Introduction to Moths

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So, you might have been to a mothing session and seen all those interesting, and quite pretty, moths or you've seen mothing on Countryfile or Springwatch. You may have brought a light trap or just seen moths on your window or feeding on your buddleia but, there's no one around to tell you what they are - help!!!

For anyone getting interested in moths for the first time it can be very confusing! With over 2500 species where does one start? I have to say that one doesn't start in mid-summer when most species and numbers occur. And, unlike birds and plants, the same species of moth can exist in several, sometimes many, different coloured forms, adding to the confusion. What can you do?

Just joining a moth group is half the battle and there are a number on Facebook where you can upload photos for identification etc. but there is no substitute for going out with others.

As with all hobbies it is possible to get bogged down in a spiral of expense but that need not be the case. As a minimum you will need a good field guide, a net and some clear tubes or boxes. You may also want to buy or construct a light trap. As you progress you will find that you are catching moths not shown in your field guide or which you can't identify. Then, a digital camera will enable you to send photos to others - possibly via an E-group or Twitter - for identification or confirmation.

There is plenty of information on mothing out there on the web and the number of books on the subject is increasing and I have included a list of the basic ones that you need at the end.

Identifying

Let's be honest, you are going to be confused when you first start. Even if you start in the early spring when the number of species is low, it may take you several hours to go through 50/60 moths. However, you soon

get to know the commoner ones. While you can search the web, it is far better to have a field guide and the three by Waring, Sterling and Manley are the basic ones that you need.

OK, you've got the books and everything in the trap is not in your book and so must be new to science! We've all been there so don't get downhearted. Even if you only identify one or two; that's one or two less to identify the next night. Soon you will have recognised all the common species flying at the time and you will be able to concentrate on the new ones.

This isn't the place to go into details about identification but here are a few pointers:

- Read through the field guide regularly. That way you will become familiar with the shapes, markings and
 patterns. Half the battle with identification is knowing where in the book to start looking. After a while
 you will know to which family or genus a moth belongs even if you don't know what it is.
- Read the text that goes with the illustration. This often gives advice about separating similar species, the time of year that it flies and the foodplant that its larvae feed on.
- Don't make the illustration fit the moth if you are unsure then let it go or take a photo.
- Be aware that books can only illustrate a few examples of each species. Some species are incredibly variable.
- Worn moths are best ignored, at least when you are starting.
- Some species cannot be separated without examining their genitalia. This is certainly true of many of the smaller moths or micros. Some macros are best recorded as the aggregate or agg. e.g. Grey and Dark Dagger; Common and Lesser Common Rustic and some of the Minors.
- Might be better to concentrate of the macros when you first start.
- Don't forget to check adjacent walls, fences etc. Not all moths enter the trap!
- Let your catch go securely and always return moths caught elsewhere to the place you caught them.

Having identified your catch what next? How do you know you've got the identifications right? Any moth-er will tell you that you can get it horribly wrong when you first start - even when you've been at it for time too!

- Have a look at the current distribution maps. These will tell you if the species is likely to be in your area and whether it is rare, scarce etc.
- If you have a new or scarce species, then you may want to check your identification before submitting your records. Pay attention particularly to the habitat, flight time, similarity to commoner species etc. If possible, take a photo for verification.
- The UK Moths website has superb photographs of most of the macros and many of the micros and is excellent for checking species you are unsure of.
- There is a lot of help on the web and there are some suggested websites, Facebook Groups and Twitter accounts at the end.

Don't worry if you struggle at first - we all did - just enjoy it. It's not worth doing it otherwise.

Who to tell

So, you've identified all your moths and have accumulated a lot of records. What do you do now? Well, you don't have to do anything. You could keep all the data to yourself. However, data on insects is in short supply and any records, even those from your garden, are valuable. We amateurs are in a unique position to contribute to our knowledge of the natural world, and it is vital that we all add to this knowledge by pooling our records.

The County Moth Recorder (CMR) coordinates all the records of moths in the county, so all records should be sent to him/her in the first place. The CMR will look through them and may get back to you with queries on some of the rarer species and may ask you if you are sure of the ID or have a photo. Don't be alarmed by

this; it applies to everyone - even seasoned moth-hunters. It is vital that only correct identifications are stored on the database. Future workers have to be able to rely on the accuracy of past records.

Having accepted your records, the CMR will then enter them on the county database and also forward a copy to the Staffordshire Ecological Record who are the central county database for all species and Butterfly Conservation who hold the national database.

Remember, your records are valuable - please send them in.

Some recommended books - identification

Waring, Townsend and Lewington 2018. *Field Guide to the Moths of Great Britain and Ireland*. Edition 3. ISBN: 9781472964519

Sterling, Parsons and Lewington 2012. *Field Guide to the Micro-Moths of Great Britain and Ireland*. ISBN: 9781472964526

Chris Manley 2021. British & Irish Moths A Photographic Guide. Edition 3. ISBN: 9781472975201

Sean Clancy 2012. *Moths of Great Britain and Ireland A Field Guide to all the Macromoths*. ISBN: 9788799351244

Henwood, Sterling and Lewington 2020. Field Guide to the Caterpillars of Great Britain and Ireland. ISBN: 9781472933560

Newland, Still and Swash 2019. *Britain's Day-Flying Moths A Field Guide to the Day-Flying Moths of Great Britain and Ireland*. ISBN: 9780691197289

Ben Smart 2018. Micro-moth Field Tips A Guide to Finding the Early Stages in Lancashire and Cheshire – A Chronological Guide from January to December. ISBN: 9781999731243

Ben Smart 2021. Micro-Moth Field Tips, Volume 2 A Guide to Finding the Early Stages in Lancashire and Cheshire. ISBN: 9781916903425

Brian Hancock 2018. Pug Moths of North-west England. ISBN: 9781999731236

Bernard Skinner and David Wilson 2004. *Colour Identification Guide to the Moths of the British Isles*. ISBN: 9788788757903

Tony Simpson, Ian Duncan, and Mike Williams 2020. Moths of the West Midlands. ISBN: 9781874357926

Colin Hart 2011. British Plume Moths. ISBN: 9781899935062

Paul Waring and Reg Fry 2020. A Guide to Moth Traps and Their Use. ISBN: 9781838024611 Edition: 3

Zoe Randle et al 2019. Atlas of Britain & Ireland's Larger Moths. ISBN: 9781874357827

Jon Clifton 2015. *Bird-Dropping Tortrix Moths of the British Isles A Field Guide to the Bird-Dropping Mimics*. Edition 2. ISBN: 9780956835222

Jon Clifton and Jim Wheeler 2012. Conifer Moths of the British Isles A Field Guide to Coniferous-feeding Lepidoptera. ISBN: 9780956835215

Field Studies Council, Aidgap Series Guide to the day-flying moths of Britain. ISBN:978-1-85153-215-5

Some recommended books - background

Michael Majerus 2002. Moths. Collins New Naturalist No. 90. ISBN: 0002201429

Mark Young 1997. The Natural History of Moths. Poyser, ISBN:0-85661-103-4

Equipment sales

Anglian Lepidopterist Supplies: https://www.angleps.com/

Watkins and Doncaster: https://www.watdon.co.uk/

Natural History Books Service: https://www.nhbs.com/equipment

Websites

West Midland Moth Atlas: https://westmidlandsmoths.co.uk/index.php

UK Moths: https://ukmoths.org.uk/

Leaf miner website: http://www.leafmines.co.uk/

British Lepidoptera: https://britishlepidoptera.weebly.com/

What's Flying Tonight: https://shiny-apps.ceh.ac.uk/whats_flying_tonight/

Twitter

Sean Foote: @MothIDUK

Facebook Groups

Staffordshire Moths

https://www.facebook.com/groups/staffsmoths

Butterfly Conservation West Midlands

https://www.facebook.com/groups/westmidlandsbutterflyconservation

Garden Moth Scheme

https://www.facebook.com/groups/438806469608527

Moths UK Flying Tonight

https://www.facebook.com/groups/Mothsukflyingtonight

UK Micro Moth Identification

https://www.facebook.com/groups/1620225701558077

Kinver Edge Moth Group

https://www.facebook.com/groups/436853667169955

Sending in your records

iRecord: https://irecord.org.uk/home

List of County Moth Recorders

https://butterfly-conservation.org/moths/moth-recording/county-moth-recorders