

## Micro-moths and the National Moth Recording Scheme

From the 1<sup>st</sup> April 2016 the National Moth Recording Scheme (NMRS) will be incorporating micro-moth records; although this development has been a long time coming, it has required a great deal of thought and consideration.

### Introduction and background

In October 2011, Butterfly Conservation met with the organisers of the National Taxa Schemes and with other well respected key experts involved in micro-moth recording to discuss the future of micro-moth recording in the UK and the potential for Butterfly Conservation's involvement. There was unanimous support for Butterfly Conservation to take the lead on this and seek funding to do so.

We have been unsuccessful in securing funding for this, although there was a small and significant development; a grant from Department for Environment, Food and Rural Affairs (DEFRA) in December 2013 enabled us to create PDFs of all of the original micro-moth record cards and hand annotated maps which have been curated by John Langmaid and Mark Young in recent years. In addition to this, 756 species were digitised to vice-county level. These important maps, which initially included data up to 31st December 2012, are available on the Moths Count website [www.mothscount.org/text/108/micro\\_moth\\_distribution\\_maps.html](http://www.mothscount.org/text/108/micro_moth_distribution_maps.html). Subsequent annual updates have been undertaken by Dave Green on a voluntary basis. At the National Moth Recorders' Meeting in January 2016 a call for volunteers was put out to help digitise the remaining 862 species maps as further funding applications have not been successful. A small team of volunteers have been recruited to complete this task and work is underway. We are incredibly grateful to these individuals for their assistance with this.

Despite the absence of major funding, Butterfly Conservation has decided to start collating micro-moth records from County Moth Recorders as part of the NMRS, within our existing resources. The County Moth Recorder network were written to in December 2015 to inform them of our plans, the feedback from them so far has been extremely positive with many feeling that the expansion of the NMRS to incorporate micro-moths is well overdue.

From the start it was considered vital that the existing County Moth Recorder network remained at the heart of the scheme and was therefore developed around this core principal.

### 'National' and Regional Verification Panels

Discussions with the National Taxa Schemes and the key micro-moth experts highlighted the importance of the verification of records. One fundamental difficulty with regard to micro-moth recording is the verification of records, particularly since many micro-moths are difficult to identify from photographs. Therefore, in order to maintain a high degree of accuracy, one proposed difference to the macro-moths, is that Regional Verification Panels (RVPs) and a 'National' Verification Panel (NVP) are established to provide support and mentoring to County Moth Recorders and oversee records entering the NMRS.

Geographically the Regional Panels are based on Butterfly Conservation's Branch areas, see figure 1; **South West Region** (Cornwall, Devon, Dorset,



Figure 1: Regional Verification Panel areas

Gloucestershire, Somerset, Wiltshire); **South East Region** (Berkshire, Buckinghamshire, Hampshire, Isle of Wight, Kent, Oxfordshire, Surrey & Sussex); **Midlands Region** (Derbyshire, Herefordshire, Leicestershire, Lincolnshire, Nottinghamshire, Shropshire, Staffordshire, Warwickshire, Worcestershire); **Eastern England Region** (Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Huntingdonshire, Middlesex, Norfolk, Northamptonshire, Suffolk); **Northern England Region** (Cheshire, County Durham, Cumbria, Lancashire, Northumberland, Yorkshire); **South Wales** (Breconshire, Cardiganshire, Carmarthenshire, Glamorgan, Monmouthshire, Pembrokeshire, Radnorshire); **North Wales** (Anglesey, Caernarvonshire, Denbighshire, Flintshire, Merionethshire and Montgomeryshire); **Scotland, Northern Ireland & Isle of Man** and the **Channel Islands**.

The number of members of each panel varies across each region; South West (3); South East (4), Midlands (5); Eastern England (4) Northern England (5), South Wales (7), North Wales (3), Scotland (7), Northern Ireland & Isle of Man (3) and Channel Islands (1).

Regional Verification Panel (RVP) Members were suggested by the key micro-moth experts based on their level of expertise. There may be a need to increase the membership of some regional panels in time if the workload becomes too heavy for the existing panel members to manage. **Things will not change for 'grass-roots' moth recorders who will continue to send their records to their County Moth Recorder.** A list of County Moth Recorders can be found [here](#).

The verification of records is an essential task and therefore we envisage the NVP providing support to the RVPs who provide identification support to County Moth Recorders at the local level. This three tier system will help share the load and responsibility of record verification. **The key thing to remember here is that these systems already exist, albeit in an informal capacity.** The contact details for members of the NVP and RVPs will be circulated to County Moth Recorders in due course.

#### **Verification guidance notes**

Verification guidance notes to help guide the verification process have been drawn up, these include a species grading system (with caveats). These will be circulated to County Moth Recorders and be made available on the Moths Count website in due course. They are currently being 'tweaked' and formatted. Please be assured that we are not teaching 'granny to suck eggs', **these guidance notes are to ensure that the verification process runs smoothly and that recorders are aware of the possibility of their records being questioned or requiring further evidence to substantiate them.** Any scheme is only as good as the data submitted and with the support of the micro-moth recording community, we aspire to maintaining a high quality dataset.

#### **Proposed data flow and explanatory note**

Data flow into the scheme will be via the County Moth Recorder network. Encouragingly there is currently a full complement of County Recorders handling micro-moths. However, should there come a time when there is not a County Moth Recorder handling micro-moths e.g. he or she steps down, whilst a successor is being sought the RVP will act in 'loco parentis', at least in the interim period. Overall verification of 'difficult' species will be overseen by the NVP. This is shown in the data-flow diagram, figure 2.

*The recorder asks him/herself if there is a County Moth Recorder (CMR) dealing with micro's in their vice-county. If yes records are sent to them. The CMR verifies what records he/she can and sends accepted records to the National Moth Recording Scheme.*

*Records that the CMR cannot verify because they are unsure or they currently lack the expertise are forwarded to the RVP for verification. Records verified by the RVP are forwarded to the CMR for inclusion in the local dataset and forwarded to the NMRS.*

*Records that cannot be verified by the RVP are forwarded to the NVP (including the National Taxa Schemes (NTS's)). Records that are passed by the NVP and NTS are returned to the RVP who return them to the CMR; these records are then included in the local dataset and forwarded to the NMRS.*

If there is not a County Moth Recorder (CMR) dealing with micro's the recorder sends the records to the RVP (who are acting in loco parentis as CMR). The RVP verify what records they can and send accepted records to the NMRS. Records that the RVP cannot verify because they are unsure or they currently lack the expertise are forwarded to the NVP and NTS's for verification. Records that are passed by the NVP and NTS are returned to the RVP who forward them to the NMRS.

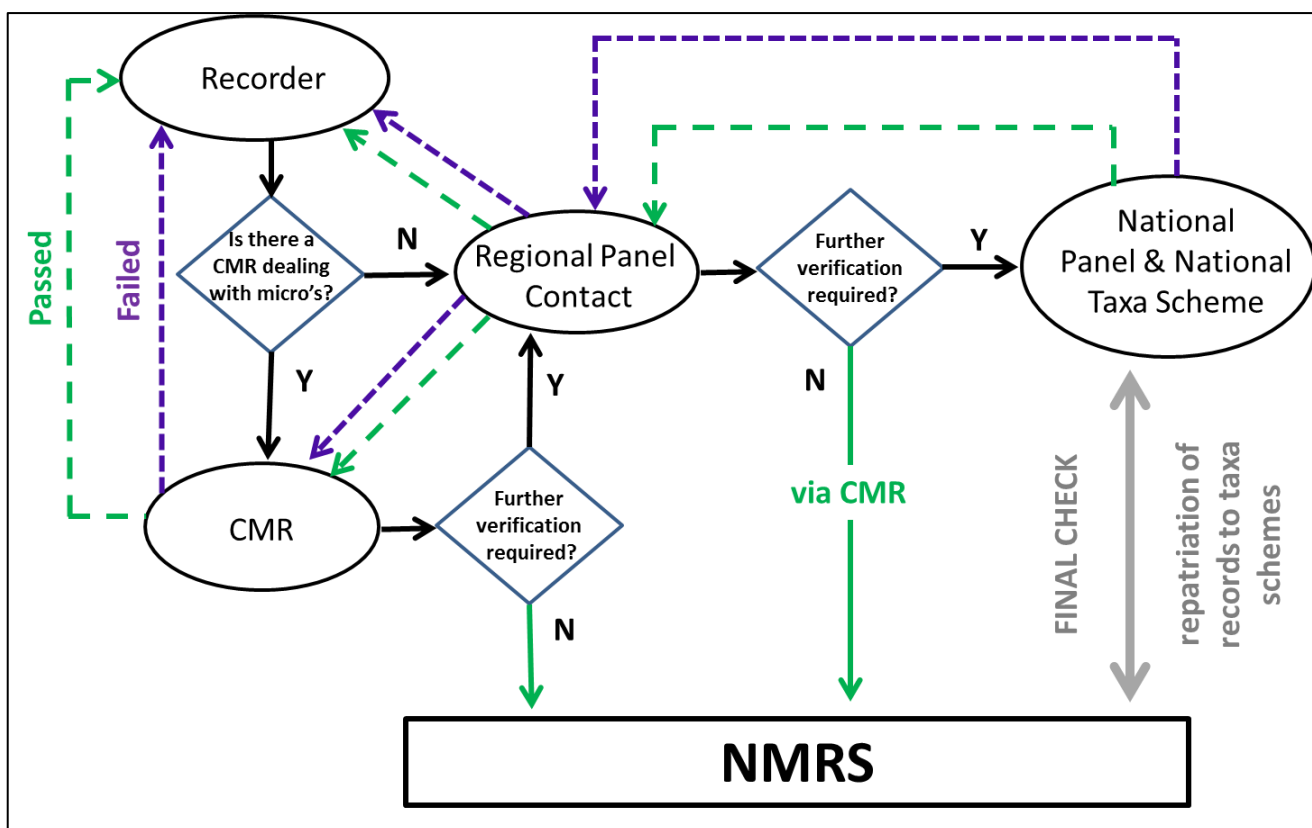


Figure 2: Proposed data flow of micro-moth records into the NMRS

### Records for the various National Taxa Schemes

County Moth Recorders have, up to now, had the option of sending in separate annual data files to the existing National Taxa Schemes (covering the Gelechiids, Incurvariids, Leaf mining species, Plumes and Pyralids). As all micro-moth data will now make its way to the National Moth Recording Scheme (and from there to the taxa schemes) there is no longer a need for CMRs to forward separate files to each scheme. However, there is one exception to this- as data can often be edited by a recorder or CMR during its lifetime, CMRs should forward details of any edited/changed records to the appropriate Scheme organiser to ensure the relevant taxa schemes have these edits. These records will not be identifiable by the NMRS so cannot be flagged up to the individual schemes.

### Records for the Microlepidoptera review

County Moth Recorders should continue to send new vice-county records to John Langmaid for inclusion in the Microlepidoptera review which is published annually in the Entomologist's Record and Journal of Variation

### And finally...

A considerable amount of thought and effort has gone into bringing this development to fruition. Butterfly Conservation is extremely grateful to the National Taxa Scheme organisers for their support and to John Langmaid, Steve Palmer and Mark Young in particular for their collation of the verification guidance notes and for providing specialist advice and expertise.

Butterfly Conservation is very excited to be pushing forward with a scheme that includes micro-moths; it is something that many of you wanted from the outset of the NMRS. We hope that you share our enthusiasm for this venture and that we have the support of the micro-moth recording community.

As stated previously the contact details for members of the 'National' and Regional Verification panels will be circulated to the relevant County Moth Recorders along with the verification guidance notes in due course. The verification guidance notes will also be available on the Moths Count website. In the meantime if you have any queries regarding this announcement please contact Zoë Randle via [zrandle@butterfly-conservation.org](mailto:zrandle@butterfly-conservation.org) or 01929 406006.

To keep up-to-date with the Moths Count project and NMRS sign up for E-moth our electronic newsletter via [info@butterfly-conservation.org](mailto:info@butterfly-conservation.org).