

Identifying Plants: Using Botanical Keys with Confidence



The location of many of John Constable's paintings, Flatford Mill runs over 300 Natural History and Arts courses in a unique and tranquil learning environment.

Course Overview

The aim of this course is to help students improve their confidence in using botanical keys to successfully identify any unknown flowering plant. We will demystify terms that sometimes make it seem like botanists are using 'a different language'. This course is especially useful for those who want to identify plants to the species-level for surveys and assessments and need to have confidence in what is recorded on a site.

The course does not expect to turn you into an expert in the immense variety of different species in the British Isles, but rather to enable you to work out what new species you have found using floras (keys) with confidence. This course is suitable for beginners (no previous knowledge will be assumed) and it is also suitable for improvers.

Course Description

Identifying plants can seem a time-consuming and daunting task for those starting out. There is a wide selection of field guides available, but how do you know your guide has the most recognisable picture? How do you know you have the right species if it is growing in an exposed or shady environment and may not look like the drawing or photograph in your book? What about plants without flowers... how can you be sure it is what you think it might be?

Different types of botanical keys use different diagnostic features so in the field it is often helpful to have a couple to hand – particularly a key to the flowering parts backed up by a vegetative key. Keys we will use on this course include Stace, Rose, Streeter and Poland. Students will also be introduced to lateral keys for different groups.

This course will begin by providing an overview of plant anatomy to become more familiar with some of the main terms used in botanical keys. We will continue to build confidence in understanding botanical terms and using different keys by practicing in the classroom and the field. There will be a classroom introductory session on plant structure on the first evening and morning of the first day. There will be other indoor classroom sessions in the mornings after breakfast and evenings after supper to get familiar with botanical structure and consolidate field work, including inspecting specimens. Participants will be encouraged to make use of the low power microscope, not just as an aid to identification but in order to see the incredible detail of floral structure and consolidate classroom sessions on this topic. Most of the daytime will be spent exploring the plants around the centre, and in nearby woodlands, hedgerows, grasslands, and coastal habitats of this beautiful corner of East Anglia.

Some learning objectives for this course include:

1. Describe how the guidebooks are laid out by discussing and listing the major divisions of the plant kingdom and their order in the book, and explaining the difference between monocots and dicots.
2. Describe floral anatomy with botanical terms by using a specimen to examine key features of a flower and by labelling a diagram.
3. Revise botanical terms relating to floral structure, different types of fruits, inflorescence arrangement and vegetative anatomy by participating in group discussion.
4. Define the different types of inflorescences and describe the inflorescence type for our specimen(s).
5. Review the structure of Asteraceae flowers and inflorescences by viewing different species in the microscope and keying out a dandelion-look-alike.
6. Explore the flora around the centre and further afield and consolidate learning by practicing identifying wildflowers using a number of different widely available keys.

Although this is not an accredited course, it is suitable for CPD (Continuing Professional Development) and a Certificate of Attendance can be provided on request.

About the Tutor

Alanna Cooper is a botanist and ecologist with over 12 years' experience in environmental consultancy. She is currently a technical director responsible for the ecology team at a regional environmental and engineering consultancy. Alanna has experience of botanical survey work and habitat management in both Canada and the UK for a diverse variety of habitats.

What to Bring

- Hand lens (x10 magnification), can also be purchased from the tutor at cost.
- Bringing a x20 magnification hand lens is optional; it may be useful to see some vegetative structures such as stomata and some hairs.
- Outdoor gear for the field visits, including stout shoes or boots, waterproofs and wellies (just in case, but these may be hired from the centre), a small rucksack or bag, insect repellent, a lunchbox, flask.

- There will be a lot of standing around outside keying out specimens. If you have a portable fold out chair/garden kneeling mat you would like to use (you will have to carry it yourself) please bring it along; fold out chairs can also be hired at the centre.
- You will find it extremely useful to bring your own flower guide that includes keys. We will specifically be using 'The New Wild Flower Key' by Francis Rose revised and updated by Clare O'Reilly and the 2nd edition of the 'Collins Flower Guide' by Streeter et. al. Copies will be available to borrow.
- Please bring your own a copy of 'The Vegetative Key' by Poland and Clements if you have one, since we will be using this both in the field and in the classroom. Copies will be available to loan.
- If you have 'New Flora of the British Isles' 3rd ed. by Stace please bring your copy with you. We will be using the field excursion version of the 2nd edition, but it is useful to have the 3rd edition to hand to see how families and species-names of some commonly encountered plants have changed.
- Less essential but handy: a dissection kit with good fine-nosed tweezers.

Start and Finish Times

Check-in is from **1600** on Friday, but the first formal activity is dinner at **1900** (with the bar open from **1845**).

Residents: Please aim to arrive on Friday between **1600 and 1800** to allow us sufficient time to show you to your accommodation and around the communal areas.

Non-residents: You do not need to arrive quite so early but please can you be here by **1800** as we need to show you the communal areas as well.

The course ends at **1600** on Monday.

What the fee includes

Residential course fee includes:

- Full board accommodation including cooked breakfast, picnic lunch, homemade cakes and an evening meal. Vegetarian and other dietary option available.
- Up to 8 hours teaching time a day, plus relaxing breaks for meals and refreshments.
- Tea and coffee making facilities available throughout the day.
- Use of resources including library, workrooms, studios and the Centre grounds.
- Transport during the courses.
- Insurance to cover cancellation, personal belongings, personal accident, legal liability and medical emergency.

If you choose to be a non-resident on a residential course, the fee will include all the above except accommodation and breakfast.

Special Offer

Bring a friend!

If you are attending a course at Flatford Mill at the sole occupancy price, we are offering a special rate for a friend or partner not enrolled on the course to also stay at £50 per night for dinner, bed and breakfast.

How to Book

Bookings can be made by telephoning the Centre; we are open 0930 – 1700 weekdays and most weekends. Alternatively, bookings can be made via our website: www.field-studies-council.org.