

**Butterfly
Conservation**

Saving butterflies, moths and our environment



E-moth

Moths Count Update November 2018

What a fantastic summer we have had - a total scorcher. Anecdotal evidence suggests that the abundance of moths seen was the highest it has been for several years. There have been many new vice-county records for South Lincolnshire (VC53) including Royal Mantle, Lempke's Gold Spot, Red Carpet, Gypsy Moth, Scarce Black Arches and Dotted Chestnut. Twin-spotted Wainscot was new to Scotland, being recorded on the inner Firth of Forth in West Lothian in August. Box Tree Moth *Cydalima perspectalis* has been recorded far and wide and was new to Scotland (Fife VC 85), new to North Wales (Denbighshire VC 50) and new to South Devon (VC 3) amongst other places.



Lempke's Gold Spot (Mark Parsons)

There have been many new macro-moths to Yorkshire this summer too. Tree-lichen Beauty was new to South-east Yorkshire (VC61), Small Ranunculus which has been moving north and has now reached North-east Yorkshire (VC 62), Yarrow Pug, Cream-spot Tiger and Dorset Cream Wave were new to South-west Yorkshire (VC63), Cypress Carpet was new to Mid-west Yorkshire (VC 64) and Fen Wainscot was new for North-west Yorkshire (VC 65).

National Moth Recording Scheme update

Data continue to be submitted for inclusion into the NMRS dataset. Since March 2018, 32 vice-county macro-moth datasets have been received equating to 604,683 records. In addition to this, 25 micro-moth datasets, equating to 834,252 records, have been received. Data import has been on hold since December 2017 due to the huge workload involved with the forthcoming Atlas of Britain and Ireland's Larger Moths. Many thanks to everyone involved in the collection, collation and submission of these valuable moth records.

Over the past year there have been some changes to the County Moth Recorder network. The NMRS would like to welcome these new people to the fold and thank them for taking on these vital roles; Bill Mansfield (Cambridgeshire, VC 29), Charles Aron (Anglesey, VC 52), Stuart Colgate as Record Collator for (Westmorland, VC 69 & Cumbria, VC 70), Nigel Voaden (Fife, VC 85), Martin Culshaw (Stirlingshire, VC 86), David Bryant (West Perthshire, VC 87), Alan Kerr (Dunbartonshire, VC 99) and David Hill (Argyll Main VC 98 & Kintyre VC 101). We thank their predecessors for their hard work and support on behalf of the NMRS and their local moth recording communities. A full, up-to-date list of County Moth Recorders is available [here](#).

UK Moth Recorders' Meetings

Our ninth UK Moth Recorders' Meeting will be held on **Saturday 26 January 2019** at the Birmingham and Midland Institute, Birmingham. The programme for the day is almost finalised and a draft can be found at the end of this newsletter. This annual event provides the opportunity for moth recorders to get

together, mix, mingle and share their experiences, as well as find out about the developments in moth recording, conservation and research locally, nationally and internationally. As in other years there will be stall holders in attendance including [Atropos](#), [Hachiware Art](#), [Pemberley Books](#), [Richard Lewington](#) and [Watkins & Doncaster](#), so bring your purses and wallets to stock up on natural history books, moth-ing equipment and other moth-related things. If there is anything specific that you might require, please contact the traders in advance who can take pre-orders for collection on the day. Atropos are offering a free packet of Nicotiana seeds to anyone who wants one, they will be available on the stand. Advance booking is essential via www.butterfly-conservation.org/ukmrm. The charge for the day is unchanged at £10.00 per person and includes morning tea/coffee and a buffet lunch, all subsidised from Butterfly Conservation budgets.

Atlas of Britain and Ireland's Larger Moths update

We are continuing work on the forthcoming *Atlas of Britain and Ireland's Larger Moths*. The regional verifiers and Butterfly Conservation staff who kindly undertook the important task of examining the distribution maps and phenology charts have unearthed a copious number of potentially erroneous and missing records. These are continuing to be queried with County Moth Recorders, hence the final atlas dataset has not yet been finalised. Once we have the final dataset, species distribution trends will be calculated using occupancy modelling. New abundance trends from the Rothamsted Insect Survey (RIS) are also being calculated. Species accounts have been drafted, but will require further editing once the final NMRS species distribution trends and RIS abundance trends have been produced.

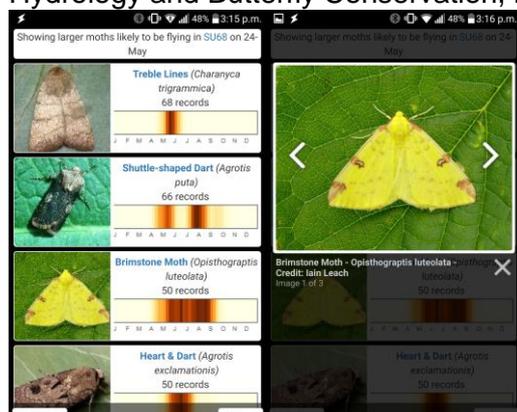
We have experienced several delays towards the publication of the atlas, which is perhaps inevitable with a project of this magnitude. This is a landmark publication, the first of its kind and ultimately the quality of the information in the atlas is paramount.

As a result, we expect to publish the atlas in late spring 2019, slightly later than anticipated.

Not only will the atlas be a substantial resource for moth recorders, conservation groups and others interested in the natural world, it will also help underpin action to conserve our larger moth fauna, provide an understanding on how species are faring, will reveal new avenues for research, raise the profile of this fascinating group of insects and encourage further recording.

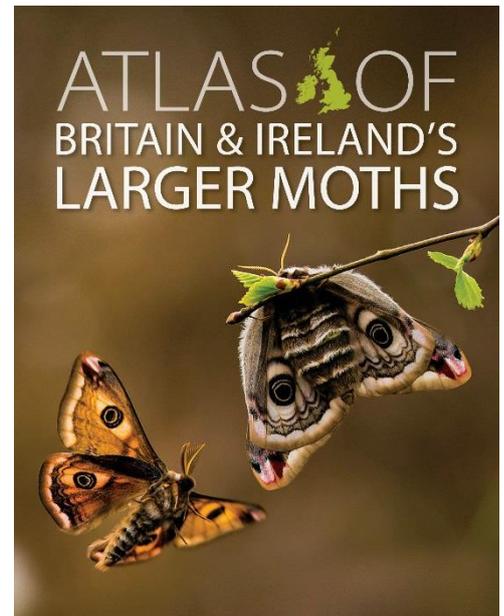
What's Flying Tonight?

Want to know which moth species might be on the wing tonight in your area? Now you can find out easily using What's Flying Tonight. This free online tool, developed by the Centre for Ecology & Hydrology and Butterfly Conservation, makes use of millions of NMRS records to provide an illustrated list of the larger moth species seen at this time of year in your area. With moth images, flight charts and the frequency that each species has been recorded (based on your location and the date), What's Flying Tonight can help with species identification making it great for beginners and for moth-ers recording in unfamiliar territory.



Screen-shot of What's flying tonight?

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



Cover shot of the forthcoming atlas

Moth Night 2018

Moth Night 2018, organised by Atropos, Butterfly Conservation and the Centre for Ecology & Hydrology, was held from 14 to 16 June 2018. The theme was Pyralid Moths, a group which includes some stunning micro-moths including Gold Triangle *Hypsopygia costalis* and Brown China-mark *Elophila nymphaeata*. The timing of Moth Night was also perfect to see some of the most publically appealing macro-moths such as Buff-tip and Elephant Hawk-moth.



Hypsopygia costalis (Patrick Clement)

So far a total of 8,174 records for 637 species have been submitted, with a minimum count of 25,278 individual moths. Many thanks to everyone who took part in this annual celebration of moths and moth recording. If you haven't submitted your Moth Night 2018 sightings yet you have until Sunday 2 December 2018 to do so. Data can be submitted [here](#) or via a MapMate Sync file, using the Moth Night 2018 filter, to CUK 6b0. All records submitted will be repatriated to County Moth Recorders.

Moth Night 2019

Moth Night 2019 will be an extra special event as it marks the 20th Anniversary of Moth Night! The dates have been set so please make a note in your diaries and calendars for 26 to 28 September 2019. There are two themes, the first being Clifden Nonpareil, a species that has recently recolonised Britain and is expanding its range rapidly in southern England, as well as seemingly becoming more frequent as an immigrant. The second theme is moth migration. As with previous Moth Nights you do not have to follow the themes, but can do your own thing such as going trapping to a new place, organising a public moth event or simply have friends and family over to share your passion for moths and show them the light! If you are running a public moth event please advertise it for free [here](#).

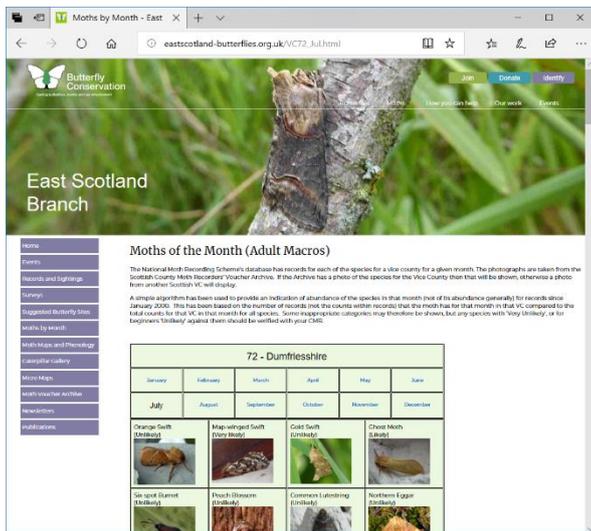


Moth recording in Scotland

When Butterfly Conservation set up the National Moth Recording Scheme (NMRS) in 2006, very few of the 40 Scottish vice-counties possessed an active County Moth Recorder (CMR). For the rest, sometimes a local biological records centre or museum held a database of moth records from regional groups of vice-counties, without any organised system of collecting or validating the data. Others lacked even that. Thus more than half the Scottish vice-counties had no formal list of their macro-moths, and only six (NE Scotland and the Northern Isles) could provide a list of their micros.

Clearly, if the NMRS was to be a success in Scotland, a whole infrastructure needed to be put in place. CMRs had to be found to fill the many vacancies, a task that fell mainly to Tom Prescott. Although the interest in moths was rapidly growing, inevitably most of the new recruits would themselves be relative beginners. Therefore part of the deal was an assurance that online help and support would be available whenever required, particularly for identification and other recording issues. In Scotland, flight times, habitat preferences and even the appearance of moths often differ from the information given in English-based popular guides.

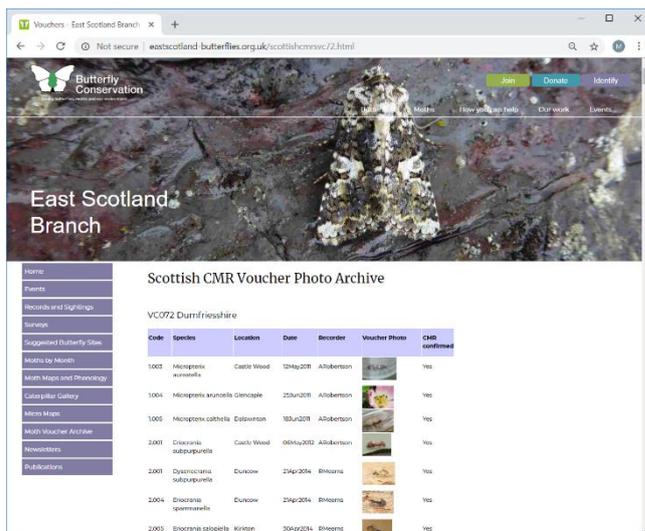
A Scottish Moths Yahoo group was set up by Neil Gregory in 2006 and quickly gained members. Mystery photos could be posted on the forum for identification or confirmation by more experienced observers, often with an explanation of the key features. To avoid embarrassment, queries may also be emailed directly to an expert for a more discreet service. The forum is now run by Mark Cubitt and has 302 members.



Moths by month screen shot (Mark Cubitt)

A major expansion of the help provided came when Mark Cubitt took over the East Scotland Branch website. With Butterfly Conservation's agreement, all Scottish data for macro-moths was made available in 2010, enabling flight histograms and distribution maps to be produced for every Scottish species. The data are updated annually. This also enables a 'moths of the month' feature to be generated individually for every vice-county based on records in the database. In addition, there are maps to at least vice-county level for 50 micros, and at 10km square resolution for the gelechids, courtesy of Stephen Palmer. Finally, there is even a section on commonly encountered caterpillars.

However, the most ground-breaking innovation was Mark's idea of a photo voucher archive for every Scottish vice-county. We can check historical records from voucher specimens deposited in a museum, but few modern observers are collectors. Instead they take digital photographs, which are all too easily deleted or lost. Fortunately, Mark possesses the computer skills to set up and administer such a scheme. So since 2011, every Scottish vice-county has had its own folder to store important voucher photos in perpetuity. Despite initial scepticism (including my own), the take-up has been excellent. Of the 40 Scottish vice-counties, 37 now have at least some vouchers in their folder. In total, these amount to 7,049 images of 1,053 species - and rising. Some CMRs deposit a voucher for every species, others mainly for the scarce or trickier ones. The folders are accessible on the BC East Scotland website, though observer's names are withheld. They proved invaluable for atlas map proof-checking. Images of individual species can also be viewed collectively, providing a useful identification aid. For Northern Arches there are 19 authenticated images, 16 vouchers for Confused, lots of difficult pugs, all correct. That's impressive! Scottish moth recording is clearly in a very healthy state. Would a similar voucher archive work so well down south? Surely it's worth a try, perhaps beginning on a regional basis.



Scottish CMR voucher photo archive screen shot (Mark Cubitt)

Written by Roy Leverton

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UK MOTH RECORDERS' MEETING 2019

DRAFT PROGRAMME

Lyttelton Lecture Theatre, Birmingham and Midland Institute, Birmingham

Saturday 26 January 2019

- 10.00 am Arrival and coffee
- 10.30 am Welcome
Julie Williams, CEO Butterfly Conservation
- 10.40 am National Moth Recording Scheme and atlas update
Dr Zoë Randle, Butterfly Conservation
- 11:05 am More than just dots- a collection of short stories about moth data
Dr Katie Cruickshanks, Butterfly Conservation
- 11:35 am What makes Bedfordshire interesting? Moth recording in a small inland county
Melissa and Andy Banthorpe, County Macro-moth Recorders, Bedfordshire
- 12:05 pm Development of a multi-access key to aid the identification of micro-moth larvae
Graham Wenman, County Micro-moth Recorder, Shropshire
- 12:35 pm Discussion session
- 12.45 pm **Lunch**
- 2.15 pm Declines in moth populations stress the need for conserving dark nights
Professor Frank van Langevelde, Wageningen University, Netherlands
- 2:45 pm tbc
- 3:15 pm The population trends of cuckoos and moths (provisional title)
Dr Chloe Denerley, Aigas Field Centre
- 3:45 pm Closing remarks
- 3:50 pm End of meeting