

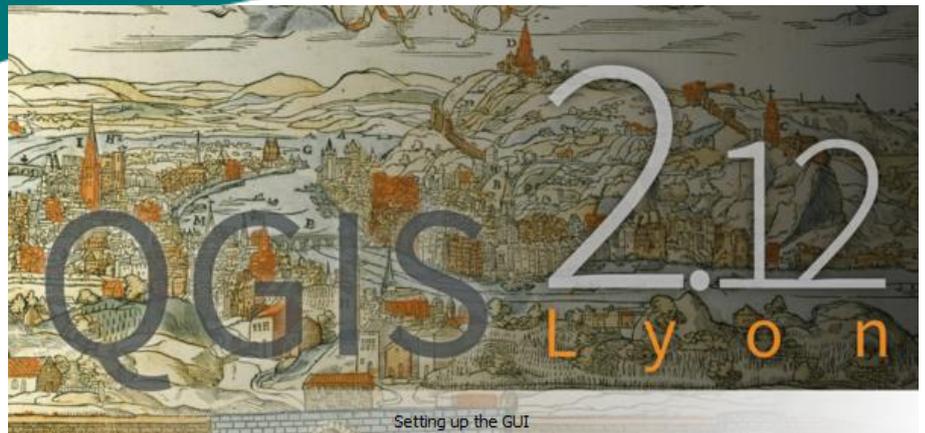
# A holistic and practical introduction to QGIS

Led by Matt Davies

FSC Juniper Hall

Wednesday 29<sup>th</sup> – Friday 31<sup>st</sup> August 2018

Course starts at 19:30 on Friday  
Course will finish at 15:30 Sunday

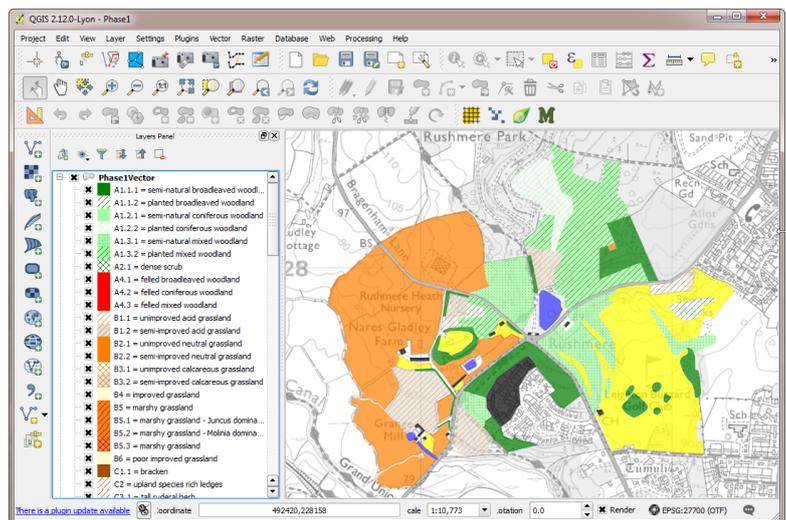


## Overview of the course

QGIS is a freely available open-source Geographic Information System (GIS) that matches the functionality and usability of commercial products like MapInfo and ArcGIS. It has been adopted by governments, businesses and NGOs around the world.

The course is suitable for beginners to GIS, those looking to refresh their skills or those looking to migrate to QGIS software. It will help ecological consultants, wildlife organisations, biological recorders and recent graduates visualise, explore and analyse spatial data.

The course will take a holistic approach to ensure participants have the skills needed to confidently implement GIS projects in the workplace. General topics will include GIS fundamentals, data licencing, map design, spatial data management and work-flow design.



A series of practical exercises will give participants hands-on experience and build confidence working with raster and vector data. Participants will learn how to:

- Navigate the QGIS user-interface
- Obtain, integrate and capture (base) map data
- Classify and stylise vector data
- Perform basic GIS analysis
- Use the FSC Tom.bio Productivity Tools plugin to map biological records from spreadsheets and download data from the NBN
- Produce professional habitat maps for reports
- Automate the production of maps for species Atlases

## Course Tutor



**Matt Davies** is a professional ecologist and geographer with 20 years' experience in the UK environment sector. He began his career at JNCC, providing GIS and database support on marine and coastal projects. He then worked at the capital's Environmental Record Centre, GiGL, where he managed a multi-disciplinary team that supported volunteer, community and wildlife recording groups and integrated their data into government decision making and the operational delivery of transport companies and emergency services. In 2015, he founded the geo-spatial consultancy Maplango.com to help people collect, analyse and visualise spatial data so they can make better informed decisions.

## Learning outcomes

By the end of the course participants will be able to:

- Describe the QGIS user interface
- Set up a QGIS project and data management process
- Source raster and vector data and incorporate into QGIS
- Capture point, line and polygon data
- Use the Tom.Bio plug in to create Atlas maps and incorporate data from NBN
- Produce professional habitat maps for reports
- Automate the production of maps for species Atlases
- Perform basic spatial analysis
- Find help and support after the course

*No prior knowledge of GIS is required, but participants should be comfortable working with computers, managing files and installing software.*

## What to Bring

- Note-taking equipment (pen and paper is fine!).
- A WiFi enabled laptop, with mouse and charger, pre-installed with QGIS long-term release for Windows, version 2.18.
- Optionally, some of your own data, for use in the final session
- Full joining instructions will be provided ahead of the course

## ***Timetable***

Day 1 Evening: Introduction QGIS software and GIS fundamentals

Day 2 Morning: Obtaining and displaying data, creating vector map layers

Day 2 Afternoon & Evening: Styling vector data, creating a PDF map

Day 3 Morning: Biological records and the Tom Bio plug-in

Day 3 Afternoon: Spatial analysis and Buffering

Lunch break and breaks as required.

**The course starts on the Friday evening (around 7:30 pm) after dinner. Residents can check in from 4:00 pm. Dinner is normally served at 6:30 pm. The course finishes at 3:30 pm on Sunday.**

## ***Course fees***

Resident (sole occupancy): £265      Resident (shared occupancy): £245      Non-resident: £210

## ***What is included within the fee?***

### **To make a booking contact: FSC Juniper Hall directly by**

- **Telephone: 01306 734501**
- **E-mail to: [enquiries.jh@field-studies-council.org](mailto:enquiries.jh@field-studies-council.org)**
- **Online at: <http://www.field-studies-council.org/centres/londonregion/juniperhall/lesisurelearning/natural-history-courses.aspx>**

## General Information 2016

In a quiet wooded valley in an unspoilt area of the chalk North Downs, Juniper Hall is a superb country house dating from the 17th century, complete with a butterfly garden and surrounding woodland.



### About The Centre

**Buildings:** Juniper Hall is made up of several buildings built between 1760 and 1979 located on the Box Hill Estate. The buildings house bedrooms, workrooms and office space with additional outdoor spaces in the grounds. There are also a number of common rooms, dining room and library.

**Facilities and services:** The dining room are located in the Main House; all catering is done in house with a fully trained and experienced Catering Team who cater for a full range of dietary requirements. The main teaching and recreation rooms are in the Main House, Coach House and Wooldridge Labs with most on ground floor level. The different ages of our Centre buildings means that bedrooms range in style from dormitories to twin rooms. All rooms have sinks and some have showers but all are close to private bathrooms. The centre is going through a major en-suiteing programme in 2017 and 2018. The centre has a wide range of specialist equipment for teaching geography, ecology and other related subjects as well as microscopes and laboratory equipment for examining and analysing samples indoors. Classrooms are fully equipped with interactive whiteboards, visualisers and Wi-Fi access. There are common rooms, drying areas, a library, a shop and a bar. We operate a 24 hour duty system and all staff are first aid trained and DBS checked.

**Site and grounds:** The Centre is on the edge of the Box Hill estate and with a range of habitats. There are a range of broad-leaved and coniferous woodlands, chalk grasslands and both the River Mole and River Tillingbourne are close by. The centre has a major advantage of being in a semi-rural location whilst being only 5 miles away from the M25. The centre is also close to both Gatwick and Heathrow airport and on the Dorking-London train line. Within the grounds there is a walled garden, apiary, reptile homes, bug hotels, orchard and our resident pygmy goats and Dorking chickens!