

## Some projects we have worked on



### HS2 Phase 1: London to Birmingham section and Phase 2: Birmingham to Manchester/Leeds

The GIS team support our ecologists on both Phase 1 and Phase 2 of this major rail infrastructure project. Work included programme management; implementation of GIS standards; creating and consulting on GIS methodologies for ecology work packages; Quality Management and risk management, and sign off and assurance for delivery of data and cartographic production for Environmental Impact Assessment (EIA) and Environmental Statement.

### DP World London Gateway

Standardisation of map layouts and geoprocessing methodology, including cost distance, buffering, area calculations and design of habitat loss and habitat restoration. We provided services direct to the client, including customised symbology and map production.

### M25 – Great Crested Newt Mitigation (Balfour Beatty / Skanska)

Mapping of species mitigation on the motorway widening scheme for sections of the M25; maps to present mitigation plan included site surveys and impact assessments, and maps that showed mitigation and compensation including: location of receptor site in relation to development site, capture and exclusion works, habitat creation, restoration and/or enhancement, and post development management.

## Experience and quality that make a difference

### Contact us:



Call your local office now to find out how The Ecology Consultancy GIS Team can help you put nature back into development. The Ecology Consultancy is part of the Temple Group.

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Visit [www.ecologyconsultancy.co.uk](http://www.ecologyconsultancy.co.uk) for our full range of GIS mapping and ecological services.  
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## Understanding surveys using GIS



[www.ecologyconsultancy.co.uk](http://www.ecologyconsultancy.co.uk)

Additional pond 4  
Additional pond 5



# What is GIS (Geographic Information Systems)



**The use of Geographic Information Systems (GIS) to gather, analyse and present data, is fast becoming the norm for many industries including construction. GIS models and maps are making technical reports much more accessible and visually engaging for the end user.**

At The Ecology Consultancy we use GIS techniques to analyse and assess biodiversity and provide a powerful decision-making tool for ecologists and other surveyors. Our GIS services are also available to others such as major land-owning companies like retailers, utilities and logistics companies.

## What can it do for your projects?

GIS provides interactive plans and data analysis to support site surveys. In the case of habitat mapping, for example, the more sophisticated surveying techniques, such as the National Vegetation Classification (NVC) that identifies and categorises specific vegetation communities on the basis of their detailed plant composition, actually depend on GIS mapping.

It can help you understand the ecology and topography of a site. In the case of an ecological study, it can help ecologists to identify what needs to be conserved and where there is potential for enhancement. As a result, GIS mapping creates maps that support decision-making and allow you to effectively

manage project planning around issues such as transportation, logistics or wildlife conservation.

## How, The Ecology Consultancy can help you

The Ecology Consultancy has a significant amount of experience working with, and providing GIS and mapping support to a range of clients from multidisciplinary engineering companies, developers and architects to local authority planning departments, ecology and landscape consultants, and statutory agencies. Our GIS specialists work closely with our clients to provide highly accurate geospatial support and mapping services. We also offer clients tailor-made GIS training.

## Our GIS range of services include:

### GIS and Remote Sensing Analysis

- GIS database design, development and maintenance
- Metadata provision and creation according to INSPIRE and FGDC
- Spatial and statistical analysis
- Network analysis
- Geo-referencing of remote sensing data
- Land use survey mapping and habitat mapping in compliance with British Standard (BS7666) for infrastructure and socio-economic assessment
- Landscape analysis and character assessment, and digital documentation of heritage sites
- Biodiversity and geo-diversity assessment
- Strategic applications including ecosystem services and biodiversity offsetting

### Training

Our GIS specialists provide training in GIS design, application and best practice; GIS related ecological issues and procedures; habitat mapping support, mobile mapping implementation and use.

### Why you should work with us

We are experienced in data capture and the geo-processing of field survey data and we use special in-house applications to provide interactive mapping.

## Ecology and Environmental Services Support

GIS habitat mapping helps provide a visual representation and analysis of where protected species can be found on site, and maps that clearly illustrate proposed habitat creation, restoration and site enhancement. We are experts in this regard and use a variety of software including ArcGIS, Map Info and AutoCAD.

- Map production including: Preliminary Ecological Appraisals (PEA), NVC, protected species, breeding and wintering birds and mitigation strategies
- BREEAM/Code for Sustainable Homes analysis
- Maps and analysis for Ecological Impact Assessment (EclA), including the design of mitigation measures for any identified impacts
- Setup, design and implementation of mobile mapping solutions for surveys, including data capture, collection and analysis
- Training in GIS related ecological issues and procedures
- Research on ecological and environmental issues

Our GIS specialists are constantly developing tailor-made tools for meeting the client requirements and increasing the overall output quality. Our GIS framework integrates a powerful set of GIS/CAD software with third party/supplementary tools (ESRI ArcGIS, XTools, and AutoCAD) that assist in streamlining processes and providing a reliable and responsive service.

Our senior specialists have more than 20 years' experience in GIS analysis, relational database design, spatial analysis and thematic cartography.

We take a systematic and standardised approach to ensure accurate geo-referencing of maps and other remote sensing data.

Our GIS output includes thematic maps in different paper sizes, and with final layouts in PDF, CAD or ESRI geodatabase format.

We are confident that The Ecology Consultancy can help you with your GIS requirements and advise on the implementation of your projects.

## Experience and quality that make a difference

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