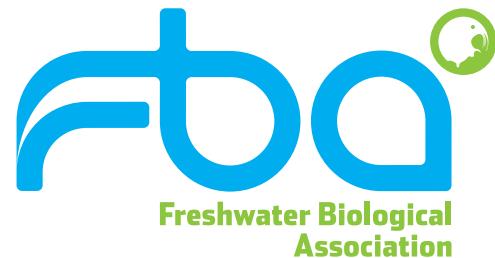


# FRESHWATER COURSES 2018

Sampling and identification courses with the freshwater specialists



## SAMPLING AND IDENTIFYING FRESHWATER INVERTEBRATES

**Date:** Tuesday 10 - Wednesday 11 April **Tutor:** John Davy-Bowker **Cost:** £240; FBA member £210 **Location:** FBA Windermere, Cumbria

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.

## IDENTIFYING MACROALGAE

**Date:** Wednesday 23 - Thursday 24 May **Tutors:** Martyn Kelly & Allan Pentecost **Cost:** £300 early bird rate £285; FBA member £270 **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 LEAPACs 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.

## ENTOMOLOGY FOR ANGLERS LEVEL 1

**Date:** Saturday 2 June **Tutors:** Stuart Crofts & Andrew Dixon **Cost:** £70 **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.

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)

## INTRODUCTION TO PHYTOPLANKTON

**Date:** Tuesday 3 - Wednesday 4 July **Tutor:** Allan Pentecost **Cost:** £240; early bird rate £225; FBA member £210 **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.

## ENTOMOLOGY FOR ANGLERS LEVEL 2

**Date:** Saturday 7 July **Tutors:** Stuart Crofts & Andrew Dixon **Cost:** £70 **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.

## SAMPLING AND IDENTIFYING FRESHWATER INVERTEBRATES

**Date:** Saturday 28 - Sunday 29 July **Tutor:** John Davy-Bowker **Cost:** £240; early bird rate £225; FBA member £210 **Location:** FBA Windermere, Cumbria

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.

## ENTOMOLOGY FOR ANGLERS LEVEL 3

**Date:** Saturday 1 September **Tutors:** Stuart Crofts & Andrew Dixon **Cost:** £70 **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.

## 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).

## BOOK YOUR PLACE

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

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

**Date:** Wednesday 19 - Thursday 20 September **Tutor:** John Davy-Bowker **Cost:** £385; early bird rate £370; FBA member £355 **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, standardised RIVPACS kick/sweep sampling, collection of time variant environmental predictor variables, principles of standardised laboratory sample processing and enumeration to required taxonomic level(s)\*, collection of time invariant environmental predictor variables, manual calculation of observed biotic index values (examples of major indices currently in use in the UK), introduction to the latest web based RICT software and RIVPACS IV models, preparation of data input files, running RICT in classify, predict and compare modes, interpretation of RICT outputs, quality classes and diagnosis of stress. The course will include a demonstration of use of the RICT software. If you would like to the chance to practice using the software yourself, please bring a laptop. John Davy-Bowker is a knowledgeable freshwater biologist with considerable research and teaching experience, and part of the team continuing to develop the RIVPACS/RICT bioassessment tool.

\*Please note: this course does not cover invertebrate identification. Some prior knowledge of river invertebrate sampling and the principles of invertebrate identification would be beneficial.

## FRESHWATER FISH: ASSESSMENT OF CONDITION AND AGEING

**Date:** Thursday 11 October **Tutor:** Roger Sweeting **Cost:** £135; early bird rate £120; FBA member £105 **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.

## FISH HEALTH, PARASITES AND DISEASE

**Date:** Friday 12 October **Tutor:** Roger Sweeting **Cost:** £135; early bird rate £120; FBA member £105 **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.

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

**Date:** Tuesday 13 - Thursday 15 November **Tutors:** Simon Pawley, Melanie Fletcher, John Davy-Bowker, **Cost:** £660; early bird rate £645; FBA member £630 **Location:** FBA Windermere, Cumbria

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. Simon Pawley and Melanie Fletcher are former FBA staff who now work for AECOM and Natural England respectively. They have both taught on a range of FBA invertebrate identification courses and are authors of the FBA publication SP67 *Guide to British Freshwater Macroinvertebrates for Biotic Assessment*, a copy of which is included in the course fee for each participant. John Davy-Bowker is an FBA Honorary Research Fellow and a knowledgeable freshwater biologist with considerable research and teaching experience.

A list of courses which we have offered in previous years but do not have a scheduled date this year can be found on our [website](#). To register your interest in one of these courses please [contact us](#).

## ABOUT US

With 85 years of scientific expertise you know you'll be in good hands.



With an impressive history dating back to 1929, the FBA is proud to continue providing courses for the freshwater community.

## 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?

Before 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. [Join here](#).

## 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.



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