

Dissection techniques for moth ID verification

Led by Dave Grundy

FSC Preston Montford

Saturday 8th – Sunday 9th April 2017

Arrive from 10 am for 10:30 start
Depart Sunday 4:00 pm



Dissected genitalia of a male Crinan Ear proving its ID
© Dave Grundy

Overview of the course

This course will teach techniques for dissecting moths for beginners and will talk about everything you need to get started dissecting moths at home. Over 95% of moths can be safely identified in the field without the need for dissection. However the remaining moths need to be dissected to identify them in order to aid conservation of the species and keeping valid records in databases.

There is a real shortage of people out there with the necessary skills. So, please give this course a try to help recording moths and conservation. The course will take you through the basics of how to prepare moth specimens, create microscope slides and identify the genitalia prepared to create valuable records.



Grey Pug - pugs are difficult to identify and often need dissection to prove their ID. © Dave Grundy



Common Rustic agg. – Common Rustic and Lesser Common Rustic are not safe to identify in the field without dissection. © Dave Grundy

Course Tutors



Dave Grundy is an experienced naturalist and wildlife consultant specialising in bird, butterfly and moth surveying. He has a particular interest in micro-moths and regularly leads training courses throughout the UK, with both beginners and more advanced participants, for these and for other natural history subjects.

Since 2003 he has organised and administered the Garden Moth Scheme, which now covers over 300 gardens across Britain and Ireland. The scheme monitors changes in the fortunes of common moth species and uses the data as indicators of environmental change.

Course objectives

No prior knowledge of dissection is assumed for this course, though some knowledge of moths and at least of macro-moths is preferable.

By the end of the course participants will be able to:

- Prepare moth specimens for dissection
- Dissect moth genitalia, male and female to enable possible identification
- Prepare a microscope slide of genitalia ready for ID
- Identify genitalia of moths from microscope slides
- Know how to take their skills forward following the course by dissection at home
- Know where to look up genitalia diagrams to enable ID.

What to Bring

- Hand lens
- Notebook and pencil
- Field guide to macro and micro-moths if you have them.
- A laptop computer if you have one (please let us know if you don't have access to one and we'll arrange for you to borrow or share one).

Timetable (provisional)

Saturday AM	Introductions and course introduction to identification of moths by dissection, running through basic techniques.
Saturday PM	Dissection of moth specimens by participants with assistance from tutor.
Sunday AM	Presentation on more advanced dissection and identification techniques.
Sunday PM	Further dissection of moth specimens by participants with assistance from tutor.

To Get Started at Home

Following the course, participants will need some basics if they want to get started dissecting moths at home. In the future you will need:

- A basic dissection start-up kit of all the necessary chemicals, slides, forceps etc.
- A binocular microscope.

The tutor has arranged a special price for these items with a supplier. If participants wish to purchase these items then they can discuss with the tutor before the course in order to collect them on the course, or they can discuss them on the course in order to get them posted to their home addresses following the course.

The important thing following the course is to get more people out there actively dissecting moths for dissection.



This could be your dissection set-up at home – this is in the tutor's house in Birmingham. © Dave Grundy

Course fees

Sole occupancy: £120

Non-resident: £90

The residential course fee includes

- Full Board accommodation with sole occupancy including cooked breakfast, picnic lunch, afternoon cake and evening meal.
 - Vegetarian and other dietary options are available
 - Tea and coffee making facilities are available throughout the day
- Transfer to and from Shrewsbury train station
- Up to 10 hours of tuition a day, with breaks for meals and refreshments
- In course transport and necessary admission fees
- Use of centre facilities including library, workrooms, studios and the Centre grounds
- Rigorous and proven health and safety procedures including 24 hour emergency cover
- Insurance to cover cancellation, personal belongings, personal accident, legal liability and medical emergency / emergency travel arrangements

The non-resident course fee includes all of the above except breakfast and accommodation.

To make a booking contact: FSC Preston Montford directly by

- Telephone: 0845 330 7378
- E-mail to: enquiries.pm@field-studies-council.org
- Online at: www.field-studies-council.org/prestonmontford

General Information 2016

FSC Preston Montford was opened as an outdoor education centre in 1957 by the Field Studies Council. Since then it has been delivering high quality, inspirational curriculum related outdoor education. Our teaching staff are expert in their field and we work with the widest possible range of learners; from pre-school to Masters level. We can provide courses for schools, universities or individuals; for infants, school students, undergraduates or enquiring adults; anyone with an interest in the natural world. We offer day and residential courses and the Centre is available as a venue for others to use; there are bed and catering facilities for 130 visitors along with 6 fully equipped teaching and meeting spaces, a library, common rooms and a bar.



About The Centre

Location and site: FSC Preston Montford is very accessible by road or rail. The site is 10 km west of Shrewsbury just 3 minutes drive from the A5 and 15 minutes drive from Shrewsbury Station.

Buildings: The campus has a complex of three main buildings built between 1700 and 1990 located around a central pond. Each building has bedrooms, classrooms and office space with additional classroom or meeting spaces set in a wooded garden area. The Main House has undergone a major re-furbishment in the first half of 2014 to provide modern bed and bathroom facilities as well as enhanced reception, meeting and library space.

Facilities and services: A dining room and kitchen are part of the Main House; all catering is done in house with a fully trained and experienced Catering Team who cater for a full range of dietary requirements. The main teaching, recreation and dining areas are on ground floor level and some accommodation is available for wheelchair users. The different ages of our Centre buildings means that bedrooms range in style from dormitories to twin rooms with full en-suite.

The centre has a wide range of specialist equipment for teaching geography, ecology and other subjects outdoors as well as microscopes and laboratory equipment for examining and analysing samples indoors. Classrooms are fully equipped with interactive whiteboards and Wi-Fi access.

There are common rooms, drying areas, a library, a shop and a bar. We operate a 24 hour duty system and all staff are first aid trained and DBS checked.

Site and grounds: The Centre has 11 hectares of ground with a range of habitats. To the north lies the River Severn Montford SSSI which has a bank of semi-ancient woodland growing on a steep bank of glacial drift. Most of the area is grazed fields with hedges, 18th century specimen trees and some more recently planted copses. The eastern side of the estate is an area of more specialised habitats; ponds, wildflower meadow, ancient orchard, the remains of a walled garden and a Bee hotel.

Around the campus there is a sensory garden with a willow classroom area, weather monitoring plot, compost heap with wormery and installations for simulating rainfall-runoff relationships. The lawns, ponds, grassland and woodland are used for introductory teaching activities as well as student recreation.