

CIEEM Training Catalogue

***Disclaimer:** please note that this catalogue is currently being updated so there may be some changes to the courses offered*

This catalogue showcases the variety of training courses available throughout the year and highlights their location and country relevance, level, format, the competencies developed, and when they are likely to run. We hope that this catalogue helps you to identify courses you are interested in, and plan your Continuing Professional Development across the year.

Our training programme is planned in advance as much as possible and courses that are live and bookable are available on our website. We cannot guarantee that each of these courses will run every year, and popular courses will often have multiple dates throughout the year.

We're always interested in new suggestions for training, to meet the needs of both early career and experienced ecologists, so please get in touch if there's a course that you need, and it's not listed here. If you're interested in a course that's listed here but not showing on our website, then please email training@cieem.net to express interest. If you are also interested in becoming a trainer for us, please do get in touch with the team and we can talk you through the process.

If you have suggestions for new training courses that you would like to see in the programme, [please complete this short survey](#).

Price bands 1st May 2026 – 31st March 2027

Band	Prices - £			
	Member (Early Bird)	Non-member (Early Bird)	Member (Standard)	Non-member (Standard)
A	133	203	156	226
A1	200	305	235	339
B	237	399	284	445
C	174	232	197	255
D	226	283	249	307
E	260	318	283	342
F	435	491	458	514
G	191 (CIEEM Trainer) 283	342	191 (CIEEM Trainer) 307	365
BNG Metric	200	303	245	339
WWC2026	342	504	388	550

* Courses are costed on the basis of delivery costs, which are informed by the delivery model (e.g. in-person vs online), trainer costs, venue costs, level of training, and number of participants. These costs provide a guide but please check course pages on our website for accurate costs as we are sometimes able to subsidise training costs through external funding / sponsorship. For full terms and conditions visit <https://cieem.net/i-am/upcoming-training-and-events/booking-terms-and-conditions/>

Course Title: Advanced Communication Skills (For ECOW site based work)

Trainer: Mike Oxford

Price Band: A

Format/Location: Online

Key Competency: C1 Communication

Level: Intermediate – Advanced

Usually runs: Once a year (Autumn)

Duration: 6 hours

Description:

This course aims to help you prepare for, and manage effectively, any situations requiring negotiation and/or conflict resolution during construction and ecological contracting work. People have disagreements and misunderstandings for all sorts of reasons, it's human nature. However, conflict can create an unhealthy work environment, generate tension, be hugely damaging to relationships, and prove unproductive. Differences of opinion can be debilitating to all parties trying to work through a conflict.

This course is for those working in an Ecological Clerk of Works (ECoW) role and recognises that an ECoW has an almost unique position of needing to work with a diverse range of groups or individuals and organisations.

People they meet on a regular basis come from a variety of backgrounds, different levels of seniority, a mix of sectors, a wide range of age groups and experience. While no two days are the same for an ECoW, which can be both motivating and interesting, the issues around communication with such a variety of people can also at times be challenging.

This course is designed to help empower those in this role by exploring the higher levels of communication skills required to:

- recognise situations when conflict could occur;
- use negotiating and influencing skills to minimise the effects of/or avoid conflict, and should a conflict escalate;
- develop the skills to resolve it with minimal damage to all parties involved.

- achieve positive influence through the use of a variety of communication tools.

Course Title: An Introduction to Appropriate Assessment in Ireland

Trainer: Marie Louise-Heffernan

Price Band: A

Format/Location: Online

Key Competency: A2 Habitat Regulations Assessment, Appropriate Assessment/Natura Impact Statements

Level: Beginner

Usually runs: Once a year (September)

Duration: 6 hours

Description:

This course will provide you with a basic template for assessments and show you how to carry out a basic assessment. We will look at multiple examples of Appropriate Assessment in action and discuss screening, Stage 2 assessments, cumulative impacts and mitigation.

The training includes discussions, presentations, and case studies to develop understanding.

Course Title: An Introduction to Practical Rewilding

Trainer: Nick Viney

Price Band: B

Format/Location: In person, Devon

Key Competency: M1 Advise on habitat / species management and / or habitat creation projects

Level: Beginner

Usually runs: Once a year (September)

Duration: 12 hours

Description:

Beginning with an overview of the history and different applications of the practice both in Britain and overseas, the course will focus on practical demonstration of rewilding within the three blocks under the Rewilding Coombeshead project, covering up to 400 acres of woodland and former pasture in Devon. Early enhancement techniques will be showcased and

demonstrated in the field, while focus will be given to the role of domestic livestock and reintroductions in rewilding projects, including both benefits and downsides and the management required. There will be the opportunity to visit a captive group of lynx to discuss the role of large predators and explore wild beaver wetlands and watch a family emerge from their lodge in the evening.

Time will be allocated to open discussion and debate, with the aim for delegates to come away with a more nuanced practical understanding of the opportunities rewilding presents and how they can be implemented on the ground.

Course Title: Ancient Woodland Indicators and Other Woodland Flora

Trainer: Mark Duffell

Price Band: A

Format/Location: In person, West Midlands

Key Competency: S2 Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: May

Duration: 6 hours

Description:

Woodlands are an important UK habitat and being able to accurately identify Ancient Woodland Indicator species (AWIs) can aid in establishing the conservation value and significance of these habitats.

The field visit allows you to appreciate the importance of AWIs in situ, see the niches they occupy, and some of the challenges you may come across when identifying them. Several AWIs have look-a-like species which can be generalists, garden escapees or even invasives (e.g., Wood Spurge and Yellow Archangel). Knowing which one is which could dramatically alter the ecological value of a site.

Time will be spent identifying individual species and understanding their role in the woodland.

A range of resources will be used to make identifications from floral/vegetative keys, comparison tables and identification guides.

This is a day course aimed at the keen beginner and improver alike, providing an introduction to woodland plant identification.

By the end of the course participants will be able to distinguish the major groups of woodland plants and recognise the key characters of those they can't identify. They will also be aware of the different books available to make a successful identification.

Course Title: Applied Meadow Management

Trainer: Rachel Remnant & Alex Cruickshank

Price Band: A1

Format/Location: In person, Southeast England

Key Competency: M3 Practical implementation of plans for ecological management and/or environmental schemes

Level: Beginner – Intermediate

Usually runs: April & September

Duration: 9 hours

Description:

Day 1 consists of a half-day online session that will set the scene, introducing meadows' historical context and the ecosystem services they provide. Exploring the role of Local Ecological Knowledge (LEK) and Traditional Ecological Knowledge (TEK) for successful outcomes. Having understood the underlying principles, we will then discuss techniques used for establishing and restoring meadow habitats and how to measure success.

Day 2 will take us into fields around Winchester, exploring urban edge meadows, amenity wildflower areas and historic meadows. We will consider the principles of meadow management in practice and discuss problems, such as livestock worrying or unreliable contractors, and options to troubleshoot these common issues.

Ecological surveys will be discussed and we will practice how to use Rapid Condition Assessments to survey a meadow, using plant species as positive and negative indicator species.

*A species list will be provided, to prepare for using Rapid Condition Assessments.

Familiarising yourself with the species list ahead of the course will help you get more out of this session.

Course Title: Applied Lowland Heathland Restoration and Management

Trainer: Rachel Remnant & Alex Cruickshank

Price Band: A1

Format/Location: In person, Southeast England

Key Competency: M3 Practical implementation of plans for ecological management and/or environmental schemes

Level: Beginner – Intermediate

Usually runs: September

Duration: 9 hours

Description:

Session 1: Online learning with discussion and quizzes covering the following:

- The formation, history and cultural value of heathlands.
- How English heathlands are protected.
- Environmental factors which influence their ecology.
- Ecological processes which impact the heathland biota.
- The elements of a heathland landscape.
- Heathland species and their ecological requirements.
- Threats to heathlands.
- Heathland condition assessment.
- An introduction to the restoration and management of heathlands.

Session 2: Field trip to West Berkshire heathland with group discussions and practical examples.

- Introduction to species identification
- Identification of positive and negative features of a heathland site
- Practical application of vegetation management
- Heathland restoration from secondary woodland, with discussion about other scenarios
- Management planning and project management

Course Title: Aquatic Plants Identification

Trainer: Mark Duffell

Price Band: A

Format/Location: In person, Wales

Key Competency: S2 Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: August

Duration: 6 hours

Description:

Aquatic plants occur in complex and dynamic environments. Often, they change their growth forms depending on growing conditions which at times can make identifications particularly challenging.

Many species have distinct ecological niches and can be used to indicate water quality (Ellenberg Indicator Values). By being able to identify a suite of species within an area, a clearer understanding of the habitats present is possible.

Several species are listed as either Schedule 8 or 9, so if they are found during a survey, accurate identification is essential to enable appropriate assessment and management to take place.

We will look at the different niches each species occupies including marginals, floating, and submerged species. Emphasis will be placed on those characters that allow reliable and accurate identification. Later, we will look at determining the more unusual species. Use will be made of several botanical keys and other resources, and by the end of the day participants should feel confident in the use of these keys.

Course Title: Badger Ecology and Surveys

Trainer: David Denman

Price Band: A

Format/Location: In person, East Midlands

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Beginner – Intermediate

Usually runs: July / November

Duration: 6 hours

Description:

This one-day training event (the first day of two days of badger training) provides a comprehensive introduction to badger ecology and surveys. The training will be delivered in three sessions and includes an overview of badger ecology, relevant legislation, survey planning and techniques, field signs (including sett identification), and writing badger reports. The course includes a visit to a main sett to find badger field signs.

Delegates will develop their knowledge through analysis of badger survey case studies and assessment of badger reports. The course culture is open with questions able to be asked anytime through the day. Badger queries can be sent to the tutor after the course.

Course Title: Badger Impacts and Mitigation

Trainer: David Denman

Price Band: A

Format/Location: In person, East Midlands

Key Competency: A1 Strategic Environmental Assessment

Level: Beginner – Intermediate

Usually runs: July / November

Duration: 6 hours

Description:

This one-day training event (the second day of two days of badger training) provides a comprehensive introduction to assessing impacts on badgers, mitigation options, licence application preparation, and procedures and implementation of mitigation measures.

Delegates will develop their knowledge through assessments of badger case studies, practice completing badger licence forms, and discuss the merits of a range of mitigation options. The culture is open with questions able to be asked anytime through the day. Badger queries can be sent to the tutor after the course.

Course Title: Barn Owl: Ecology, Surveying and Mitigation

Trainer: Stefan Bodnar

Price Band: A

Format/Location: In person, West Midlands

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Beginner – Intermediate

Usually runs: April / September

Duration: 6 hours

Description:

This course will cover barn owl ecology, conservation, and legal significance. The training will be taught entirely in the field. This extended field session will enable delegates to review data sources and limitations, survey and methodological considerations, and survey protocols.

The field session will look at roost features in buildings and in trees and will enable participants to define:

- potential nest sites (PNS)
- an active roost site (ARS)
- a temporary rest site (TRS)
- potential feeding and dispersal habitats (PFH)

Delegates will also learn to identify the evidence for confirming an occupied breeding site (OBS) and how the data should be recorded.

Course Title: Bat Ecology and Survey

Trainer: Emma Boston

Price Band: A

Format/Location: In person, Ireland

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Beginner – Intermediate

Usually runs: June

Duration: 6 hours

Description:

The course will provide an introduction to key knowledge and skills necessary for undertaking professional bat work in the UK and Ireland. The course will introduce bat legislation, bat ecology and identification. It will provide an overview of the bat survey types and requirements following the latest good practice guidance, through presentations, demonstrations, case studies, and a site visit to known bat roosts.

The course aims to inform those who are new to professional bat survey work, as well as those who have some previous experience but would like to learn more about the various survey techniques.

Delegates will gain a good understanding of bat ecology, the ability to differentiate bat species, a working knowledge of bat law and licensing, an ability to assess the need for surveys, to plan and prepare for surveys and select appropriate equipment and resources, and be able to analyse and interpret results in order to write good reports.

There will be a short field trip in the afternoon where delegates will look at some buildings/structures in relation to bat roost potential, and the option of an evening bat survey on site (weather permitting) where up to 8 bat species are known to be present.

Course Title: Bat Impacts and Mitigation

Trainer: Emma Boston

Price Band: A

Format/Location: In person, Ireland

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Intermediate

Usually runs: June

Duration: 6 hours

Description:

This one-day course delivered by Emma Boston will introduce bat impact assessments and demonstrate how to assess impact for various development types, including residential developments, roads or other large infrastructure projects, and wind farms.

Delegates will explore the measures currently available to mitigate the impact of development in line with current legislation, using presentations, question and answer sessions, and case studies of bat mitigation and enhancements appropriate for a variety of bat species

In the afternoon, delegates will have the opportunity to work through and discuss example scenarios in groups.

Course Title: Introduction to Bat Ecology and Bat Surveys

Trainer: Katie Pollard

Price Band: A

Format/Location: Online

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Beginner

Usually runs: March / September

Duration: 6 hours

Description:

This course will focus on the essential skills for ecologists to conduct bat surveys to a high standard, in line with current legislation and best practice guidelines. We will examine the laws protecting bats in the UK and Ireland. We will explore key aspects of bat ecology and important features for identifying bats, discuss various types of roosts, and how to look for signs of roosts. We will review the requirements and methods of bat surveys, how to prepare for them, select appropriate equipment, and compile all survey information into clear and concise reports.

Throughout the course, we will also examine effective communication with clients, a crucial role of an ecologist, to ensure a positive outcome for bats.

The training style will combine presentations, case studies, and scenarios with small group work.

Course Title: Bats: Exploring the Impact of Development on Bats and Discussing Mitigation Hierarchy

Trainer: Katie Pollard

Price Band: A

Format/Location: Online

Key Competency: M2 Designing and preparing environmental management, mitigation

Level: Beginner - Intermediate

Usually runs: March / September

Duration: 6 hours

Description:

This course will concentrate on the essential skills required for ecologists, with an understanding of bat ecology and surveys, to identify and assess the various impacts of different developments on bats. We will also consider and discuss suitable types of mitigation for various bat species. We will consider the mitigation hierarchy, examining avoidance, mitigation, compensation, and enhancement, and their appropriate contexts. Additionally, we will address the importance of effective communication with clients.

Throughout the course, we will also examine effective communication with clients, a crucial role of an ecologist, to ensure a positive outcome for bats.

The training style will combine presentations, case studies, and scenarios with small group work.

Course Title: Beaver Ecology and Field Sign Identification

Trainer: The Beaver Trust

Price Band: A

Format/Location: Devon, Scotland, Kent, Wales, Northumberland

Key Competency: S2 Species identification, handling and evaluation

Level: Beginner - Intermediate

Usually runs: Summer/ Autumn

Duration: 6 hours

Description:

This course will aim to provide a good understanding of Beavers as a species in the UK including their ecology, habitat requirements, field signs and current status and protection. The below will be covered in the course content:

- Introduction to the species
- General biology and behaviors
- General ecology and habitat requirements
- Detail range of field signs – foraging, shelter, habitat modifications
- Group work on field sign identification
- Field sign misidentification
- Legal status of beavers and level of protection
- Beaver licensing and when required (Scotland and England relevant)

The course will consist of a morning classroom session, a lunch break and then an afternoon session exploring the venue's local beaver habitat to identify beaver field signs.

Please note that this course is the first in a series of three courses led by Beaver Trust and accredited by Natural England. Evidence of completing this course can be used to register for the Natural England's Beaver Management Class Licences CL51 and CL52. The second course in this series "Beaver Survey Methods and Management" must also be completed as evidence to register for the Natural England's Beaver Management Class Licences CL51 and CL52.

We recommend completing this course before completing “Beaver Survey Methods and Management”.

The third course in this series is “Beavers and Development: Survey, impact assessment and mitigation”. This is a 3 hour online course. We recommended completing this course (“Beaver Ecology and Field Sign Identification”) and “Beaver Survey Methods and Management” before attending the third course.

Course Title: Beaver Survey Methods and Management

Trainer: The Beaver Trust

Price Band: A

Format/Location: Devon, Scotland, Kent, Wales, Northumberland

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Intermediate

Usually runs: Summer/Autumn

Duration: 6 hours

Description:

This one-day course aims to build on previously gained knowledge of beavers in Scotland, England and Wales. By the end of the course you will be able to find, identify and assess their field signs and impacts through a range of monitoring methods. In addition, you will feel confident with current beaver management techniques and associated licensing.

This course will cover the below content:

- Protected status of beavers (England/ Scotland) [what legislation applies, what constitutes an offence, compliance]
- Range of monitoring techniques, when to use and data collection
- Focus on field signs and their interpretation
- Field sign survey data collection platforms
- Assessing beaver impacts, subjective and real impacts
- Impact scenarios across varying land-use / sectors
- The beaver management hierarchy
- When you need a beaver licence, how to register and licensable activities
- Beaver mitigation not requiring a licence
- Beaver mitigation that requires a licence
- Emergency animal movement and cadaver transportation
- Monitoring and reporting
- Managing for beaver presence

Please note that this course is for those working in this sector / professional ecologists and they must have completed the Beaver Ecology and Field Sign Identification course (or one of the Natural England CL50 or CL51 courses) first

The course will consist of a morning and afternoon classroom session with a lunch break. Both sessions will be based around PowerPoint presentations with interactive quizzes, Q&A sessions, and group workshops.

Please note that this course is one in a series of three courses led by Beaver Trust and accredited by Natural England. Evidence of completing this course can be used to register for the Natural England's Beaver Management Class Licences CL51 and CL52. The first course in this series "Beaver Ecology and Field Signs" and may also be completed as evidence to register for the Natural England's Beaver Management Class Licences CL51 and CL52.

The third course in this series is "Beavers and Development: Survey, impact assessment and mitigation". This is a 3 hour online course. We recommended completing this course ("Beaver Survey Methods and Management") and "Beaver Ecology and Field Sign Identification" before attending the third course.

Course Title: Beavers and Development: Survey, impact assessment and mitigation

Trainer: The Beaver Trust

Price Band: A

Format/Location: Online

Key Competency: M2 Designing and preparing environmental management, mitigation, restoration and enhancement plans

Level: Intermediate

Usually runs: June, September, November

Duration: 3 hours

Description:

The aim of this course is to equip those making or advising on planning applications and/or development work in areas where beavers might be present.

The course will cover the below:

- Protected status of beavers (England/ Scotland) [what legislation applies, what constitutes an offence, compliance]
- If/when a survey might be needed and who should undertake it
- Survey method and reporting
- Assessing the effect of development on beavers
- Avoidance, mitigation and compensation measures (including planners guide for protected species and development)
- Complying with the biodiversity duty
- When to apply for a development mitigation licence
- Site management and developing a monitoring plan

The course will consist of one online session broken into multiple sections with a comfort break in the middle. The sessions will be based around PowerPoint presentations with interactive quizzes, Q&A sessions, and group workshops.

Please note that this course is the final course in a series of three courses led by Beaver Trust and accredited by Natural England.

We recommend completing “Beaver Ecology and Field Sign Identification” and “Beaver Survey Methods and Management” before attending this course.

Course Title: Beginners QGIS for Ecologists and Conservation Practitioners

Trainer: Paul Losse

Price Band: B

Format/Location: Online

Key Competency: IM2 Information Technology

Level: Beginner

Usually runs: Jan - March & Oct - Dec

Duration: 12 hours

Description:

This course introduces you to the open source (free) QGIS software which is now an industry standard in the ecological, conservation, and consultancy sectors. This course is suitable for complete beginners to GIS. The course is designed to enable you to become a competent QGIS operator with a practical focus on producing survey maps and analysing data derived from your surveys.

We will cover basics including the QGIS interface, sourcing existing data, and creating background maps using this data. You will then be able to create new species records and habitat maps, classify data, undertake basic analysis, and prepare maps for inclusion in reports.

Course Title: Beginners QGIS for Ecologists and Conservation Practitioners (Ireland)

Trainer: George Smith

Price Band: B

Format/Location: Ireland

Key Competency: IM2 Information Technology

Level: Beginner

Usually runs: February or November

Duration: 12 hours

Description:

This course introduces you to the open source (free) QGIS software which is now an industry standard in the ecological, conservation, and consultancy sectors. This course is suitable for complete beginners to GIS. The course is designed to enable you to become a competent QGIS user with a practical focus on producing survey maps and analysing data derived from your surveys.

We will cover basics including GIS concepts, the QGIS interface, and how to display and explore ecological data in order to effectively interpret it. We will also learn how to source existing environmental data, create new species records and habitat maps, undertake basic analysis, and prepare maps for inclusion in reports.

Participants should allow time in advance of the course to install the QGIS software and supporting files (links to these will be provided prior to the training).

Course Title: Botany for Beginners

Trainer: Neill Talbot

Price Band: A

Format/Location: In person, Southwest England

Key Competency: S2 Species identification, handling and population size

Level: Beginner

Usually runs: May/June

Duration: 6 hours

Description:

This field-based training course will help delegates understand the key differences between common plant families and recognise the key ID features of plants in the field. The training will also highlight some of the key indicator plant species for grassland habitats and factors which influence where plant species are found.

The training sessions are planned to help delegates build the underpinning skills and knowledge required for botanical surveys including UKHab/BNG/Phase 1 Habitat surveys and will help participants to assess whether a site is species-rich botanically.

The course takes place at Folly Farm Nature Reserve, which is owned and managed by Avon Wildlife Trust. Folly Farm is a fine example of a traditional farm with wildflower meadows and ancient woodland. This 250-acre nature reserve offers spectacular views over Chew Valley Lake and the Mendips.

Delegates will be able to explore plant species across a range of grassland and woodland habitats within the reserve. The meadows are unspoilt by pesticides and fertilisers, and are full of indicator plants such as betony, ox-eye daisy, and heath spotted orchid. The woodland ground flora is extremely rich with spring flowers such as native English bluebell, yellow

pimpernel, and early purple orchid. The wildflower meadows and Dowlings Wood are Sites of Special Scientific Interest (SSSI).

The course is pitched at beginner level and is suitable for those who have some prior knowledge/understanding of plants, though background information on plant structure and common plant families will be sent to all delegates in advance of the course. The training includes group activities, discussion, informal Q&A sessions, and a chance to test knowledge gained in a review of plant families and ID factors at the end of the day.

Course Title: Breeding Bird Surveys and Checks

Trainer: Stefan Bodnar

Price Band: A

Format/Location: In person, West Midlands

Key Competency: S1 Habitat / species survey design, planning and fieldwork

Level: Beginner – Intermediate

Usually runs: Spring

Duration: 6 hours

Description:

The course aims to provide a baseline for breeding bird surveys and checks on sites. It will cover the relevant legislation and its interpretation and definitions; how this translates into practice, site inspections, and approaches; a review of species and habitats that are commonly encountered; understanding of breeding cycles and seasonal timing; what constitutes disturbance and Schedule 1 Species. Exemptions, Licensing, Enforcement, Reporting, Non-licenced method statements.

Course Title: Broadleaf Tree ID for Ecologists and Arboriculturists

Trainer: Mark Duffell

Price Band: A

Format/Location: In person, West Midlands

Key Competency: S2 Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: September

Duration: 6 hours

Description:

Early autumn is an excellent time to observe broad-leaved trees when their fruits and autumnal tints become prominent features of the landscape.

Broadleaved trees and shrubs are a major feature of the UK landscape, from upland Birch woodland to the Oak and Ash woodland in the lowlands.

However, our native and non-native trees are coming under direct threat from a number of challenges: climate change, pollution, development of ancient woodland sites, and a number of diseases and pests. Government agencies, forestry companies, conservation charities, and other organisations are undertaking widespread planting schemes to counteract this. The challenge ahead is ensuring that this is carried out sustainably, utilising appropriate species and sites – a sound understanding of broad-leaved trees and their identification will be key to this.

Likewise, classification of our native and plantation woodlands using the NVC, UK Hab and Phase 1 survey techniques all require accurate identification of the trees present.

Many broad-leaved species appear similar, and even some seemingly simple groups can be complex to unravel and differentiate (e.g. the two native Oak *Quercus*). Much of the course will be spent looking at specimens and getting to grips with the key terminology that refers to the shape of leaves and the structure and classification of fruits. You will also practice working with different identification keys in the presence of an expert tutor.

This course will develop and support your abilities in recognising the major genera of broadleaved trees and shrubs, and to be able to separate many species.

Identification will focus on foliage and flowers/fruits for the different groups (characters suited to both mature and juvenile material). Key identification features for genera and species will be taught, using a range of handouts, keys, and visual presentations.

By the end of the course, you should be able to identify in the field and laboratory a range of the major genera of broadleaved trees and have had practice looking for appropriate characters to confirm the species.

FISC level 1 and above.

Course Title: Conifer Identification for Ecologists

Trainer: Mark Duffell

Price Band: A

Format/Location: In person, West Midlands

Key Competency: S2 Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: October

Duration: 6 hours

Description:

Put off by Conifers? Want to go beyond 'Conifer species'? Even the more experienced Ecologists tend to shy away from tackling what initially looks like a challenging group. This course will develop and support your abilities in recognising the major genera of conifers and start to separate the many species.

Identification will focus on foliage and cones for the different groups within conifers (characters suited to both mature and juvenile material). Key identification features for genera and species will be taught, using a range of handouts, keys, and visual presentations.

By the end of the course, you should be able to identify in the field and laboratory a range of the major genera of conifers and have had practice looking for appropriate characters to confirm the species. Recent taxonomic changes and how these have affected the current naming of Conifers will also be discussed.

FISC level 2 and above.

Course Title: Delivering Environmental Net Gain

Trainer: Martina Girvan

Price Band: A

Format/Location: Online

Key Competency: A1 Strategic Environmental Assessment

Level: Beginner – Intermediate

Usually runs: October/November

Duration: 6 hours

Description:

The course would start with a foundation in the natural capital and ecosystem service approach to delivering ENG. It would set out the legislative, policy and strategic context in a UK and Ireland and global setting. It would highlight the tools available to apply the approach and help delegates navigate the many forums, strategies, frameworks, standards, and tools that currently exist. Examples of interventions and their ability to deliver ENG would be provided, and the necessary KPIs for measurement.

There will be an online interspersed with opportunities for group working to apply what has been learned re the identification of appropriate ecosystem services and worked examples around the quantification and monetization of benefits. This would include examples of the necessary business cases required to confirm feasibility of interventions, including both capital and operational works.

This would also be followed by case studies showing how this has been applied in a project and/or plan context. This would end with a Q and A. Materials will be provided, such as existing tools, spreadsheets, recommended guidance etc. It would be a mixture of lecture, group activities, and discussion. The aim of this training is to support the audience in integrating ENG

into their plans and projects in a meaningful way that can be measured to demonstrate benefit delivery.

Course Title: Design considerations for BNG river and stream enhancement

Trainer: Jennifer Collins, Eleanore Miles & Lucy Shuker

Price Band: A

Format/Location: Online

Key Competency: M2 - Designing and preparing environmental management, mitigation, restoration and enhancement plans

Level: Beginner - Intermediate

Usually runs: Multiple times throughout the year

Duration: 6 hours

Description:

This course will help navigate some of the factors to consider when designing river enhancements.

There are lots of factors to consider when designing river enhancements, and this will be unfamiliar to many who are new to this area. Discovering new requirements for progressing from concept to outline and detailed design stages can feel overwhelming!

This course aims to provide foundation learning and helpful tips on how to navigate river enhancement design processes with clear guidance on the key things to consider, giving participants the confidence to understand, communicate, and contribute towards the design and implementation of river enhancements and post-project appraisals.

Over 2 x 3hr virtual sessions, this course will cover the following:

- What additional specialist skills you may need to consider, and who will be liable for the success of proposed designs?
- Rivers and streams are dynamic habitats which are formed and maintained by natural processes over time. This course will cover what additional information and/or

professional support you may need to consider and draw upon to support different stages of the design process. This will help you understand and work towards a sustainable design solution.

- How long do river enhancements take to design and deliver?
- The design and delivery process of river enhancements may vary depending on the location, river type, and nature of the proposed enhancements and their feasibility. The timescales to get from baseline assessment and forecasting to delivery can also vary considerably. This course will highlight the different stages and requirements for developing a river enhancement project programme from outline to detailed design and delivery.
- Which stakeholders you may need to consult and what permissions / assessments you might need
- Rivers and stream enhancements can deliver many biodiversity benefits and also provide a number of ecosystem services (e.g. water supply, fisheries, recreation) but rivers and changing climatic conditions can also present hazards in terms of drought (exacerbating poor water quality) and flood risk. There can be many different stakeholders involved who may have their own design, assessment, and permitting requirements. This course will help you identify and build collaborative approaches with relevant stakeholders; and introduce the likely considerations, assessments, permissions and permits required to deliver river enhancements and sustainable ecological outcomes.
- How do you ensure the delivery of river enhancements in dynamic systems, over a 30-year period?
- Over the design life or conservation covenant time scale, river enhancements may be impacted by a range of factors that could influence their performance e.g. invasive species, climate change, flooding, drought, land use. This course will introduce you to techniques and guidance to support you in developing a bespoke monitoring and adaptive management plan (above statutory HMMP requirements) to help you maximise the performance and long-term sustainability of your design.

Course Title: Developing Skills in Ecological Impact Assessment (EcIA) (England & Wales)

Trainer: Mike Dean CEcol CEnv FCIEEM

Price Band: F

Format/Location: In-person, West Midlands

Key Competency: A4 – Ecological assessment including PEA and EcIA

Level: Intermediate

Usually runs: Multiple times throughout the year

Duration: 12 hours

Description:

This training course is aimed at those practitioners who have existing experience of undertaking EcIAs and wish to develop those skills further. The course will follow the approach to EcIA set out in CIEEM's guidelines and will focus on the terrestrial (rather than the marine) environment.

The focus will be on delivering teaching through a combination of PowerPoint presentations and breakout session workshops, with attendees working through a variety of relatively straightforward case study examples (all relating to terrestrial ecology).

This course will cover all aspects of EcIA, including the basic concepts of scoping and baseline. Attendees will therefore be expected to have some knowledge of the legislation and policy drivers behind EcIA, and practical experience of undertaking ecological surveys.

This course includes a brief session on how to present the outcomes of EcIAs in a report.

Attendees may be asked to do a small amount of reading (1-2 hours) in their own time.

This course will make reference to the policy and legislation that is relevant in England and Wales and will be based on case studies from England. Anyone who undertakes the majority of their work outside of England and Wales may also attend, but we ask that they check with CIEEM before booking.

Course Title: Developing Skills in Ecological Impact Assessment (EcIA) Ireland

Trainer: Andrew Speer

Price Band: B

Format/Location: In-person, Ireland

Key Competency: A4 – Ecological assessment including PEA and EcIA

Level: Beginner - Intermediate

Usually runs: Spring/summer

Duration: 12 hours

Description:

A two-day practical course aimed at those practitioners who have existing experience of undertaking EcIAs and wish to develop those skills further. Sessions have been tailored to explore legislation and case studies relevant to practitioners working in Ireland, but the principles are applicable in both ROI and any UK nation. The course will follow the approach to EcIA set out in CIEEM's guidelines and will focus on the terrestrial (rather than the marine) environment.

This course will cover all aspects of EcIA, including the basic concepts of scoping and baseline. Attendees will therefore be expected to have some knowledge of the legislation and policy drivers behind EcIA, and practical experience of undertaking ecological surveys.

This course includes a brief session on how to present the outcomes of EcIAs in a report (this is covered in more detail in the CIEEM Report Writing course).

The focus will be on delivering teaching through a combination of PowerPoint presentations and workshops, with attendees working through a variety of case study examples (all relating to terrestrial ecology).

Course Title: Ecological Report Writing

Trainer: Mike Dean CEcol CEnv FCIEEM

Price Band: C

Format/Location: Online

Key Competency: A4 – Ecological assessment including PEA and EcIA

Level: Beginner

Usually runs: Multiple times throughout the year

Duration: 6 hours

Description:

This training course will cover how to produce good quality ecological reports, for species and habitat surveys and Preliminary Ecological Appraisals (PEAs), following CIEEM's 'Guidelines for Ecological Report Writing' (part of the Technical Guidance Series).

The course will include workshops, group discussions, case studies and PowerPoint presentations, focusing on the following topics:

- Why high-quality ecological reports are important and the consequences of poor-quality reports
- Challenges faced in producing ecological reports
- Different types of ecological report, their purposes and target audiences

- Generic guidance on report structure and content
- Proportionality and 'fit for purpose'
- Avoiding common pitfalls
- Tips on writing good reports

Attendees will be asked to review some example reports in their own time, and prior to the 2nd session (these will be sent out in advance of the course commencing).

Course Title: Ecological Risk Management in Construction

Trainer: Michael Oxford FCIEEM

Price Band: A

Format/Location: Online

Key Competency: M6 – Risk management and control during project and/or scheme implementation

Level: Beginner - Intermediate

Usually runs: Spring & Autumn

Duration: 6 hours

Description:

This course aims to provide delegates with the skills to be able to anticipate and manage risks that may arise during construction and ecological contracting.

The course will cover:

Who and what may be at 'ecological risk' on a construction or ecological contracting project?

The types and origins of both document-based and site-based ecological risk that may be encountered in the ECoW role and why it is important to make a careful distinction between them.

An examination of why and where document-based ecological risk may occur, why it should not be ignored, nor its implications or significance underestimated.

The principles of both the traditional approach to risk management as well as a more dynamic and responsive approach based on increased scrutiny and ongoing review – with an emphasis on achieving biodiversity outcomes.

How to address documentary and design defects and omissions, as well as project changes that may arise during the work.

How various necessary changes in ecological works on site can and should be achieved and who may be involved in their formulation and approval.

For an ECow to perform effectively, they should work collaboratively with other professionals on site, while being continually aware of when they may need to advise on necessary remedial or corrective measures where required.

Course Title: Environmental Management on Construction Sites

Trainer: Adrian Davis MCIEEM

Price Band: B

Format/Location: In-person, Scotland

Key Competency: M1 – Providing specialist advice on ecological Management and/or environmental schemes

Level: Beginner - Intermediate

Usually runs: Autumn

Duration: 12

Description:

Environmental Management on Construction Sites EMCS should not be confused with Ecological Clerk of Works ECOW role in construction projects. If an ECOW is not contracted, this may fall into the EMCS role as well. Although the remit can sometimes have some degree of cross-over and divergence with ECOW it is important to define roles at an early stage. The scale

of the project should indicate the obligations and resources required and in the absence of an ECOW, then EMCS as a wider remit can undertake:

- Compliance with Environmental Assessment and planning conditions
- Effective communication with Project management, supervisor and foreman or lead engineer
- Identification of key environmental constraints and opportunities and advice on Construction Environmental Management Plan CEMP
- Pre-construction checks for sensitive habitats and protected species
- Micro-siting infrastructure features and monitoring pollution
- Dewatering and runoff control
- Detail of specific tasks and remit with timescales often described in CMSs and related documentation including compliance for all EM regulations
- Species Protection Plans
- Prepare EPS licences
- Produce exclusion zones and contingency plans
- Mitigation and restoration (often following Habitat Management or Restoration Plans)

EMCS work may require a team. Input from specialists, such as hydrologists, ecologists, chemists, and fisheries biologists may be required. On larger projects it is likely there may be an ECOW and EMCS contracted and therefore liaison is essential.

Course Title: Fern Identification for botanists and ecologists

Trainer: Mark Duffell

Price Band: A

Format/Location: In-person, West Midlands

Key Competency: S2 – Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Summer/autumn

Duration: 6 hours

Description:

Ferns and their allies (Pteridophytes) have a reputation for being challenging to identify, and they can prove daunting to the beginner and improver ecologist or botanist. Part of this is due to a lack of understanding of the different botanical and reproductive structures of more typical wildflowers.

This course provides the beginner and improve the skills required to identify a wide variety of species, recognise a number of species to genus, and become familiar with the key identification features.

Many Ferns can be used to help determine the underlying geology and/or habitat, so can offer the ecologist another tool in their surveying skillset.

Several species are listed as either Schedule 8 or 9, so if they are found during a survey, accurate identification is essential to enable appropriate assessment and management to take place.

The day will start with an introduction to Fern structures and terminology, followed by how to identify the commoner fern species. Later on, we will look at techniques for determining the more unusual species. Use will be made of the excellent FSC 'Fern Guide', as well as discussion of other resources and by the end of the day participants should feel confident in the use of this key.

Course Title: Good Practice for Biodiversity Net Gain: training for Local Planning Authority Ecologists

Trainer: Julia Baker CEnv MCIEEM

Price Band: A

Format/Location: Online

Key Competency: P3 – Advising on the requirements of legislation, policy and guidance or international standards

Level: Intermediate

Usually runs: Multiple times throughout the year

Duration: 9 hours

Description:

This course provides LPA ecologists with the necessary tools to determine an appropriate level of BNG information to require prior to determination of a planning application, what best

practice looks like when determining applications and discharging conditions, and how the LPA can ensure BNG gets the best outcomes for nature both in relation to on-site and off-site gains, noting the wider environmental and nature policy landscape.

This course is primarily for Ecologists within Local Planning Authorities who are involved with the implementation of mandatory Biodiversity Net Gain (BNG).

This course starts with the BNG Good Practice Principles and how the Principles can be applied in practice. The various roles of LPAs with regards to mandatory BNG are then explored, and how BNG can be central to Place Making especially given synergies between BNG and other local policy priorities.

The course then sets out good practice for mandatory BNG throughout the planning system, from pre-app advice to the submission of a planning application, the discharge of BNG conditions and monitoring the implementation of BNG on-site and via habitat banks. This session includes reviewing BNG documents submitted for planning applications, as well as time for discussion and Q&A.

This course does not cover details of legal requirements under mandatory BNG, or detailed technical training on BNG such as biodiversity metric calculations or designing BNG (please see other BNG training courses by CIEEM). This course does focus on good practice for mandatory BNG, specifically for Ecologists within Local Planning Authorities.

Course Title: Grass Identification for Ecologists

Trainer: Mark Duffell

Price Band: A

Format/Location: In-person, West Midlands

Key Competency: S2 – Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Spring/summer

Duration: 6 hours

Description:

Grasses (along with Sedges and Rushes) form the foundation for many of the UK's plant communities. They are extremely useful botanically as they can tell you much about a site's

ecology, both past, present and in the future. Being able to reliably identify which species you have found can aid your identification and classification of plant communities (Phase 1, UK Hab and NVC) as well as aid in conservation decisions for a site.

Unfortunately, grasses do not have large obvious 'flowery' bits, so many people are put off attempting to identify them. By observing those characters which help identify each species we will be able to understand why a species is what it is; in time we will also learn short-cuts as to how to recognise individual species. The course will cover what a grass is, structures, identification techniques, use of keys and what habitats the individual species occur in. Use of microscopes in the classroom will back up those characters that we have looked at in the field using hand lenses. Given the short duration of the course, we will concentrate on the commoner and also more important members of this family and focus mainly on floral rather than vegetative characters.

FISC levels 2 and above.

Course Title: Grasses, Sedges and Rushes Identification

Trainer: Neil Talbot ACIEEM

Price Band: A

Format/Location: In-person, Southwest England

Key Competency: S2 – Species identification, handling and population size

Level: Beginner

Usually runs: Summer

Duration: 6 hours

Description:

The course will focus on identifying native grass, sedge, and rush species using key features such as flowers, leaves, ligules, structure, and habitat. It will also outline indicator species of ancient woodlands. (specimens of 3 or 4 wall ferns that may not be present in the woodland site will be provided).

The course is pitched at beginners who have some prior knowledge and understanding of plants including grasses/sedges/rushes

Delivery –

- handouts - to be read by participants prior to the day*
- participants will be shown key ID features on grasses/sedges/rushes in the field - focusing on around 20 common grass/sedge/rush species.
- group involvement which will include groups of 3-4 identifying a grass/sedge/rush and then discussing amongst the group what the key ID features of this plant are – this will include using an identification key.
- informal question/answer session at lunchtime.
- brief test on grasses/sedges/rushes and ID factors at the end of the day

*handouts will be sent 5-7 days before, including grasses/sedges/rushes identification; info on factors as to distribution/habitats of different grass/sedge/rush species; taxonomy; indicator grass/sedge/rush species of ancient woodland; grass/sedge/rush biology/structure; references (useful books, websites etc).

Useful for Phase 1 Habitat surveys and other botanical surveys, and also as an overview to different habitat types and will help participants to assess whether a site is species-rich botanically (using indicator plants).

Course Title: Ground Water Dependent Terrestrial Ecosystems

Trainer: Adrian Davis MCIEEM

Price Band: B

Format/Location: In-person, Scotland

Key Competency: S1 – Habitat/species survey design, planning and fieldwork

Level: Intermediate

Usually runs: Spring

Duration: 12 hours

Description:

GWDTE are a range of habitats influenced by ground water. GWDTE are wetlands which critically depend on groundwater flows and/or chemistries. As part of the assessment of groundwater

status, we are required to assess if a GWDTE has been significantly damaged and if the pressure causing this damage has been transmitted via a groundwater body.

This course aims to look at the ecological requirements – habitats and species' relationship to groundwater hydrology, chemistry and geology, and will examine the factors to be studied to understand the complexity of these systems. This will include GWDTE functions.

Course Title: Habitat Survey and Mapping

Trainer: Paul Losse MCIEEM

Price Band: B

Format/Location: In-person, West Midlands

Key Competency: S1 – Habitat/species survey design, planning and fieldwork

Level: Beginner

Usually runs: Spring/summer

Duration: 12 hours

Description:

The course is an introduction to habitat survey and the main principles involved and assumes no prior knowledge of surveying.

The course is aimed at those who have not carried out surveys such as Phase One or the new UK Habitat Classification survey. A basic level of plant identification skill is assumed because you cannot expect to carry out a survey of habitats (i.e. vegetation) without this skill, but informal help with plant identification is given throughout.

The first morning will include an overview of the main survey methods with a focus on the Phase One habitat survey, and how to prepare for a survey. There will be a short outdoor session in the afternoon. We will then look at mapping protocols

On day 2 we will carry out a field exercise identifying and mapping habitats in the field. We will then look at the new UK Habitat Classification survey in the afternoon.

The course is about the method and not how to identify plants. Hopefully a few people will know a few species. However, we will be covering a few indicator plants.

The course is delivered through a mix of presentation, question and answer sessions, exercises, and field work

Course Title: Habitats Regulations Appraisal (HRA) of Plans and Projects (Scotland)

Trainer: Sue Bell CEcol CEnv FCIEEM

Price Band: E

Format/Location: In-person, Scotland

Key Competency: A2 – Habitat Regulations Assessment (HRA) / Natura Impact Statements (NIS)

Level: Beginner - Intermediate

Usually runs: Spring/winter

Duration: 6 hours

Description:

This beginner - intermediate level training will provide a thorough understanding of the overall purpose, process, and methodology of Habitats Regulations Appraisal, including Appropriate Assessment and the roles of different organisations and individuals in the process.

The course is designed specifically for anyone working in Scotland, but will also have relevance to those working in other parts of the UK. Whilst designed primarily for those new to or with limited experience of Habitats Regulations Appraisal, experienced practitioners may also benefit from a refresher of their understanding of key terms and concepts.

The course will provide a thorough understanding of the overall purpose, process, and methodology of Habitats Regulations Appraisal, including Appropriate Assessment and the roles of different organisations and individuals in the process. It will cover the application of HRA to both projects and plans (e.g. Local Development Plans) and is suitable for those charged with conducting HRA or providing information to enable a HRA to be carried out as well as those who may need to review an HRA prepared by others.

The training will follow the approach set out in NatureScot's guidance on HRA. It will cover the legislative basis for HRA, and the stages in the assessment process. It will introduce participants to key terms and concepts and provide guidance on the different stages in the process, including how to decide whether an HRA is required, how to identify European sites that might be affected, and how to identify those aspects of a project or plan that require appropriate assessment. It will also include professional tips and hints on compliance and best practice.

The course will be taught via group discussions, exercises and presentations and will draw on published guidance and case law. Usually, a member of NatureScot staff also attends the course and provides guidance on NatureScot's role and how the information they hold can be used within the HRA process.

Course Title: Hazel Dormouse: Handling and Survey Methods

Trainer: Hazel Ryan MCIEEM

Price Band: A

Format/Location: In-person, Southeast England

Key Competency: S2 – Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Summer

Duration: 6 hours

Description:

This one-day course provides a basic introduction to dormouse ecology, with more detailed information on survey and handling techniques. The training includes practical sessions on dormouse handling and nibbled nut identification.

A practical handling session will enable participants to check nest boxes in Wildwood's captive enclosures and to handle, sex, and weigh adult dormice. There may also be the opportunity to observe or handle baby or juvenile dormice depending on the time of year and breeding success.

Course Title: Heathland plants identification: for botanical surveying and habitat classification

Trainer: Mark Duffell

Price Band: A

Format/Location: In-person, West Midlands

Key Competency: S2 – Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Summer

Duration: 6 hours

Description:

Heathlands occur across the British Isles, from sea level to mountainous regions. They vary due to their hydrology and geology, from wet to dry heaths, mires and bogs, and being able to classify them properly relies on accurate identifications of the species they contain.

Being able to quickly recognise key species e.g. some members of the Heather family, will enable you to assess the wetness of the site and designate it as dry/wet heath.

We will concentrate on the key species indicators for Phase 1, UK Hab and NVC classifications for wet and dry heaths as well as some of the members of the bog/mire communities.

Starting with members of the Heather family (including Heathers, Cranberry, Cowberry, and Bilberry), we will learn how to identify them correctly and distinguish them from each other.

Time will be spent squelching through a wet flush (so bring wellies or stout boots), looking at the gems that are Bog Asphodel, Marsh Violet, Marsh Speedwell, and Sundews. We will also look at sedges, Cottongrass, and true grasses, all plants that make up part of the heathland. Hopefully a peculiar member of the fern family will also make a showing on the day.

This is a day course aimed at the keen beginner and improver alike, providing an introduction to heathland plant identification.

Course Title: Identification of Grasses, Sedges and Rushes

Trainer: Ben Averis

Price Band: A

Format/Location: In-person, Scotland

Key Competency: S2 – Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Summer

Duration: 6 hours

Description:

This one-day beginner to intermediate level training course delivered by Ben Averis will equip delegates with the skills to identify common grasses, sedges and rushes.

The course will take place in the field. Beginning with a brief introduction when the trainer will ask about people's interests and knowledge of the subject. The training will focus on identifying native grass, sedge, rush and woodrush species (probably about 30 in total) using features such as leaves, ligules, flowers, and general structure. The trainer will explain differences between grasses, sedges, rushes, and woodrushes in terms of their biology and structure. They will indicate species that are good indicators of different soil/habitat types and habitat condition states. Useful reference sources will also be discussed.

Course Title: Identifying Bryophytes (Mosses and Liverworts)

Trainer: Laurie Wildwood MCIEEM

Price Band: A

Format/Location: In-person, Yorkshire and Humber

Key Competency: S2 – Species identification, handling and population size

Level: Beginner

Usually runs: Autumn

Duration: 6 hours

Description:

Learn to identify mosses and liverworts using the British Bryological Society's Field Guide in a relaxed environment.

Identifying bryophytes is an essential skill for many habitat surveyors, including those conducting:

- UKHab surveys of woodland, heaths and mires.
- Habitat condition assessment.
- National Vegetation Classification (NVC) surveys.

The British Bryological Society's Field Guide is a fantastic resource, but it can feel a little daunting to begin with.

The morning will be spent in the comfort of the classroom, keying a wide selection of samples with the support of your expert tutor. After lunch, you will explore a local site and see a range of bryophytes in the field. Anatomy, terminology and the key itself will become second nature by the end of the day.

Course Title: Identifying Grasses using Poland and Clement's Vegetative Key

Trainer: Laurie Wildwood MCIEEM

Price Band: A

Format/Location: In-person, Northeast England

Key Competency: S2 – Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: Autumn

Duration: 6 hours

Description:

Learn to identify non-flowering grasses using Poland and Clement's Vegetative Key in a relaxed environment.

When surveying out of season or in grazed/mown habitats, being able to confidently identify grasses is an essential skill.

Poland and Clement's Vegetative Key is a fantastic resource that is, in our experience, more likely to give you a correct identification than any other publication. It can however be daunting to use. Becoming proficient will enable year-round habitat surveying or simply allow you to get your botanical fix during the winter months!

There will be a short PowerPoint presentation of handy tips, but the vast majority of the day will be spent practicing the key with the support of your expert tutor. Samples not found at the training venue (such as those of wetland and acidic habitats) will be brought in, and excursions will be taken on foot to explore local habitats including modified, neutral and calcareous grassland and a range of woodland types.

Teaching will be informal, with participants encouraged to practice the key independently. Time will also be spent both keying as a group, discussing identification features in the field, and revising commonly encountered species. Anatomy, terminology and the key itself will become second nature by the end of the day.

Course Title: Indicator Plants of Woodland, Heathland/Acid Grassland and Wetlands

Trainer: Neil Talbot ACIEEM

Price Band: A

Format/Location: In-person, Southwest England

Key Competency: S2 – Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Spring

Duration: 6 hours

Description:

This one-day course focuses on recognising woodland, acid grassland/heathland and some wetland habitats that are valuable for wildlife by identifying species that are indicators of those habitats.

This classroom and field-based training course will help delegates understand the importance of identifying key indicator plant species for the habitats listed above, including an outline of factors which influence where plant species are found.

The training sessions are planned to help delegates build the underpinning skills and knowledge required for botanical surveys including UKHab/BNG/Phase 1 Habitat surveys and will help participants to assess whether a site is species-rich botanically.

The course takes place at Folly Farm Nature Reserve, which is owned and managed by Avon Wildlife Trust. Folly Farm is a fine example of a traditional farm with wildflower meadows, wetland, and ancient woodland. This 250-acre nature reserve offers spectacular views over Chew Valley Lake and the Mendips.

Delegates will be able to explore plant species across grassland, wetland and woodland habitats within the reserve. The meadows are unspoilt by pesticides and fertilisers, and are full of indicator plants such as betony, ox-eye daisy and heath spotted orchid. The woodland ground flora is extremely rich with spring flowers such as native English bluebell, yellow pimpernel and early purple orchid. The wildflower meadows and Dowlings Wood are Sites of Special Scientific Interest (SSSI). Heathland habitats will be covered in the classroom part of the course.

Course Title: Indicator Plants of Woodland, Wetland, Heath and Acid Grassland

Trainer: Ben Averis

Price Band: A

Format/Location: In-person, Scotland

Key Competency: S3 – Habitat identification, classification and assessment

Level: Beginner - Intermediate

Usually runs: Summer

Duration: 6 hours

Description:

This one-day beginner to intermediate level training course delivered by Ben Averis will equip delegates with the skills to be able to recognise which plant species are good indicators of various types of woodland, wetland, heath and acid grassland.

The course will take place in the field, looking at different kinds of woodland, wetland, heath and grassland, noting important plant indicator species and discussing their identification and what they tell us about the habitat's ecology, management, etc. Any questions will be welcome throughout the day.

Ben Averis has 41 years of experience of professional botanical survey and monitoring work in a wide range of habitats in Britain for a wide range of clients including government agencies, conservation charities and ecological consultancies.

Course Title: Indicator Plants, Relationships and Habitats - beginners

Trainer: Lorna Bointon

Price Band: A

Format/Location: Online

Key Competency: S2 – Species identification, handling and population size

Level: Beginner

Usually runs: Spring/autumn

Duration: 6 hours

Description:

This one-day course, delivered as two online sessions across two days, will cover recognition of plant species as indicators of underlying environmental conditions, such as wet or dry indicators or indicators of enriched soils. It will also explore the many complex relationships that exist between plants, soil bacteria, and fungi. As part of this, we will also look at the laws and legislation surrounding protected and/or invasive non-native plant species and how biosecurity measures are vital to prevent the spread of pathogens and plant fragments between sites. This is relevant to land managers, ecologists, conservation professionals or volunteers, or to anyone who wants to gain a better understanding of indicator plants, environmental conditions, habitats and relationships.

Course Title: Intermediate QGIS for Ecologists and Environmental Practitioners (Ireland)

Trainer: Dr George Smith CEcol MCIEEM

Price Band: B

Format/Location: In-person, Ireland

Key Competency: IM2 – Information technology

Level: Intermediate

Usually runs: Autumn/winter

Duration: 12 hours

Description:

This course is aimed at those who have some experience with QGIS and wish to improve their skills. The course focuses especially on creating good quality spatial datasets and interrogating ecological GIS data.

The course will focus on techniques for quickly and efficiently digitising complex maps and how to correct digitising errors using a range of QGIS tools. Users will learn how to import data from a variety of sources, how to georeference background maps for use in QGIS and how to access online GIS data. We will also cover how to use QGIS as a tool for data analysis including querying data to create subsets of features from layers and analysing spatial relationships between features.

The event will combine demonstrations with exercises to consolidate learning after every session. There will be some pre-event work to help to ensure all delegates have a similar level of QGIS knowledge prior to attendance.

Participants should bring their own laptop with QGIS and relevant plug ins installed. Further details will be provided prior to the training.

Course Title: Introduction to Construction

Trainer: Michael Oxford FCIEEM

Price Band: A

Format/Location: Online

Key Competency: PRM1 – Managing, funding and evaluating projects

Level: Beginner - Intermediate

Usually runs: Autumn & Spring

Duration: 6 hours

Description:

This course aims to provide an overview of how construction activities are planned, organised, and undertaken and the various resources, equipment, and materials involved.

This one-day course has been created for those working as an Ecological Clerk of Works (ECoW) during construction and ecological contracting. A key requirement of an ECoW role is that they understand the wider construction context in which they carry out ecological works.

The course will cover:

- The common organisations, roles and personnel typically found on construction sites.
- The planning, organisation, and documentation found in common construction and related contracting operations.
- The common types and uses of material and equipment employed in construction.
- The typical working areas and types of contracting activities encountered on site during various phases of construction.

Course Title: Introduction to National Vegetation Classification

Trainer: Adrian Davis MCIEEM

Price Band: B

Format/Location: In Person, Scotland

Key Competency: S1 Habitat/species survey design, planning and fieldwork

Level: Beginner - Intermediate

Usually runs: April/May

Duration: 12 hours

Description:

Day 1 (Lectures/group discussion; part-field observation)

- Understanding Scottish habitats,
 - Background to NVC
 - Keys to identification of woodlands, mires, heaths and grasslands
 - Key methods for quadrats
 - Ecological requirements for habitats
 - Survey techniques and interpretation of quadrat data
 - Different vegetation types and key species
 - Topography, common species and habitats
 - Plant identification and species indicators for vegetation communities
- Field excursion (Plant indicators for community classification/identification)

Day 2 (Workshop and Field Day)

- Key methods for data collation, quadrats
- Field element: Key plants and vegetation communities.
- Lectures/group discussion; part-field observation (Understanding Scottish species and habitats):
 - Plant characteristics and relationship to vegetation communities
 - Quadrat methods and analysis of data, floristic tables
 - NVC identification keys and tables,
 - Key species and associations
 - Data tables and interpretation

Course Title: Introduction to Nature Conservation Legislation in the UK (England)

Trainer: Dr Alina Congreve & Professor Anthony Gallagher

Price Band: C

Format/Location: Online

Key Competency: P3 Advising on the requirements of legislation, policy and guidance or international standards

Level: Beginner

Usually runs: Spring and Autumn

Duration: 6 hours

Description:

The policy and legislative environment in England is constantly changing - keep up to date with this training course!

The Environment Act in 2021 is the most significant policy change in 25 years. It provided a framework, and to put the Act into practice we are now seeing many new guidance documents, changes to regulations, and further consultations. This course helps participants navigate a period of rapid change, providing a clear review of current law and policy, and signposts to the future direction. It enables participants to reflect on how these large-scale shifts in national policy translate to change on the ground. Conservation policy has multiple ambitions to halt species decline, deliver benefits for people, and compliment policy action on climate change. The course will review and debate how effective the current and proposed framework is in achieving multiple aims. Whilst taking a UK perspective, this particular course focuses specifically on England.

By the end of the course, participants will have developed a strong practical understanding of the system of nature conservation governance in England. They will be familiar with the key environmental designations at a local, national, and international scale. They will understand the overlapping roles of the key statutory agencies, including the new Office for Environmental Protection. Participants will also engage with the current and changing regulations for protected species, including District Level Licences.

Course Title: Introduction to Nature Conservation Legislation in the UK (Scotland)

Trainer: Dr Alina Congreve and Duncan Craig

Price Band: C

Format/Location: Online, Scotland

Key Competency: P3 Advising on the requirements of legislation, policy and guidance or international standards

Level: Beginner

Usually runs: Autumn/Winter

Duration: 6 hours

Description:

This is a dynamic period for UK conservation law and policy. To understand the changing landscape and the implications for our day-to-day work, this course provides an introductory level review of nature conservation legislation, looking at how the current framework translates to practical actions, and considering how effective it is in achieving its aims. Whilst taking a UK perspective, this particular course focuses specifically on Scotland and participants will develop a strong practical understanding of the system of nature conservation governance in Scotland, and how the new laws and policies impact our work on the ground.

The course will provide six hours of learning, designed around two online sessions that will draw on the knowledge held within each cohort through 'real-world' decision-making based on the use of specific case studies. The session will be participatory in nature and participants will work through a live case study which will help bring the legal and policy context to life by providing opportunities to explore how a wide range of conservation laws and policies work in practice including: terrestrial and marine SSSIs; protected species legislation; national park protection; new buffers for protected areas; and sites of local importance for nature conservation.

Course Title: Introduction to Nature Conservation Legislation in the UK (Wales)

Trainer: Dr Alina Congreve & Professor Anthony Gallagher

Price Band: C

Format/Location: Online, Wales

Key Competency: P3 Advising on the requirements of legislation, policy and guidance or international standards

Level: Beginner

Usually runs: Autumn/Winter

Duration: 6 hours

Description:

This is a dynamic period for UK conservation law and policy with a number of key developments currently underway which have significant implications for our day-to-day work. In order to understand the changing landscape, this course provides an introductory level review of nature conservation legislation, looking at how the current framework translates to practical actions, and considering how effective it is in achieving its aims. Whilst taking a UK perspective, this course focusses specifically on Wales.

Participants on the course will develop a strong practical understanding of the system of nature conservation governance in Wales, and how the new laws and policies impact our work on the ground.

The course will provide six hours of online learning that will endeavour to draw on the knowledge held within each cohort through 'real-world' decision-making based on the use of specific case studies. Supporting materials will be provided beforehand, and resources to take away afterwards. These include a glossary created specifically for attendees. The session will be participatory, and participants will work through a live case study which will help bring the 'dry' legal and policy context to life. The case study will provide opportunities to explore how a wide range of conservation laws and policies work in practice including: terrestrial and marine SSSIs; protected species legislation; national park protection; new buffers for protected areas; and sites of local importance for nature conservation.

Course Title: Introduction to the Biodiversity Metric Watercourse Module

Trainer: Dr Lucy Shuker

Price Band: A

Format/Location: Online

Key Competency: A6 Quantifying Biodiversity Gain

Level: Beginner – Intermediate

Usually runs: Multiple times a year

Duration: 6 hours

Description:

This course will provide an introduction to the Biodiversity Metric Watercourse Module and how to proceed with a Watercourse Module assessment, explaining:

- (i) its context as part of the wider Biodiversity Metric;
- (ii) the individual components that make up the Watercourse Module and how they contribute towards the calculation of Watercourse Units.
- (iii) what information is needed for each component to complete the Watercourse Module within the Biodiversity Metric spreadsheet, and where to access it.
- (iv) how to approach a Watercourse Module assessment for different types of watercourses and projects.

Course Title: Introduction to the UK Habitat Classification

Trainer: Bob Edmonds

Price Band: A

Format/Location: Online

Key Competency: S1 Habitat/Species Survey design, planning and fieldwork

Level: Beginner

Usually runs: Spring and Autumn

Duration: 6 hours

Description:

This course will enable delegates to plan for and conduct a habitat survey using the UK Habitat Classification.

We consider the range of uses of the UK Habitat Classification, from baseline survey to monitoring and its application in the Statutory Biodiversity Metric. We focus on habitat identification and survey methods, rather than plant identification, but mention the importance of recognising indicator species. The course covers survey planning, mapping techniques, and tips for identifying habitats.

Delegates will be introduced to the UK Habitat Classification Field Key and how to map polygon, linear and point features using the protocols developed for UKHab.

The course is suitable for early careers ecologists to advanced level/experienced practitioners wanting confidence to move across to UKHab from other systems. No habitat survey experience is strictly necessary, but an understanding of the purpose of habitat classification, the identification of habitats and standard survey methods; as well as some plant knowledge and identification skills; will be an advantage.

The UK Habitat Classification is seen as a replacement to the Phase One Habitat Survey method as the standard survey method used as part of Preliminary Ecological Appraisals, EclA and Biodiversity Gain. Many organisations are adopting UKHab for their habitat surveys.

Knowledge of the UK Habitat Classification system is essential for consultants using the Statutory Biodiversity Metric (DEFRA, Feb 2024). This course is a useful component of training for BNG but does not focus on the use of applications of UKHab for the Statutory Metric.

Course Title: Introduction to UKHab – Edinburgh Field Course

Trainer: Bill Butcher

Price Band: A

Format/Location: In Person, Scotland

Key Competency: S3 Habitat identification, classification and assessment

Level: Beginner – Intermediate

Usually runs: July

Duration: 6 hours

Description:

The course introduces UKHab and describes approaches to desk-based and field mapping, the importance of pre-survey preparation, and how to map features using polygons and lines. We will focus on woodland, grassland, scrub, and urban habitats.

The course is not designed to cover habitat recording specifically for BNG Statutory Metric or habitat condition assessment, but elements of these will be explored.

Course Title: Introduction to Waxcap Grasslands

Trainer: Richard Thompson

Price Band: A

Format/Location: In Person, Northeast England

Key Competency: S2: Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: Autumn

Duration: 6 hours

Description:

Attendees will learn to identify potential Waxcap Grasslands, a much-overlooked habitat which is at risk internationally. The day will start with a series of workshops and presentations discussing key criteria in defining a Waxcap grassland, and the fungi species that make up them (CHEGD species). We will also discuss relative legislation and national & international directives, as well as the standpoints of regulatory bodies. We will also have field visits to see local sites with waxcap interest. This will allow us to discuss survey efforts and methods. Some species identification will take place, however this will generally be high-level and will not involve microscopy, which is required for some species.

Course Title: Invasive Species Identification and Management

Trainer: Nicola Morris

Price Band: A

Format/Location: Online

Key Competency: M3 Practical implementation of plans for ecological management and/or environmental schemes

Level: Beginner – Intermediate

Usually runs: Autumn

Duration: 6 hours

Description:

Invasive non-native species are an increasing problem and can often cause significant changes to habitats, delays to development schemes, impact on the economy and in some cases cause human health issues.

This course aims to help participants:

- identify some of the most commonly seen INNS in GB
- understand the impacts they have
- learn the main management techniques and how they can be implemented
- find out how to implement effective reporting protocols
- who to go to for further advice and information

This training aims to enable those starting work in the ecology or conservation sector to understand how INNS can impact on their work and how they can overcome the issues they present. Students may find the sessions valuable as additional learning to support their studies and land managers may not only find the sessions informative but able to provide problem solving questions which could be answered as part of the case study sessions.

Course Title: Otter Ecology and Surveys

Trainer: Mike Dean CEcol CEnv FCIEEM

Price Band: A

Format/Location: In Person, Southwest England

Key Competency: S2 Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: Spring/Summer

Duration: 6 hours

Description:

The course will cover relevant aspects of the background ecology of otters, focusing on the use of resting sites, field survey techniques, legislation, and licensing for surveys. The field visit will allow those attending to put the theory into practice, searching for and identifying field signs of otters in different types of habitats.

Course Title: Peregrine Falcon - Ecology, Survey and Mitigation

Trainer: Dr Stefan Yaroslav Taras Bodnar MCIEEM

Price Band: A

Format/Location: In Person, West Midlands

Key Competency: S1 Habitat/species survey design, planning and fieldwork

Level: Beginner – Intermediate

Usually runs: Spring

Duration: 6 hours

Description:

This course aims to provide an up-to-date understanding of peregrine ecology, current conservation status, and threats. In particular the course aims to provide examples of effective survey, timings, and precautions in respect of development and mitigation examples.

Using a combination of presentations, case studies and field work, participants will see a number of mitigation projects and gain an understanding of the legislative framework surrounding the species. The aim of the course is to provide participants with the skills to undertake competent surveys, produce relevant and rational reports in line with national guidelines, and to advise on developments in respect of ecological constraints and mitigation measures.

Course Title: Phase 1 Habitat Survey

Trainer: Adrian Davis

Price Band: B

Format/Location: In Person, Scotland

Key Competency: S1 Habitat/species survey design, planning and fieldwork

Level: Beginner – Intermediate

Usually runs: Spring

Duration: 12 hours

Description:

This course is aimed at consultants, botanists, and ecologists involved in the conservation, surveying, and classification of habitats in Scotland.

The two days of training provide an introduction to vegetation identification to identify the characteristics of main Phase1 habitats during the winter months and plan surveys for the following summer season. This will involve excursions (weather permitting) to a range of habitats within the JNCC Phase 1 habitat survey system. Methods or appraisal for ecological habitat assessment in relation to land-management is discussed and debated.

Course Title: Pine Marten and Wildcat Ecology and Survey

Trainer: Adrian Davis

Price Band: B

Format/Location: In Person, Scotland

Key Competency: S1 Habitat/species survey design, planning and fieldwork

Level: Beginner - Intermediate

Usually runs: February

Duration: 12 hours

Description:

This two-day training course aims to raise awareness about two Scottish predators, pine martens and wildcats. The content will: outline and refresh field techniques for their identification, ecology, behaviour, and habitat preferences; improve understanding of the legal status of protected species with regard to their conservation; highlight key issues relating to pine martens / wildcats and habitat management.

The course commences with an introduction to wildcats and pine martens with presentations of previous surveys. Survey methodologies are elaborated, and feedback of sightings and footage (camera and video images) given to enhance students' knowledge. Images of cats will be analysed and compared.

Course Title: Plant Identification

Trainer: Adrian Davis

Price Band: A

Format/Location: In Person, Scotland

Key Competency: S1 Habitat/species survey design, planning and fieldwork

Level: Beginner - Intermediate

Usually runs: April

Duration: 6 hours

Description:

This training course is part lecture / group discussion, and part field observation and will cover the following:

- Understanding Scottish habitats and species
- Identification of vascular plant characteristics
- Key species and methods
- Use of plant ID keys
- Ecological requirements
- Habitats and species
- Plant ecological requirements
- Different vegetation types and key species
- Topography, common species and habitats
- Plant identification and species
- indicators for habitats

The afternoon will include a field excursion, where you will look at plant indicators for habitat identification. This is likely to include a few of the most common but also most interesting species and their habitats in the areas visited. We will focus on common species and plants associated with these communities. As well as incidental observation and awareness for other species e.g. introduced species.

Course Title: Plant Identification and Botanical Keys

Trainer: Lorna Bointon

Price Band: A

Format/Location: Online

Key Competency: S2 Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Multiple times a year

Duration: 6 hours

Description:

This one-day course delivered as two online sessions across two days will give participants the confidence to identify a wide range of common plant species using plant components, such as stem, leaf, bract, inflorescence, roots/bulbils, reproductive organs, and hairs as identifying features. Training will also cover using botanical keys to identify plants. We will also be looking at the naming rules and hierarchical structure of plants, sub-species, and hybrids (taxonomy). Training will include 'hands on' identification of at least one specimen plant with question-and-answer sessions to follow. This course is relevant to professional ecologists who want or need to improve their plant identification knowledge and skills and for conservation volunteers who require accurate ID skills to conduct surveys and record species for conservation charities.

Course Title: Plant Identification for Ecologists

Trainer: Mark Duffell

Price Band: A

Format/Location: In Person, West Midlands

Key Competency: S2 Species identification, handling and population size

Level: Beginner – Intermediate

Usually runs: June

Duration: 6 hours

Description:

Have you ever struggled to identify a plant, not sure where to begin? Put off by the thought of using 'Stace' or other floras? Then this is the course for you; an introduction to learning how to identify plants using a variety of resources including keys.

Botanical Surveys (Phase 1, UKHab, Hedgerow and NVC) provide the botanist and ecologist with ways of classifying a wide range of vegetation and habitats. Accurate species identification is critical to correctly identifying the appropriate habitats and then using this information to decide on their ecological value. This course aims to develop the professional surveyor's identification skills, and abilities in using botanical keys.

Starting with an introduction to the basic botanical structures and terminology, we will then concentrate on the key features for a range of wildflowers. Detailed study will be made of individual species and their particular characteristics and how they fit into their families. During this course you will have the opportunity to practice your plant identification skills using a range of identification resources, particularly Stace's New Flora (3rd / 4th editions).

By the end of the course, you will be familiar with a wide range of botanical terminology and be able to start to place a variety of plants into families.

Course Title: Positive Planning for Biodiversity

Trainer: Sarah Dale

Price Band: Price Band A

Format/Location: Online learning

Key Competency: P1 - Development of legislation, policies, programmes, strategic plans, guidance or standards

Level: Intermediate - Advanced

Usually runs: Spring/ Autumn

Duration: 6 hours

Description:

The course will begin with a workshop discussing legal compliance, best practice approaches and policy compliance. The discussion will include detail required in the planning process and potential exemptions including non-licensed method statements. The interaction between licensing and planning processes will be discussed.

An online training session will be provided covering a range of complex planning issues including:

- The planning appeals and judicial review processes;
- Habitats Regulations Assessments and Appropriate Assessments;
- Permitted Development, DCO and LDO processes;
- Conditions, Section 106 and legal agreements;
- Case Law; and
- Biodiversity Net Gain requirements.

Example cases and tips will be provided, and discussion will be welcomed. Example cases will be provided at the end of part 1 for attendees to review before Part 2. The focus can be guided by the needs of attendees, who are welcome to submit cases for discussion if they wish to. In session two, the cases will be discussed in a workshop. This will be followed by an online training session providing advice for issues which regularly arise in the planning process including:

- Making definitive decisions;
- Presenting complex and technical information;
- Negotiating good outcomes for biodiversity;
- Resolving conflicts or competing requirements;
- Presenting in person e.g. at inquiry; and
- Net gain and how to be proportional but ambitious.

Course Title: Positive Planning for Biodiversity - First Principles

Trainer: Sarah Dale

Price Band: Price Band A

Format/Location: Online learning

Key Competency: P1 - Development of legislation, policies, programmes, strategic plans, guidance or standards

Level: Beginner

Usually runs: Once in the Spring/ Once in the Autumn

Duration: 6 hours

Description:

In the first session, the course will provide an overview of biodiversity law and how this interacts with the planning process. The planning system, including application processes, planning policy and the role of Local Authority Biodiversity officers and ecological consultees will be explained. . Where there are differences in Wales, Scotland and England, these will be set out.

A workshop will follow exploring emerging policies and approaches. This will include District Licensing, planning reform, ecosystem services/green infrastructure, biodiversity net gain, and Nature Recovery Networks. Discussion will be welcomed. Any particular approaches could be discussed in more detail if requested by the participants in advance.

Links to example planning cases will be provided at the end of the first session with the invitation for attendees to review and decide how they would respond as a Local Authority Ecologist. These cases will be discussed and reviewed in detail in the second session. Participants will also be invited to present and discuss any particular issues or cases they may wish to. The session will close with a lecture covering top tips for planning submissions including evidence requirements, reports, use of Supplementary Planning Documents, and best practice guidance and protocols.

The course is focused on Local Planning Authority processes rather than the Development Consent Order process for Nationally Significant Infrastructure Schemes. Interaction between planning and protected species licensing is also discussed, but the course does not cover information and mitigation requirements for licensing in its own right.

Course Title: Preliminary Ecological Appraisal

Trainer: Mike Dean

Price Band: Price Band C

Format/Location: Online Learning

Key Competency: A4 - Ecological assessment including PEA and EcIA

Level: Beginner - Intermediate

Usually runs: Twice in Winter

Duration: 6 hours

Description:

This training course will provide delegates with an introduction to the process of Preliminary Ecological Appraisal (PEA). The course will cover:

- The purpose of PEAs
- How to undertake an effective desk study
- Setting the appropriate scope for a field survey to inform a PEA
- The appropriate use of reference sources
- Dealing with limitations
- Making recommendations
- A brief introduction to writing PEA Reports (note that this is covered in more detail in the 'Ecological Report Writing' course.)

The course is delivered entirely online and therefore it will not cover, in detail, how to assess and map habitats, how to assess the likely presence of protected or notable species, and identification of invasive plant species.

It is expected that those attending will have some existing knowledge of these topics. Sufficient enough to allow them to understand practical application of the PEA process. Those without knowledge of these topics should consider attending other relevant CIEEM CPD courses before attending the PEA course.

Course Title: QField for Biodiversity Net Gain

Trainer: Paul Losse

Price Band: Price Band A with field session

Format/Location: Online Learning

Key Competency: IM2 Information Technology

Level: Intermediate

Usually runs: Spring and Autumn

Duration: 9 hours

Description:

We cover the key advantages of capturing habitat and species data electronically as well as considering equipment options. The first part of the event focuses on setting up projects in QGIS for transfer to QField, including the use of the QField Sync plugin. We demonstrate how to prepare basemaps, set up species drop-down lists, configure QField to take photographs and transfer projects to a mobile device for use in the field.

We then look at QField functionality on a mobile device (android 'phone or tablet), firstly indoors and then in the field. Field work will include capturing point, line and polygon data as well as editing data in the field.

Finally, we will cover the transfer of field data back into a QGIS project.

To attend the event, you **MUST** be a proficient QGIS user but prior experience of QField is not necessary. Familiarity with the QGIS BNG template is desirable.

The event will combine demonstration with exercises to consolidate learning. There will also be an outdoor session during which delegates can capture real data in the field.

IT equipment, including a PC or Mac (desktop or laptop) pre-loaded with QGIS and a smart phone or tablet running the Android operating system (version 5 or above) will be needed. The use of Apple mobile devices is not supported on this course.

Please note that there is no need for anyone to attend who has already attended the standard QField course.

Course Title: QField for Ecologists and Environmental Practitioners

Trainer: Paul Losse

Price Band: Price Band A with field session

Format/Location: Online Learning with field session

Key Competency: IM2 Information Technology

Level: Intermediate

Usually runs: Spring and Autumn

Duration: 10 hours

Description:

This event introduces surveyors to QField, an open-source mobile GIS mapper which works alongside the QGIS GIS program. The application allows for efficient electronic data capture in the field and can be used for habitat mapping as well as capturing species information.

We cover the key advantages of capturing habitat and species data electronically as well as considering equipment options. Much of the event focuses on setting up projects in QGIS for transfer to QFIELD, including the use of the QField Sync plugin. We demonstrate how to prepare basemaps, configure map themes, and transfer projects to a mobile device for use in the field.

We then look at Qfield functionality on a mobile device (android 'phone or tablet), firstly in the classroom and then in the field. Field work will include capturing point, line and polygon data as well as editing data in the field.

Finally, we will cover the transfer of field data back into a QGIS project in the classroom.

The event is suitable for anyone who is proficient at basic map production (e.g. habitat maps) in QGIS and wishes to use QFIELD for capturing data electronically in the field.

The event will combine demonstration with exercises to consolidate learning after every session. There will also be an outdoor session during which delegates can capture real data in the field.

IT equipment, including a laptop pre-loaded with QGIS and a smart phone or tablet running the Android operating system will be provided by delegates.

Please note that there is extra time required outside of the course hours, to complete homework.

Course Title: QGIS Essentials

Trainer: Matt Davies

Price Band: Self-Led

Format/Location: Self-led course with tutor led sessions

Key Competency: IM2 Information Technology

Level: Beginner

Usually runs: Multiple times throughout the year

Duration: 6 hours

Description:

QGIS is a freely available open-source GIS that matches the functionality and usability of commercial products like 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 migrate to QGIS software. The course will cover the Day 1 topics of the popular '*QGIS for Ecologists and Environmental practitioners*' course which are the essential skills needed to confidently start using QGIS.

Although the topics are well established, the course will be delivered using CIEEM's Moodle Learning Management Platform. The approach will blend self-led learning with some tutor contact. The course will run over a month, and delegates will need to undertake 1.5 hours of exercises each week.

Each week delegates will watch demonstration videos and then undertake practical exercises (instruction documents and data will be provided). Delegates will then have the option to join the tutor for two, 1-hour live sessions exploring the topics covered in your self-led learning. Overall, the approach will allow delegates to learn from wherever they are based, at their own pace, to have some tutor contact, and to gain hands-on experience needed to confidently implement GIS projects in the workplace.

Course Title: QGIS for Biodiversity Net Gain

Trainer: Matt Davies

Price Band: Price Band A

Format/Location: Online learning

Key Competency: IM2 Information Technology

Level: Intermediate

Usually runs: Multiple times throughout the year

Duration: 6 hours

Description:

Conducting a BNG assessment will soon become mandatory for most new developments. It is a new area of work and one that ecologists, particularly consultants, are having to adopt. Conducting these assessments requires specialist technical skills, and can be carried out using the freely available, open-source mapping software, QGIS.

The event is suitable for delegates familiar with the QGIS interface who have been using the product for at least three months. Ideally, they will have attended an introductory QGIS course. The course will be delivered online (via Zoom), using a range of tried and tested techniques including presentations, demonstrations, individual exercises, and case studies.

The course builds on delegates QGIS skills and equips them with the specific skills needed to carry out a BNG assessment. It covers how to integrate pre-development habitat data, that they would have collected via field survey, with proposed development data, often provided by a (landscape) architect. The course will cover working with CAD data in QGIS, which is very often needed in a BNG assessment. It will also enable delegates to confidently use NE's BNG QGIS project, together with NE's Import to BNG Metric Excel tool.

Course Title: Red Squirrel Ecology and Surveys

Trainer: Adrian Davis

Price Band: Price Band B

Format/Location: In person, Scotland

Key Competency: S1 - Habitat / species survey design, planning and fieldwork

Level: Beginner

Usually runs: Winter/Spring

Duration: 12 hours

Description:

This two-day training course will provide an introduction to red squirrel behaviour and ecology with scientific research papers and actual site visits to see and witness red squirrel behaviour and ecology. Delegates will learn to identify the characteristics of main habitats during the winter months and plan surveys for the following summer season. This will involve excursions (weather permitting) to a range of red squirrel habitats. Methods of appraisal for ecological habitat assessment in relation to red squirrels and appropriate land management is discussed and debated.

Adrian Davis leads the course and has been involved in red squirrel conservation for over 25 years. This has involved large scale surveys of Tentsmuir forest, and Ladybank Woods in Fife and sites in Perthshire to protect key populations from threats. Recent work has involved study on red squirrel dreys in broadleaved woodland in Perthshire.

Course Title: Reptiles: Ecology, Surveys & Mitigation

Trainer: Demian Lyle

Price Band: Price Band A

Format/Location: In-Person training

Key Competency: S2 - Species identification, handling and population size

Level: Beginner

Usually runs:

Duration: 6 hours

Description:

This one-day training course, delivered by Demian Lyle, will cover the following key areas:

- Identification of the six native UK reptile species and more common non-native reptile species
- The ecology, including habitat requirements of reptiles in the UK
- The main legislation and guidance documents relating to reptiles in England and Wales
- Designing and undertaking a robust reptile survey
- Appropriate mitigation and enhancement measures for reptiles.

The training will include classroom-based activities and learning as well as a field element where delegates will undertake their own reptile survey as the site supports populations of the four widespread native reptile species, adder, grass snake, slow worm and common lizard.

Course Title: Self-Led QField for Ecologists and Environmental Practitioners

Trainer: Paul Losse

Price Band: Self-led

Format/Location: Online self-led

Key Competency: IM2 Information technology

Level: Intermediate

Usually runs: Once a month

Duration: 12 hours

Description:

This Self- Led learning course uses pre-recorded videos to introduce surveyors to QField, an open-source mobile GIS mapper which works alongside the QGIS GIS program. The application allows for efficient electronic data capture in the field and can be used for habitat mapping as well as capturing species information.

The course, using CIEEM's Learning management system (LMS) is suitable for anyone who is proficient at basic map production (e.g. habitat maps) in QGIS and wishes to use QField for capturing data electronically in the field.

We will cover the key advantages of capturing habitat and species data electronically as well as considering the equipment options. Much of the event focusses on setting up projects in QGIS for transfer to QField, including the use of the QField Sync plugin. Through videos, we demonstrate how to prepare basemaps, configure map themes and transfer projects to a mobile device for use in the field. We then look at QField functionality on a mobile device (android 'phone

or tablet) Self-led field work will include capturing point, line and polygon data as well as editing data in the field.

Finally, we will cover the transfer of field data back into a QGIS project.

The course content is split into topics so that you can easily navigate your way through the sessions by watching demonstrations and replicating these as you go along. This course takes approximately 12 hours to complete.

Please note that this course does not support Apple mobile devices. Delegates will need access to a desktop/laptop PC or Mac with the latest Long Term Release of QGIS loaded and an Android mobile device ('phone or tablet) running Android version 5 or higher (Android 9 or higher recommended).

If you require support during your course, you will be able to contact the trainer via the support forum or by contacting CIEEM.

Course Title: Self-Led QGIS for Biodiversity Net Gain

Trainer: Matt Davies

Price Band: Self-Led

Format/Location: Online self-led course

Key Competency: IM2 - Information Technology

Level: Intermediate

Usually runs: Various times throughout the year

Duration: 6 hours

Description:

Conducting a BNG assessment is now mandatory for most new developments. It is a new area of work and one that ecologists, particularly consultants, are having to adopt. Conducting these assessments requires specialist technical skills, and can be carried out using the freely available, open-source mapping software, QGIS.

The course is suitable for delegates familiar with the QGIS interface who have been using the product for at least three months. Ideally, they will have attended an introductory level QGIS course. The course will be delivered online (via our online learning system and zoom), using a range of tried and tested techniques including presentations, demonstrations, individual exercises and case studies.

The course builds on delegates QGIS skills and equips them with the specific skills needed to carry out a BNG assessment. It covers how to integrate pre-development habitat data, that they would have collected via field survey, with proposed development data, often provided by a (landscape) architect. The course will cover working with CAD data in QGIS, which is very often

needed in a BNG assessment. It will also enable delegates to confidently use NE's BNG QGIS project, together with NE's Import to BNG Metric Excel tool.

Each week delegates will watch demonstration videos and then undertake practical exercises (instruction documents and data will be provided). Delegates will then have the option to join the tutor for two, 1-hour live sessions to explore the topics covered. Overall, the approach will allow delegates to learn from wherever they are based, at their own pace, to have some tutor contact, and to gain hands-on experience needed to confidently implement GIS projects in the workplace.

Course Title: Soils, Plants and Phytoremediation

Trainer: Lorna Bointon

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S2 - Species identification, handling and population size

Level: Beginner

Usually runs: Twice a year, once in the spring/ once in the autumn

Duration: 6 hours

Description:

This course will cover soils, plants and phytoremediation. The course will help participants understand soil types, horizons, structures, and nutrients and the effects of soil pH balance (acid, neutral, basic/alkaline). We will also look at mycorrhizal fungi and symbiotic relationships between plant species and their importance for biodiversity and the food web. Participants will learn how to identify habitat types and indicator plants and identify plant species that can be used for phytoremediation. We will look at brown sites, pollutants and nutrient enrichment and hyper-accumulators, bioaccumulation, and harvesting. Participants will also gain an understanding of the laws surrounding protected species and invasive plants.

Training will take place remotely via Zoom at a relaxed pace over two half days.

Course Title: Statutory Biodiversity Metric Training

Trainer: We have a pool of trainers for this course

Price Band: BNG Metric

Format/Location: Online learning

Key Competency: A6 - Quantifying Biodiversity Gain

Level: Intermediate

Usually runs: Various times throughout the year

Duration: 9 hours

Description:

This course is based on the Statutory Biodiversity Metric issued for England's first phase of mandatory Biodiversity Net Gain for most developments seeking planning permission. This course provides training on good practice for undertaking statutory biodiversity metric calculations for a development. It covers the baseline and post-development calculations, both on-site and off-site. While off-site calculations are covered, this course focuses on statutory biodiversity metric calculations for a development (rather than for offsite providers).

This training will be covered by three online Zoom sessions (each of three hours). Please note that this course does not cover details on designing Biodiversity Net Gain for a development, or the Watercourse component of the Statutory Metric or on Habitat Condition Assessments. Other CIEEM training courses are available on these aspects.

Course Title: The Importance of Meres and Mosses

Trainer: Lorna Bointon

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S3 - Habitat identification and evaluation

Level: Beginner - Intermediate

Usually runs: Spring and Autumn

Duration: 6 hours

Description:

This course will cover the identification of different types of peatland (e.g. bog, mire, fen) and recognition of bog habitats (e.g. raised, blanket, quaking etc). Participants will also learn about peat formation and edge habitats (e.g. lagg) and the positive and negative indicators that help inform management techniques. Participants will understand the environmental importance of mosses and meres (e.g. in terms of flooding, water quality, carbon sequestration) along with the importance of meres and mosses as wildlife corridors or 'stepping stones'.

We will look at case studies identifying existing and historical wetland projects. Participants will learn about Sphagnum moss species taxonomy and classification and other bog specialist species. We will also cover designations and protected status, rare species, invasive species and threats.

Training will take place remotely via Zoom at a relaxed pace over two half days.

Course Title: Tree Identification for Beginners

Trainer: Lorna Bointon

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S2 - Species identification, handling and evaluation

Level: Beginner

Usually runs: Spring and Autumn

Duration: 6 hours

Description:

Key areas to be covered are recognition and identification of common tree species, and the different habitats in which they grow best. The course will also cover the relationships that exist between trees and other organisms, such as soil bacteria and fungi. We will look at how trees grow and how they reproduce. We will cover epiphytes, mycorrhizal fungi, and symbiotic relationships between tree species and their importance for biodiversity. Participants will also gain an understanding of the laws surrounding trees.

This training is relevant to ecologists, conservation managers, and biodiversity officers to understand the importance of trees within the ecosystem and the complex relationships and connections that exist within woodland habitats. This course is suitable for beginners and will help professional ecologists or those just starting out to identify tree species, understand the threats that face trees, the specific habitats and conditions some tree species require and to recognise their importance in supporting biodiversity and for carbon capture and climate regulation.

Course Title: UK Habitat Classification for Practitioners

Trainer: Peter Carey/ Bob Edmonds

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S3 - Habitat identification, classification and assessment

Level: Intermediate

Usually runs: Throughout the year

Duration: 6 hours

Description: This course aims to provide ecologists with an introduction to the UK Habitat Classification. UKHab is the base classification for DEFRA's Biodiversity Metric 2.0 and is becoming the accepted standard for habitat surveys supporting development applications in the UK.

This course will provide an overview of the architecture of UKHab, including how to use primary and secondary codes. The course will provide training in using the Habitat Field Key (V2.0) to identify habitats and how to prepare habitat maps in the field. The course will provide training on how to plan and design a survey, from pre-survey map preparation and research, setting your Minimum Mapping Unit (MMU) and other meta-data and how to display maps and data collected in UKHab. It will also provide guidance on how to store and share UKHab data and why this is important.

The course is aimed at competent habitat surveyors and those with basic skills wishing to expand their knowledge. The correspondence to previous classifications will be discussed and so an understanding of existing classifications, e.g. Phase 1 or UK Broad and Priority Habitat Types would be beneficial.

Trainees would be expected to have downloaded and reviewed the UKHab document set (the manual, definitions, field key and hierarchy) before the training sessions.

Course Title: Understanding the Vegetative Key, an essential tool for Ecologists for extending the survey season

Trainer: Mark Duffell

Price Band: Price Band A

Format/Location: In-person, West Midlands

Key Competency: S2 - Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Summer

Duration: 6 hours

Description:

In many books and courses the focus of plant identification is on flowers, with foliage taking a back seat. This has changed with the (recently updated) Vegetative Key to the British Flora by John Poland, which relies solely on using vegetative characters for identification. In the time that 'Poland' has been available it has been taken to heart by botanists and ecologists as it enables them to make accurate identifications and effectively extends the botanical field season.

Concentrating on the characters used in 'Poland' you will discover the weird and wonderful world of botany and find out how easy it can be to make an accurate identification. Using a hand lens or microscope you will come to marvel at the structures and details to be found in even the commonest species. Working through the 'Flora' together participants will discover a range of characters that regularly crop up in the key and, these will be further illustrated with specimens and presentations.

Focusing on practical skills, with group and individual keying out in the classroom and field; this course is ideal for amateur or professional botanists/ecologists both in the voluntary or ecological sector. FISC level 2 and above.

Course Title: Using Bioacoustics for Field Survey (Online)

Trainer: Carlos Abrahams

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S1- Habitat/species survey design, planning and fieldwork

Level: Beginner - Intermediate

Usually runs: Spring

Duration: 6 hours

Description:

This online course will cover the use of acoustic recording for a range of species groups that produce sounds in the audible range, such as birds, amphibians, invertebrates, and mixed animal communities (ultrasonic recording for bats will be mentioned but not covered extensively).

The training will introduce and explain a range of hardware, software, and methodological approaches, that will allow attendees to understand how they might be able to use bioacoustics within their own practice. The training will cover recent guidance on bird acoustic survey, and ecoacoustic monitoring in both terrestrial habitats and freshwater. Delegates should come away with a good understanding of recording principles and approaches for the analysis of sound data – and how this can be used to generate valuable ecological information.

The training will be delivered by lectures and hands-on data analysis workshops using Kaleidoscope Pro and Audacity software. This will allow attendees to manipulate and analyse sound recordings on the day.

The online course is followed the next day by an in-person event, focusing on developing skills in using recording hardware, and the practical implementation of bioacoustics studies.

Course Title: Using Bioacoustics for Field Survey

Trainer: Carlos Abrahams

Price Band: Price Band A

Format/Location: In-person, London

Key Competency: S2 - Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Spring

Duration: 6 hours

Description:

This in-person course is intended for those delegates who have attended the previous day's online training course, or who have equivalent theoretical knowledge. The intention is to build upon this desk-based background and provide a hands-on day where a wide range of acoustic hardware can be demonstrated and used, and survey methods employed in the field. The training will allow delegates to program automated units, adjust settings in a range of handheld devices, and gain practical skills in implementing the fieldwork requirements of an ecoacoustic study. This fieldwork will include above-ground, freshwater and soil recording using several different types of microphones and recorders.

The course will enable delegates to set up and run the hardware according to recent guidance on bird acoustic surveys, and ecoacoustic monitoring in both terrestrial habitats and freshwater. Delegates will also be able to practise downloading, archiving, manipulating, and analysing sound data to generate ecological insights.

Course Title: Using the NVC: Plant Communities and Habitats

Trainer: Lorna Bointon

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S2 - Species Identification, Handling and Population Size

Level: Beginner - Intermediate

Usually runs: Autumn/ Winter

Duration: 6 hours

Description:

This course will cover using NVC classification and plant communities (including indicator species), as well as exploring the UK Habitats Classification. As part of this we will cover recording frequency/percentage cover using the DOMIN scale. We will also look at the taxonomy and classification of common plant species and the habitats in which they grow. As part of this we will explore how soils and grazing regimes can affect plant growth, survival and structural diversity. We will explore resources that can be used to gain information about conservation status and habitat.

Participants will also gain an understanding of the laws surrounding protected species and invasive plants. We will cover habitats and biotic/abiotic influences on surveying vegetation, the optimum times for surveying vegetation, techniques to record plant diversity and abundance e.g. using the DOMIN scale.

Course delivery will comprise an illustrated talk, including recognition of different habitats and plant communities. We will compare Phase 1 habitat surveys with UKHabs. The UK habitats Classification provides more detailed information about habitats and has become the industry standard. The Biodiversity Metric uses the UKHabs classification methodology, and we will

mainly focus on this, including looking at how we can combine NVC survey with the UK Habitats Classifications.

Training will take place remotely via Zoom at a relaxed pace over two half days.

Course Title: Using UKHab for Biodiversity Net Gain

Trainer: Bob Edmonds

Price Band: Price Band A

Format/Location: Online learning

Key Competency: S3 – Habitat identification, classification and assessment

Level: Intermediate - Advanced

Usually runs: Various times throughout the year

Duration: 6 hours

Description:

Aimed at consultant and local authority ecologists with experience of habitat survey, this course will introduce environmental practitioners to the interface between DEFRA's Statutory Biodiversity Metric and UKHab.

The course focuses on the application of BNG in relation to development and land use planning in terrestrial habitats. Practical experience of UKHab surveys and the use of the BNG Metric is not strictly required but would be beneficial.

The course focusses upon the design of baseline habitat surveys and data collection for BNG and discusses feasibility and design of development projects that have made a commitment to biodiversity net gain.

There is a short homework exercise introduced at the end of the first session which is discussed on Day 2. This will take 1-2hrs (depending on your level of experience with the Metric and UKHab). Although not essential, delegates will benefit if they have some experience of basic mapping skills in GIS or using Google Earth polygon mapping tools.

Course Title: Water Vole Ecology and Surveys

Trainer: Mike Dean

Price Band: Price Band A

Format/Location: Online learning with a field visit

Key Competency: S2 - Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Spring and Autumn

Duration: 6 hours

Description:

This introductory course on water voles will cover the background ecology of, and appropriate survey techniques for, water voles in the context of development projects.

The course will have a particular focus on determining the most appropriate approach to surveying water voles in development scenarios, following the guidance set out in the Water Vole Mitigation Handbook. It will cover identification and recording of field signs, assessing habitat suitability, gathering and using desk study, and other contextual information.

This course is aimed at beginners and those with some previous experience. Attendance on this course is strongly recommended as preparation for our two intermediate - advanced level courses on Water Vole Mitigation and Water Vole live-trapping.

Course Title: Water Vole live-trapping

Trainer: Merryl Gelling

Price Band: Price Band A

Format/Location: In-person, Southwest England

Key Competency: M3 - Practical implementation of plans for ecological management and/or environmental schemes

Level: Intermediate - Advanced

Usually runs: Autumn

Duration: 6 hours

Description:

This course is designed to be completed in parallel with the CIEEM Water Vole Mitigation course.

Delegates should only book onto this course if:

- They also book on the Water Vole Mitigation course to be run in autumn of the same year
- They have completed the Water Vole Mitigation course in the past 12 months
- They can otherwise demonstrate sufficient existing knowledge of water vole mitigation, at the discretion of the trainer.

It will provide delegates with experience in choosing equipment and planning a trapping project, setting live-capture traps, trap checking, handling and sexing of animals, subsequent release and biosecurity measures.

Based entirely in the field, delivery of material will be via example and demonstration, with participants being guided through setting and checking their own traps and thereafter handling captured animals*. It provides an opportunity for participants to bring questions regarding their own projects for discussion, so is ideal for those delegates who are planning or need to undertake their own trapping project for water voles.

*Note – handling of animals is at the discretion of the trainer and dependent on numbers caught.

Course Title: Water Vole Mitigation

Trainer: Mike Dean

Price Band: Price Band A

Format/Location: Online learning

Key Competency: M2 - Designing and preparing environmental management, mitigation, restoration and enhancement plans

Level: Intermediate - Advanced

Usually runs: Summer/Autumn

Duration: 6 hours

Description: This course covers the impacts of different types of development on water voles and the options for mitigation. It will have a particular focus on determining the most appropriate approach to relocating water voles, by either trapping or use of the displacement technique, following the Water Vole Mitigation Handbook published in April 2016. The principles of displacement will be discussed in particular detail. The basic principles of trapping will also be discussed though this topic is covered in greater detail on CIEEM's 'Water Vole Live Trapping, Care and Restoration' training course.

This course is aimed at experienced practitioners (intermediate or advanced level) which complements our practical training on 'Water Vole Live Trapping, Care and Restoration'.

Those attending should have a good understanding of water vole ecology and survey techniques as these topics will not be covered during the course (we recommend attending the Water Vole Ecology and Surveys course first).

Course Title: Wetland Habitats

Trainer: Neill Talbot

Price Band: Price Band A

Format/Location: Online

Key Competency: S3 - Habitat identification, classification and assessment

Level: Beginner - Intermediate

Usually runs: Spring & Autumn

Duration: 6 hours

Description:

This course will provide an overview of freshwater wetland habitats (excluding running water) including ponds, covering: indicator/characteristic flora and fauna species; protected species; the environmental value of wetlands for climate change/water quality/flood mitigation; pond creation/management including positive and negative indicators that help inform management techniques; invasive species and other threats; succession stages.

Course Title: Winter Tree ID: Extending the Season in Ecological Surveys

Trainer: Mark Duffell

Price Band: Price Band A

Format/Location: In-person, West Midlands

Key Competency: S2 - Species identification, handling and population size

Level: Beginner - Intermediate

Usually runs: Winter

Duration: 6 hours

Description:

Winter is seen as a time of year when little useful field botany can be done, but that is not the case with deciduous trees and shrubs. They are in many ways easier to identify when the leaves are out of the way. The course starts with an introduction to the key characters used in the identification of deciduous trees and shrubs, using specimens and illustrated talks.

Using the latest winter tree identification guides including John Poland's new 'The Field Key to Winter Twigs (2019) and Bernd Schulz's "Identification of Trees and Shrubs in winter using Buds

and Twigs' (2018), as well as the FSC 'Guide to the identification of deciduous Broad-leaves trees and Shrubs in Winter'.

Time may then be spent outdoors using these skills to identify the trees and shrubs that we come across.

This is a day course aimed at the keen beginner and improver alike, providing an introduction to winter tree identification. Emphasis will be placed on key characters to distinguish each species from similar looking plants. By the end of the course participants will be able to use a key and will be able to recognise the key characters. FISC level (1) 2 and above.

Course Title: Working with Crayfish: Survey Methods, Ecology, Mitigation, Licensing and Invasive Species

Trainer: Paul Bradley

Price Band: WWC

Format/Location: In-person, Yorkshire

Key Competency: S1 - Habitat / species survey design, planning and fieldwork

Level: Beginner - Intermediate

Usually runs: Summer

Duration: 16 hours

Description:

White-clawed crayfish are rapidly disappearing throughout much of the country. This is largely due to the ongoing spread of American signal crayfish and 'crayfish plague'; though changes in the water environment are also a factor; potentially associated with climate change. The wider negative impacts of invasive non-native crayfish are also becoming increasingly apparent - ecological, fisheries, geomorph, and economic.

An authoritative and practical review of crayfish ecology and field methods is presented, including both standing and flowing water sites. The course also includes an authoritative introduction to white-clawed crayfish conservation measures, controlling the spread of invasive non-native crayfish and crayfish plague, and crayfish at development sites.

The content of this training event will contribute towards the development of competencies for survey of white-clawed crayfish, as set out in CIEEM guidance*.