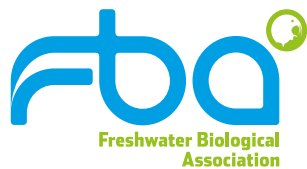


# FRESHWATER COURSES 2019



## SAMPLING AND IDENTIFYING FRESHWATER INVERTEBRATES

**Date:** Tuesday 9 - Wednesday 10 April **Tutor:** John Davy-Bowker **Cost:** £260; early bird rate £245; FBA member £235 **Location:** FBA River Laboratory, Dorset

This two day course will involve the collection and identification of aquatic invertebrates from running water habitats, and will feature sampling methods, bankside sorting and lab-based identification. John Davy-Bowker is a knowledgeable freshwater biologist with considerable research and teaching experience.

## NEW! INTRODUCTION TO ADULT CADDISFLIES

**Date:** Saturday 27 April **Tutor:** Stuart Crofts **Cost:** £75 **Location:** FBA Windermere, Cumbria

This one day course is aimed at anyone who wishes to begin studying the adult stages of these fascinating insects. It will also be an introduction to the **new FBA publication; Caddisfly Adults of Britain and Ireland (Family level keys and introductory guide)**. During the course Stuart will take you through the main identification features used in the family level keys of the book and show you how the keys are used. It is very much a hands-on day and no prior experience of FBA courses is needed.

## IDENTIFYING FILAMENTOUS ALGAE/MACROALGAE

**Date:** Tuesday 14 - Wednesday 15 May **Tutors:** Martyn Kelly and Allan Pentecost. **Cost:** £320; early bird rate £300; FBA member £290 **Location:** FBA Windermere, Cumbria

A two-day course on how to recognise the larger freshwater algae. Field and laboratory-based exercises will introduce participants to the biology and identification of those freshwater algae most likely to be encountered during LEAFPACS and other freshwater surveys. An introduction to the use of macroalgae for rapid assessment will also be included. Martyn Kelly is a freelance consultant, specialising in the use of algae for environmental monitoring. Allan Pentecost, of the FBA, has studied algae for 50 years and has published many research papers and a book on algal ecology and taxonomy.

Our freshwater courses have been developed for professionals, as well as enthusiasts. If there is a subject area that you would like to learn more about, please let us know at [events@fba.org.uk](mailto:events@fba.org.uk)

## BOOK YOUR PLACE

Contact us at: [events@fba.org.uk](mailto:events@fba.org.uk); Tel. 015394 42468

# Sampling and identification courses with leading freshwater specialists

## ACCREDITED COURSE: INVERTEBRATE IDENTIFICATION FOR BIOTIC ASSESSMENT (including examination)

**Date:** Tuesday 14 - Thursday 16 May **Tutor:** John Davy-Bowker **Cost:** £675; early bird rate £650; FBA member £640 **Location:** FBA River Laboratory, Dorset

This three day course covers the identification of the freshwater macroinvertebrate families used for biotic assessment (BMWP, WHPT, LIFE and PSI). It is aimed at professionals with experience of identification, who wish to consolidate their knowledge. At the end of the course, participants will be examined on their identification skills and, if the required standard is attained, a certificate of achievement in family- level invertebrate identification will be awarded. This course is part of a series of FBA accredited invertebrate identification courses; future courses will allow participants to demonstrate their skills in taking individual groups of invertebrates to species level. John Davy-Bowker is a knowledgeable freshwater biologist with considerable research and teaching experience.

## ENTOMOLOGY FOR ANGLERS LEVEL 1

**Date:** Saturday 18 May **Tutors:** Stuart Crofts & Andrew Dixon **Cost:** £75 **Location:** FBA Windermere, Cumbria

The purpose of this course is to increase fly-fishers' understanding of entomology, which could make a big difference to their catch. Understanding the lifecycle of the flies that are being imitated helps better decisions to be made on what a fish is feeding on, when and where that type of food will be available, and how best to represent that food form. The course will describe certain aspects of the natural fly which can be incorporated into imitations, explain why some flies are more significant than others and why some important flies are often neglected by anglers. It will also involve a field visit to a river site to collect some of the invertebrates the fly-fisher encounters and the fish could be feeding on. This will be followed by practical advice on how to identify them under the microscope.

## AQUATIC BEETLES

**Date:** Tuesday 21 & Wednesday 22 May **Tutor:** Garth Foster **Cost:** £260; early bird rate £245; FBA member £235 **Location:** FBA Windermere, Cumbria

This two day course will concentrate on the collection and

identification of water beetles. The aim of the course is to increase confidence in beetle identification and will include: beetle morphology as used for identification, field survey techniques, the use of identification keys, microscope work, and some aspects of conservation. There will also be the opportunity to try out the Royal Entomological Society British water beetles handbook. Garth Foster is the coordinator for the Aquatic Coleoptera Recording Scheme for Britain and Ireland and has done nothing else for 50 years!

## NEW! STONEFLIES, MAYFLIES & CADDISFLIES

**Date:** Tuesday 18 - Thursday 20 June **Tutors:** Craig McAdam, Richard Chadd & Sharon Flint **Cost:** £550; early bird rate £535; FBA member £525 **Location:** FBA Windermere, Cumbria

This three day course will involve the collection and identification of mayflies, stoneflies and caddisflies from a variety of freshwater habitats, and will feature sampling methods, bankside and lab-based identification.

Craig Macadam has been studying freshwater invertebrates for over 25 years. His particular specialism is mayflies, stoneflies and caddisflies (the 'riverflies'). He regularly delivers training on the identification of freshwater invertebrates and is national co-ordinator of the Mayfly and Stonefly recording schemes. Richard Chadd has nearly 30 years' experience as a freshwater ecologist, specialising in freshwater invertebrates, their identification and use in deriving environmental information for management and regulation. Sharon Flint is a Caddisfly enthusiast and has been teaching on the identification of aquatic invertebrates for 25 years and is the County Recorder for Caddisflies, Mayflies and Stoneflies for the Yorkshire Naturalists' Union

## ENTOMOLOGY FOR ANGLERS LEVEL 2

**Date:** Saturday 22 June **Tutors:** Stuart Crofts & Andrew Dixon **Cost:** £75 **Location:** FBA Windermere, Cumbria

The Level 2 course progresses a little deeper into the habits of the insects, and explains why anglers only need a small selection of artificials to cover all stages of the invertebrates found. Participants will learn why some patterns work better than others, and be shown how to identify some the important invertebrates to at least family level. The course will be based on a similar format to Level 1 with Powerpoint presentations, practical demonstrations on some fly-fishing issues and another lab session using



microscopes. The Level 2 course is open to those who have previously attended Level 1.

## INTRODUCTION TO PHYTOPLANKTON

**Date:** Tuesday 2 July & Wednesday 3 July **Tutor:** Allan Pentecost & Bill Brierley **Cost:** £320; early bird rate £300; FBA member £290 **Location:** FBA Windermere, Cumbria

This two day course will provide methods of collection, examination and identification of the common freshwater phytoplankton. The Lake District contains a great diversity of fresh waters and a wide range of material will be available for study. A field trip will be included and the lectures will cover both practical and theoretical aspects of phytoplankton ecology. Allan Pentecost, an Honorary Research Fellow at the FBA has been studying algae for 50 years and is currently involved in a number of research projects on the English Lakes. Bill Brierley is CEO for the FBA, and a professionally qualified freshwater ecologist, with extensive knowledge of ecology, eutrophication and water resource management, as well as a sound background in agronomy.

## SAMPLING AND IDENTIFYING FRESHWATER INVERTEBRATES

**Date:** Saturday 27 & Sunday 28 July **Tutor:** John Davy-Bowker **Cost:** £260; early bird rate £245; FBA member £235 **Location:** FBA Windermere, Cumbria

As described on page one.

## MACROPHYTES

**Date:** Monday 29 & Tuesday 30 July **Tutor:** Tim Jones **Cost:** £320; early bird rate £300; FBA member £290 **Location:** FBA River Laboratory, Dorset

This 2 day course will give participants an introduction of how to sample and identify a range of aquatic plants, using a pragmatic and practical approach to identify common and ubiquitous aquatic forms. It will provide an introduction to the survey method used to assess river macrophyte populations and will use a structured based approach pioneered by Nigel Holmes and subsequently refined by the tutor. This approach allows the identification of plants using easily recognisable features (e.g. submerged linear leaved, paired broad leaved marginal, etc.). This approach does not always follow the traditional botanical approach but has been shown to be an effective way for people to

learn and accurately identify aquatic plants. The course will comprise talks and presentations, lab practicals looking at fresh specimens and visits to local river sites. Tim Jones is an experienced freshwater ecologist and aquatic plant expert – he has run plant training courses for many years and together with Nigel Holmes ran the accreditation plant scheme for the Environment Agency.

The introductory course will form the foundation for a more advanced course which will be run in 2020.

## RIVER INVERTEBRATE PREDICTION AND CLASSIFICATION SYSTEM (RIVPACS)/ RIVER INVERTEBRATE CLASSIFICATION TOOL (RICT) BIOASSESSMENT TRAINING

**Date:** Thursday 19 - Friday 20 September **Tutor:** John Davy-Bowker **Cost:** £395; early bird rate £380; FBA member £370 **Location:** FBA River Laboratory, Dorset

During this two-day course delegates can expect to gain a thorough theoretical and practical knowledge of the latest version of the RIVPACS/RICT bioassessment tool. Delegates will be able to produce biological assessments to similar standards as used by the regulatory authorities for Water Framework Directive compliance monitoring. The course will provide an introductory background to bioassessment, biotic indices, RIVPACS models and RICT. *Note: this course does not cover invertebrate identification. Some prior knowledge of river invertebrate sampling and the principles of invertebrate identification would be beneficial.*



**BOOK YOUR PLACE**

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## ENTOMOLOGY FOR ANGLERS LEVEL 3

**Date:** Saturday 21 September **Tutors:** Stuart Crofts & Andrew Dixon **Cost:** £75\* **Location:** FBA Windermere, Cumbria

This course continues to build on the knowledge gained from Levels 1 & 2 and is open to those who have previously attended Levels 1 & 2. During the day we will continue to look in even greater depth and detail at the actual invertebrate food of the fish and how to progress with identification skills.

\*If you have completed levels 1 & 2 this year, then level 3 will be offered at a special price of £55

## FRESHWATER FISH: ASSESSMENT OF CONDITION AND AGEING

**Date:** Tuesday 8 October **Tutor:** Roger Sweeting **Cost:** £95 **Location:** FBA Windermere, Cumbria

This course is aimed at fisheries managers, fishermen and naturalists who want to know more about the fish that they see, catch or handle. Without recourse to detailed dissection it is quite staggering how much we can piece together about a fish's well-being and condition, its age and growth, life history and sexual development. This course aims to provide an insight into the ways of observing fish for these purposes. Roger Sweeting has spent many years studying fish health and helping to develop an understanding of how to improve fisheries for Thames Water, the National Rivers Authority (NRA), the Environment Agency and the FBA.

## SAMPLING AND IDENTIFYING FRESHWATER INVERTEBRATES

**Date:** Wednesday 9 & Thursday 10 October **Tutor:** John Davy-Bowker **Cost:** £260; early bird rate £245; FBA member £235 **Location:** FBA Windermere, Cumbria

As described on page one.

## FISH HEALTH, PARASITES AND DISEASE

**Date:** Tuesday 29 October **Tutor:** Roger Sweeting **Cost:** £95 **Location:** FBA Windermere, Cumbria

This is a course for people wanting to understand more about the parasites and diseases of freshwater fish. It will include general principles of parasitology, fish physiology and some practical dissection and microscope work. Roger Sweeting has spent many years studying fish health and has a particular interest in fish parasitology.

## ACCREDITED COURSE: INVERTEBRATE IDENTIFICATION FOR BIOTIC ASSESSMENT (including examination)

**Date:** Tuesday 12 - Thursday 14 November **Tutor:** John Davy-Bowker **Cost:** £675; early bird rate £650; FBA member £640 **Location:** FBA Windermere, Cumbria

As described on page two.

### BESPOKE TUITION

We offer bespoke, tailored tuition for a wide range of courses. To discuss bespoke options please contact [events@fba.org.uk](mailto:events@fba.org.uk).

### ABOUT US

With 90 years of scientific expertise you know you'll be in good hands.



### WHAT WE PROVIDE

- 🕒 Lunch & refreshments throughout the day unless stated
- 📍 Field, site and lab equipment
- 📚 Course materials

### WHAT YOU WILL NEED TO BRING (for field courses)

- 👢 Wellies or waders for sampling
- 🧥 Outdoor gear: warm clothes/waterproofs/sun hat & sun cream

### GIVE LIFE IN FRESH WATERS A FUTURE

#### Do you want to learn more?

Beyond booking why not become a member of the FBA to take advantage of member discounts on course fees, as well as gaining further insights into the fascinating world of fresh waters.

### BOOKING TERMS

Accommodation, travel guidance and directions will be sent with your booking. Courses may be altered or cancelled due to unforeseen circumstances. Please see the booking form for our terms and conditions.

Early bird rates apply to fees paid at least eight weeks before the start of the course. Please note that only one discount can be applied at any one time, and that courses will only run subject to sufficient participant uptake.