

G081 Habitats Data Standards

Guidance on habitat and land use data standards for site surveyors		
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Introduction

As the capital's environmental records centre GiGL mobilises, curates and shares data that underpin our knowledge of London's natural environment. We work with a range of stakeholders to collate and verify data on London's natural environment, providing access to high quality data via services tailored to the requirements of those who need to make informed decisions in London.

GiGL's habitat holdings consist of two datasets; a legacy habitat dataset and a new habitat and land use dataset. The legacy dataset contains historic habitat data recorded from the mid-1980s onwards primarily using the London Survey Method and typically listed as multiple habitats per site parcel. The new dataset contains data translated from the legacy habitat dataset and from Ordnance Survey attributes into the Integrated Habitat System (IHS), and is snapped to Ordnance Survey MasterMap boundaries as single-habitat polygons. The new dataset will soon be translated into the new UK Habitat Classification system (UKHab), which is reflected in GiGL's recommendations for incoming habitat data standards (see below).

This document sets out the data collection and management standards that are recommended by GiGL for habitat survey design and outputs. Though ecological expertise and local factors will dictate the most appropriate methods for a given survey, it is important that survey results are recorded in a format that supports efficient processing and valid analysis to inform current and future projects. It will also improve the ease of incorporating local results into Londonwide datasets without loss of information.

Please notify surveyors prior to any survey of the available guidance and encourage them to follow the agreed data standards, as outlined in this document. If you have any queries about how to record or supply the data please contact the GiGL team.

Please see GiGL Site Survey Guidance for ideal survey outputs for wildlife observations, habitat data and open space data. Any species data that is generated through the survey can also be shared with us to be included in the London wide species database.

Recommended survey standards

Metadata

Metadata is data that describes the provided dataset. It informs what the dataset consists of, what different columns and attributes mean and what categories were used. Metadata is highly important to avoid any misinterpretation or confusion of the data content.

The dataset provided should include the following metadata:

- A name or code for each field (attribute)
- A description of each attribute & the categories or typology used for each attribute. Note: if strictly using GiGL attributes and typologies as described in this document it is only necessary to indicate that these are the standards being used

In addition, each dataset should be accompanied by a document ('read me' file) listing:



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- The date of the survey
- The scope of, and reason for, the survey (e.g. borough wide play spaces only, or all open spaces in a specific area of the borough)
- The organisation undertaking the survey
- A lead contact at the organisation who is able to answer questions about the survey data if they arise
- The name and version number of the software package the data are provided in

GiGL can provide a metadata template with all required metadata information to fill in when providing habitat information.

Habitat codes

The UK Habitat Classification (UKHab) is preferred for terrestrial and freshwater habitat surveys where possible going forwards. However, GiGL's habitat dataset can also incorporate data recorded using JNCC Phase I survey categories, National Vegetation Classification (NVC) or London Survey Method (an adapted version of Phase I).

More information about UKHab can be found at https://ukhab.org/ and more information about the London Survey Method can be found at http://www.gigl.org.uk/habitat-data/londonsurvey/. Please check with GiGL if you are unsure about compatibility.

GiGL are currently in the process of translating and transferring our legacy habitat data to a new dataset based on UKHab and incorporating boundaries and attributes from Ordnance Survey's MasterMap dataset. Most historic surveys using this method, based on historic survey data recorded from the mid-1980s mostly using the London Survey Method, typically listed multiple habitats per site parcel rather than single habitat polygons (which are now preferable whenever possible). Historic baseline data from the legacy dataset can be provided on request.

Mapping and data capture

Habitats should be mapped as GIS polygons with associated attributes. This section provides key pointers for ensuring high quality outputs that can be processed efficiently.

- <u>Single habitat mapping</u> (i.e. one boundary around one habitat patch) is essential for onward data management. Please do not map multiple habitats per boundary, even when using the London Survey Method (which are likely to have been recorded as multiple habitats per parcel in the historic baseline). See Image 1 below for an example.
- <u>Careful digitisation</u> is also essential. Snapping boundaries to the latest Ordnance Survey MasterMap polygons is recommended where appropriate. Avoid slivers, self-intersections, unintended holes, duplicates, attribute rows with no map object and vice versa and overlapping polygons.





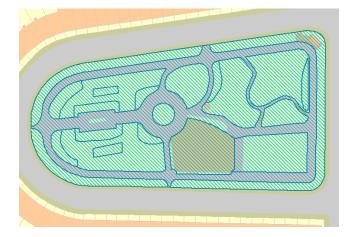


Image 1: Example of habitat polygons mapped to OS MasterMap. Contains OS MasterMap data © Crown copyright and database rights 2018 Ordnance Survey 100035971 © Copyright Transport for London 2018. NB: this example could be mapped even better by excluding the buildings.

- <u>Reference to original GiGL data</u>, e.g. legacy habitat survey data (PolygonID), SINCs (SiteRef) or Open Spaces (SiteID) is helpful, although original polygon boundaries may not always be appropriate for new boundaries.
- <u>Boundaries</u> of surveys and habitat parcels should match, and not straddle, boundaries of Local Authorities and designated sites where applicable.
- Spatial data should be projected using the British National Grid [EPSG: 27700] coordinate system.
- Be consistent with all attributes, categories and formatting (e.g. text, date formats, symbols, spelling).
- Indicate any measurement units used where applicable.

Other data

GiGL provide a number of documents for specific guidance when surveying Open Spaces (G072), SINCs (G071) and for species recording (G082). Please refer to these for additional guidance.

For full details of all the datasets GiGL hold, please refer to the GiGL Data Guide (H003).

Please refer to the GiGL style guide (H024) for details of standard GIS styles used.

As well as the core datasets, GiGL also manages other types of data, such as site facilities, urban greening features and street trees. Please check with the GiGL team if your surveys generate data that may be relevant.





Attributes

Please follow the attributes format below. GiGL can provide ESRI Shapefile templates containing these attributes on request.

Name Description Example ID Unique integer reference for each 1 polygon/line within the dataset SiteRef Reference identifier of site. Use the GiGL HgBI03 SINC (SiteRef), open space (SiteID) or habitat survey site reference (PolygonID) if applicable Name of surveyed site. Use the GiGL SINC, Coldfall Wood SiteName open space or habitat survey site name if applicable UKHab HabClass Habitat survey classification, i.e.: UKHab, London Survey Methodology, JNCC Phase 1 HabVersion 1.1 Habitat survey classification version/date HabName Name of habitat present, according to the Woodland and forest -Lowland mixed deciduous survey classification woodland HabPrimary Primary code of habitat present, according to w1f6 the survey classification HabSecond Primary codes of habitat present, if 33,47,49,86,99,136 applicable, according to the survey classification UK Priority Habitat (based on the Natural Lowland mixed deciduous PriorityHab Environment and Rural Communities Act woodland (2006) Section 41 habitats of principal importance) or 'None', if none present DetermQual How well the current habitat has been Definitely is this habitat determined, i.e.: Definitely is this habitat Probably is this habitat, but some uncertainty Habitat is in polygon but not accurately mappable Habitat probably in polygon, but not accurately mappable The reliability of the translation between the InterpQual Good survey classification/code and the UK Priority Habitat if relevant, i.e.: Good Average Poor Comments on UK Priority Habitat translation, InterpCom especially if Average or Poor

Table 1. Standard Habitats attributes

Greenspace Information for Greater London CIC is a community interest company limited by guarantee registered in England and Wales 8345552. Registered Address: 10 Queen Street Place, London, EC4R 1BE





SurveyName	Name of survey/project	South London woodland review
SurveyRef	Original reference identifier for the survey (or site if the GiGL identifier is provided in SiteRef)	S012
SurveyDate	Date of survey	21/04/2021
GenCom	Comments on habitat, condition or management, especially if Priority Habitat is present	Evidence of significant grazing
DistCat	Current distinctiveness category of habitat according to the Defra metric 3.0 scale, i.e.: Very High High Medium Low Very Low	High
CondCat	Current condition category of habitat according to Defra metric 3.0 scale, i.e.: Good Fairly Good Moderate Fairly Poor Poor N/A Not assessed	Moderate
Organisation	Name of organisation responsible for survey	The good ecologists Ltd.
Surveyor	Name of principal surveyor	Heath Robinson
BaseMap	Base map used during survey, e.g.: OS 1:10,000 OS 1:25,000 Aerial Photo OS LandLine OS MasterMap	OS 1:10,000
DigiMap	Map used to digitise GIS information (e.g. as above). Boundaries should be snapped to OS MasterMap wherever possible.	OS MasterMap
GridRef	Full grid reference of site centroid	TQ2804887729
CentroidX	X coordinate of site centroid (Easting)	518772
CentroidY	Y coordinate of site centroid (Northing)	184858
AreaHa	Area in hectares. Measured from GIS	7.02