



Dear Recorder,

Thank you for your interest in recording moths in our area. This is a short guide to help you to help us if you intend to send your results in to add them to the County Records. I have tried to make these notes comprehensive for new observers, so can already experience recorders please bear with me for some of the more obvious points.

How To Present Your Records:

We will accept records in a number of formats, from handwritten documents, to plain emails, or more detailed electronic lists using a variety of software. As the compiled data is to be held on a number of databases (Map-mate and Recorder 2000), it is preferable to receive your data in tabular format (preferably Microsoft Excel compatible), particularly when sending larger amounts covering a number of days / weeks / months, and we would prefer what data you have to be inserted into the pre-formatted spreadsheet (containing example data as a guide) which is downloadable from our "Records" web page. There are, however, Microsoft Word templates which can also be downloaded and used if you don't have access to Excel. These can either be printed off and filled in for posting (address on forms), or preferable be attached to an email and sent to records@cornwallmothgroup.org.uk.

Explaining Our Templates:

You do not need to complete all columns in our templates, but certain bits of data are required to make your observations useful and complete. Where the data is the same for a range of species recorded at the same time (as in an overnight trapping session), the common data can just be entered in the first line of the list or at the top of the sheet for a single date. For overnight recording please use the date of the evening that recording was started, not the following morning date when the trap is opened.

Identifying The Species:

To identify the species you have observed, there are a number of ways you can start. Perhaps the best book for identification of the larger moths is a new publication "*Field Guide to the Moths of Great Britain and Ireland*" by Waring, Townsend, and Lewington (ISBN 0-9531399-2-1). This has become the "Recorder's Bible", as it shows illustrations of all the UK moths at rest, as you would see them live in the wild. A now older book, "*Colour Identification Guide to Moths of the British Isles*" by Skinner (ISBN 0-670-80354-5) is essential for identifying very similarly marked species where the differentiation is made by inspecting the underwings which are normally covered at rest. This book shows all the moths in the set position with wings spread. A third book is useful for identifying some of the smaller species you might come across, but are not covered by the two above. This is "*British Pyralid Moths*" by Groater (ISBN 0-946589-08-9). Between them these three books can help in identifying a large number of the commoner moths, but even these cannot cover a lot of the very small "micro" moths, or specialist groups like the "Plume" and "Tortrix" moths. Books to check these families can be very expensive and even then species can be difficult to pin-point, as many are similarly marked or very variable, or both! If you have a Computer with Internet access, a very useful web-site called UK Moths, at <http://ukmoths.org.uk/> is available. There are a large number of pictures and identification methods presented there, and the aim is to finally illustrate the full Bradley & Fuller list of UK species.

Although Bradley & Fuller (B&F) Reference numbers are sometimes included in our template documents, these are not essential and can be ignored if not readily available, as the recording software can provide them from the other information. To list your species, we provide columns for both Scientific and Common names, but these can be used as preferred (although for some species of mainly smaller moths, there is no Common name!). Where a known rare or unusual species is being recorded we would request a picture of the insect, or the actual specimen to be available to verify it, but please only send a lower resolution picture (resized to 300 pixels on the long side) initially. It goes without saying, that the picture must be in-focus and exposed correctly to see the wing patterns to be able to identify the insect. If there is no evidence available, the report will be classed as "unverified".

The Observing Site Details:

To give your observing site details, as well as it's name (if available) please give the Ordnance Survey Grid Reference if possible. Alternatively, if you are unsure about Grid References, or just don't have the appropriate map, please give the nearest Postcode to allow us to get an idea of the location, together with any directions to the site from the Postcoded habitation. We can then convert this to a Grid Reference for the records. It is also useful to provide a brief description of the recording site environment, e.g. woodland, garden, marshland, farmland, etc.

On the Excel Spreadsheet template there are a number of columns included as they are needed to be present for the Database programmes. They do not need to be completed for your report, as is only available if data is available. Some column data are produced by the software as a result of the rest of the data provided. Generally, please ignore "Vice County", "Sex" (unless obvious), and "Status" columns. These will not be in the simpler "Word" templates.

The Observers:

In the Excel template, there are two columns to link the observer(s) to the moth data. These are the “Recorder”, and “Determiner” columns. The Recorder column can be used for a single person, but can also include a group of people involved with the observation (i.e. Husband & wife, or friends). The Determiner is the person who has decided the identification, which may be the person logging the data, or in some cases an “Expert” who has done some identification for the Recorder, was not at the event (as in if specimens or photographs were taken, then passed on to someone else for identification). Normally, as familiarity increases, the Recorder and Determiner is the same person, so the Determiner column is left blank. On the simpler templates, it is assumed the Recorder and Determiner is the same as the person sending in the information. If otherwise, please indicate the situation either in the “Comments” boxes, or inform us in the email or covering letter.

Observing Methods:

This box or column on our templates is used to record the way in which the moths are being observed, e.g. Day observation, Lamp & Sheet, House Light, or an overnight trap. In the last three cases, the type of lamp should be recorded, with the Wattage rating (e.g. 125 Watt Mercury Vapour lamp, 25W “black” UV lamp, or 160W composite). Many traps are made to a particular design originally created by entomologists, and are known by their generic names (e.g. Robinson, Skinner, Heath), but there is plenty of options for improvisation with completely new designs, so please record the details so that analysis in the future may discover the best performance.

How To Improve The Effectiveness Of The Data:

I have been considering the usefulness of the actual data which many of us are gathering, and thought it might help to try to get everyone to adopt some standards to make it easier to extract information for a number of potential requirements in the future if anyone wants to analyse all data for Cornwall.

The value of the information is greatly enhanced by keeping your records as empirical as possible, with quantities of each species recorded on a single date in a specific trap. This makes the data much more useful for population studies and long term analysis of trap type information, or flight time analysis. Combining trap results at source are not good and would tend to misrepresent the results and make them less valuable for long term analysis.

Recording The Weather Conditions:

Finally, all the data can be considerably enhanced in usefulness by recording weather conditions and the time duration of recording. As a standard format it could be a single line covering Cloud / Temperature / Wind / Duration.

At the start, check how cloudy the sky is (easiest way is in 1/8ths, dividing what you can see in sky areas by halves i.e. 8/8 = overcast, 4/8= half cloud, 0/8 = clear). Also include rain, misty, drizzle, or dry.

Check the Temperature (actual would be ideal, but you could also use a simple sensory range comparison).

Sensory	Cold	Cool	Mild	Warm	V.Warm
Fahrenheit	32-40	41-50	51-60	61-70	72+
Centigrade	0-4.5	5-10	10.5-15.5	16-21	22+

Estimate the Wind Direction & Strength - Usual Compass notation; W, SW, E, etc, and Still, Light Breeze, Light Wind, Gusty Wind, Medium Wind, Strong Wind.

And finally, was the Moon visible, and what phase was it? These will be “New” ☐, “1st Quarter” ◐, “Full Moon” ◑, “Last Quarter” ◒, or leave this out if no Moon was visible.

So a weather example would be:

2/8 cloud, dry / Mild (12°C) / Light Wind (SE) / Full Moon / 20.00-06.00

Many thanks and good luck trapping,
Tony James, County Recorder

Cornwall Moth Group,
c/o Cornwall Wildlife Trust,
Five Acres, Allet,
Nr. Truro, Cornwall.
TR4 9DJ

records@cornwallmothgroup.org.uk