

**Butterfly
Conservation**

Saving butterflies, moths and our environment



E-moth

Moths Count Update November 2019

The seasons are changing and along with it the moths in our traps. The recording season is tailing off and it's time for Chestnuts, Yellow-line Quakers, November Moths, Winter Moths and December Moths to name but a few. A couple of weeks back there was a flurry of excitement as Death's-head Hawk-moths were being spotted across the country; amongst other places this species was seen in Dorset, Somerset, Cardiganshire and as far north as Shetland, where one was found hitching a ride on a yacht. As moth recording slows down, data entry takes its place, with the records reminding us of those balmy summer days and evenings. Lovely memories to keep us going through the winter darkness, until the freshness of spring, with its busting of new life, returns.



Death's-head Hawk-moth (Les Evans-Hill)



UK Moth Recorders' Meeting (Jim Asher)

UK Moth Recorders' Meeting

Our tenth UK Moth Recorders' Meeting will be held on **Saturday 25 January 2020** at the Birmingham and Midland Institute, central Birmingham. The programme for the day is almost finalised and a draft can be found at the end of this newsletter. We are delighted to be welcoming a wide range of speakers including Barry Henwood and Phil Sterling to talk about their amazing new field guide to caterpillars, Professor Frank van Langevelde who will discuss the latest findings about the impacts of light pollution on moths and Professor Simon Leather speaking about Insectageddon. This annual event, which brightens up the month of January, provides the opportunity for moth

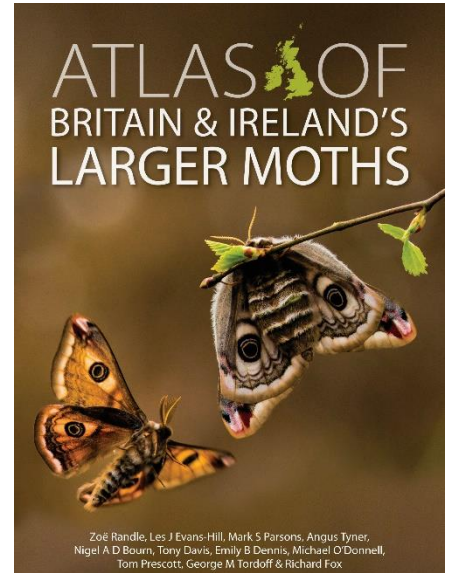
recorders to get together, mix, mingle and share their experiences, as well as find out about the developments in moth recording, conservation and research locally, nationally and internationally. As in other years there will be stall holders in attendance - so far [Atropos](#), [Hachiware Art](#), [Pemberley Books](#), [Richard Lewington](#) and [Watkins & Doncaster](#), have confirmed their presence, so bring your purses and wallets to stock up on natural history books, beautiful works of art 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. 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

It is with great pleasure (and a big sigh of relief!) that I can announce to you that the *Atlas of Britain and Ireland's Larger Moths* has gone to press! The book will be available from 25 November, just in time for Christmas, to order a copy please visit the [NatureBureau Bookshop](#).

This landmark publication, the first-ever atlas of larger moths in Britain, Ireland, the Isle of Man and the Channel Islands was produced in partnership with MothsIreland. It comprises over 25 million moth records from Butterfly Conservation's National Moth Recording Scheme (NMRS) and the MothsIreland dataset. We are grateful to every single moth recorder who has submitted their sightings to the NMRS or MothsIreland. We are also indebted to the County Moth Recorder network and the verification panels in Ireland who have undertaken the vital task of collating and checking records prior to them entering the NMRS or MothsIreland databases.

The atlas is beautifully illustrated with over 800 colour photographs and displays distribution maps showing current and historical records for 893 species. Distribution trends and abundance trends are presented along with the IUCN Red List status for Great Britain and for Ireland. Phenology charts have been produced for 866 species, the majority of these compare the flight period of the moth in the 1970s with 2000–2016. These provide some interesting insights into how some species are responding to climate change by changing their phenology, either by flying earlier in the year, or by having a second generation much further north than was possible in the 1970s.



Cover shot of the imminent atlas

69.008 (1982) Narrow-bordered Bee Hawk-moth *Hemaris tityus*

BRITAIN (incl. CI & IoM)
 • pre-1970 209
 • 1970-1999 98
 • 2000 onwards 211

IRELAND
 • pre-1970 12
 • 1970-1999 25
 • 2000 onwards 87

GB DISTRIBUTION (LT) — GB STATUS: LC
 GB DISTRIBUTION (ST) 2000–2016 -34%
 GB ABUNDANCE — IRISH STATUS: LC

Resident. Historically recorded widely over much of Britain. Now mainly in south-western and southern England with scattered sites in Wales. Recently shown to occur widely over parts of Scotland, particularly in the west and north-east. Predominantly found in north and west Ireland with recent reports suggesting a south-easterly expansion.

FLIGHT PERIOD ■ 2000–2016

Sponsored by Professor John R.G. Turner and Mrs Sandra F. Turner

69.010 (1984) Humming-bird Hawk-moth *Macroglossum stellatarum*

BRITAIN (incl. CI & IoM)
 • pre-1970 466
 • 1970-1999 917
 • 2000 onwards 1877

IRELAND
 • pre-1970 48
 • 1970-1999 101
 • 2000 onwards 268

GB DISTRIBUTION (LT) 1970–2016 363%*
 GB DISTRIBUTION (ST) 2000–2016 21%
 GB ABUNDANCE — GB STATUS: LC
 IRISH STATUS: NE

Immigrant and probable temporary resident. A regular immigrant found widely in England and Wales, but most numerous in the south. Records in Scotland and Ireland have a southern and eastern bias. Its distribution shows a large increase since 1970. In recent decades, adults have hibernated successfully, especially in south-west England.

FLIGHT PERIOD ■ 1970–1979 ■ 2000–2016

Sponsored by Garry, Deborah, Jennifer and Rebecca Jones

69.009 (1983) Broad-bordered Bee Hawk-moth *Hemaris fuciformis*

BRITAIN (incl. CI & IoM)
 • pre-1970 152
 • 1970-1999 83
 • 2000 onwards 110

IRELAND
 • pre-1970 0
 • 1970-1999 0
 • 2000 onwards 0

GB DISTRIBUTION (LT) — GB STATUS: LC
 GB DISTRIBUTION (ST) — IRISH STATUS: —
 GB ABUNDANCE —

Resident. The distribution of this bumblebee mimic has undergone historical and recent declines due to habitat loss. Remaining strongholds include heaths and forests in Lincolnshire, East Anglia, Hampshire and Dorset. Elsewhere in England, and in Wales and the Channel Islands, colonies are sparsely distributed.

FLIGHT PERIOD ■ 2000–2016

Dedicated to Denise Wood by Harry E. Clote

69.011 (1985) Oleander Hawk-moth *Daphnis nerii*

BRITAIN (incl. CI & IoM)
 • pre-1970 74
 • 1970-1999 13
 • 2000 onwards 17

IRELAND
 • pre-1970 5
 • 1970-1999 2
 • 2000 onwards 0

GB DISTRIBUTION (LT) — GB STATUS: NA
 GB DISTRIBUTION (ST) — IRISH STATUS: NE
 GB ABUNDANCE —

Scarce immigrant. There are just over 110 records for this species with a peak of 15 in 1953. Most modern records are from southern counties of Britain, but it has been found north to Shetland. This moth is a very rare visitor to Ireland and was last recorded in 1997.

FLIGHT PERIOD ■ 2000–2016

Sponsored by Paul Sutton, Adam, dedicated to my wife Judy with all my love - 1st

Double page spread of the atlas showing the layout of the species accounts

This book is an absolute treasure trove of information detailing the changing fortunes of our resident and immigrant moths. We hope that it will be considered to be an essential addition to every moth recorder's personal library.

Thank you to everyone who has contributed to the atlas project over many years, including the grass roots moth recorders, County Moth Recorder network, Ireland's verification panels, 'dodgy-dot' checkers, reviewers, photographers, species sponsors, charitable trusts, corporate sponsors, Rothamsted Research, the Centre for Ecology & Hydrology and NatureBureau/Pisces Publications.

National Moth Recording Scheme update

The production of the moth atlas is a massive achievement and could not have been done without the entire moth recording community, thank you all. A copy of the atlas dataset has been 'frozen' and will be kept as a data archive.

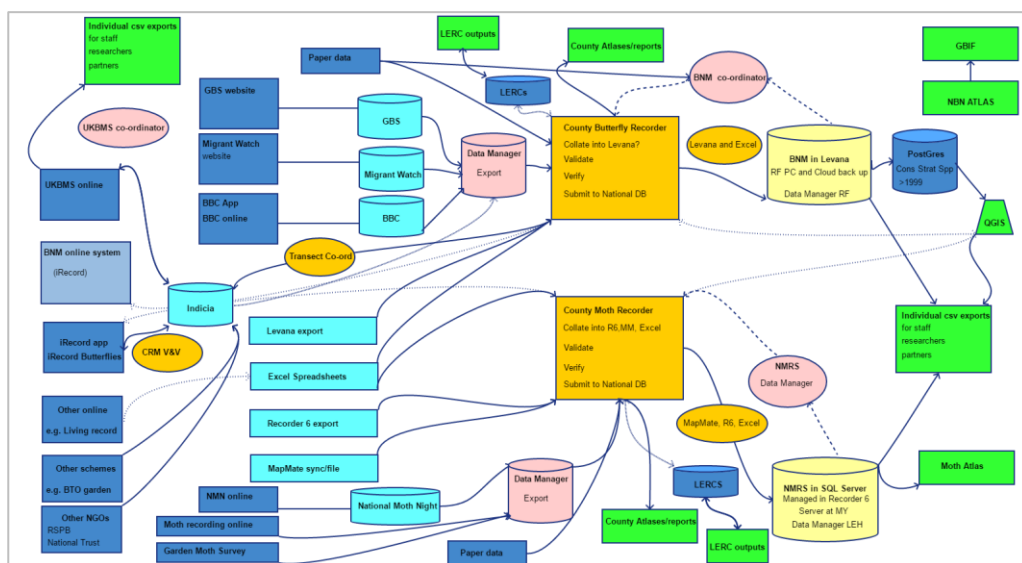


The NMRS database underwent some serious cleaning in order to produce the *Atlas of Britain and Ireland's Larger Moths*. It was a painstaking and excessively time-consuming exercise for us and for the County Moth Recorder (CMR) network. We are extremely grateful to the CMR network for assisting us with this process. We are all keen to learn lessons from this clean-up going forward as the level of resources it has required is completely unsustainable. Consequently, we are reviewing our future data import requirements and will be adopting a more rigorous data quality assurance protocol at Butterfly Conservation. We are developing a variety of practical options that will enable us to maintain the integrity of the NMRS dataset before data import recommences. We are well aware that one-size does not fit all and a variety of technological tools is required to ensure high-quality data reach the NMRS with least work for CMRs (see following article). We will be in touch to keep CMRs informed of developments in the coming weeks.

Moth Recording: taking opportunities and making it easier

The significant achievements of Recorders and County Moth Recorders are celebrated through the production of the Atlas of Britain & Ireland's Larger Moths. This publication represents millions of hours of devotion to moths spent in the field and in front of a computer screen- late at night, no doubt. The work involved in

verifying the huge volumes of data by the County Recorders is a job that only the brave and dedicated choose to take on. We are hugely indebted to the recording community and looking beyond the Moth Atlas we want to make recording easier. It's important that Butterfly Conservation looks afresh at the tools available to recorders and County Moth Recorders to make



The various routes for records into the NMRS and Butterflies for the New Millennium (BNM)

sure that we are taking the right opportunities to make data submission and data flow into the NMRS database easier. The digital age has had a significant impact upon biological recording with a huge surge in the volume of data since the 1990s.

Following the Moth Atlas, 'Team Moth' aka Zoë, Les and Richard will be working with Katie Cruickshanks (Senior Data Ecologist at BC) to better support recorders and County Recorders to make this mammoth job more manageable. Let's face it, we're all in it for the moths, which makes it more important that our efforts shouldn't be slowed down by improvements needed in online data portals, difficult spreadsheets, a proliferation of mobile phone apps or, worst of all, a lack of knowledge about which tool to choose and how to use it.

Katie's role at BC has been to review all of the data flows into Butterfly Conservation and out of it. We are now at the stage of coming up with a plan to make it easier for the recording community to keep doing the great job that they do. We will be consulting recorders and working closely with County Recorders to improve the current situation where necessary. In practical terms, we will be providing more training, support and guidance to steer those in need towards tools and systems that make their lives easier. Please do be patient with us, as the recording community is diverse and this process isn't about finding one size fits all - it's about looking at the 'data ecosystem' as it is and finding ways to join it up so that it runs more smoothly.

There will be a meeting for County Moth Recorders at the UK Moth Recorders' meeting to discuss local data management and flow to the NMRS. It would be great if County Moth Recorders could attend and share their views.

If you have any thoughts on recording then please get in touch with Katie Cruickshanks kcruckshanks@butterfly-conservation.org. Some questions to get you thinking: Which data capture routes work for you- online, by email, paper data, apps? How would you like to get at your data to visualise your records?

Moth Night

Moth Night 2019 was an extra special event as it marked the 20th Anniversary of Moth Night! It took place from 26 to 28 September 2019. There were 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 was moth migration. So far data have been submitted for a total of 363 events, that generated 4,249 records of 258 species. It will be really interesting to see the results of Clifden Nonpareil sightings and assess the expansion of the species. You have until Sunday 1 December 2019 to submit your sightings for Moth Night, you can enter them online at www.mothnight.info/home or synchronise them to Moth Night with MapMate. For further details visit www.mothnight.info/node/342#Map_mate.



Clifden Nonpareil (Andrew Cooper)

Moth Night 2020 will be held from **Thursday 27th – Saturday 29th August 2020**. The focus will be on 'red underwing' moths including the scarce Dark Crimson and Light Crimson Underwings, the rare recent colonist Rosy Underwing and the resident Red Underwing, which is widespread in England and Wales and has recently spread to Scotland, Ireland and the Isle of Man.

Moth Night is organised by Atropos, Butterfly Conservation and the Centre for Ecology & Hydrology.



Centre for
Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL

#MothsMatter

Butterfly Conservation's #MothsMatter social media campaign, which aims to raise the public's awareness of moths is continuing throughout the winter months. There are several themes including hibernating Herald's, Winter Moth and December Moth. If you are one of the millions of people who engage with social media, please use the campaign hashtag #MothsMatter when posting interesting information about moths.

It is concerning that two-thirds of people still relate to the common misconceptions about moths, that they are jumper-munching pests, are harmful etc. etc. Challenging such views is vital and is a responsibility that we all share. In order for people to value these creatures they need to know what role they, and other insects, play in the survival of other species including *Homo sapiens*. There are shafts of light, often a casual encounter with a moth, caterpillar or pupae can be a catalyst to finding out more, developing a deeper interest and ultimately a life-long passion.



December Moth (Mark Parsons)

We can all help inspire the next generation and new recruits to the moth fold. We are very good at 'preaching to the converted' but reaching and connecting with 'cooler customers' is also critical to our cause. Back in the summer Zoë Randle was invited to take part in a debate about 'Swatting insects' on ITV's Good Morning Britain television show. This broadcast did reach a more diverse audience than normal, you can watch it here <https://www.youtube.com/watch?v=uWfTIfQsDAw>. However, it is clear that our work in educating and convincing a vast swathe of society about our valuable insect fauna is far from done, we need to keep spreading the word that #MothsMatter.

Science News

Butterfly Conservation undertakes scientific research into moths and butterflies, often in collaboration with universities and other organisations around the world, in order to enable sound scientific evidence-based conservation action.

Science News is a free, twice-yearly email newsletter exploring the wide range of science that Butterfly Conservation is involved with and explaining how we're applying this to our conservation projects. You can read previous editions of Science News [here](#). To sign up to receive future editions please follow this [link](#).

National Moth Recording Scheme contacts

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@savebutterflies



www.facebook.com/savebutterflies

UK MOTH RECORDERS' MEETING 2020

Programme

Lyttelton Lecture Theatre, Birmingham and Midland Institute, Birmingham

Saturday 25 January 2020

- 10.00 am Arrival and coffee
- 10.30 am Welcome
- 10.40 am Journey to the atlas
Dr Zoë Randle, Butterfly Conservation
- 11:05 am Progress on Butterfly Conservation's Data Review
Dr Katie Cruickshanks, Butterfly Conservation
- 11:20 am Kent moths, a play in three acts
Ian Hunter, County Moth Recorder for Kent
- 11:50 pm Producing trends and indicators for moths in Scotland
Dr Emily Dennis, Butterfly Conservation
- 12:20 pm Getting to grips with grubs - the new Field Guide to the Caterpillars of Great Britain and Ireland
Dr Barry Henwood, County Moth Recorder for Devon and Dr Phil Sterling, Butterfly Conservation
- 12:50 pm Discussion session
- 1.00 pm **Lunch**
- 1:45pm County Moth Recorder Meeting (in the Main Hall, 2nd floor)
- 2.30 pm Declines in moth populations stress the need for conserving dark nights
Professor Frank van Langevelde, Wageningen University, the Netherlands
- 3:00 pm Insectageddon – myths and mitigation
Professor Simon Leather, Harper Adams University
- 3:30 pm Conservation success stories from Scotland
Dr Tom Prescott, Butterfly Conservation Scotland
- 4:00 pm Closing remarks
- 4:15 pm End of meeting