 10 km for conservation concern
<u>eventDate</u>	The date (DD/MM/YYYY or (YYYY-MM-DD are accepted) or date-time with zone (in ISO 8601 format for example2022-05-20T0623+08) during which a species occurrence was observed. For occurrences, this is the date-time when the event was recorded. Not suitable for a time in a geological context.	Mandatory	Date	2019-09-24
samplingProtocol	The sampling protocol is the method used to sample the locality to determine the presence (or absence) of the taxon referred to in this record at the indicated time. This may be a collecting method or a method to observe an organism without collection. Recommended best practice is to describe a species occurrence with no more than one sampling protocol. In the case of a summary, in which a specific protocol can not be attributed to specific species occurrences, the	Optional	String	Human observation

	recommended best practice is to repeat the property for each IRI that denotes a different sampling protocol that applies to the occurrence.			
basisOfRecord	The specific nature of the data record.	Optional	String	Preserved Specimen (Vocabulary link)
recordedBy	A person, group, or organisation responsible for recording the original Occurrence.	Optional	String	J. Doe
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.	Optional	String	OPP 7101
occurrenceStatus	A statement about the presence or absence of a Taxon at a Location.	Optional	String	Present (Vocabulary link)
<u>habitat</u>	A category or description of the habitat in which the event occurred.	Optional	String	Closed forest of Melaleuca lanceolata. White,grey or brown sand, sandy loam.
establishmentMe ans	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.	Optional	String	Native (Vocabulary link)
organismRemark s	Comments or notes about the Organism instance.	Optional	String	good condition

individualCount	The number of individuals present at the time of the Occurrence.	Optional	Integer	1
<u>lifeStage</u>	The age class or life stage of the Organism(s) at the time the Occurrence was recorded.	Optional	String	Mature (Vocabulary link)
sex	The sex of the biological individual(s) represented in the Occurrence.	Optional	String	Unspecified (Vocabulary link)
reproductiveCon dition	The reproductive condition of the biological individual(s) represented in the Occurrence.	Optional	String	No breeding evident
occurrenceID	An identifier for the Occurrence (as opposed to a particular digital record of the occurrence). There are no constraints on how the identifier is named, except that it should be unique.	Optional	String	S09-201909 24-02
ownerInstitutionC ode	The name (or acronym) in use by the institution having ownership of the object(s) or information referred to in the record. This institution is the custodian of the occurrenceID and/or catalogNumber that are appended to this record.	Optional	String	WAM
collectionCode	The name, acronym, code, or initialism identifying the collection or data set from which the record was derived. It is associated with the catalogNumber.	Optional	String	HERB
catalogNumber	An identifier (preferably unique) for the record within the data set or collection.	Optional	String	145732, 145732a, 2008.1334, R-4313
institutionCode	The name (or acronym) in use by the institution having custody of the object(s) or information referred to in the record. This institution is a stakeholder in the creation of	Optional	String	MUS

	this record.			
otherCatalogNum bers	A list (concatenated and separated with a space vertical bar space ()) of previous or alternate fully qualified catalog numbers or other human-used identifiers for the same Occurrence, whether in the current or any other data set or collection.	Optional	String	NPS YELLO6778 MBG 33424
preparations	A list (concatenated and separated with a space vertical bar space ()) of preparations and preservation methods for a specimen.	Optional	String	alcohol (Vocabulary link)
preparedDate	The date (DD/MM/YYYY or (YYYY-MM-DD are accepted) or date-time with zone (in ISO 8601 format for example 2022-05-20T0623+08) representing the date or date-time the specimen was prepared.	Optional	Date	2019-09-24
associatedSeque nces	A list (concatenated and separated with a space vertical bar space ()) of identifiers (publication, global unique identifier, URI) of genetic sequence information associated with the Occurrence.	Optional	String	https://www. ncbi.nlm.nih. gov/nuccore/ MT766606.1
sequencingMeth od	The method used to obtain sequence data for example DNA, RNA, or protein from the sample.	Optional	String	Sanger-dide oxy-sequenc ing
verbatimIdentifica tion	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	Optional	String	Caladenia ?excelsa

	instead of it.			
dateIdentified	The date (DD/MM/YYYY or (YYYY-MM-DD are accepted) or date-time with zone (in ISO 8601 format for example2022-05-20T0623+08) on which the subject was determined as representing the Taxon.	Optional	Date	2019-09-24
identifiedBy	A list (concatenated and separated with a space vertical bar space ()) of names of people, groups, or organisations who assigned the Taxon to the subject.	Optional	String	J. Doe S. Smith
identificationMeth od	Method used to associate the organism with the scientificName label.	Optional	String	DNA
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 identificationQualifier column. NOTE: Phrase names such as Rhagodia sp. Hamersley (M.Trudgen 17794) are permitted in the scientificName field where those are in use.	Mandatory	String	Caladenia excelsa
identificationQual ifier	A brief phrase or a standard term ("cf.", "aff.") to express the determiner's doubts about the Identification.	Optional	String	Species incerta (Vocabulary link)
identificationRem arks	Comments or notes about the Identification.	Optional	String	DNA evidence may indicate a new species. Further analysis

				required.
acceptedNameU sage	The full name, with authorship and date information if known, of the currently valid (zoological) or accepted (botanical) taxon.	Optional	String	Calaendia excelsa Hopper & A.P.Br.
kingdom	The full scientific name of the kingdom in which the taxon is classified.	Mandatory	String	Plantae (Vocabulary link)
taxonRank	The taxonomic rank of the most specific name in the scientificName.	Optional	String	Species (Vocabulary link)
theatStatus	The conservation status (or code) assigned to an organism that is recognised in conjunction with a specific jurisdiction.	Conditionally mandatory with conservation Jurisdiction	String	EN (Vocabulary link)
conservationJuris diction	The jurisdiction under which an organism is recognised to have a specific conservation status applied.	Conditionally mandatory with threatStatus	String	EPBC, WA (Vocabulary link)
threatStatusChec kProtocol	The method used to determine if the organism is listed under the relevant jurisdictional threatened species list.	Optional	String	Species name check of the Department of Climate Change, Energy, the Environment and Water's Species Profile and Threat Database http://www.e nvironment.g ov.au/cgi-bin /sprat/public/ sprat.pl
threatStatusDate Determined	The date on which this record of this organism was assigned to the nominated threatStatus and conservationJurisdiction	Optional	Date	dd/mm/yyyy
threatStatusDeter minedBy	The person and/organisation responsible for appending the	Optional	String	J. Bloggs, Department

conservationJurisdiction to this organism's occurrence record.	COI				of Environment
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Vocabulary lists

Apart from geodeticDatum, the data validation does not require adherence to the below vocabularies for each of the fields indicated as having vocabularies. These vocabularies are provided as a means of assistance in developing consistent language within the database. New terms can be added to more appropriately describe your data that goes beyond the current list. Table 2 provides some suggested values from existing sources such as:

Biodiversity Information Standard (TDWG), EPSG.io Coordinate systems worldwide, the Global Biodiversity Information Facility, and Open Nomenclature in the biodiversity era.

Table 2: Suggested values for controlled vocabulary fields in the template. Each term has a preferred label with a definition to aid understanding of its meaning. For some terms, alternative labels are provided that mean the same sort of thing. Note: **geodeticDatum** value must come from one of the four options in this table.

Template field name	Preferred label	Definition	Alternate label
basisOfRecord	FossilSpecimen	A preserved specimen that is a fossil.	Fossil Specimen
basisOfRecord	HumanObservation	An output of a human observation process.	Human Observation
basisOfRecord	LivingSpecimen	A specimen that is alive.	Living Specimen
basisOfRecord	MachineObservation	An output of a machine observation process.	Machine Observation
basisOfRecord	MaterialSample	A physical result of a sampling (or subsampling) event. In biological collections, the material sample is typically collected, and either preserved or destructively processed.	Material Sample
basisOfRecord	Occurrence	An existence of an Organism (sensu http://rs.tdwg.org/dwc/terms/Organism) at a particular place at a	

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		particular time.	
basisOfRecord	PreservedSpecimen	A specimen that has been preserved.	Preserved Specimen
establishmentMeans	introduced	Establishment of a taxon by human agency into an area that is not part of its natural range.	alien, exotic, non-native, nonindigenous
establishmentMeans	introducedAssistedCo Ionisation	Establishment of a taxon specifically with the intention of creating a self-sustaining wild population in an area that is not part of the taxon's natural range.	assisted colonisation
establishmentMeans	native	A taxon occurring within its natural range.	native (indigenous)
establishmentMeans	nativeReintroduced	A taxon re-established by direct introduction by humans into an area that was once part of its natural range, but from where it had become extinct.	native: reintroduced
establishmentMeans	uncertain	The origin of the occurrence of the taxon in an area is obscure.	unknown, cryptogenic
establishmentMeans	vagrant	The temporary occurrence of a taxon far outside its natural or migratory range.	casual
geodeticDatum	AGD84	Australian Geodetic Datum 1984	EPSG:4203
geodeticDatum	GDA2020	Geocentric Datum of Australia 2020	EPSG:7844
geodeticDatum	GDA94	Geocentric Datum of Australia 1994	EPSG:4283
geodeticDatum	WGS84	World Geodetic System 1984, used in	EPSG:4326

		GPS	
identificationQualifier	animalia cetera	It groups all the unidentified specimens that are not listed as separate taxa. The term cetera (abbreviated c. or cet.) may be applied to a given high-rank taxon, meaning that identification at a lower taxonomic level has not been attempted (see also stetit) but explicitly not including subordinate taxa that may have been identified.	a.c., A.C.
identificationQualifier	confer	"Compare with". Specimens should be compared to reference material, since most of the diagnostic characters correspond to a given species but some are unclear. Also used in the sense of affinis and species incerta (these usages are discouraged).	cf., cfr., conf., sp. cf.
identificationQualifier	ex grege	"Of the group including". The specimen has some affinity to a known species or it belongs to a species group or species complex; see also affinis and species proxima.	ex gr., gr.
identificationQualifier	familia genus species	The specimen has not been attributed to any known species nor family; see also species.	fam. gen. sp.

identificationQualifier	genus et species nova	The specimen is considered to belong to a new species and a new genus; for more details, see species nova.	gen. et sp. nov., gen. nov., sp.nov., nov. gen. et sp.
identificationQualifier	genus novum	The specimen is considered to belong to a new species and a new genus; for more details, see species nova	gen. nov., g. nov., gen. n., g. n., nov. gen.
identificationQualifier	genus species	The specimen has not been related to any known species nor genus; see also species.	gen. sp., g. sp.
identificationQualifier	species	The specimen has not been identified, nor it has been related to any known species; the uncertainty is potentially provisional: it could be due to the lack of suitable dichotomous keys, or to the occurrence of a species not previously described. Also used in the sense of species indeterminabilis and stetit (these usages are discouraged.	sp.
identificationQualifier	species (pl.),	More than one species belonging to the same genus (or higher-rank taxon) are included.	spp., sp. pl.
identificationQualifier	species affinis	"Has affinity with". The specimen has some affinity to a known species but it	aff., sp. aff.

		is not identical to it; it generally implies distinction more than a possible identity, in contrast with the qualifier confer; see also species Proxima and ex grege. It is often used in combination with the ON qualifier species nova. Also used in the sense of confer (this usage is	
		discouraged).	
identificationQualifier	species incerta	The identification is uncertain; it usually indicates a higher reliability with respect to confer. The sign "sp. inc." is also used in the sense of species, species indeterminabilis and species inquirenda (these usages are discouraged).	?, sp. Inc
identificationQualifier	species indeterminabilis	The specimen is indeterminable beyond a certain taxonomic level due to the deterioration or lack of diagnostic characters. Also used in the sense of species and stetit (these usages are discouraged.	indet., ind., sp. indet., sp. ind.
identificationQualifier	species nova	The specimen is considered to belong to a new, previously undescribed species. (1) When describing a new species, the use of the qualifier is required by the ICZN	sp. nov., spec. nov., sp. n., nov. sp., nov. spec., n. sp.

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to a known species but it is not identical to it; see also affinis and ex grege. identificationQualifier stetit Identification at a lower taxonomic level has not been attempted, even if allowed by the sample conditions. It may also be used when more records with different ON qualifiers need to be merged at a safe taxonomic level. identificationQualifier subspecies The only infraspecific rank regulated by the ICZN (1999). As ON qualifier, it indicates that the specimen probably belongs to a subspecies but it has not been related to any known one; see also species. kingdom Animalia Kingdom Animalia Kingdom (taxonRank: Regnum) Fungi kingdom Plantae Ringdom (taxonRank: Plantae Haeckel)			indicate the taxa name as intentionally new. (2) Used as ON qualifier to refer to a new, still unnamed species before the formal publication of	
lower taxonomic level has not been attempted, even if allowed by the sample conditions. It may also be used when more records with different ON qualifiers need to be merged at a safe taxonomic level. identificationQualifier identificationQualifier subspecies The only infraspecific rank regulated by the ICZN (1999). As ON qualifier, it indicates that the specimen probably belongs to a subspecies but it has not been related to any known one; see also species. kingdom Animalia Kingdom (taxonRank: Regnum) Fungi kingdom Plantae Kingdom (taxonRank: Plantae Haeckel	identificationQualifier	species proxima	to a known species but it is not identical to it; see also affinis	l' ' ' '
rank regulated by the ICZN (1999). As ON qualifier, it indicates that the specimen probably belongs to a subspecies but it has not been related to any known one; see also species. Kingdom Animalia Kingdom Animalia Kingdom (taxonRank: Regnum) Fungi Kingdom (taxonRank: Plantae Haeckel	identificationQualifier	stetit	lower taxonomic level has not been attempted, even if allowed by the sample conditions. It may also be used when more records with different ON qualifiers need to be merged at a safe	l '
kingdom Fungi Kingdom (taxonRank: Regnum) Fungi kingdom Plantae Kingdom (taxonRank: Plantae Haeckel	identificationQualifier	subspecies	rank regulated by the ICZN (1999). As ON qualifier, it indicates that the specimen probably belongs to a subspecies but it has not been related to any known one; see	ssp., subsp.
Regnum) Fungi kingdom Plantae Kingdom (taxonRank: Plantae Haeckel	kingdom	Animalia	Kingdom Animalia	
	kingdom	Fungi	,	
	kingdom	Plantae	,	Plantae Haeckel

lifeStage	adult	An adult is a plant, animal, or person who has reached full growth or alternatively is capable of reproduction.	imago
lifeStage	embryo	An embryo is a multicellular diploid eukaryote in its earliest stage of development, from the time of first cell division until birth, hatching, or germination.	egg, seed
lifeStage	gamete	A gamete is a cell that fuses with another gamete during fertilization in organisms that reproduce sexually. In species that produce two morphologically distinct types of gametes, and in which each individual produces only one type, a female is any individual that produces the larger type of gamete — called an ovum (or egg) — and a male produces the smaller tadpole-like type — called a sperm. This is an example of anisogamy or heterogamy, the condition wherein females and males produce gametes of different sizes. In contrast, isogamy is the state of gametes	ovum, sperm, pollen

		from both sexes being the same size and shape, and given arbitrary designators for mating type. Gametes carry half the genetic information of an individual, one chromosome of each type.	
lifeStage	gametophyte	In plants and algae that undergo alternation of generations, a gametophyte is the multicellular structure, or phase, that is haploid, containing a single set of chromosomes. The gametophyte produces male or female gametes (or both), by a process of cell division called mitosis. In mosses, liverworts and hornworts (bryophytes), the gametophyte is the commonly known phase of the plant. An early developmental stage in the gametophyte of mosses (immediately following germination of the meiospore) is called the protonema. In most other land plants the gametophyte is very small (as in ferns and their relatives) or even reduced as in flowering plants	gamont, protonema, pollen, ovule

		(angiosperms), where the female gametophyte (ovule) is known as a megagametophyte and the male gametophyte (pollen) is called a microgametophyte.	
lifeStage	juvenile	A juvenile is an individual organism that has not yet reached its adult form, sexual maturity or size. Juveniles sometimes look very different from the adult form, particularly in terms of their colour. In many organisms the juvenile has a different name from the adult.	seedling, eft, calf, hatchling, infant, foal, kitten, kit, chick, nymph, fawn, whelp, pup, elver, fry
lifeStage	larva	A larva (Latin; plural larvae) is a young (juvenile) form of animal with indirect development, going through or undergoing metamorphosis (for example, insects, amphibians, or cnidarians). The larva can look completely different from the adult form, for example, a caterpillar differs from a butterfly. Larvae often have special (larval) organs which do not occur in the adult form. The larvae of some species can	larvae, tadpole, polliwog, pollywog, polliwig, polewig, polwig, planula, nauplius, zoea, nymph, caterpillar, grub, maggot, wriggler, trochophore, veliger, glochidium, ammocoete, leptocephalus, bipinnaria, caterpillar, grub, maggot

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		become pubescent and not further develop into the adult form (for example, in some newts). This is a type of neoteny. It is a misunderstanding that the larval form always reflects the group's evolutionary history. It could be the case, but often the larval stage has evolved secondarily, as in insects. In these cases the larval form might differ more from the group's common origin than the adult form. The early life stages of most fish species are considerably different from juveniles and adults of their species and are called larvae.	
lifeStage	pupa	A pupa is the life stage of some insects undergoing transformation between immature and mature stages. The pupal stage is found only in holometabolous insects, those that undergo a complete metamorphosis, with four life stages: egg (-> embryo), larva, pupa, and imago (-> adult).	puppe
lifeStage	spore	A spore is a reproductive structure that is adapted for dispersal and	

surviving for extended periods of time in unfavorable conditions. Spores form part of the life cycles of many bacteria, plants, algae, fungi and some protozoans. A chief difference between spores and seeds as dispersal units is that spores have very little stored food resources compared with seeds. Spores are usually haploid and unicellular and are produced by meiosis in the sporangium by the sporophyte. Once conditions are favorable, the spore can develop into a new organism using mitotic division, producing a multicellular gametophyte, which eventually goes on to produce gametes. Many ferns, especially those adapted to dry conditions, produce diploid spores. In this case spores are the units of asexual reproduction, because a single spore develops into a new organism. By contrast, gametes are the units of sexual reproduction, as two gametes need to fuse

		to create a new organism.	
lifeStage	sporophyte	All land plants, and some algae, have life cycles in which a haploid gametophyte generation alternates with a diploid sporophyte, the generation of a plant or alga that has a double set of chromosomes. A multicellular sporophyte generation or phase is present in the life cycle of all land plants and in some green algae. For common flowering plants (Angiosperms), the sporophyte generation comprises almost their whole life cycle (that is whole green plant, roots etc), except phases of small reproductive structures (pollen and ovule).	agamont
lifeStage	zygote	A zygote (or zygocyte) describes the first stage of a new unique organism when it consists of just a single cell. The term is also used more loosely to refer to the group of cells formed by the first few cell divisions, although this is properly referred to as a blastomere. A zygote is usually	blastomere

preparations prepa				
occurrenceStatus not present at the location and time of the observation. occurrenceStatus present The occurrence was present at the location and time of the observation. preparations preparations deepFrozen preparations dried Dried Dried Dried and pressed preparations formalin preparations freezeDried preparations glycerin preparations gumArabic preparations microscopicPreparati on preparations mounted Mounted preparations other Other University the location and time of the observation. Deep frozen Deep frozen Deep frozen Deep frozen Deep frozen Dried and pressed Dried and pre			fertilisation event between two haploid cells - an ovum from a female and a sperm cell from a male - which combine to form the single diploid cell. Thus the zygote contains DNA originating from both mother and father and this provides all the genetic information necessary to form a	
present at the location and time of the observation. preparations preparations preparations deepFrozen preparations dried Dried Dried Dried and pressed preparations preparations formalin preparations freezeDried preparations glycerin preparations gumArabic preparations preparations microscopicPreparati on preparation preparations preparations mounted mounted preparations prepara	occurrenceStatus	absent	not present at the location and time of	
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preparations pinned Pinned	preparations	noTreatment	No treatment	No treatment
	preparations	other	Other	unspecified
preparations refrigerated Refrigerated	preparations	pinned	Pinned	
	preparations	refrigerated	Refrigerated	

sex	female	Female (♀) is the sex of an organism, or a part of an organism, which produces mobile ova (egg cells).	F , ♀
sex	hermaphrodite	One organism having both male and female sexual characteristics and organs; at birth an unambiguous assignment of male or female cannot be made	Zwitter
sex	male	Male (3) refers to the sex of an organism, or part of an organism, which produces small mobile gametes, called spermatozoa.	M, &
sex	undetermined	If the sex of an organism can't be determined for some reason.	Undet., unknown
taxonRank	class	class	
taxonRank	cultivar	The epithet is usually output in single quotes and may contain multiple words, see ICBN §28. Examples: Taxus baccata 'Variegata', Juniperus ×pfitzeriana 'Wilhelm Pfitzer'; Magnolia 'Elizabeth' (= a hybrid, no species epithet).	
taxonRank	cultivarGroup	cultivar group	grex
taxonRank	family	family	
taxonRank	form	form	forma
taxonRank	genus	genus	
taxonRank	informal	informal	

taxonRank	infragenericname	Used for any other unspecific rank below genera and above species.	
taxonRank	infraorder	infraorder	
taxonRank	infraspecificname	Used for any other unspecific rank below genera and above species.	
taxonRank	infrasubspecificname	Used for any other unspecific rank below subspecies.	
taxonRank	kingdom	kingdom	regnum
taxonRank	order	order	alliance
taxonRank	phylum	phylum	division
taxonRank	section	Section within a genus. In Zoology a section sometimes refers to a group above family level, this is NOT meant	
taxonRank	series	Series within a genus	
taxonRank	species	species	
taxonRank	speciesAggregate	A loosely defined group of species. Zoology: 'Aggregate - a group of species, other than a subgenus, within a genus. An aggregate may be denoted by a group name interpolated in parentheses.' The Berlin/MoreTax model notes:'[these] aren't taxonomic ranks but circumscriptions because on the one hand they are necessary for the concatenation of the fullname and on the	aggregate, species group, species complex

taxonRank	subfamily	other hand they are necessary for distinguishing the aggregate or species group from the microspecies.' Compare subspecific aggregate for a group of subspecies within a species!	
taxonRank	subform	subform	subforma
taxonRank	subgenus	subgenus	
taxonRank	suborder	suborder	
taxonRank	subsection	Subsection within a genus	
taxonRank	subseries	Subseries within a genus	
taxonRank	subspecies	subspecies	
taxonRank	subspecificAggregate	A loosely defined group of subspecies. Zoology:'Aggregate - a group of subspecies within a species. An aggregate may be denoted by a group name interpolated in parentheses.'	
taxonRank	subtribe	subtribe	
taxonRank	subvariety	subvariety	subvarietas
taxonRank	superfamily	superfamily	
taxonRank	supragenericname	Used for any other unspecific rank above genera.	
taxonRank	tribe	tribe	
taxonRank	unranked	unranked	
taxonRank	variety	variety	varietas

Table 2b: Suggested values for conditionally mandatory values for the threatStatus and conservationJurisdiction in the template. State and Territory conservationJurisdictions spelt out in words are also valid. For some threatStatus terms, alternative labels are provided that are also valid for that conservationJurisdiction.

conservationJurisdiction	threatStatus	threatStatus alternative labels
ACT	extinct	
ACT	extinct in the Wild	
ACT	critically endangered	
ACT	endangered	
ACT	vulnerable	
ACT	regionally conservation dependent	
EPBC	EX	extinct
EPBC	XW	extinct in the wild, EW
EPBC	CE	critically endangered, CR
EPBC	E	Endangered, EN
EPBC	V	Vulnerable, VU
EPBC	CD	conservation dependent
EPBC	JAMBA	· ·
EPBC	CAMBA	
EPBC	KAMBA	
EPBC	CITES	
NSW	EX	Extinct
NSW	CE	Critically Endangered
NSW	En	Endangered
NSW	V	Vulnerable
NT	Ex	Extinct
NT	Ew	Critically endangered (possibly extinct)
NT	CE	Critically endangered
NT	EN (extinct in NT)	Endangered (extinct in NT)
NT	EN (extinct in wild in NT)	Endangered (extinct in wild in NT)
NT	EN	Endangered
NT	Vu (extinct in NT)	Vulnerable (extinct in NT)
NT	Vu	Vulnerable
NT	NT	Near Threatened
NT	LC (extinct in NT)	Least concern (extinct in NT)
NT	LC	Least concern
NT	DD	Data Deficient
NT	NE	Not Evaluated

QLD	EX	Extinct wildlife
·	PE	Extinct in the wild wildlife
QLD		
QLD	CR	Critically endangered wildlife
QLD	E	Endangered wildlife
QLD	V	Vulnerable wildlife
QLD	NT	Near threatened wildlife
QLD	SL	Special least concern wildlife
QLD	С	Least concern wildlife
QLD	I	International wildlife
SA	E	Endangered
SA	V	Vulnerable
SA	R	Rare
SA	ssp.	indicates that at least one subspecies for this species has been given a conservation rating
SA	sp.	indicates that a rating has been applied to the species level. The status has not been assessed at the subspecies level
TAS	х	Extinct
TAS	е	Endangered
TAS	v	Vulnerable
TAS	r	Rare
VIC	Extinct	
VIC	Extinct in the Wild	
VIC	Critically Endangered	
VIC	Endangered (Extinct in Victoria)	
VIC	Endangered	
VIC	Vulnerable	
VIC	Conservation Dependent	
VIC	Restricted	
WA	Т	
WA	CR	critically endangered species
WA	EN	endangered species
WA	VU	vulnerable species
WA	EX	extinct species
WA	EW	extinct in the wild
WA	Specially protected species	
WA	MI	migratory species
	<u> </u>	<u> </u>

WA	CD	species of special conservation interest (conservation dependent fauna)
WA	os	other specifically protected fauna
WA	P1	priority 1: poorly-known species
WA	P2	priority 2: poorly-known species
WA	P3	priority 3: poorly-known species
WA	P4	priority 4: rare, near threatened and other species in need of monitoring

Further information

The valid latitude and longitude coordinates range in the BDR system is based on information from Geoscience Australia. The **Australian Continent** coordinate extremities can be found on this site:

https://www.ga.gov.au/scientific-topics/national-location-information/dimensions/continental-extremities

The coordinates range for the seven **Australian External and Offshore territories** can be found on these sites:

https://d28rz98at9flks.cloudfront.net/70562/AustraliaAndExternalTerritories.pdf

https://www.ga.gov.au/scientific-topics/national-location-information/dimensions/remote-offsh ore-territories)

In summary:

• Australian continent

Latitude range: -10.689167 and -43.644444 Longitude range: 153.637222 and 113.155000

Heard and McDonalds Island

Latitude range: -52.902770 and -53.195018 Longitude range: 73.872715 and 72.577376

Lord Howe Island

Latitude range: -31.486129 and -31.787767 Longitude range: 159.280368 and 159.036807

• Macquarie Island

Latitude range: -54.355874 and -55.123198 Longitude range: 158.998625 and 158.674929

Norfolk Island

Latitude range: -29.136568 and -28.994170 Longitude range: 167.998035 and 167.913770

Ashmore and Cartier Islands

Latitude range: -12.184700 and -12.547300 Longitude range: 123.581854 and 122.927010

• Christmas Island

Latitude range: -10.412390 and -10.570559 Longitude range: 105.712810 and 105.533149

Cocos Islands

Latitude range: -11.822133 and -12.211000 Longitude range: 96.930763 and 96.815497

• Coral Sea Islands

Latitude range: -15.721024 and -29.982747 Longitude range: 159.140729 and 147.839456

• Australian Antarctic Territory

Latitude range: -64.928558 to -90.000026 Longitude range: 167.724334 to 45.000000

For assistance, please contact: bdr-support@gaiaresources.com.au