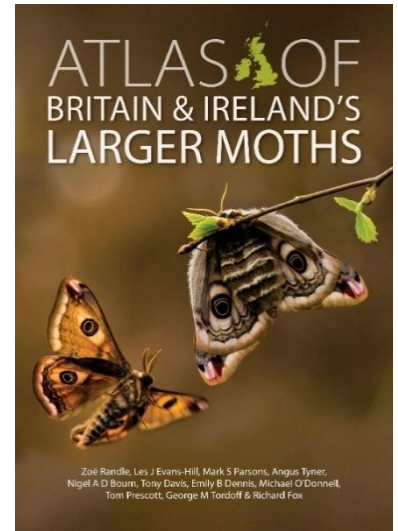


E-moth Update May 2022

Spring has finally sprung and with the (generally) warmer nights the moths are flocking to our traps. Familiar favourites to be seen at the moment are Pebble Hook-tip, Lime Hawk-moth, Eyed Hawk-moth, Poplar Hawk-moth, Lesser Swallow Prominent, Buff-tip, Chocolate-tip and Pale Tussock.

Our moths are undergoing interesting changes in distribution, abundance and phenology as a result of climate and land use change. Pebble Hook-tip and Chocolate-tip are species that are flying earlier in the year now compared with the 1970s. Lime Hawk-moth is expanding its range northwards, most recently in Northumberland and Cumbria. Buff-tip and Lesser Swallow Prominent are both widely distributed across Britain and Ireland and are both experiencing increases in distribution yet declines in abundance.

To learn more about the status of your favourite moths you might want to get yourself a copy of the *Atlas of Britain and Ireland's Larger Moths*. It is currently on offer with a discount of 23% from [NatureBureau](https://www.naturebureau.com/). It might be worth checking your local library too, as this title may be available to borrow. This book is a great companion to the field guides and comes highly recommended by many County Moth Recorders and grass-roots recorders alike.



****Moth Night 2022 is this week!!****

Moth Night 2022 takes place this week on the days and nights of Thursday 19th – Saturday 21st May. The theme of this year's event is woodlands. May is a particularly diverse month for woodland moths, with the tail end of early spring species and the start of the flight season for many early summer moths. Woodland offers protection from the elements too, so moth trapping in the woods is less likely to be impacted by the weather than in open habitats. As well as gathering records, Moth Night is also a great opportunity to celebrate and publicise the importance of native woodlands, both as habitat for biodiversity and as a means to address the climate crisis.



Speckled Yellow (Patrick Clement)

Of course, as is always the case with Moth Night themes, you don't have to focus on woodland. Indeed, this year Moth Night is also encouraging daytime recording as there are many day-flying species on the wing, including the bee hawk-moths, Speckled Yellow, Mother Shipton, Burnet Companion and Emperor. So spending time looking for moths on a sunny day is also likely to be very rewarding. In Scotland, it is a particularly special time of year, when rare day-flying species such as Argent and Sable, Nettle Mountain Moth, Small Dark Yellow Underwing should be on the wing.

For more information, please see www.mothnight.info. Here you find details of public events taking place near you and you can enter all your sightings over the three days and nights.

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

UK Moth Recorders' Meeting 2022

We held our annual UK Moth Recorders' Meeting on 29 January 2022. This was a virtual meeting, attended by over 270 people. If you missed the meeting the recording is available [here](#). We had a great line up of speakers who presented some fascinating work. Along with the annual update on the National Moth Recording Scheme from Zoë Randle we also had Professor Darren Evans from Newcastle University who spoke about the [ground-breaking research](#) undertaken by the late Douglas Boyes on the

negative impacts of street lighting on local moth populations. Dr Lisbeth Hordley battled against technological issues caused by storm Malik to present her work on climate change driven range shifts in cool-adapted moths and revealed some very interesting findings. This research will be published in the scientific literature in due course. Peter Hall, the County Moth Recorder for Herefordshire, showcased the [West Midlands online Moth Atlas](#) which is a fantastic resource for West Midlands moth-ers. And finally James Lowen gave an inspiring talk about his mothing adventures around the UK in search of rare and remarkable moths, upon which he based his book [Much Ado about Mothing](#).



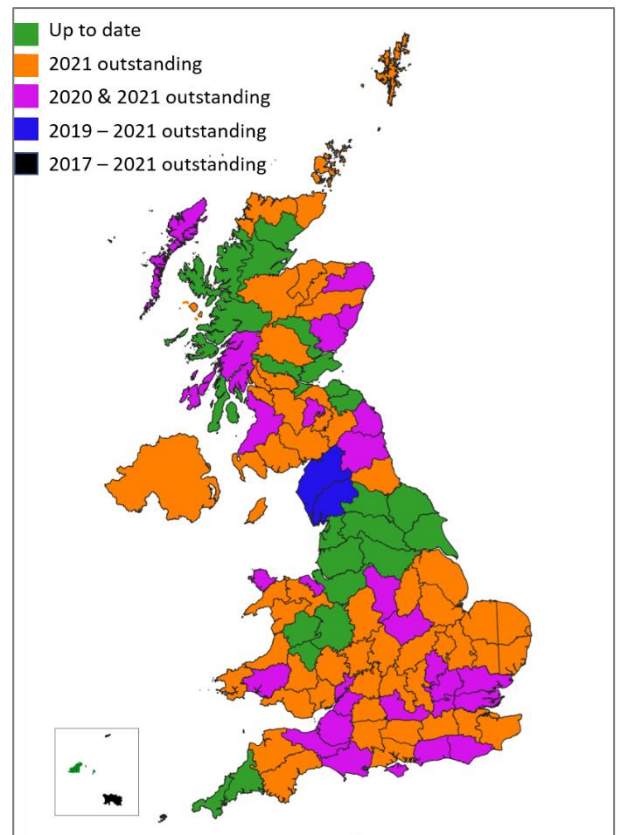
The date for the next UK Moth Recorders' meeting is planned for **28th January 2023**. It is likely to be a hybrid event providing people with the opportunity to attend in person and enjoy meeting fellow moth enthusiasts or to watch from the comfort of their own homes. Further details will be announced in due course.

National Moth Recording Scheme Update

We are pleased to announce that dataset importation to the NMRS database is in full swing and we have made great progress catching up with the backlog that built up during the work on the Moth Atlas. Over the past year Les has received 95 datasets which amount to some 2.8 million macro-moth records! The NMRS currently holds 32.4 million verified macro-moth records and 5.2 million verified micro-moth records. Many thanks to the County Moth Recorder network and their Verification Assistants for efforts in collating and verifying local datasets for submission to the NMRS, it is much appreciated.

It is important that we keep the NMRS up to date so that we and our conservation partners can use the data to inform conservation work. For example, NMRS data have been used to inform the [Tree Council's Oak Processionary Moth toolkit](#). This tool is evidence based and enables land managers to balance the need to safeguard public health with maintaining biodiversity and protecting oak trees.

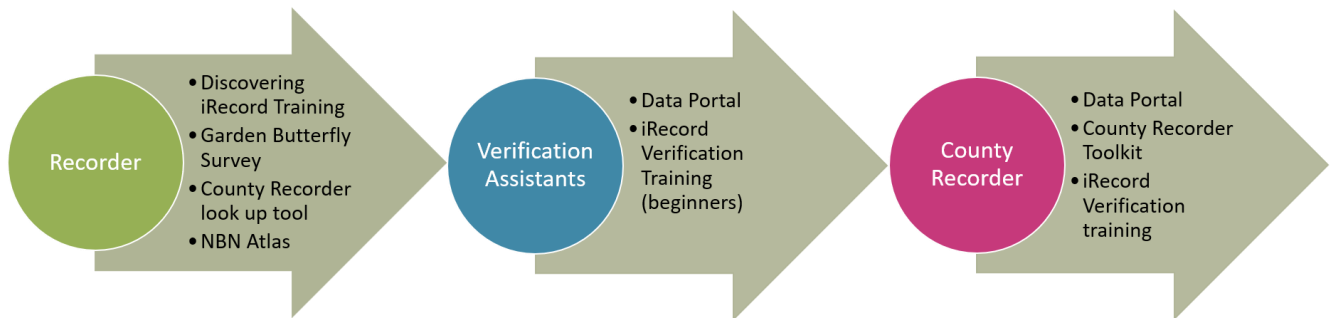
We'd also like to explore using the data help people make informed decisions about all sorts of other land-use change, such as tree planting. They are also used in collaboration with research partners to help us better understand the changes in moth populations. Your valuable records continue to influence land management decisions for the benefit of lepidoptera more widely.



NMRS dataset status as of 9 May 2022

Supporting science, planning for the future

Our Supporting Science project has a big ambition to help streamline Lepidoptera dataflow in response to Butterfly Conservation's data review and the County Moth Recorder survey. Our project themes support three key stages of participation in the recording and verification process from recorder to County Recorder.

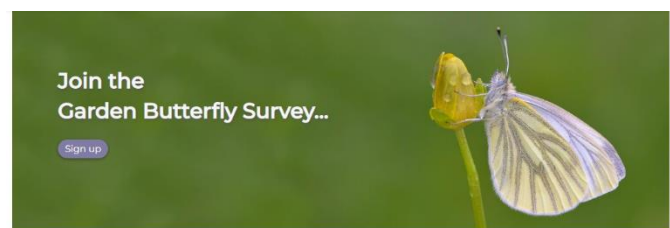


To date we have:

- Collated targeted feedback from County Recorders and Verification Assistants
- Delivered an iRecord Verification training course for County Recorders and Verification Assistants in partnership with the Field Studies Council
- Commenced a Discovering iRecord course in partnership with the Field Studies Council to introduce new and diverse people to the world of biological recording of lepidoptera and train more established recorders in iRecord
- Redeveloped the [Garden Butterfly Survey](#). It has a fresh new look and additional features and we will be promoting it to encourage greater participation
- Created content for the County Recorder toolkit, including tools from the network, role profiles and induction training (development ongoing throughout the project)
- Partnered with UKCEH, with whom we will design and deliver the data management portal within iRecord
- Recruited Evaluation Consultancy, Shepherd & Moyes to help us assess progress and learn lessons for the future

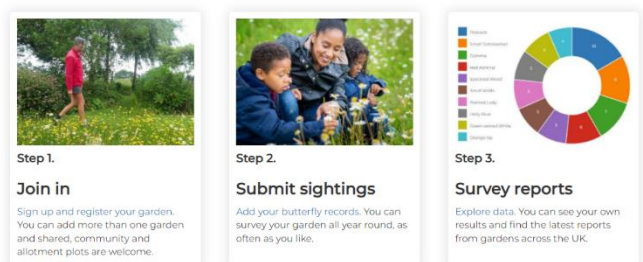
Next Steps:

- Collaborate with County Recorders to prioritise the data management and verification portal development, working with a user research and product management expert
- Establish a training process for the data management and verification portal
- Deliver a final programme of Field Studies Council training to upskill new and existing volunteers in the verification process using iRecord, to help alleviate verification workloads and encourage succession into the role (further details below)
- Develop an online County Recorder look up tool
- Support the transfer of data to the NBN Atlas
- Write up and evaluate our project and prepare sharable case studies and learning for other digital heritage projects and legacy work



Take part from your garden, allotment or community space...

Tell us about your garden and the butterflies you see throughout the year. Together we can work out how best to help them and provide a much-needed haven all year round.



Our new look Garden Butterfly Survey home page

Future data skills:

Our final iRecord training programme in September of this year will provide training in the verification of a select set of distinctive butterflies and moths. Our approach is twofold, to introduce new people at an early stage in their biological recording experience to the skills required for verification and to support Lepidoptera recorders to take the next step to join verification teams or become county recorders.

We need you and there are several ways you can join in with this exciting new venture:

Join in - We will be running identification and iRecord verification courses starting 26th August delivered online in partnership with the Field Studies Council. Watch out for upcoming publicity and booking information or contact Rachael Conway for more information.

Share with others - share this opportunity with your networks, mention it to those people you know are interested in verification and encourage beginner recorders to take part, so they can become familiar with the purpose and process of verification early on.

Co-create – County Recorders and Verification Assistants, please provide us with suggestions for the species you encounter that are easy to identify, widely distributed and generate a lot of records. We'll be focusing our ID and verification training on species that will make most difference to your workload.

Mentor - If you are a County Recorder or Verification Assistant and would be happy to support a trainee to learn verification skills, please get in touch, your experience and expertise is invaluable.

To express an interest in any of these opportunities or to find out more please contact Rachael Conway, Supporting Science Officer at rconway@butterfly-conservation.org.

Supporting Science has 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 Valentine Charitable Trust and Sophia Webster Ltd. for their generous support.



Made possible with

Heritage Fund



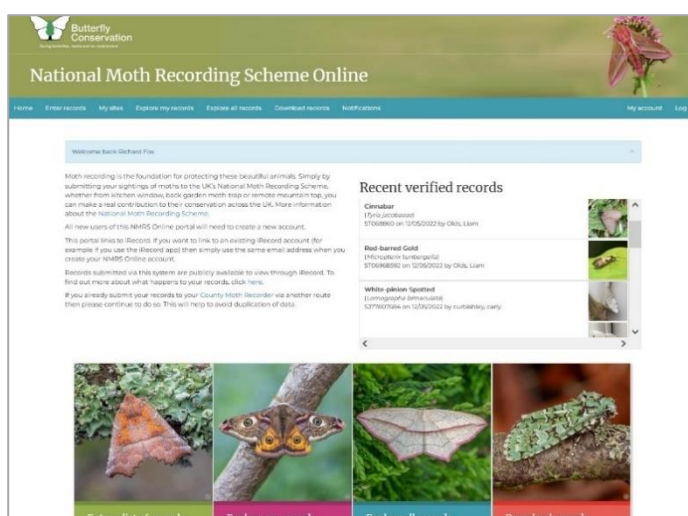
Department for
Digital, Culture,
Media & Sport

New NMRS Online system

Earlier this year we re-launched the [NMRS Online system](#). The new NMRS Online is based on iRecord architecture and provides a much-improved user experience. We've implemented some of the enhancements suggested by County Moth Recorders regarding the data submission fields, for example recorders need to enter a sampling method and the life stage as compulsory fields.

The system also has better tools enabling users to view and explore their data and other people's records. The species list is regularly updated and there is better integration with County Moth Recorders and the National Moth Recording Scheme. Data flows are smoother as County Recorders have direct access to records, via iRecord.

If you already have an iRecord account it can be linked to NMRS Online provided you register on the NMRS Online system with the same email address.



The feedback from users of the new system has been incredibly supportive and positive. If you're looking for an online system for storing and submitting your moth records please try it out:

www.mothrecording.org. If you already submit your records to your County Moth Recorder via another route then please continue to do so. This will help to avoid duplication of data.

Day-flying moths added to iRecord Butterflies app

The popular iRecord Butterflies app can now be used to submit sightings of some day-flying moths. The app was updated at the end of March and now includes a selection of widespread and easily identifiable day-flying moths. This development will encourage the recording of day-flying moths, many of which are under-recorded. Other improvements to the app include a new single-species timed count option for monitoring threatened butterfly species (including for immature stages e.g. Marsh Fritillary webs or Brown Hairstreak eggs). And the app now provides more feedback to recorders – you can now see all your submitted records on an interactive map, including the verification status of each record from iRecord. You can download the free app from [iTunes](https://www.apple.com/uk/itunes/app/apple-store/iRecord-Butterflies?id=1441111111) or the [Google Store](https://play.google.com/store/apps/details?id=org.butterflyconservation.iRecordButterflies).



Scarce Crimson & Gold (*Pyrausta sanguinalis*) MSc Research projects for Northern Ireland

Butterfly Conservation successfully applied to the Esmé Mitchell Trust for funding to support two MSc student projects for the coming academic year 2022/23. The Scarce Crimson and Gold is a rare and threatened species of moth in the British Isles. Although it is now thought to be extinct in mainland Britain, it continues to be found in the Burren, Republic of Ireland, and the Isle of Man along with a few populations along the north coast of Northern Ireland.

Both projects involve field-based studies in Northern Ireland. One project aims to understand more about the habitat preferences and population dynamics of the Scarce Crimson & Gold. The second project aims to understand how and why the distribution of the moth has changed since 2005. Using species and habitat data, the project will model the potential distribution of the moth to help target future management work. For more information on the projects, please email research@butterfly-conservation.org.



Pyrausta sanguinalis (Phil Sterling)

Contributed by Rose Cremin, Senior Conservation Officer, Butterfly Conservation, Northern Ireland

Northern Ireland update: Targeted Species for Monitoring Work

This coming season, we are planning to focus our monitoring work in Northern Ireland on three priority species including the Forester, Irish Plume and *Pyrausta sanguinalis*. In particular, it would be great to get some volunteer fieldwork support with the Forester. Following a targeted workshop last season for the species, fieldwork confirmed one known breeding site although we continue to believe it could be found elsewhere. If you'd like to help with this monitoring effort, please get in touch with the Senior Conservation Officer at rcremin@butterfly-conservation.org.

Contributed by Rose Cremin, Senior Conservation Officer, Butterfly Conservation, Northern Ireland

QGIS Training update

Throughout March and April, we delivered a series of QGIS training courses to County Recorders and Butterfly Conservation Volunteers, from two-part beginners courses through to a series of more subject-specific intermediate level sessions. This included file management, mapping, creating atlas-style maps, and querying, joining and summarising data.

The courses have been popular, and I have been impressed with the enthusiasm and commitment attendees have shown in tackling what can be quite complex concepts and tasks. I hope that they all go on to great things with their mapping and spatial data.

All of the courses have been recorded, and these recordings and the full course materials have been uploaded to the QGIS Yammer support forum. When I get chance, I will edit the recordings to remove the pauses (while people are working), and so make them easier to watch. The forum is there to provide support and information for Butterfly Conservation staff, volunteers and County Recorders. If you would like to join the forum, please email gis@butterfly-conservation.org and let me know who you are and what role you have, and I will send you an invitation to join.

NBN Record Cleaner Workshops

The first of what was planned to be two NBN Record Cleaner workshops was held via Zoom on 9 February 2022 and was attended by 13 delegates. Topics covered included: Windows 10 issues; uninstallation/installation; automatic/manual updates to the software and rules; supported input data formats; data validation including matching species names; running the data against the rules; changing the mapping visualisation; exporting the 'failed' records.

Regretfully, due to technical difficulties, the scheduled workshop on 17 February 2022 was cancelled with a view to rearranging another date in the future. To-date, due to workload and personal reasons this has yet to be rearranged. However, Les hopes to address this before the summer recording season starts. All of those who booked into the second workshop will be contacted in due course.

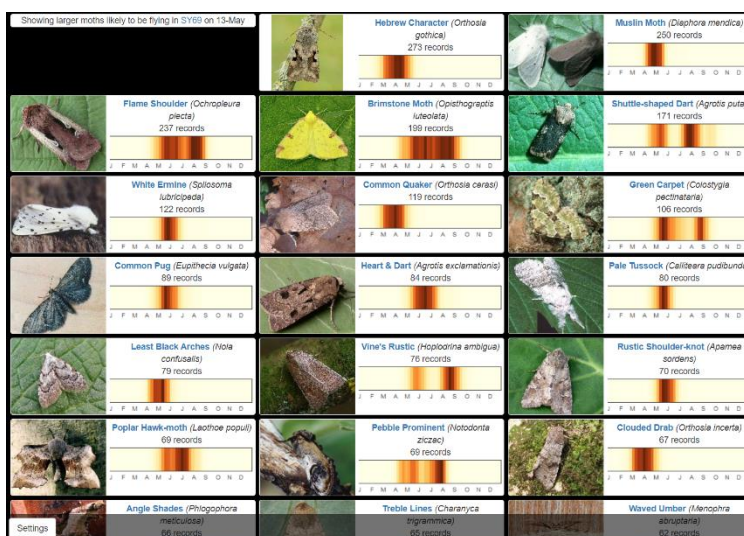
Species Dictionary

The Checklist of the Lepidoptera of the British Isles by Davis Agassiz, Stella Beavan and Bob Heckford has been updated regularly in the Entomologist's Record and Journal of Variation since it was first published back in 2013. However, the changes may take some time to filter through to recorders, County Recorders and the software they use. Many County Recorders maintain their own electronic copies of the checklist, as do some recorders. MapMate users must wait for the changes to be implemented via a software patch, while users of products that use the UK Species Inventory managed by the Natural History Museum (e.g. Recorder 6, Record Cleaner, NBN Atlas, iRecord, NMRS Online) must wait much longer for the changes to filter through.

In the interim, an Excel spreadsheet is available to download from <https://bit.ly/3sq2REd> which is amended and released soon after the latest additions and changes are made to the British Lepidoptera Checklist.

What's Flying tonight app updated

The [What's Flying Tonight app/website](https://www.what'sflyingtonight.org/) uses UK sightings of larger moths gathered by the National Moth Recording scheme and has recently been updated to include data from 2005 to 2020. It is a free resource built by the Biological Records Centre, supported by the Centre for Ecology & Hydrology, Butterfly Conservation, UKmoths, and the Joint Nature Conservation Committee. Covering the larger moths only, it shows the user which species have been previously recorded in their local area (a 30km by 30km grid) at this time of year.



MapMate update

Les Evans-Hill has designed a procedure whereby he can capture all new, amended, and deleted records from a MapMate sync (SQZ) file. This will help to manage updates for the NMRS from local databases. However, to get the most out of this process a prerequisite is to have all unique record keys imported into the NMRS along with the records. For some vice-counties this has already been achieved. For those where this has yet to happen, Les is happy to receive a brand new Full (Reset Sync Record) sync SQZ file; all subsequent sync files can be normal and there is no requirement to reset the sync record.

If any unique record keys are lost or deleted, it will be necessary to reset the sync procedure. Therefore, to ensure this does not happen and/or in the event of a rebuild of MapMate, it is recommended all MapMate users take a backup of their database via the MapMate replicator regularly, and a copy of the backup file stored separately from your hard or solid-state drive. It is also worth considering copying the entire "My MapMate" folder periodically as well.

Some County Moth Recorders have had problems syncing SQZ files via the MapMate Web Server. Some users have been asked to re-register, even though they are already registered with the MapMate website, and others have found their sync file fails to upload or download from the MapMate Web Server. The registration issue can be fixed by upgrading the Replication Manager from v2.4.0 to v2.4.2. This can be done by going to the MapMate "Alex" repository at <https://www.mapmate.co.uk/alex/> and following the instructions to do a complete uninstall/reinstall of MapMate. Please read the instructions thoroughly before attempting the procedure.

Kent Moths new website

In the 2010s interest in recording moths in Kent grew. Unfortunately, the verification and collation of data became a burden using the old established methods and the County Recorder stepped down. It was clear a team effort was needed to re-establish the data flow to Butterfly Conservation's National Moth Recording Scheme.

In 2016, Karen Bartlett-Hodgson persuaded two of us, Ian Hunter and Dave Shenton, to join her in establishing the Kent Moth Group. To promote the group and re-establish contacts a website was quickly created using WordPress as the framework. This was followed by Facebook and Twitter groups and data and discussion started to flow.



< Return to Family Page
Eyed Hawk-moth
Smerinthus ocellata
Family: Sphingidae
RES: 19.002 BAF: 1980
Verification Grade (Adult): []



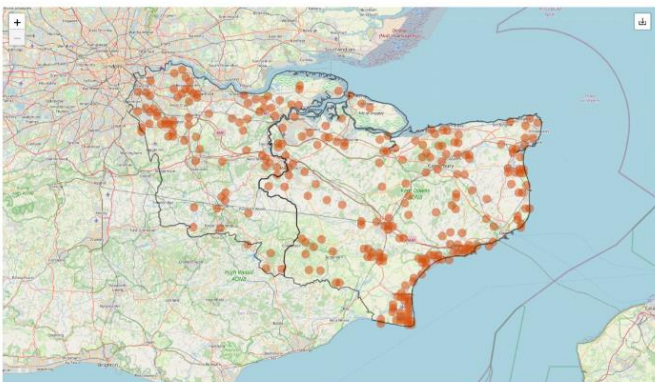
< Previous Species | Next Species >
Widespread but not as abundant as the other Hawk-moths likely to be encountered in Kent. This species can be found across the county, but is more concentrated at coastal locations (especially Dungeness). An unmistakable species.
Flight Season: Flies between May and August
Foodplant: Mostly feeds on Willows and Sallows but has been noted on other plants

QUICK NAVIGATION:
Distribution in Kent | Phenology | Photo Gallery | Reporting Rate | External Links

Distribution in Kent

The map below shows the distribution of records of **Eyed Hawk-moth** (*Smerinthus ocellata*) within Kent. Use the control below to show data for a certain time period. If you've got a dot to add, please submit your records to us. [Click here](#) for more information on how to submit data.

Filter by Time Period: All Pre-1950 1950 - 2000 2000 - 2020



The constraints of the WordPress format proved frustrating but to create a new website would take time and require help. After discussions Alex Perry stepped forward and the search for a suitable format began. Requests for advice yielded nothing and the service provided by Vercel was settled on.

In Alex's words "my first step was to create the design of the website, the goal to make something with a simple aesthetic that was self-explanatory to navigate and provide all the information users asked for". The pre-2016 data needed a lot of sorting with numerous old taxon

names and duplicate records. Once the simplified data were uploaded into the database, it allowed the building of a page for each species with interactive distribution maps, phenology graphs and yearly recording rates.

Now whenever new records are added to the database the website will automatically update. “What’s Flying Tonight” pages were generated. Finally, an administration page was created giving contributors the ability to add additional information to each species page such as written accounts and images. This is a work in progress. It took several months for Alex with Dave’s help to complete. Since the new website, www.kentmoths.org, was launched the feedback has been very positive.

The site covers all 2,148 species recorded in Kent and most importantly it has given micro-moths equal prominence – a long held aim of Dave Shenton’s.

Contributed by Ian Hunter, Dave Shenton and Alex Perry

Missing moths: Can you help rediscover the Scarce Lance-wing *Epermenia farreni* in England?

The first article of a new E-moth feature on elusive micro-moths focusses on the mysterious Scarce Lance-wing *Epermenia farreni*. The moth belongs to the small family Epermeniidae, which includes the common and widespread Garden Lance-wing *Epermenia chaerophyllella* as well as the conservation priority Chalk-hill Lance-wing *Epermenia insecurella*. Unlike *E. insecurella*, *E. farreni* has never been included on any priority species lists, but available information suggests that it hasn’t been recorded in England since 1987. Elsewhere in the UK there is just a single known Scottish site, on the coast of Kincardineshire, where the moth was recorded in 2021 for the first time in 15 years.



Epermenia farreni (Ruedi Bryner)

The moth has been recorded from six vice-counties in southern and eastern England (the year of the most recent record is given): Oxfordshire (1987), Northamptonshire (1927), Cambridgeshire (1894), North Essex (1980), West Suffolk (1974) and West Norfolk (1874). The known larval foodplants are Wild Parsnip *Pastinaca sativa* in England and Hogweed *Heracleum sphondylium* in Scotland, though it may also use Hogweed in England as this is a known foodplant in continental Europe. Larvae feed on the seeds in August and September.

Adults have been recorded in June and July, sitting on the flowers of the foodplant or on nearby vegetation. The most recent English records were from July (11 July 1980 and 26 July 1987), but the recent Scottish record occurred earlier in the year (12 June 2021).

Wild Parsnip is a common plant in lowland England, occurring in neutral and calcareous grasslands, especially on chalk and limestone soils. It is generally found in areas of tall vegetation on downland, roadsides and waste ground. Given the widespread nature of the plant, as well as the growing interest in micro-moth recording, it is surprising that there have been no English records for over 30 years. One possible reason is that it appears to show little or no interest in light traps. Another reason the moth may be overlooked is its small size – adults are just 4-5mm in length. It seems hard to believe the moth is extinct in England, but we urgently need some new records to confirm that it is still present.

Checking Wild Parsnip (and possibly Hogweed) flowers in June and especially July is likely to be the best way to find this elusive species. Given the moth’s occurrence in eastern Scotland it could probably turn up anywhere on the eastern side of the UK, and would be worth looking out for further west too. If you are lucky enough to encounter it, please take a photo and let your county moth recorder know. I’d also be grateful for information about the record and the surrounding habitat (email address below). Best of luck with your searches!

Contributed by George Tordoff, Senior Ecologist, gtordoff@butterfly-conservation.org

Moth Spreadsheet Validator

County Moth Recorders have a significant task to validate and verify the many valuable records that are submitted to them every year. The [Moth Spreadsheet Validator](#) is designed to help County Moth Recorders by alerting them to things to check as well as creating a consistent output format from the many data sources they receive. The input to the validator can either be in list of species-based records or can be in various species/date matrix formats. Data exported from MapMate and iRecord can be verified.

Depending on the format option selected, it produces a new worksheet that should be able to be imported into iRecord or MapMate or also a more general one with common names. Medium or high severity messages will normally mean that some manual remediation is required prior to import. The Validator can also optionally, using a variety of checkbox selected options, perform some Verification analysis of the records.

The validator has a number of functions to help reformat, validate and verify records:

- Reads in Excel or csv files whether in list or pivot table format
- Supports GB and Ireland
- Looks up and updates taxa to those used by either MapMate or iRecord/Recorder
- Trims spaces from all fields and removes carriage returns from comment field
- Corrects stage and sex terms to standard values
- Checks dates for BC provided species flight times for adult and undesignated stage records and issues minor or major warning depending on how far outside
- Checks or sets VCs to 100m accuracy based on validated grid refs in GB and 1km for Irish grid refs (based on NBN Record Cleaner rules)
- Optionally verifies the following (as an alternative to and extending NBN Record Cleaner functions):
 - o flight period based on NBN Record Cleaner rule data provided by BC (2016 data)
 - o new to 10k square* based on NBN Record Cleaner rule data (2016)
 - o rare for 10k square* (fewer than 5 records since year 2000)
 - o new to VC - NMRS extract Jan 2022
 - o rare in VC (fewer than 5 records since year 2000) - NMRS extract Jan 2022
 - o identification difficulty grading

* the 10k square verification can optionally use a buffer to a 30km square for more remote VCs

A sample output page can be seen here:

1	Taxon	CommonName	Sitename	Gridref	VC	Recorder	Determiner	Date	Quantity	Method
2	Apamea monoglypha	Dark Arches	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	12/08/2021	2	25W ac
3	Blastobasis adustella	Adult: Spec/photo may be needed cf. B. vittata & B. lacticolella (2)	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	12/08/2021	1	25W ac
4	Noctua comes	Lesser Yellow Underwing	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	12/08/2021	6	25W ac
5	Hermia tarsipennis	Fan-foot	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	12/08/2021	1	25W ac
6	Dysstroma truncata	Common Marbled Carpet	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	06/09/2021	1	25W ac
7	Argyresthia goedartella	Golden Argent	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	06/09/2021	3	25W ac
8	Dichrorampha acuminatana	Adult: Gen det may be normally required cf. D. montana (4) - record comment is "Gen det, Photo"	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	06/09/2021	1	25W ac
9	Epinotia ramella	Small Birch Bell	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	06/09/2021	1	25W ac
10	Acleris forsskaeleana	Maple Button	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	06/09/2021	2	25W ac
11	Epiphyas postvittana	Light Brown Apple-moth	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	5	25W ac
12	Dysstroma truncata	Common Marbled Carpet	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	6	25W ac
13	Amphipyra tragopoginis	Mouse Moth	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	3	25W ac
14	Argyresthia goedartella	Golden Argent	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	1	25W ac
15	Autographa gamma	Silver Y	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	1	25W ac
16	Noctua pronuba	Large Yellow Underwing	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	7	25W ac
17	Aporophya nigra	Black Rustic	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	1	25W ac
18	Xestia baja	Dotted Clay	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	4	25W ac
19	Pandemis cerasana	Adult: Spec/photo may be needed cf. Pandemis heparana (2)	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	1	25W ac
20	Acleris laterana	Adult: Usually distinctive but cf. A. caledonensis & A. comarana (4)	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	1	25W ac
21	Acleris variegana	Garden Rose Tortrix	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	1	25W ac
22	Xanthorhoe fluctuata	Garden Carpet	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	13/09/2021	4	25W ac
23	Orthosia incerta	Clouded Drab	Haddington, East Lothian	NT52227292	82	AN	Observ AN Observer	20/03/2021	3	25W ac

You can download the Moth Spreadsheet Validator [here](#). If you would like further information or support then please contact me Mark Cubitt, via validator@eastscotland-butterflies.org.uk.

Contributed by Mark Cubitt, County Moth Recorder for East Lothian and West Lothian

Moth Voucher Photo Archive

Butterfly Conservation have a [Moth Voucher Archive](#) web application that has been created by Mark Cubitt to hold the archive of voucher photographs of British moths that have been validated by County Moth Recorders (CMRs). The Archive currently contains images from almost all Scottish vice counties and also those that comprise Cumbria and Lancashire. Other vice-counties can start to use the archive too.

The archive provides somewhere to put photographic evidence that a species has been recorded at a local VC level. Additional (or composite) images including mines or genitalia may be required for some species, for example there is little point in having just an image of a Lesser Common Rustic which can't be distinguished from Common Rustic. It may be appropriate to have multiple photos of the same species that are recorded only every few years or in different areas of a large vice county. The archive can also be used to hold images of unusual forms or aberrations of the types that collectors may have prized in the past. One of the key things is to provide a long-term repository so that a future CMR can satisfy themselves that an unusual historical record is sound.

The archive web site holds copies of the photos to provide 'public' access to the archive. The photographs remain copyright of the photographer. It is not supposed to be a high-quality photo display of which there are many on the web. The majority of macros have also been independently verified. If any images appear to be incorrectly identified then please contact the administrator who can contact the relevant CMR.

Contributed by Mark Cubitt, County Moth Recorder for East Lothian and West Lothian

Moth Models in DECIDE

With more people than ever before out monitoring moths, the DECIDE project wants to encourage butterfly and moth recorders to not only visit new places, but places where new records will be of most value in improving Species Distribution Models. To do this we have designed a map-based web Tool (<https://decide.ceh.ac.uk/>), that highlights local areas with greatest priority for more records.

A new version of the Tool is just being released (v1.0.0) incorporating many improvements on the previous versions as well as some new features. One of these is the addition of a map layer for nocturnal moths.

If you are an existing moth trapper, and particularly if you have battery powered traps that you can take into the wider countryside, take a look at the maps on the DECIDE Tool for inspiration of new locations to try. Please also send us feedback by clicking on the orange feedback button on the Tool and filling in the form. This will help us to improve the Tool and develop a resource that is useful for recorders and importantly, helps generate more butterfly and moth records from places that need them.

To support more mobile moth trapping in the regions covered by two of the project's partners, Greenspace Information for Greater London CIC (GiGL) and North and East Yorkshire Ecological Data Centre (NEYEDC), we have distributed a set of LED traps. Each area has its own project underway:

GiGL (contact: Benjamin.Town@GiGL.org.uk)

- The project will start in late May and be up and running by June. Distribution of traps will be via the London Wildlife Trust and county moth recorders. However, anyone interested in getting involved can also contact us direct via the contact details above.
- Full training will be provided on how to use the traps, common species ID and how to incorporate the DECIDE Tool into planning your moth trapping outings.



Dutch Butterfly Conservation LED Trap (Jan Ensing ©)

NEYEDC (contact: Lucy.baldwin@neyedc.co.uk)

The project is already underway with a group of beginner biological recorders. Workshops and events are planned to introduce moths and moth recording and provide support for independent trapping.

- More experienced recorders are still needed to help support these beginners, for example by providing online help with queries and attending trap opening events.
- We would also like to hear from any established recorders who would like an LED trap to trial the DECIDE Tool and supply feedback.

Much more about the DECIDE project can be found on the information pages and blog posts on the Tool: <https://decide.ceh.ac.uk/>.

For those that record butterflies, there is also an exciting trial called MyDECIDE running this summer that will be exploring ways to provide automated personalised feedback on your recent recording. Sign up on the Tool and get involved if you can!



Tribute to Martin Anthony (1947-2022) by Dave Slade

Originally from Essex, Martin moved to Risca in south Wales in 1976 and was employed as a Chemistry lecturer until he retired in 2002. His passion was for butterflies and moths, and by the time he had taken over the County Recorder role in 1995, he had discovered 14 species of macro-moth not on the county list and was involved in the addition of one other.

His garden had a list of 427 macros plus 29 of the more distinctive micros – as he didn't collect, rear out or dissect, he didn't feel able to record micros. But it was his trapping away from home, particularly in the previously overlooked west of the county that was responsible for "greatly extending our knowledge of the macrolepidoptera in the west of the county" (to paraphrase Dr Neil Horton, Martin's predecessor as county recorder). In doing so, Martin went on to add a further nine species, one accompanied by Roger James and another in the company of Rodney Morris and Roger.



Martin Anthony

He was one of the founder members of the Newport Moth Group (formed in 1999), which later evolved into the Monmouthshire Moth and Butterfly Group. Towards the end of 2000 he started producing regular newsletters in November 2000, with issue 174 being the last one he produced, at the end of 2021.

And as county recorder he was always both patient and generous with his time, particularly with beginners, assisting with identifications and offering up more information than was requested on the species in question.

Martin was also very involved in many committees and conservation groups over the years, not least were stints as the chairperson for Gwent Wildlife Trust, Gwent Recorders Forum, South Wales Branch of Butterfly Conservation, and South East Wales Biodiversity Records Centre. As well as being passionate about conservation, he was very keen to ensure that the data he collated were put to use, and along with Roger James, he helped draft the first data exchange agreement with SEWBReC, which became the template for sharing of records in south-east Wales.

I am personally pleased that he lived to see the website www.GwentLeps.org.uk that was built to showcase the many thousands of records accumulated by himself and Sam Bosanquet over the years, and I hope it will continue to be a useful resource for moth'ers in Gwent for many years to come. His untimely death after a mercifully short illness was a shock to all that knew him and he will be sorely

missed, across the recording and conservation community. As a nice touch, an Oak Beauty was sat on the crematorium window, so Martin continued to help generate records right up to the end.

Tribute to David Budworth by Felicity Jackson

On 12 February 2022 we lost David Budworth. Dave was a leading light in several wildlife organisations, both local and national. He grew up in Cresswell, Derbyshire, and later moved to Newhall, near Swadlincote, with his wife Madeline. His career was as an electrical engineer, working for many years with the National Coal Board. He gained a BSc in electrical engineering at Loughborough University, and an MSc not long after. Later he worked in railway research.

His first interest was birds; in 1966 he trained as a bird ringer, and over the years went with a long-standing friend on numerous expeditions, to locations including Sule Skerry, Portugal and Senegal. His interests also extended to insects. By the 1970s he was a member of the Derbyshire Entomological Society (which later became Derbyshire & Nottinghamshire Entomological Society), with particular interest in moths, observed using light trapping, and also Hemiptera. He was President for several years, Secretary from 1988, and took on the roles of Treasurer and collator of invertebrate records, and also was Society recorder for moths (both macro and micro), and Hemiptera. He was also a County Recorder for the National Moth Recording Scheme.



David Budworth

He was also an active member of many other groups, including the British Trust for Ornithology, acting as County representative for many years; Derbyshire Ornithological Society, where he became Ringing secretary; the Bees, Wasps & Ants Recording Society (Treasurer until recently), and the Linnaean Society.

With his wildlife expertise and engineering background, Dave was the go-to person for so many things. His knowledge was immense, and he was recognised nationally. He was always keen to pass on his knowledge, and very many people have been inspired by him, some going on to pursue a career in entomology. On top of that, he was warm and humorous, down-to-earth, entertaining, energetic and enthusiastic.

We extend our sympathy to his wife and extended family at this sad time.

Dr John Rendle Langmaid – a personal tribute by Phil Sterling

It is with great sadness that we mark the passing of one of the leading lights in the world of moths and butterflies, John Langmaid, in early March 2022 at the age of 87. Here are a few of my memories of the great yet humble man. I first met John when I was 17 just as I was starting to get into 'micros'. We were at a field meeting looking for leaf-miners in Haugh Wood, Herefordshire, led by Dr Mike Harper and we were accompanied by Col Maitland Emmet. I didn't realise at the time I was standing on the shoulders of giants, but within hours I was hooked and went away with poly bags full of leaves and hope of rearing tiny yet beautiful micro-moths the following spring. That same year, 1987, I introduced John to my parents who lived in Winchester, John in Southsea, and that started weekly mothing field trips for John and my dad, Dougie Sterling, especially during his retirement years and we became family friends.



John Langmaid

John began his entomological exploits at a young age and taking time out from school at Clifton College in Bristol, he found the only accepted record of Double-spot Brocade, *Meganephria bimaculosa*, sitting on an elm tree in Leigh Woods in July 1949. That must have been an inspiring moment for him, and I'm sure contributed to the dedicated field worker that he became in the following decades.

Virtually all of John's adult life was spent living in Southsea, Portsmouth, where he was appointed as a GP in 1962, working together with his father, Frank, for many years. He ran a moth trap in his tiny garden for decades, building an impressive list of 1,114 species that put most of the rest of us to shame. He diligently recorded all the moths he saw, and if he didn't recognise anything, he kept it aside for further investigation. Every year I used to look through his 'mystery box' of things to be dissected when the winter came along and among the specimens were numbers of firsts for the UK, or for Hampshire. He even had one micro-moth new to science named after him, *Tetramoera langmaidii*, a species associated with bamboo.

John was well known for his field exploits looking for leaf-miners, and many of you who will have joined him in the field for autumn forays will have benefitted from his wisdom and experience, which he would generously share in a warm-hearted and often humorous way. He found *Phyllocnistis ramulicola*, new to science, in Havant Thicket just north of Portsmouth and you always felt with John around there was a good chance of finding something interesting. Whatever he found, he would assiduously record the observations in his diaries. Over the years he amassed 97 of these, full of detailed notes and observations from all over the UK. Almost all the information in the diaries he entered onto MapMate during his early retirement years, so the data was more widely available to county recorders and the National Moth Recording Scheme.

John published a great deal of his field observations, often with others, and there are many papers to his name. But without doubt his most important contributions that will stand the test of time are his contributions to books on moths. He was a wonderful co-editor and co-author with Maitland Emmet of volume 4 of the Moths and Butterflies of Great Britain and Ireland, and his attention to detail and accuracy allows these works to stand head and shoulders above others. All of us who record micro-moths rely on the information within or derived from these volumes. I owe much of my knowledge of the then Oecophoridae, now Depressariidae, to his field work when we were able to be out together looking for larvae. More recently, John was co-author, with Steve Palmer and Mark Young, of what we affectionately know as LPY. This is an updated version of Maitland Emmet's original 'A Field guide to the Smaller Moths of Great Britain and Ireland' and packed with information about the life histories of micro-moths.

If we didn't get to know John in the field, many more of us will have become acquainted with him online, via email or Facebook. John has been a mentor and an inspiration for so many in the UK and Ireland, and well-known throughout Europe, generously offering his time to help others identify what they'd found. You were never made to feel insignificant by the great man, no query was too trivial to deserve an answer. His hallmark was to sign off with fish-related puns!

Most people don't collect moths these days, but to look through John's collection is breath-taking. Every specimen is meticulously labelled on an individual mount, and he was keen to obtain examples from many places, not one, in case the species was split into two or more. This reference material is now invaluable as we enter the era of DNA barcoding, and John's collection has been and will continue to be sampled from all over the world for moth legs from which the DNA is extracted. Mark Parsons and I were fortunate to be able to depend on John's collection for so much of the material that Richard Lewington used in the illustrations for 1st edition of the Field Guide to the Micro-moths of Great Britain and Ireland. His collection will continue to be of national importance for a long time to come.

John asked me to be his Entomological Executor in his Will, and it has been my pleasure to make sure his collection, diaries, herbarium of pressed leaf-mines, and the preparations of genitalia of thousands of specimens are now safely lodged at the Natural History Museum in London where the material will be accessible in perpetuity.

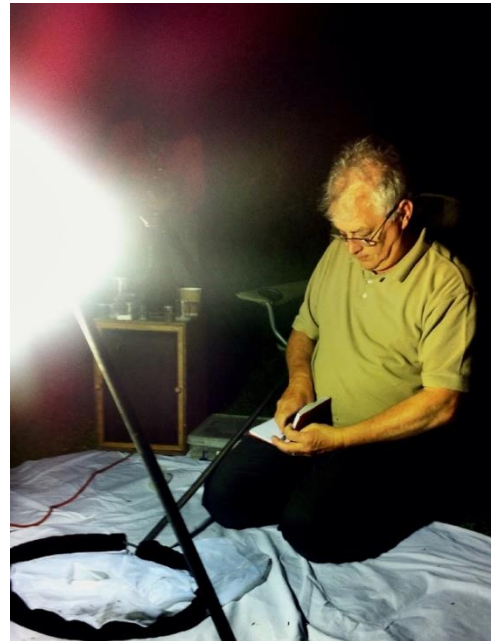
A tribute to Adrian Russell (29/10/1956 - 22/04/2022) – by the VC55 Moth Recorders

It is with great sadness and shock that we learned of Adrian Russell's passing on 22nd April after a short illness. Adrian was the County Moth Recorder (CMR) for VC55 Leicestershire and Rutland, a role that he had fulfilled in an exemplary manner across four decades.

In his working life, Adrian led the Environmental Health team at Leicester City Council. But it was through his role as CMR and his active involvement with local groups, not least the Leicestershire Entomological Society and the East Midlands Branch of Butterfly Conservation, that many formed long-lasting friendships with him.

Being a County Recorder is as much about people as recording wildlife, and Adrian epitomised this through his talks, events and demonstrations. He brought naturalists together and created an ever-growing community of moth recorders in Leicestershire and Rutland. He always welcomed and supported new recorders and shared his enthusiasm and experience freely, gently leading absolute beginners through the minefield of identification with unfailing courtesy, patience and kindness.

So great was his desire and willingness to engage with new recorders, and to widen the recording coverage within VC55, that he turned his garage into a second-to-none moth trap workshop. His mechanical and electrical skills were remarkable, and he was constantly experimenting with innovative new ideas and prototypes. There are few recorders within VC55 today that have not owned at least one of his custom traps, which he often freely lent out to encourage recording.



Adrian Russell

Adrian always celebrated the successes of others and was careful to avoid the sort of one-upmanship that had put him off birding in his younger years. If someone posted a particularly impressive catch on the county Facebook page, he would often reassure others that he had caught almost nothing that night and other recorders shouldn't be disheartened.

Adrian was fascinated by distribution, abundance and phenology and had a particular passion for historical data - often going to great lengths to verify obscure records or claims that he had come across. He had a very sharp and enquiring mind and would methodically go about researching and unravelling the details. His research skills were quite outstanding, and he would have made an excellent historian. It is incredibly sad that his long-planned book covering the Butterflies and Moths of Leicestershire and Rutland was not completed and published in his lifetime, his main focus and ambition during his retirement.

Many of us enjoyed sharing Adrian's company out and about doing what he enjoyed the most; revelling in moths coming to a sheet or enthusiastically emptying traps from multi-light overnight sessions, often with a gas-stove fuelling us with coffee and breakfast. Even the occasional tricky situation such as a completely flat Land Rover battery in the early hours of the morning in remote woodland, getting locked in at a site, or the Police turning up to investigate reports of bright lights, were always dealt with in his characteristically calm way and with his sense of humour intact.

It is sometimes said of someone that nobody had a bad word to say about them. In the case of Adrian, this is undoubtedly true. He is universally held in the very highest esteem by his friends and acquaintances for his generosity, thoughtfulness, and his considerate and sensitive nature.

We were incredibly lucky in VC55 to have such a hardworking, dedicated and encouraging CMR. But above all, Adrian was a pleasure to spend time with. He will be sorely missed by all who knew him, the moth recording community will be very much the poorer for his loss.

Our thoughts and condolences go to his wife Margaret, his son Ben, his daughter Kate and his wider family.

Sign up to Science News

Butterfly Conservation publishes a biannual email newsletter that explores the wide range of science that we are involved in and explains how we are applying this to our conservation projects. The valuable data that you collect is our evidence base and is used to inform our conservation action. We work in collaboration with universities and other organisations around the world to produce scientific research to undertake conservation action. You can find out more or subscribe to Science News [here](#).

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