## 7 *the* No.118 Spring 2024 Comma

Regional Magazine of West Midlands **Butterfly Conservation** 

> **Summer events:** Butterfly walks and moth breakfasts

**Volunteer opportunities:** 

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Bringing butterflies and moths back to Britain • westmidlandsbutterflyconservation.wordpress.com



#### Cover story

Dark Green Fritillary by Roger Littleover, late highlight on a 40-year transect (see pages 12-14)

#### Contributions

Please send articles and images to the Editor. Photographs should be as high-resolution as possible and sent as separate files (not embedded in a document).

Our copy deadlines are Spring - 28 February Autumn - 31 August Winter - 23 November (early submissions are welcome). Contact the Editor for information. Editor: Marian Newell. comma.editor@newellporter.co.uk

#### **Publisher**

**Butterfly Conservation West Midlands** Branch. The opinions expressed in this magazine are not necessarily those of the Branch or of Butterfly Conservation.



BC West Midlands Butterflies



Butterfly Conservation West Midlands



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### Chairman's Address



#### Committee news

The March committee meeting agenda covered a range of topics. Firstly, we thanked Martin Harrison for his work as Secretary over recent years and wished him well on his future butterfly adventures to Northern Macedonia and the like. We welcomed Marian Newell as the new Secretary and thanked her for taking on the role. Marian is already the Comma Editor.

I've been hearing of good progress at work

parties from around the region during the winter, despite the wet weather. Thanks to everybody involved. Head Office has introduced a new volunteer register called Assemble, which people will be asked to join. The online portal is secure and is available to join by phone if people prefer.

#### **Projects**

Staff updates were available from Rhona Goddard. Regional Conservation Manager, and from Natalie Norton, Midlands Landscape Officer. These included many site visits, managing contractors, leading/supporting work parties, working in partnership, and budget management.

Jenny Joy's Grayling Action Group update included the inspirational use of



grazing goats on one site, which are controlled by a virtual fence. Plans also include the use of UV torches for surveying caterpillars. Other updates included Kentish Glory and Pearl-bordered Fritillary reintroduction news.



Stephen Lewis reported excellent recent transect results for Silver-studded Blue at Prees Heath, which will hopefully lead to an article in the Summer issue of the national BC magazine, Butterfly. He continues to press Head Office for the resources to help maintain and improve the reserve.



#### Meetings

At the time of writing, two events were scheduled for late March. Russell Hobson from the Senior Leadership Team at Head Office was visiting to meet members of the committee, with a walk ground the Grafton Wood Reserve planned for afterwards, and

**Branch** the Branch Chairs had a face-to-face meeting in **AGM** Nottingham. Looking ahead, our Branch AGM is 28 September arranged for 28 September at Pant Memorial Hall, Pant Memorial Hall near Oswestry. We're moving the venue for our near Oswestry annual meetings around the region and hope this will encourage more people to attend. We have two excellent speakers lined up and an enjoyable day in store.

Recordina

John Tilt gave a fascinating talk on the uplift in recording in the West Midlands, with a staggering 100,000 records during 2023 roughly ten times more than twenty years ago. These were compiled by over 5,000 recorders recording over 300,000 butterflies, demonstrating a tremendous growth in people's interest in butterflies. He noted that it's a good job that records are no longer in paper form. The results are available on the Branch website at westmidlandsbutterflyconservation.wordpress.com

John demonstrated how detailed transect record trends can be used to target habitat management, particularly for scarcer species (see pages 18–19). I commented that an East Midlands Branch representative enquired about our online moth atlas at westmidlandsmoths.co.uk, with a view to emulating it.

#### Finance

Our Treasurer, Ian Duncan, reported that the Branch remains financially sound, although insufficient funds were available for all the spending requests from members. He therefore presented a realistic budget,

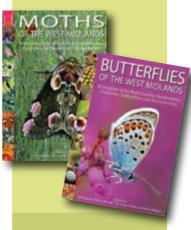
which will retain an emergency fund should it be required. This was approved by the committee. lan's last item was a call for people to look out for Purple Emperor, which appears to be colonising our region (see pages 4-6).

All in all, there is plenty to look forward to this coming season! Bring it on!

Michael Southall Branch Chair

#### Tool up for the summer season!

The Branch books covering butterflies and moths of our region are available from naturebureau.co.uk (ISBNs 9781874357728 and 9781874357926).



For further detail on moths, try our online moth atlas at westmidlandsmoths.co.uk





# Where to find the Purple Emperor

Recent articles 'Has the West Midlands, joined the Purple Empire?' by Mike Williams in Comma 110 and 'In search of the Purple Emperor' by Sam Macvie in Comma 117 have documented the spread of Purple Emperors into our area and how to look for them. The purpose of this article is to highlight sites where they have been recorded recently and found historically.

#### Recent records

Where better to start looking for **Purple Emperors** than at sites where they have been seen previously? This approach will provide a focus, rather than looking randomly for an elusive and notoriously difficult-to-find butterfly that's spread thinly over a wide area.

The red diamonds on the map show where verified records of Purple Emperor have been entered into the BC database since 2020. Not surprisingly, most of these records come from the most visited sites at Grafton Wood and Tiddesley Wood. So far, larvae have been found only at Tiddesley in 2022. Additional sightings are shown as blue dots on the map. The records are surprisingly numerous over a wide area.



66 Let's start looking in earnest for this butterfly in our area.

#### Historic sightings

It's also interesting to look at the historical sightings, which show records recurring at some sites over a long period (see table overleaf). Examples are around Malvern in Worcestershire and at Eastnor and the Doward in Herefordshire. We really need to look closely again at these areas. Personally, I am aware of some very suitable habitat at the Gullet and the adjoining Castlemorton Common.

It would also be good to check all areas with plentiful sallow (Salix caprea), regardless of previous

CONTINUED ON PAGE 6

Purple Emperor - underwing (Andrew Cooper)

#### CONTINUED FROM PAGE 5 ▶

Purple Emperor sightings. Sallow is also known as goat willow and pussy willow. Interestingly, with the loss of ash trees, sallow is becoming the dominant tree on wet, heavy soils, providing opportunities for the spread of this species.

Article by lan Duncan Map created by John Tilt

#### Purple Emperor Action Group

Some of us have established a Purple Emperor Action Group to coordinate recording and to encourage and train volunteers. If you're interested in becoming involved, please contact me at erebia13@gmail.com

We plan to run a number of field meetings through the year, looking for the butterfly in all its life stages

Digby Wood

Digby Wood

BC database

BC database

Jack Green

Jack Green

Bernard Miles

Bernard Miles

Bernard Miles

BC database

BC database

Bernard Miles

Bernard Miles

Bernard Miles

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Bernard Miles

BC database

VCH

VCH

VCH

VCH Herefordshire

Frohawk

BC database

Jack Green



Caterpillar on sallow showing the classic pussy willow catkin

(Gillian Thompson)

Frohawk, F. (1934) Complete Book of

Green, J. (1982) A Practical Guide to the Butterflies of Worcestershire

Miles, B. (1981) Past Aurelians and Butterflies. Woolhope Club Transactions

Victoria County History Shropshire (1908) Vol 1 109-109

Victoria County History Herefordshire (1908) Vol 1 85-87

Wood, D. (2006) Looking for Purple Emperors. Comma 64, 4-7

# Kentish Glo Welcome to Ezz Miles





Tello! My name is Erinna Miles (Ezz) and I have recently been appointed as the new Lepidoptera Conservation Coordinator, based at Twycross Zoo in partnership with Butterfly Conservation. I'm currently living on the Shropshire/Powys border, working between my office at Twycross Zoo and the Wyre Forest to get this fantastic project underway.

I have recently finished two degrees, my research focused on using conservation genetics to understand more about our rare and reintroduced UK species. My undergraduate degree delved into the world of hybridisation between the polecat and the ferret, while my master's degree allowed me to study the genetic health of the Scottish pine marten population. In both of my degrees, I was lucky enough to be co-supervised by the Vincent Wildlife Trust, using their samples to learn the science of DNA barcoding.

Alongside my studies, I worked at The Magic of Life Butterfly House (Aberystwyth) for several years, and then as a wildlife officer for the Dyfi Osprey Project. This new position is a fantastic opportunity to use my previous practical knowledge, research and passion to reintroduce this incredible species.



#### What are we hoping to achieve?

My new position is funded by Twycross Zoo, working in partnership with Butterfly Conservation (West **TWYCROSS ZOO** Midlands Branch), Forestry England,

Natural England and other key partners. It will be looking at the potential to reintroduce the Kentish Glory moth

(Endromis versicolora) into the Wyre Forest. The project team also hopes to support the conservation of other priority butterflies and moths within the Wyre Forest landscape, such as Pearl-bordered Fritillary (Boloria euphrosyne) and Wood White (Leptidea sinapis).

At this early stage, we are starting to plan out genetic analysis, working with the Natural History Museum in London and the University of Leicester to produce recommendations as to which population we should use as a potential source for reintroduction. This DNA work is stretching not only to our last extant UK populations in Scotland but as far as France, Belgium, Netherlands, Germany and the Czech Republic. We need to investigate the genetic differentiation between populations, ensuring we pick the most suitable for possible reintroduction.

Alongside this, we are also in the process of undertaking habitat assessments, ecological surveys, reintroduction feasibility studies and habitat management. Then, a little further down the line, we will be giving Mel Mason's 'Pearl Hotel' some competition with the 'Glory Hotel' - breeding facilities for the Kentish Glory that will be situated at Twycross Zoo.

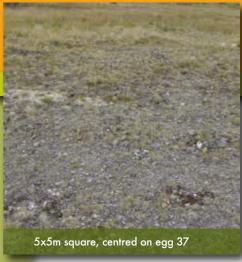
#### What makes this project so special?

This is a very exciting project to be working on: not only is Kentish Glory hugely important for biodiversity but it is also one of the most beautiful moth species in the UK, with a rather fantastic name. If we succeed, it will also hold the title of the first-ever moth reintroduction in the British Isles! I feel privileged to be involved in such a momentous venture and I intend to give it all the publicity it deserves.

Article by Erinna Miles erinna.miles@twycrosszoo.org

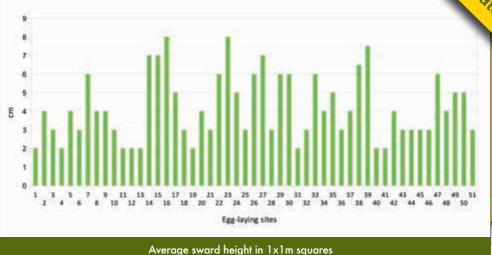
# Grayling Action Group The Bog Mine in Shropshire





Last summer, to inform habitat management proposals, 48 Grayling egg-laying sites were identified at The Bog. For each site, the vegetation, bare ground and average sward height within a 1x1m square centred on the egg was recorded, together with the percentage of open habitat and any plants over 1m tall within a 5x5m square centred on the egg.





n average, the 1x1m squares contained 46% grass and 46% bare ground, with a sward height of 4.2cm. Most of the 5x5m squares were 100% open habitat with very little vegetation over 1 m. The take-away from the data was that, in addition to the fine grass caterpillar food plant, Grayling needs substantial amounts of bare ground within more sheltered areas to lay egas.

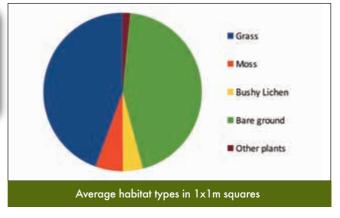
There were anomalies that raised questions; for example, three eggs were laid above thick lichen with bare ground less than 20%. There were also places that fitted the data for suitability but where no butterflies were seen laying eggs. Many of these areas appeared damp and visiting the site this January showed just how wet The Bog can get.

This work has suggested that a hydrological survey should inform any management proposals, so that work targeted at improving Grayling habitat (such as creating scrapes, raking moss and clearing scrub and bracken) takes place in areas likely to stay dry in the long term.

To build on this data, caterpillar searches and more egg-laying surveys are planned, perhaps spending more time in apparently suitable habitat where no egg sites have been identified and investigating the role of lichens.

Article and photographs by Lucy Lewis lemiller@btinternet.com

If anyone is interested in helping with similar work at Earl's Hill near Pontesbury, please get in touch!



# Brown Hairstreak spreads eastwards

Last winter's **Brown Hairstreak** eggsearching season proved to be a very notable one, especially in the extreme east of the known population. Not only were the numbers of eggs found generally higher than average (indicative of a good egg-laying season last autumn) but, more importantly, there was also evidence of a significant increase in range involving a major spread across the county boundary and into west Warwickshire.

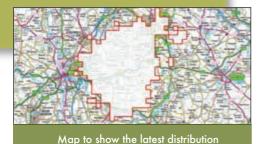


#### Closing the gap

We've known for several years of a small **Brown Hairstreak** population in the Heart of England Forest (HOEF) around Spernal in Warwickshire, following the discovery of a few eggs there in 2018 and every year since. However, it wasn't known where the adults that laid those eggs had come from: there was quite a large gap in the map between the HOEF egg locations and the known eastern edge of the Worcestershire meta-population. This winter, however, egg discoveries in many previously unrecorded areas of west Warwickshire have closed this gap and the Brown Hairstreak's distribution is now continuous between the two populations.

It now seems extremely likely that the Warwickshire population originated through colonisation from the west, from Worcestershire.

In total this season, eggs (plus in two cases adults) have been discovered in 14 new 1km OS grid





squares. This is the highest number for four years, since we found 15 in 2019–20. Only two of the 14 are not in the east (one in Worcester City and one near Wick, Pershore) and only four are in Worcestershire (including two in east Redditch); the other ten were all recorded in Warwickshire. These Warwickshire finds include one discovery, to the northeast of Studley, of several eggs on a few blackthorn suckers growing in front of an old completely unmanaged hedge, in what looked to be wholly unsuitable habitat. (A clue, perhaps, to its unsuitability was the fact that our nearest suitable parking spot was a supermarket car park!) The significance of this find (in SP0764) was that it was the final 'linking square' that bridged the gap between the two counties' populations.

A bright future

The future of the Brown Hairstreak, in both Worcestershire and Warwickshire, now looks extremely bright. The steady annual increase of known

If you live in west Warwickshire and are reading this, we need your help in covering some of these unrecorded squares - please get in touch.

occupied grid squares in east Worcestershire (116 in the past 14 years), which shows no sign of diminishing, is in all compass directions but especially around Redditch, where the butterfly has now 'conquered' the town and spread all the way from west to east in about ten years. In addition, there's huge potential for future expansion into other unrecorded areas of the HOEF in west Warwickshire, given the wealth of blackthorn present there and the fact that much of it is being managed specifically with Brown Hairstreak in mind!

#### Article by Simon Primrose

Species Champion for Brown Hairstreak simonjprimrose@aol.com





# 800 miles for Butterflies

It sounds hard to believe but 40 years of transects at roughly a mile in length gets you near that figure. I decided to start a transect walk when I became the warden of the Knapp Reserve around 1980. The scheme had just been announced and it struck me this was a good place to have a go, knowing that butterflies were plentiful in a reserve that had many different interesting habitats. As 2023 is likely to be my last as a transect recorder, I've been asked to write about the transect and the changes I've seen.

#### Highlights

The two larger meadows provide the highest numbers, with species such as **Meadow Brown** and **Ringlet**, and Papermill Meadow usually produces **Dingy Skipper**, a BAP (Biodiversity Action Plan) Priority species. How it clings on here is a mystery, with double figures in only five years and none seen in five

others. In poor years, of course, it's very easy to miss.

Two species have been special delights. One, Marbled White, has given great pleasure over the years, from odd sightings and some summers void until 2013, when it finally reached double figures. It has not looked back: since 2016, counts have been over a hundred during the summer months and sometimes well

# Orange-tip (Mel Mason) Peacock (Mel Mason) Comma (Mel Mason)

#### A remarkable achievement!

I am sure Branch members would like to join me in thanking Garth for his long service as transect recorder at the Knapp, a remarkable achievement unlikely to have been equalled anywhere else. We owe it to Garth to continue this transect and are delighted that Allan Bernau has offered to lead a new team of volunteers. If you would like to help, contact him at allanbernau@gmail.com

Michael Southall Branch Chair

over that figure. The other is Silver-washed Fritillary, usually seen somewhere near the brook where bramble predominates. It was first seen in 1993, with more in 2009, but 2021 was when it went into double figures. Oddly, White Admiral also appeared in 1993, was seen on and off until 2009 and 2010, which were better years, and has since become more elusive.

#### Challenges

As all transect participants realise, it's not easy in our climate to match a sunny day with work patterns or time available, and most butterflies are reluctant to fly when the clouds roll in. My job's headquarters moved to Tewkesbury some years ago and my sister Cherry Greenway helped me out a lot from then until my retirement in 2002. It was also lucky that the reserve is only ten minutes' walk from my home.

I count my blessings that I started when I did, as numbers were much better then: total sightings in a season were sometimes around 4000 - half that figure is more normal now. Remarkably, the number of species has stayed much the same (mid-twenties). One puzzling fact is that the reserve has changed little in all those years, so it seems improbable that habitat is behind the big decline. Having said that, subtle changes have occurred in Papermill Meadow: there is an insidious creep of bracken and bramble, which now cover perhaps a quarter of what was formerly pasture. This is likely to continue in future, with detrimental results.

CONTINUED ON PAGE 14



# Knapp and Papermill Nature Reserve

Managed by Worcestershire Wildlife Trust, the reserve is located west of Worcester and consists of 34 hectares of old valley meadows, woodland and orchard. It is important for bats, with 11 of the UK's 17 regular breeding species found there.

Three meadows are maintained by hay-cutting and/or grazing. Big Meadow is a hay meadow with flowers such as knapweed, ox-eye daisy and yellow rattle, plus a scattering of orchids. Papermill Meadow, an old pasture on slightly more

acidic soil, is a favourite hunting ground for buzzards. The smaller Tor Meadow has orchids and cowslips. More than 30 species of butterfly have been recorded.

#### Seasonality

Over so many years of doing the same transect, a pattern appears as to the emergence of the various species as the year progresses. In the first part of the year, when total numbers are low, most are found by the main track along the Leigh Brook. These are the winter hibernators, which use butterbur and bluebell flowers and set up territories along the brook, while Orange-tip favours the patches of lady's smock (many Green-veined Whites also use this habitat). Later the meadows become more important, when Dinav Skipper and Common Blue arrive, leading to peak numbers as Marbled White, Meadow Brown and Ringlet explode. From August on, as numbers plummet and Devil's-bit scabious flowers, Papermill Meadow becomes important and sometimes brings a shock, as in 1997 when an explosion of Small Tortoiseshell resulted in an impressive 501 sightings for the year. Recent years have been poor, though, attracting mainly Small White, with the odd Brimstone and Comma, feeding and preparing for hibernation, plus a few late Meadow Browns

The walks have had their frustrations over the years, from the weather to the change to online data input, but on the whole they've given me a great deal of pleasure. A satisfying sighting in my final year was my first **Dark Green Fritillary** (like the one shown on the cover of this issue), over the flowers in Papermill Meadow and probably from a fairly recently discovered site near Birchwood.

Article by Garth Lowe





# **Event Calendar**

## Members' Day and AGM

11am on Saturday 28 September 2024 Pant Memorial Hall, SY10 9QG (near Oswestry in Shropshire)

This event is moving to the autumn, when the Branch's audited accounts will be available. We have two excellent speakers lined up: **Steve Gray** will tell us more about Wild Spaces, Butterfly Conservation's flagship engagement programme, and **Simon Spencer's** talk, Butterflies need Farmers, will explore conservation challenges in the Oswestry uplands.

Buffet lunch provided



Steve Gray, Head of Wild Spaces, Butterfly Conservation

#### **Staffordshire**

Swynnerton Army Base Target species: Grizzled and Dingy Skipper, Brown Argus and Marsh Pug.

Sun, 2 Jun. 12 noon. Booking essential, limited places, potential for last-minute cancellation due to military activity. Contact John Bryan: johnpbryan15@aol.com

#### Moth Morning, Moseley Old Hall

Sun, 9 Jun. 9am. In partnership with the National Trust. Meet in the Barnyard outside Visitor Reception, Fordhouses, Wolverhampton, WV10 7HY. Book in advance, £8 (including hot drink and pastry). Leader: Richard Orton. Bookings: 0344 249 1895, moseleyoldhall@nationaltrust.org.uk

#### Welsh Clearwing Day, Cannock Chase

Fri, 14 Jun. 10.30am at the Gatehouse, Wolseley Centre, Wolseley Bridge, near Rugeley, ST17 OWT (signposted off A51, plenty of parking). An opportunity to learn



about, and hopefully see, one of Britain's rarest moths. Presentation by Steve Barnes, who's made a detailed study of this species on Cannock Chase, followed by a field visit. Tea/coffee provided, bring a packed lunch. Only 20 places available; booking essential: wmbutterflies@gmail.com

#### **Moth Morning, Kinver Rock Houses**

Sat, 6 Jul. 9–10.30am. In partnership with the National Trust and Kinver Moth Group. Compton Road, Kinver, DY7 6DL. Book in advance, £10 (including hot drink and breakfast pastry).

Leader: Dave Smith. Bookings: 0344
249 1895, kinveredge@nationaltrust.org.uk

#### **Shropshire**

#### Buglife Butterfly ID Training Event, Langley Fields, Telford

Fri, 31 May. 2–4pm. Langley Fields. Leader: Jenny Joy. Booking essential: emily.hughes@buglife.org.uk

#### Moth Morning, Comer Wood, Bridgnorth

Sat, 8 Jun. 9.30am. Joint event with National Trust. Heath Meadow, Comer Wood (part of the Dudmaston estate). Book in advance, £15 (including hot drink and a cake). Not suitable for dogs. Leader: Mary Singleton. Contact: 01746 780866, dudmaston@nationaltrust.org.uk

#### Guided Walk, Telford Millennium Nature Reserve. Target species: Dingy Skipper and Green Hairstreak.

Wed, 26 Jun, Sat, 3 Aug

Meet at 2pm in the car park (SJ685109); this is behind Jenko's Mongolian BBQ/The Compasses Inn, Beveley Road, TF2 6SD – turn onto this road from the eastern end of Ketley Park Road, off the B5061 near Farmfoods (TF1 5DS). Contact Jenny Joy: 07968 549580

#### **Butterfly ID Workshop, All Stretton**

Fri, 28 Jun. 10.30am – 3pm. In association with the Strettons Community Wildlife Group. All Stretton Village Hall (SY6 6JR). Book in advance, free, bring a packed lunch. Contact Mike Williams: 07802 274552, wmbutterflies@gmail.com

#### Survey, The Cliffe, Ruyton-XI-Towns Survey of Small Copper colonies

Sat 27 Jul. 11 am, Doctor's Meadow Car Park, end of Aldersley Way, Ruyton-XI-Towns (SY4 1NE). Contact David Shearan: 07816 534716, dave.shearan@icloud.com

#### **Stiperstones Bat & Moth Evening**

Fri, 16 Aug. 8.30pm. Stiperstones National Nature Reserve. Join local moth expert Dave Green and the Shropshire Bat Group in searching for some of the bats and moths sweeping the Stiperstones evening skies. Booking is not essential. More information: 01743 792294 or stiperstones.events@naturalengland.org.uk

#### **Birmingham and Black Country**

#### **City Nature Challenge 2024**

26–29 Apr Birmingham and the Black Country (Dudley, Sandwell, Walsall & Wolverhampton) will be taking part in the 2024 City Nature Challenge, which is an annual competition between cities all over the world to see how many wild species their citizens can spot over four days. We need YOUR help to spot as much wildlife as we can in that time!

bbcwildlife.org.uk/CityNatureChallenge



#### Shropshire Moth Group 2024 Programme

Apr to Oct. The Group organises a programme of moth trapping field trips on Friday nights. Observers, beginners and experienced trappers welcome, so why not join them? For further details please contact Tony Jacques (Shropshire Macro-moth Recorder) at vc40tj@gmail.com

#### **Oswestry Hills and Border Group**

This area group organises impromptu events, including surveys and trips to search for specific species (see page 26). Contact Simon Spencer: 07866 428875, cerisyi@btinternet.com



#### **Volunteer Opportunities**

#### Planting marsh violets and recording Small Pearl-bordered Fritillary, South Shropshire Uplands

The Small Pearl-bordered Fritillary is a UK priority species that has undergone severe decline in extent and population across England. Small, wetland populations persist in the Stiperstones and Long Mynd area, but even here they have noticeably declined and some colonies have been recently lost. Despite this, upland colonies are known to have good potential to move between sites. With support from the Stepping Stones Project and National Landscapes, we are working to create a more robust and resilient population of this threatened butterfly by improving and linking areas of suitable wetland habitat. This includes increasing the abundance of the larval food plant, marsh violet, with 20,000 plug plants currently being propagated from local stock by Robert Lee. If you can help with planting out the marsh violets, sign up to the Stepping Stones newsletter where



planting dates and locations will be advertised (most of the planting will take place in Autumn 2024). We are also keen to hear of Small Pearl-bordered Fritillary records from the South Shropshire uplands, particularly from sites where recent sightings are very sporadic, such as wet flush habitat on



the western flanks of Long Mynd.

#### Contacts

Caroline Uff for butterfly sightings: uffcaroline@gmail.com
Charlie Bell for the Stepping Stones Newsletter and volunteering opportunities: charlie.bell@nationaltrust.org.uk

#### Walking transects, Oswestry and Borders area

Transects need to be walked every week in good weather from 1 Apr to 30 Sep, so a small team to cover absences is ideal. Contact Simon Spencer: 07866428875, cerisyi@btinternet.com

#### Searching for Grayling eggs, Earl's Hill, Pontesbury, Shropshire

Contact Lucy Lewis: lemiller@btinternet.com

Trapping moths in Kite's Wood (part of Grafton Wood), Worcestershire
Contact John Tilt: john.tilt2@btopenworld.com

## Don't forget to check Butterfly Conservation's websites and groups for other events:

- westmidlandsbutterflyconservation.wordpress.com/events-and-work-parties
- www.facebook.com/groups/westmidlandsbutterflyconservation
- www.facebook.com/groups/250738579030862 (Malvern Butterfly Group)
- butterfly-conservation.org/events

#### Worcestershire

#### Pearl-bordered Fritillary Release in the Malverns

Wed, 8 May 10.30am. Booking essential, numbers restricted on this vulnerable site; visit may be postponed or cancelled due to poor weather. For confirmation/information, contact Mel Mason: mbg.records@btinternet.com

#### Butterfly Walk, Penny Hill Landfill Site Target species: Dingy Skipper, Green Hairstreak and Wood White

Sun, 12 May 11am at the site entrance off Pudford Lane, Hillside, Martley (SO752613)

Contact Trevor Bucknall: 07704 138398, trevor bucknall@outlook.com

#### Moth Morning and Butterfly Walk, Lodge Hill Farm, Wyre Forest

Tue, 21 May 9.30am start, 11am walk. Part of National Nature Reserve Week. Bookings: Rob.Murray@naturalengland.org.uk

#### Moth Breakfast and Butterfly Walk, Monkwood. Target species: Wood White

Fri, 31 May 9.30am breakfast (bacon rolls available), 11am walk. Leaders: Mike Southall/Mike Williams: 07802 274552, wmbutterflies@gmail.com

#### **Butterfly ID Workshop Part 1, Bewdley**

Fri, 7 Jun 10.30am – 3pm. Part of the Wild about Wyre project. St Georges Farm, Tanner Hill, Bewdley, DY12 2LS. Focusing on those hard-to-identify species including whites, skippers and fritillaries. Leader: Mike Williams. Bookings: kate@wyreclt.org.uk

#### **Moth Morning, Croome Park**

Sun, 16 Jun 9.30–11 am. Joint event with National Trust. Book in advance, £15 (including hot drink and breakfast roll). Leader: Mike Southall. Contact: 0344 249 1895, croome@nationaltrust.org.uk

#### **Purple Emperor Hunt, Tiddesley Wood**

Sat, 29 Jun 9am. Tiddesley Wood Nature Reserve near Pershore (WR10 2AD). Limited places, book in advance. Meet at car park off minor road (SO929460). Donation of £3 to Worcestershire Wildlife Trust, payable on the day. Contact Mike Williams: 07802 274552, wmbutterflies@gmail.com

#### Herefordshire

#### **Ewyas Harold Reserve and Common Work Parties**

Sat, 20 Apr 10am at the northern Cwm Hill end of Ewyas Harold Common, adjacent to the top cattle grid (\$O382302). Approach from Abbey Dore off the B4347 (\$O384306). Bring gloves, hand tools, lunch and a drink. Contact Dean Fenton (fenton@littleburyfarm. co.uk), Ian Hart (yellowrattle4@aol.com) or Natalie Norton (nnorton@butterfly-conservation.org)

#### Butterfly Walk, Kington. Target species: Green Hairstreak and Small Pearl-bordered Fritillary

Sun, 2 Jun Gentle walk along Hergest Ridge (some uphill), 3–4 hours, including a detour to Hanter Hill. Bring a packed lunch or just a snack; tea available at Hergest Croft Gardens afterwards. 10am. Hergest Croft Gardens Car Park, Ridgebourne Road, Kington, HR5 3EG (SO 28534 56744). Follow signs to Hergest Croft off A44; car park is 450m along Ridgebourne Road on right-hand side. Leaders: Bob Hall and Martyn Davies. Bookings Bob Hall: randphall@gmail.com, 01432 850623

#### **Herefordshire Group Events**

This area group organises events for members who live in Herefordshire, including field trips in search of rare species. Contact Martyn Davies: martyn.davies808@gmail.com

#### **Butterfly ID Workshop Part 2, Bewdley**

Fri, 19 Jul 10.30am – 3pm. Part of the Wild about Wyre project. St Georges Farm, Tanner Hill, Bewdley, DY12 2LS. Focusing on those hard-to-identify species including whites, skippers and fritillaries. Leader: Mike Williams. Bookings: kate@wyreclt.org.uk

#### Brown Hairstreak Week, Grafton Wood Sat 17 Aug to Fri 23 Aug, from 2pm

Meet at the main reserve gate. Guides will be available to help to find this elusive species. Check the weather forecast before coming and also look for updates on sightings and locations at graftonwood.wordpress.com.

Contact: John Tilt (01386 792458)

## Butterfly Variations, Aberrations and the Environment Part Two

In Part 1, we explored how environmental temperatures during pupation can influence wing appearance in Lepidoptera, illustrating examples of the interaction between temperature and gene expression of wing coloration and patterns. Day-length also influences wing appearance in many

#### Thermal shock during pupation

The naturally adaptive mechanisms to environmental exposure described in Part 1 may be overwhelmed by extreme cold or heat shock close to the limits of pupal survivability, during a very specific period of pupal metamorphosis 6-72 hours after the onset of pupation. Even very brief extreme thermal shock to the pupa at that time interferes with specific gene expression related to the location and pattern of, for example, wing eyespots and wing margins; this is especially true of the production of excess melanin pigment, which may dramatically blacken the wings in susceptible species.

Extreme environmental interference with the usual genetic program may result in dramatic outcomes - but only if the pupa survives the thermal stress. Adults from surviving pupae may show a range of aberrant patterns, usually manifesting along a recognisable continuum of disordered appearance within a species, from mild to extreme (Fig. 1). Some families of butterflies, such as the Whites (for example, Orangetip), Skippers and Browns, are very resistant to extreme aberrations of this type, whereas the brushfooted Nymphalidae (Fritillaries, Small Tortoiseshell, Painted Lady, Red Admiral and Peacock) and Blues seem more visibly affected.

In 2023, we've seen photos of exceedingly rare aberrant forms of Small Tortoiseshell, Comma and Fritillary butterflies in the wild (Figs 2 and 3). Experimentally, aberrations of this type are more usually



Fig 1. Melanic White Admiral - extreme environmental coldshock. Limenitis camilla ab. obliterae. Bookham Common, Surrey 01/07/2019 (Andrew Magnay)



environmental thermal shock. Aglais urticae ab. nigricaria. Glastonbury, Somerset 2023 (Emily Vowles)



Fig 3. Comma - extreme environmental coldshock. Polygonia c-album ab. nigricaria Chambers Farm Wood, Lincolnshire 07/08/2023 (David Goff)



Fig 5. Small Copper – Genetic aberration missing hindwing orange margin. Lycaena phlaeas ab. obsoleta. Cliff Polls RSPB Reserve, Kent, 26/09/2023 (Tim Bates)



Fig 4. Gatekeeper – additional eyespots. Genetic variability of eyespot number, size, shape, ± pupil. Not environmentally influenced. Pyronia Tithonus ab. excessa. Hartwell Hills, Staffordshire 03/08/2021 (Andrew Magnay)

CONTINUED FROM PAGE 15 ▶

seen in extreme cold-shock rearing studies (as low as -8°C for a brief period, or -2°C to -1°C for up to 72 hours during the early pupation sensitive period). Some aberrations can be reproduced by heat shock (up to 40°C). In some cases, similar aberrations can result from both heat and cold shock.

In nature, the pupal stress leading to extreme aberrations is uncontrollable, almost inevitably killing the pupa, hence wild aberrant adults are rarely observed. Survivors exhibiting extreme pattern aberrations may well have reduced mating success,



Fig 6. Small Copper – unilateral (localised pathological insult?) Lycaena phlaeas ab. extensaconjuncta. Bridgnorth cemetery, Shropshire 06/09/2023 (Roger Littleover)

suggested by selective-rearing experiments. Mating in captivity between extreme cold-shock aberrations results in pupae more resistant to developing into extreme aberrations (Karl Bailey, personal comm). This raises the possibility that repeated exposure to extreme conditions can generate resistance to the same extreme shock in subsequent generation(s). One could speculate that five consecutive very hot years with mild winters could lead to improved resistance to very hot conditions and extreme heat shock, but reduced protection from future cold shock.

Melanic aberrations in British butterfly species are not usually genetic, unlike in some moths, but arise from environmental insults that increase melanin expression as described above. A notable exception is a melanic allele in the **Swallowtail**, which appeared for a short

period in early 20th century, the mutant gene disappearing quickly from the wild.

#### Genetically-determined aberrations

Eyespot variation (number, size, shape, location, ± pupil) is common among the Browns, such as Ringlet, Gatekeeper (Fig 4) and Meadow Brown. A genetically-determined plasticity of eyespot expression within this sub-family accounts for most of this variation, with environmental conditions playing a minimal role. 'Spot-counters' will know that the number and prominence of spots beneath the wings of the Blues is prone to certain recurring variations. In the Small Copper too, the upperside margin, spot numbers and ground colour of the wings can exhibit striking aberration. As with the eyespots of Browns, these are usually bilaterally symmetrical inheritable features, occurring in a very small proportion of wild individuals (Fig 5), and can be selected by captive rearing. However, asymmetric aberrations with dramatic anomalous features occasionally appear (Fig 6); these are probably caused by topical disrupted development of part of one wingcase of the pupa, perhaps a local noxious insult or injury during the sensitive period.

#### Conclusion

The climatic environment matters. There is so much we don't know about how insects will resist or adapt to climate change, and how this will affect global insect and wider ecology. I hope you find this topic interesting enough to keep looking out for oddities and variations, to appreciate and share your images for the interest of others.

#### Article by Andrew Magnay

#### Further reading:

- 1. Variation in British Butterflies. Harmer A S, Russwurm A D A, 1999. Paphia Publishing (UK). ISBN 0953723607 2. 'Thermobiological effects of temperature-induced color variations in Aglais urticae (Lepidoptera, Nymphalidae)'. Markl, G et al. Ecology and Evolution, 2022; 12(6) e8992. DOI:10.1002/ece3.8992
- 3. 'Changes in structural and pigmentary colours in response to cold stress in *Polyommatus icarus* butterflies'. Kertész, K et al. Scientific Reports, 2017; 7: 1118.

DOI:10.1038/s41598-017-01273-7

- 4. 'Colour pattern modification by coldshock in Lepidoptera'. Nijhout, H F. *Journal of Embryology and Experimental Morphology*, 1984; 81: 287-305. (Available free online at Researchgate.net)
- 5. Online at: ukbutterflies.co.uk/aberrations.php



#### What do **YOU** think?

I became Editor of this magazine in Autumn 2018, taking the reins from Stephen Lewis's capable hands. We haven't made major changes since then, building instead on the solid foundations laid by previous editors.

Readers have made suggestions for *The Comma* from time to time but these are sometimes conflicting: some prefer a print publication while others would be happy with online; some of those who prefer print would like a larger format. Clearly print costs more than online, and a larger format costs more than a smaller one. A hybrid of print and online would not cut design costs and might not cut print costs much (long print runs are proportionally cheaper than short ones) but would result in lower postage costs.

Set against these factors, the West Midlands is the largest of Butterfly Conservation's Branches and The Comma is much admired. If it is being read and valued, it would be a shame to dilute its impact. Print publications are often shared or passed on, and some of us read them more closely.

I'd be very interested to hear more about your preferences – do drop me an email with your ideas. Some questions you might like to consider are:

- Do you prefer a print or online magazine? Why?
- If online, what format and delivery mechanism?
- How much of the magazine do you read?
- What do you like about it?
- What don't you like about it?
- What else would you like to see in it?

Article by Marian Newell comma.editor@newellporter.co.uk

Note: Searchable PDF files are already available at westmidlandsbutterflyconservation.wordpress.com/download-the-comma



# Recording in 2023

This was by far the best recording year ever, with 5,034 recorders, 99,922 records and 308,888 butterflies. Most of the data is collected online now; it is verified by a team of dedicated verifiers, without whom the system would be meaningless.

The records come through various channels:

#### 1. United Kingdom Butterfly Monitoring Scheme

- Transects
- Wider Countryside Butterfly Survey
- Timed-counts

#### 2. Other counts

- Big Butterfly Count
- Garden Butterfly Count

#### 3. Casual recording (iRecord)

• All records by species and grid reference

#### So what do we get out of this?

Transects give us population trends by species and by site. In 2023, we received records for more than 90 sites in the West Midlands. This enables us to plot overall numbers of each species over the years. We can also use transect records as a management tool, targeting work for a section of a transect or for specific species.

Timed-counts made during peak flight periods can give us detailed information of where species are breeding,

Records submitted for key species from a timed-count at Penny Hill Quarry on 21 May 2023



which helps us to manage habitats appropriately. For example, we might manage the habitat at Penny Hill Quarry to suit the site's key species: Dingy Skipper, Green Hairstreak and now Wood White.

We combine records from all the schemes, including casual records, to create an atlas showing the species recorded in 5km squares across the region over the past five years. For species in our Biodiversity Action Plan (BAP), individual records are overlaid on zoomable Google Maps.

#### What does this mean for the future?

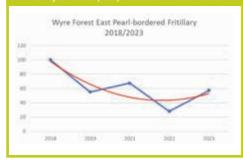
We now have over a million records in the West Midlands database, and modern computer power to analyse and present the data. All this can – and must – be used to conserve butterflies. Recording alone does nothing to help populations of butterflies and other wildlife.

Article by John Tilt

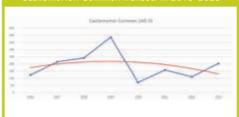
#### Find out more

Branch records: westmidlandsbutterflyconservation.wordpress.com/recording UK Butterfly Monitoring Scheme: ukbms.org











# What a weekend!

Moth Recorders' Meeting Birmingham, 27 January



The 'Moth-er's Meeting' is an annual event, which has been held in the Birmingham

Midland Institute each year since 2011 (the 2021–23 meetings being run via Zoom). Its proper title is the UK Moth Recorders' Meeting and it is open to anyone who is involved in moth recording. Prior to 2011, 'Moths Count' meetings were held at 'Country' level.

One of the best things about it is the chance to meet old friends, your County Recorder, fellow mothers and to talk to some of the well-known attendees. Among the (up to) 250 attendees, there are usually several County Recorders but the majority are just ordinary folk like us who record moths (are we really ordinary?). There were at least eight Shropshire mothers there and I guess quite a lot of other West Midlands mothers too.

The morning and afternoon sessions included talks on major projects, surveys carried out and the work done by Butterfly Conservation on statistics, training and volunteering.

This year, staff members told us all about:

- Supporting and sustaining the next generation of moth recorders (Chloë Smith)
- An update on the National Moth Recording Scheme (Dr Zoë Randle) – analysis of our moth records over the last ten years, showing trends, changing distribution patterns and interesting facts (such as the most recorded moths each month and how our records help Butterfly Conservation decide on future recovery projects)
- Seeing the light how we got into moth verification (Rachel Conway, with Derbyshire verification assistants April Darby and Tim Dray)
- Butterfly Conservation's work in monitoring, research and conservation of the UK's most threatened moths (Dr George Tordoff)
- Moths and Forest Management (Patrick Cook) an 'animated' talk (see photo).

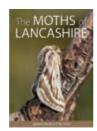
#### Other speakers were:

 Dr Charlie Outhwaite of University College London talked about changes in insect biodiversity and how she learned to love insects.



Moths and Forest Management: To illustrate the effects of different felling programmes, we all chose at random a number from one to five, representing five different felling regimes. We were the trees and we stood up or sat down as numbers were called. After each call, we could see how such regimes changed the areas of open ground for flora and thus their effects on insect populations. (Neil Gregory)

• Ben Smart of Lancashire Moth Group, co-author with Steve Palmer of The Moths of Lancashire. outlined preparation of this book, the first since 1940. Based on nearly two million records, from 1829 to 2023, it comprises records from over 2,400



recorders and includes accounts for 1,570 Lancashire species, including larval food plants, distribution maps and phenology graphs.

- Dr Max Anderson of the University of Sussex showed that moths are responsible for a lot of pollen deposition - research on brambles revealed that pollen distribution at night is greater than during daylight.
- Katty Bird, a volunteer with the East Scotland Branch of Butterfly Conservation, spoke about moth recording in Scotland.

In addition to the talks, a large range of books and all things moth-ing was for sale. Not only that, but the event is free and includes a very nice lunch and tea/coffee.

#### Preston Montford, 28 January



entomological has also been annual, with a Covid break of course. Unlike

the Butterfly Conservation meeting, it costs £10 - but there's lots of tea, coffee, cake and biscuits.

people attended, all local Around 100 entomologists or from Harper Adams University (staff and students). Nearly all those who were at the Butterfly Conservation meeting were there too!

The Keynote Address was by Dr Erica McAlister, Principal Curator (Flies and Fleas) from the Natural History Museum, advocate for entomology and conservation both nationally and internationally, who spoke about the value of data and specimens in helping us understand and inform the conservation of habitats and species.

Pete Boardman, Shropshire County Recorder for Craneflies, gave us an illustrated talk about his training methods for the annual intake of new members of the Natural England Field Unit, especially concerning recognition of important habitats for flies at SSSIs. A former Project Manager at Preston Montford, Pete was the Founder of Ento Day.

Dr Heather Campbell, a myrmecologist at Harper Adams, enlightened us on the world of ants, both in the UK and in sub-Saharan Africa - a fascinating show of ants looking so different to the ones we are used to seeing in the UK.

Sue Rees-Evans has been Shropshire County Recorder for Dragonflies for the last 13 years. She told us of the additional species and changes in flight times over the years, all of which can be found on the Shropshire Dragonflies website and its related blog, both of which she created and manages.

Josie Bridges, representing Wales's flagship Green Recovery project (Natur am Byth) just over the border, outlined their aim to save species from extinction and reconnect people to nature.

County Recorders for Bees and Wasps, Clare Boyes (Montgomery) and Ian Cheeseborough (Shropshire) told us of new bees and wasps recorded recently and what may be buzzing our way since the creation of the Provisional Atlas

The talks were followed by an informal networking session and the opportunity to consult the Centre's collections (microscopes were available). For sale were selected Field Studies Council publications and entomological artworks (both originals and highquality prints).

Article by Graham Wenman

#### Find out more

Watch the UK Moth Recorders' Meeting at: youtube.com/watch?v=fmbrEFvZyOQ Learn about dragonflies at: shropshiredragonflies.co.uk and shropshiredragonflies.co.uk/blog

# Canal and River Trust



The Canal and River Trust, the charity who looks after over 2000 miles of waterways, is nearly halfway through its two-year Unlocking Biodiversity project, funded in partnership with Severn Trent, to improve 335km of priority habitat across the West Midlands canal network. A key aim is to connect fragmented habitats and species populations together by creating focused wildlife 'green' corridors along the canals for a wide range of species.

There is an ambitious target of 166km of hedgerow and grassland enhancements to help support our region's most declining invertebrates. With a focus particularly on pollinators, as a cornerstone of our ecosystem, the hedgerow enhancements involve increasing connectivity and diversity by planting up

gaps with a variety of native species such as blackthorn, buckthorn and wild privet, as well as fruiting trees such as crab apple, damson and common pear. Flora seeding in the hedge understory, adjacent grassland space and fringe with larval and nectar species for target pollinators will expand potential range and strengthen foraging opportunities.

#### **Brown Hairstreak**

**Brown Hairstreak**, which lays its eggs on young blackthorn growth, has seen a sharp population decline in recent decades and, working with the support of Butterfly Conservation, our Canal and River Trust ecologists have been monitoring the population at Tibberton Orchard on the Worcester and Birmingham



canal for three years to date. As part of our habitat enhancement project, we are restoring 12km of hedgerow by planting blackthorn whips on the Worcester & Birmingham and Droitwich canals and at Bittell Reservoir Site of Special Scientific Interest (SSSI), as well as planting bullace, damson and cherries as part of our Great Canal Orchard. We are monitoring our conservation enhancements for the Brown Hairstreak as part of our citizen science programme, surveying for eggs on these prunus species to assess population and habitat expansion.

#### Small Blue

Small Blue has also had our ecologists' special attention on 28km of the Grand Union canal through

#### Find out more

If you'd like to learn more about our project or help us deliver some of these great habitat enhancements, visit canalrivertrust.org.uk/thingsto-do/canal-and-river-wildlife/unlocking-biodiversity-partnership-project-with-severn-trent You can contact me at the email address below.

this project, with two isolated populations identified at Stockton cutting and the Kingswood junction area. Wildflower seed has been sown along the embankments and towpath verges, including the favoured nectar sources of bird's-foot trefoil and vetches, and hedgerow gaps planted to create sheltered areas and low shrubs. Kidney vetch,

this species' sole larval plant, will be planted in spring, near areas of bare ground created for basking, to extend and connect their preferred habitat between these two isolated populations.

#### Other pollinators

Enhancement works are also happening on 45km of the Staffordshire & Worcestershire canal. with native wildflower seeding on the embankments and towpath verges from Stourport-on-Severn in north Worcestershire all the way up to Coven Heath in south Staffordshire. We're using a varied and soilappropriate seed mix to benefit a range of species; it includes pollinator super-species such as bird's-foot trefoil, field scabious and knapweeds, and also more targeted species such as bitter vetch and meadow vetchling. We'll be planting plenty of dog-violet plugs as well, and an abundance of nectar sources, such as bugle and bluebells.

Article and photographs by Emily Cowell Horton Unlocking Biodiversity Project Manager & Ecologist Emily.Cowell@canalrivertrust.org.uk



See the canal network at canalrivertrust.org.uk/canals-and-rivers

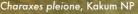




Cymothoe aubergina, Kakum NP

# A Butterfly Trip to Ghana







Euriphene barombina, Kyabobo NP



In November 2023, Mike Williams and nine friends from Butterfly Conservation embarked upon a butterfly expedition to Ghana, which boasts some 950 butterfly species. Its national parks encompass its two major natural habitats: Guinean savannah and tropical rainforest; outside the national parks, these habitats are severely degraded. As well as a local guide and driver, we were accompanied by Hungarian butterfly expert Szabolcs Sáfián (Safi), so an itinerary encompassing four national parks was devised that offered us a wide range of species and provided Safi with opportunities to continue his research.

#### Guinean savannah

Our first base was the lodge at Mole NP, set on a high point with a waterhole just below and overlooking a forest unbroken to the horizon. The look-out was an ideal spot during any free time, offering Bateleurs and White-headed Vultures in the skies, an elephant bathing with its calf in the waterhole and Patas Monkeys and a multitude of birds among the bushes. The bus took us to various locations in this Guinean savannah, often accompanied by angry tsetse flies clattering at the windows to get at us, though with a minor change of habitat they would disappear.

Our first butterflies were familiar to us from European travels: **Grass Jewel**, *Colotis* whites and **African Grass Blues** flying at ankle height over short grass. Then followed an array of *Acraea* species in combinations of white, black and orange, and bush browns in the genus *Bicyclus* with their variations on drabness. On one drive, Safi ordered an emergency stop as he had seen an interesting pair of mating butterflies from the moving bus that none of us could





Safi wanted

us to see the

the forest floor





Pink Silk Moth (Mike Southall)

see now we were stopped alongside! The butterflies were Euphaedras or Foresters, a family more associated with rainforests so finding them in savannah was interesting, as was the fact that Safi couldn't match their features with any known species. Returning to base, our progress was held up Ghost butterfly, a by a belligerent bull elephant and a Puff plain white species Adder on the track. that tiptoes over

Tropical rainforest

The remaining bases were set in rainforest habitats. In Kyabobo NP in the hilly border country with Togo, a waterfall was the target for riverside walks. Kakum NP provided a canopy walkway with magical views of a flying squirrel at last light and was close to Bonkro, a home to the iconic Yellow-headed Picathartes, where the group enjoyed a memorable dinner in the community that protects this rare bird followed by a night walk and a close encounter with a White-bellied

Pangolin. At Ankasa NP in the south west, Safi wanted us to see the Ghost butterfly, a plain white species that tiptoes over the forest floor, and where at night we heard the haunting disco sounds of the Nkulengu Rail and miraculously found four roosting in a tree.

The rainforests were home to beautiful Euphaedra and Cymothoe species, Charaxes enticed from the

canopy to ground level by something smelly, and fairy hairstreaks (Hypolycaena sp) trailing long tails in their display flights. An intriguing group of butterflies in the family Lycaenidae referred to as Liptenids had the unusual habit of settling at the tips of twigs or at the end of down-hanging tendrils. Moth trapping in these

habitats was spectacular, with many Convolvulus Hawk-moths caught and one of the giant silkworm moths, the beautiful pink Eudaemonia argus.

Sights such as these will remain long in the memory and we are grateful to Mike for organising the trip and inviting us to join him.

Article and photographs (except where credited otherwise) by Robert Godden



# Oswestry and Borders Butterfly Group

The good news is that a contractor paid for by Powys County Council has done some excellent work in clearing the footpath on Middletown Hill. Those of us who monitor **Pearl-bordered Fritillary** (PBF) there will appreciate this very much, so a big thank you to the Council.

The butterfly season will soon be upon us. As for last year, I won't be organising events by the calendar (as it nearly always means rain) but I'll try to run a series of short-notice events to fit in with the weather. I suspect it will be an early year and I'll need volunteers in late April to survey the Moellydd and Nantmawr areas for PBF and violets. I have a list of sites that it would be really useful to resurvey for PBF, many being former sites for this species. As I need to arrange access in most cases, I won't publish details; please ring me if you would like to try to find a new or lost PBF colony.

Later on, we'll try to run trips to see several special butterflies, such as **Wood White** at Bury Ditches, **Large Heath** at Whixhall Moss and **Silver-studded Blue** at Prees Heath. Again, these will be short-notice events with details sent to my list of email addresses.

The proposed Oswestry Hills grazing project is making slow progress and it's great to announce two calves.

Article and main photographs by **Simon Spencer** cerisyi@btinternet.com 07866 428875





Top left: Large Heath ab cockaynei at Whixall Moss (Phil Dawson) Above: Silver-studded Blue at Prees Heath (Nigel A Ball) Left: Wood White at

#### **Branch** contacts

	Di di icii c	ornacis	
Officers			
Chairman Vice Chair and Malvern Hills Secretary Treasurer Recording, Transects, Website Publicity, Marketing Conservation — Herefordshire Conservation — Worcestershire Moths — Birmingham, Black Country Moths — Herefordshire Moths — Worcestershire Brown Hairstreak Champion Scarlet Tiger Project Herefordshire Newsletter Editor Social Media Manager Wider Countryside Butterfly Survey Regional Conservation Manager (BC) Midlands Landscape Officer (BC)	Mike Southall* Mel Mason* Marian Newell* Ian Duncan* John Tilt* Mike Williams* Ian Hart* Trevor Bucknall* David Jackson* Robin Hemming* Mike Southall* Simon Primrose* Joy Stevens* Martyn Davies* Craig Jones Philip Nunn Rhona Goddard Natalie Norton	michael_southall58@hotmail.co.uk mbg.records@btinternet.com comma.editor@newellporter.co.uk erebia13@gmail.com john.tilt2@btopenworld.com wmbutterflies@gmail.com yellowrattle4@aol.com trevor.bucknall@outlook.com jacksongrus@talktalk.net robinhemming@btinternet.com michael_southall58@hotmail.co.uk simonjprimrose@aol.com joystevens@blueyonder.co.uk martyn.davies808@gmail.com cfjmarlpool@gmail.com philip-nunn@hotmail.co.uk rgoddard@butterfly-conservation.org nnorton@butterfly-conservation.org	01299 251467 01684 565700 01746 765287 01684 891446 01386 792458 01299 824860 01981 510259 07704 138398 01902 344716 01568 797351 01299 251467 07952 260153 01432 266703 07970 808898 07931 488624 01746 762364 07485 372199
Reserve Managers			
Ewyas Harold Grafton Wood Monkwood Prees Heath Trench Wood County Records Coordinators – bu		yellowrattle4@aol.com john.tilt2@btopenworld.com pdadamsrainbow@gmail.com nnorton@butterfly-conservation.org bridge1805@btinternet.com	01981 510259 01386 792458 07725 622342 07485 372199 07801 568334
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County Moth Recorders			
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<sup>\*</sup> Committee members

#### Book Review

# A guide to the Pyralid and Crambid Moths of Britain and Ireland



• ISBN: 9780955108648 • Author: Mark Parsons and Sean Clancy

• Publisher: Atropos Publishing • Publication date: October 2023 • Cost: £80

• Format: Hardback, 508 pages

ver since the last published British guide to the Pyralid moths by the late

Barry Goater in 1986 there has been an increasing need for an updated and more comprehensive volume covering these species. Taxonomic changes have now divided the members of this superfamily, the Pyraloidea, into two evolutionary lineages, the Pyralidae and the Crambidae, based on differences in wing venation, male genitalia, structure of tympanal organ, and larval features. They are among the larger moths of the Microlepidoptera – the Mesolepidoptera if you like. They are regularly attracted to light traps and include many migrant and vagrant species, as well as a number of synanthropic ones (ecologically associated with humans), and so are very popular with many recorders. Some are readily identifiable but some species groups are more difficult.

#### Content

The book starts with acknowledgements and an introduction. The latter explains how to use the guide, the morphology of the moths, how to find them, and aspects of their conservation and immigration. There is a dated list of first additions to the British list, sources of further information, a bibliography and a full species checklist.

The main content of the book, 207 species accounts, describes native, naturalised or immigrant species. Most accounts consist of two pages, beautifully illustrated with photographs of the adults and some of larvae, larval feedings and pupae, and some habitat shots. Each account includes these

sections: description of adult, similar species, flight season, life cycle, larval pabulum (non-plant food), habitat, and status and distribution. There is a small shaded distribution map and a flight-date bar for most of the species. Both vernacular and scientific names are given. There are helpful tables of key identification features for five of the most difficult species groups.

The appendices cover species that are adventive (33 species not fully established in Britain), possibly not British (species added to the list in error) and intercepted (species found but not yet added to the list). A Stop Press addendum covers three species that were added to the British list while the book was being finalised.

Ten special plates follow, with life-sized photographs by David Wilson of set specimens of the 240 species. Then 18 pages of figures show selected genitalia preparations for species that are otherwise tricky to separate; including these for more species could have been useful. Last are lists of food plants, with the species that use them, and of vernacular names. There are two indexes, one for scientific names and one for vernacular names.

#### Evaluation

This superbly produced and illustrated guide contains an enormous amount of up-to-date information about the life histories of these insects and data on the occurrence of many of the rarer migrants. It will be of great help to British and Irish moth recorders in identifying Pyralid and Crambid moths. I can highly recommend it and think it well worth the cost.

Review by Tony Simpson

We carry a book review in each issue of *The Comma*. Newly published titles are ideal but particularly interesting or useful books from the past are also worth highlighting. See page 2 for contribution details.