

Getting Started with micro-moths

2. Some tips on how to begin identifying micros

1. Many micros fly by day, especially towards dusk, so *don't wait for dark and moth traps!* They do come to light, but often get swamped by the larger species.
2. Collect micros into small diameter glass or plastic tubes, narrow enough to allow you to use a x10 lens to see them on the opposite tube wall. **Keep these tubes out of the sunshine or the micros will die very quickly! Keep the inside of the tube dry or they will 'drown'!** Don't add anything but the moth, and particularly avoid any vegetation, which will cause condensation.
3. Record the context! Many species have a very restricted flight period, a precise habitat and may stay on or near their foodplant. So, note down date, habitat, altitude, main vegetation type, the plant that they seem to be on or around, and anything else that seems to be special. Later on, when choosing between look-a-likes, *these details may be very important.*
4. It may seem a bit feeble but, especially when still inexperienced, *don't try and identify worn specimens of the harder groups.* A worn 'scoparia' or 'flatbody' can't be done without dissection, and you won't manage that until you are reasonably experienced. Without feeling any guilt, just let them go!
5. Unfortunately, although good photographs of fresh specimens of species that are distinctive can work well, *photos are often not enough.* If the specimen is from a tricky group, even a good photo may not be enough – accepting the difficulty of getting the colour balance exactly right, most *Coleophora* species can look identical! Often the angle of the photo is not quite right and so a key feature may not be clear. Size is often crucial, so even the best photos need a scale to be useful. Always try to get a side-on and top-down photo.
6. Bred specimens are best! They really show their distinctive colour pattern and knowing the foodplant adds enormously to your chance of success.
7. **Please do try and identify your specimen yourself, before you send it off for other opinions!** That will help you develop your experience and ability, whereas just getting a name from someone else will teach you very little.
8. Having said all that, *first try and place your specimen in its characteristic family.* Is it a tortricid or a coleophorid? Don't accept your first thought but always have a second thought, to confirm your ideas. There are some confusing species, but many can be assigned fairly easily to their family.
9. The only non-moths that might really be confusing are caddis flies. They hold their wings in a steep roof-shape and keep their antennae out to the front, instead of tucked back, but the main difference is that they have hairs not scales on their wings! Use a lens to help see this. **ALL micro-lepidopterists carry and use a 10x lens.**
10. Once you have a family in mind, try to assign your moth to a group within the family. For example, within the 'pyrales' there are several recognisable groups and your moth might be a 'grass moth' or a colourful 'pyrale'. This can't always be done easily, but **flicking through pictures books is something we all do first!** You will soon begin to recognise the jizz of the most common groups.

11. If you can get near to a possible candidate, then *begin to be more careful and detailed in your comparisons*. The books may have a 'similar species' section, or there may be a key, which notes the particular characters that distinguish one species from another. Most microlepidopterists don't use the whole of a lengthy key, but usually do use the 'final' couplets to be reminded of important differences.
12. It really helps you concentrate your attention on important features if you do a scribbled drawing. Where are the most obvious patches of colour? What angles do the lines make? Is the pale patch actually just a worn spot? How is it sitting at rest? What size is it? The drawing needn't be artistic to be useful! *Have a go at this*.
13. *Concentrate on essential features*. If the moth does not have an eye-cap (a flat bit at the base of the antennae over the eyes) then it won't be a Nepticulid! If the palps droop down, instead of sticking up, then it won't be a Gelechiid. If it doesn't have a hairy head, then it can't be an *Eriocrania* species. Check the family descriptions in the books, ignore the technical stuff about wing venation etc., and *try to pick out these key features*.
14. Give yourself a contender, or a small group of similar contenders, then begin to check important corollary facts. Does the species fly at this time of year? Does its distribution reach to your area? What habitat does it favour? What is its foodplant? Is it a mountain species (not likely in a river valley)? Is it a common species – likely – or a rare species – keep hoping! Of course some micros do stray about, but the great majority are found in context, near their foodplant in a defined habitat.
15. Until you are experienced, get your identification checked. *You can keep micros alive in the fridge for a few days*, so why not do that and send off a quick photo to an expert, which might tell you whether it is what you think it is, or that it needs another look. Don't always accept the first identification you are given! Think about whether it is convincing. *Once you have an answer **then** you can let the moth go unharmed*.
16. Unfortunately, some species and many worn specimens may have to be dissected. At some point you must make a very tricky decision about your attitude to killing specimens. In some cases, to be sure of the identity, you *have* to have a corpse! Cooling micros down in a deep freeze is an easy and humane way to kill them. Use an air-tight tube and when removing it from the freezer don't jiggle it about or the brittle bits will ping off! Once thawed, allow it to dry out thoroughly in the air, rather than leaving it to fester in the tube before you pack it up to send to an expert, (but watch out for mites/wasps and clothes moths!)
17. Keeping a specimen has two main uses, it may act as a *reference specimen*, to help you make future identifications, or as a *voucher specimen*, to convince someone that you were right, or it may be both of these.
18. Once you get a bit of experience, go back to your earlier photos/specimens and re-check! We all get better and I am constantly re-checking my specimens and sometimes I find I have to change my mind. We all make mistakes, so be careful!
19. Be humble! Everyone makes mistakes, including slips of the tongue or pen. The amazingly expert Teddy Pelham-Clinton, always used to say, "please double-check and if you think I have made a daft mistake, let me know – I often do, you know!"
20. Micros are much less well-known than macros and you will soon find something really exciting and make your name! Go for it!

We created the County Recorder toolkit as part of Supporting Science. This project received DCMS and National Lottery funding, distributed by The Heritage Fund as part of their Digital Skills for Heritage initiative. We are also grateful to The Henry C. Hoare Charitable Trust, Sophia Webster Ltd., Sabina Sutherland Charitable Trust, and The Lochlands Trust for their generous support.

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