Systematic Survey Site data template instructions

Overview

Use this template to record data about the Site area where species occurrences have been sampled during a systematic survey.

This Systematic Survey Site template **must be used in combination** with the Systematic Survey Occurrence template and the Systematic Survey Metadata template.

Templates have been provided to facilitate integration of your data into the Biodiversity Data Repository (BDR) 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 with provision to add extra fields (do not remove, or change the order of fields),
- have populated the relevant fields using the correct data type (for example dates for date fields),
- additional fields may be added **after the templated fields**,
- have values in **mandatory fields** (see Table 1), and
- comply with data **value constraints** for example the geographic coordinates are consistent with a geodeticDatum type of the available options and latitude and longitude values fall within the south eastern quadrant of the Earth.

File format

The systematic survey site data template is a **UTF-8** encoded comma separated value (csv) file (not Microsoft Excel Spreadsheet (xlsx)). Be sure to save this file with your data as a .csv (UTF-8) otherwise it will not pass the in-browser csv validation step upon upload. **Do not include empty rows**.

File size

MS Excel imposes a limit of 1,048,576 rows on a spreadsheet, limiting a CSV file to the header row followed by 1,048,575 occurrences. Furthermore, MS Excel has a 32,767 character limit on individual cells in a spreadsheet. These limits may be overcome by using or editing CSV files with other software.

Larger datasets may be more readily ingested using the API interface. Please contact bdr-support@gaiaresources.com.au to make us aware of your data needs.

Template fields

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

- **Field name** in the template (and an external link to the Darwin Core standard for that field where relevant);
- **Description** of the field;
- **Required** whether the field is **mandatory or optional**;
- **Format** (datatype) required for the data values for example text (string), number (integer, float), or date; and
- **Example** of an entry for that field.
- **Vocabulary** links within this document (for example pick list values) where relevant. The fields that have suggested values are highlighted in Table 1 and the options for those fields are listed in Table 2 in alphabetical order of field name.

Additional fields

Data that do not match the existing template fields may be added as additional columns in the CSV files after the templated fields.

Table 1: Systematic Survey Site data template fields with descriptions, conditions, datatype format, and examples.

Field name	Description	Mandatory / Optional	Datatype Format	Examples / Vocabulary
siteID	A unique within dataset string identifier for the site. Valid values include strings that are used specifically for this survey or URIs from BDR Sites that have been established in previous surveys.	**Mandatory**	String	P1
siteType	The type of site that relates to its sampling type and/or dimensions.	**Optional**	String	Plot
siteName	A name for the site that may be more descriptive than the SiteID.	**Optional**	String	Plot 1
siteDescription	The site (plot) description covers important aspects of the site (generally of the land surface). Some overlap in collected information does occur due to the modular nature of the survey processes. The description provides significant background information to gain an appreciation of the plot history, topography, position in the landscape and for understanding the likely relationship between the soils, vegetation and fauna.	**Optional**	String	Fine woody debris.

Field name	Description	Mandatory / Optional	Datatype Format	Examples / Vocabulary
decimalLatitude	The geographic latitude (in decimal degrees, using the spatial reference system given in geodeticDatum) of the origin of a Site. Positive values are north of the Equator, negative values are south of it. Accepted values for the BDR lie between -90 and 0.	**Optional**	Number	-34.036
decimalLongitude	The geographic longitude (in decimal degrees, using the spatial reference system given in geodeticDatum) of the origin of a Site. Positive values are east of the Greenwich Meridian, negative values are west of it. Accepted values for the BDR lie between 0 and 180.	**Optional**	Number	146.363
footprintWKT	A Well-Known Text (WKT) representation of the shape (footprint geometry) that defines the Site. A Site may have both a point-radius representation and a footprint representation, and they may differ from each other.	**Optional**	WKT	LINESTRING (146.363 -34.036, 146.363 -34.037)
geodeticDatum	The geodetic datum, or spatial reference system (SRS) upon which the geographic coordinates given for the Site are based.	**Mandatory**	String	WGS84 (Vocabulary link)

Field name	Description	Mandatory / Optional	Datatype Format	Examples / Vocabulary
coordinateUncertaintyInMeters	The horizontal distance (in metres) from the given decimalLatitude and decimalLongitude describing the smallest circle containing the whole of the Site. 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**	Integer	50
siteVisitStart	The date (with precision of year (YYYY), month year (YYYY-MM) or date in the following formats DD/MM/YYYY or YYYY-MM-DD are accepted) or date-time with timezone (in ISO 8601 format (for example 2022-05-20T06:23:00+08:00) data collection commenced at the Site. Not suitable for a time in a geological context.	**Mandatory**	Temporal Entity	2016-02-28
siteVisitEnd	The date (with precision of year (YYYY), month year (YYYY-MM) or date in the following formats DD/MM/YYYY or YYYY-MM-DD are accepted) or date-time with timezone (in ISO 8601 format (for example 2022-05-20T06:23:00+08:00) data collection was completed at the Site. Not suitable for a time in a geological context.	**Optional**	Temporal Entity	2016-02-28

Vocabulary list

Table 2 describes preferred labels for geodeticDatum.

Note: If included, **the geodeticDatum value must come from one of the four Preferred labels or Alternate Labels in this table**.

Table 2: Suggested values for geodeticDatum controlled vocabulary fields in the template.

Template field name	Preferred label	Definition	Alternate label
spatialCoverage GeodeticDatum	AGD84	Australian Geodetic Datum 1984	EPSG:4203
	GDA2020	Geocentric Datum of Australia 2020	EPSG:7844
	GDA94	Geocentric Datum of Australia 1994	EPSG:4283
	WGS84	World Geodetic System 1984, used in GPS	EPSG:4326

Well Known Text (WKT) notes

For general information on how WKT coordinate reference data is formatted here. The length of a WKT string or of its components is not prescribed. However MS Excel has a 32,767 (32K) character limit on individual cells in a spreadsheet.

It is possible to edit CSV files outside of Excel in order to include more than 32K characters.

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