

SAMPLING AND IDENTIFYING FRESHWATER INVERTEBRATES

Date: Tuesday 19th - Wednesday 20th April **Tutor**: John Davy-Bowker **Cost**: £260; early bird rate £247; FBA member £234 **Location**: FBA Lakeside, Cumbria

This 2 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.

INTRODUCTION TO ADULT CADDISFLIES

Date: Saturday 23rd April **Tutor**: Stuart Crofts **Cost**: £75 **Location**: FBA Lakeside, Cumbria

This I 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. This is very much a hands-on day and no prior experience of FBA courses is needed.

IDENTIFYING FILAMENTOUS ALGAE/ MACROALGAE

Date: Tuesday 17th - Wednesday 18th May **Tutors**: Martyn Kelly & Allan Pentecost. **Cost**: £320; early bird rate £304; FBA member £288 **Location**: FBA Lakeside, Cumbria

A 2 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.

FRESHWATER ALGAL IDENTIFICATION

Date: Monday I3th - Friday I7th June **Tutors**: Professor D.John, Dr M.Kelly, Dr B. Brierley & Dr A. Pentecost **Cost**: £495 early bird rate £475; FBA member £455 **Location**: FBA Lakeside, Cumbria

We are pleased to add this comprehensive 4.5 day course to train staff of environmental and other agencies, utility companies, consultancies, museums, universities, and research students in the identification of the major groups of ecologically important freshwater algae. Special consideration will be given to harmful and nuisance algae, recognition of algae responsible for "incidents" and the use of freshwater algae for ecological assessment.

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

ACCREDITED COURSE: MACROPHYTE IDENTIFICATION (including examination)

Date: Monday 11th - Wednesday 13th July Tutor: Tim Jones £95 Location: FBA Lakeside, Cumbria Cost: £675; early bird rate; £642 FBA member; £607 Location: FBA River Laboratory, Dorset

This 3 day course will give participants a more advanced look see, catch or handle. Without recourse to detailed dissection at a range of aquatic plants, using a detailed pragmatic and it is quite staggering how much we can piece together about a practical approach to identify common and ubiquitous aquatic fish's well-being and condition, its age and growth, life history and forms. This course will continue to employ the effective sexual development. This course aims to provide an insight into survey method used to assess river macrophyte populations the ways of observing fish for these purposes. Roger Sweeting introduced in the Beginner's course and will use a structure has spent many years studying fish health and helping to develop based approach by Nigel Holmes and subsequently refined by an understanding of how to improve fisheries for Thames Water, tutor Tim Jones. This approach allows the identification of plants the National Rivers Authority (NRA), the Environment Agency easily recognisable features (e.g. submerged linear leaved, paired and the FBA. broad leaved marginal, etc.). This approach does not always follow the traditional botanical approach but has been shown to be an ENTOMOLOGY FOR ANGLERS LEVEL 3 effective way for people to learn and accurately identify aquatic Date: Saturday 15th October Tutors: Stuart Crofts & Andrew plants. At the end of the course, participants will be examined on Dixon Cost: £75* Location: FBA Lakeside, Cumbria their identification skills and, if the required standard is attained, a certificate of achievement will be awarded.

The course will comprise talks and presentations, lab practicals Levels I & 2. During the day we will continue to look in even looking at fresh specimens and visits to local river sites. Tim Jones greater depth and detail at the actual invertebrate food of the fish is an experienced freshwater ecologist and aquatic plant expert and how to progress with identification skills. - he has run plant training courses for many years and together with Nigel Holmes ran the accreditation plant scheme for the *If you have completed levels I & 2 this year, then level 3 will be Environment Agency. Lunch is provided for the duration of the offered at a special price of £50 course.

RIVER INVERTEBRATE PREDICTION AND CLASSIFICATION SYSTEM (RIVPACS)/ RIVER INVERTEBRATE CLASSIFICATION TOOL (RICT) TRAINING - NEW & UPDATED

Date: Tuesday 11th - Wednesday 12th October Tutor: John Davy-Bowker Cost: £395; early bird rate £375; FBA member £355 Location: FBA River Laboratory, Dorset

During this 2 day course, delegates can expect to gain a theoretical and practical knowledge of the latest version of the RIVPACS/RICT bioassessment tool. 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.

FRESHWATER FISH HEALTH & CONDITION

Date: Wednesday 5th October Tutor: Roger Sweeting Cost:

This course is aimed at fisheries managers, fishermen and naturalists who want to know more about the fish that they

This course continues to build on the knowledge gained from Levels 1 & 2 and is open to those who have previously attended



Sampling and identification courses with leading freshwater specialists

It is designed to be an introduction for those with limited experience of freshwater algae but, nonetheless, every effort will be made to cater for those who wish to enhance their existing taxonomic expertise and identification skills. This course is based on the highly successful Durham Freshwater Algal Identification Course.

ENTOMOLOGY FOR ANGLERS LEVEL I

Date: Saturday 14th May Tutors: Stuart Crofts & Andrew Dixon Cost: £75 Location: FBA Lakeside, 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 INTRODUCTION TO MACROPHYTES be incorporated into imitations, explain why some flies are more Date: Monday 4th - Tuesday 5th July Tutor: Tim Jones Cost: significant than others and why some important flies are often neglected by anglers. It will also involve a field visit to a river River Laboratory, Dorset 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.

STONEFLIES, MAYFLIES & CADDISFLIES Note:

This course is still to be confirmed.

Date: Wednesday 13th - Friday 15th July Tutors: Craig McAdam & lan Wallace, Cost: £375; early bird rate £357; FBA member £337 Location: FBA Windermere, Cumbria

This 3 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 coordinator of the Mayfly and Stonefly recording schemes.

He will be joined by Ian Wallace, recorder and curator of UK Trichoptera species with a passion for Caddis. He is interested in their UK distribution, conservation and biology. lan has written keys to help expand the knowledge of enthusiasts and experts, and wrote the first comprehensive UK Cased Caddis larva key, which incorporated information hitherto not known to science.

ENTOMOLOGY FOR ANGLERS LEVEL 2 Date:

Saturday 18th June Tutors: Stuart Crofts & Andrew Dixon Cost: £75 Location: FBA Lakeside, 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 I 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.

£375; early bird rate £357; FBA member £337 Location: FBA

This 2 day course will give participants and 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.

Book 8 weeks in advance to take advantage of early bird rates!







PARASITES AND DISEASE IN FRESHWATER FISH

Date: Wednesday 26th October Tutor: Roger Sweeting

Cost: £95 Location: FBA Lakeside, 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: Wednesday 2nd - Friday 4th November **Tutor**: John Davy-Bowker **Cost**: £675; early bird rate £642; FBA member £607 **Location**: FBA Lakeside, Cumbria. Lunch provided.

This 3 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.

RIVER RESTORATION TRAINING

Date: Tuesday 3rd - Thursday 5th May **Tutors**: Olly Southgate, George Heritage, Nick Mott, Neil Entwhistle, Ashley Deane & Simon Johnson **Cost**: £200*; **Location**: FBA Lakeside, Cumbria

*Cost includes packed lunch and 'A Field Guide to British Rivers' RRP £60

This three-day course aims to introduce participants to a variety of naturalising and restored river and floodplain systems illustrating the variety of fluvial form that should be considered in any restoration scheme and demonstrating the geomorphological processes operating to create and maintain such environments in a dynamically stable state. The field visits will provide first-hand experience of the use of soft restoration and naturalisation techniques to rejuvenate dynamic systems on both low and high gradient watercourses reviewing both in-channel, valley bottom and tributary improvement options.

Intervention success is fundamentally governed by system understanding and we will review practical ways of gaining knowledge of geomorphological, ecological and hydrological aspects through audit and monitoring techniques.

BESPOKE TUITION

We offer bespoke, tailored tuition for a wide range of courses. To discuss bespoke options please contact events@fba.org.uk.

ABOUT US

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

WHAT WE PROVIDE

- Refreshments throughout the day unless stated
- Field, site and lab equipment
- Ourse materials

WHAT YOU WILL NEED TO BRING (for field courses)

- Wellies or waders for sampling
- Outdoor gear: warm clothes/waterproofs/sun hat & sun cream. Packed lunch unless stated.

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.

BOOKING TERMS

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

Early bird rates apply to fees paid at least 8 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.



