



#### Cover story

A Speckled Wood taking flight by Andrew Fusek Peters (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 - 30 November
(early submissions are welcome).
Contact the Editor for more
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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Branch website address www.westmidlands-butterflies.ora.uk



### Chairman's Address

I am writing this piece towards the end of the second lockdown. Without wanting to wish our lives away, I suspect many of us are looking forward to seeing our first male **Orange-tip** next year. We can then be sure that Spring has well and truly sprung and that Summer is not far away. Hopefully, by then, our lives will be starting to return to something more normal.



The Orange-tip (Anthocharis cardamines) is a species that has been doing well recently, extending its range northwards into Scotland and increasing its numbers in our region. I was surprised to read that its distribution extends across



Europe, Asia and even to Japan, and that its green-looking underwings (see page 12) are created by a pattern of only yellow and black scales; the green colour is but an optical illusion. Japan and Thailand have another species called the **Great Orange-tip** (Hebomoia glaucippe), whose caterpillars mimic Vine snakes to deter predation – all fascinating stuff.

#### Give Something Back

Participating in monitoring schemes is one way to Give Something Back, our theme for this issue and the coming year (more from Mike on this in our Event Calendar). Although the occasional butterfly sighting is still reported beyond autumn,



winter moth species are far more numerous. Mild nights can yield several species to the moth lights, including occasional migrants and some out-of-season resident surprises, such as Muslin Moths in Herefordshire in November! After collating my weekly records, I send them annually to the Garden Moth Scheme (see page 9) as well as to my county moth recorder.

#### Branch projects

I hear that sales of our new book, Moths of the West Midlands, are going well, so don't forget to secure your copy. Work is continuing on the exciting online moth atlas project (see page 8). With a lot of data to be processed, including



#### Correction

On page 16 of the Autumn 2020 Comma, we featured a photograph of a Dotted Fan-foot. Unfortunately, we incorrectly credited the image to Ken Willetts rather than Steve Whitehouse. Our sincere apologies to both parties for this error.



the 2020 records, the website is not expected to go live until later in the Spring.

The Malvern Hills Lost Fritillary Project carries on apace, including an excellent online talk given by Mel Mason and on-the-ground habitat assessments. The appeal for donations is going well and is still live: www.justgiving.com/fundraising/mel-mason4.

Work on the Kentish Glory moth project has also begun, with an initial habitat assessment.

#### Practical conservation

Winter work parties were interrupted by the second lockdown but can now continue, as the rule-of-six applies to outdoor locations. Take a look at our Event Calendar and contact the work party leader shown if you can make it. New volunteers are always made very welcome.

Meanwhile, we wish you all the best for the New Year.

#### Michael Southall Branch Chair



#### Open Gardens programme 2021

Butterfly Conservation intends to run its Open Gardens programme in 2021, subject to reduced Covid-19 infection rates.

The idea is for gardeners to invite friends, neighbours and family to enjoy the wildlife in their gardens, hopefully inspiring visitors to make

changes in their own gardens that will help butterflies and moths. On top of that, and especially if you can offer a cuppa and a cake, it will raise much-needed funds for Butterfly Conservation.

The programme, which has to be finalised soon, runs from April to September. If you'd like to know more, please contact me as soon as possible. The programme is open to gardens that already

admit the public, whether regularly or as part of the National Garden Scheme.

Mike Williams Publicity & Marketing





#### Lucy retires as treasurer

When Lucy Lewis stood down earlier this year as Branch Treasurer, we were not sure how to mark her contribution in these times of social distancing. Lucy brought her accounting experience to the role, which she held for several years, but her partner Stephen may well view her longstanding involvement at

Prees Heath reserve as equally significant! So, we could do no better than to present by remote control a print of the Dingy Skipper and ask you to imagine Lucy is standing in front of us at the postponed Branch AGM. We thank Lucy and wish her all the very best for the future.



Butterfly

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England & Wales (254937) and in Scotland (SCO39268)

# Brown Hairstreak (Mel Mason)

Mike Williams recalls the highs and lows of this unusual year.

#### Spring

In a year dominated by Covid-19, members drew great comfort from the butterflies and moths seen in their gardens. Although the Spring began with a lengthy national lockdown, the weather was good and many species were plentiful. This was especially true for hibernators: Small Tortoiseshell and Peacock sustained last year's recoveries. Comma and Brimstone did fairly well, while the first Orange-tips and Holly Blues were again reported before the end of March and both had good seasons.

Most surprising, perhaps, was a Camberwell Beauty near Cannock and a Large Tortoiseshell at Baggeridge Country Park in the Black Country. It's impossible to know if these were migrants or homebred specimens but 2020 wasn't a good year for most migrant butterflies: Painted Lady, Clouded Yellow or, until Autumn, Red Admiral. Interestingly, in early August, another Camberwell Beauty was reported in Worcestershire.

Outside gardens, lockdown made monitoring of some key species difficult but, by mid-April, there were good numbers of **Green Hairstreak** at most of its main sites. A week later saw the first **Pearl-bordered Fritillaries** and **Wood Whites** (they often appear around the same time), with average numbers of the former at key sites and further evidence of dispersal in

## Butterfly of the

the Wood White, both in the Wyre Forest and around Monkwood (numbers at Grafton Wood, where it was reintroduced in 2018, were very encouraging). In contrast, Common Blue and Small Copper emerged in small numbers for the second year; Dingy and Grizzled Skipper numbers seemed low at many sites. As is often the case, very few first-generation adults of Brown Argus were reported.

May brought more good weather and early emergence for several species. Low numbers of Small Pearl-bordered Fritillaries were on the wing by mid-month. Meadow Brown, Large Skipper and Ringlet were all seen before month-end, as were Silver-studded Blue, Large Heath and White Admiral. The latter was sighted on 31 May at Monkwood – the earliest report in Branch records; later in the year, we received a report of what appeared to be a second-brood individual from Grafton Wood.

Silver-studded Blue had an exceptional year at Prees Heath, attracting photographers from far and wide; particularly encouraging was the number recorded on areas of restored heathland (formerly fertilised fields).

Small Blue was again seen at its south Worcestershire site, where it was reported in 2019; great that it's regaining a toehold in our region after disappearing in the 1990s

First-brood **Small Tortoiseshells**, often not seen until late June, were on the wing by the end of May. Large numbers of larval webs for **Peacock** showed that they, too, were having an early year.

#### Summer

Small Tortoiseshell (Claire Workman)

The pattern of early emergence continued into June. Marbled White was first reported in Worcestershire on the 6th and Silver-washed Fritillary on the 8th. Dark

Green Fritillary, first seen around mid-month, was later reported widely at sites where it's not regularly seen, even gardens, and was more numerous at several known sites.

White-letter Hairstreak, in contrast, was hard to find and Purple Hairstreak, while widely reported, wasn't

## Year and other awards

Gatekeeper

(Susan Croft)

Thanks to

on social

numerous.

After the flurry of Purple Emperor observations in 2019 (thought to be releases), one was seen near the Worcestershire-Warwickshire border – probably a stray from the introduced population at Oversley Wood. Both

Small and Essex Skippers were early, the latter far outnumbering the former at many sites where both occur. Grayling and

Gatekeeper appeared before the end of June, although numbers of the former were disappointing at most sites. A feature of the year was the number of aberrations reported. The valezina form of Silver-washed Fritillary seemed particularly widespread, along with several forms of White Admiral (lacking white markings to varying degrees). Unusual forms of Small Tortoiseshell, Comma, Small Copper and Red Admiral all featured on our Facebook group.

July was notable for a good Peacock emergence, much earlier in the month then normal, together with a new hatch of Commas and second-brood Holly and Common Blue, Brown Argus and Small Copper. Apart from Holly Blue, Lycaenid numbers were

The Big Butterfly Count timing didn't work well. By the start, many common species (including

low but better than for the first-brood.

Meadow Brown and Ringlet), were nearly finished, while secondbrood species were still scarce. Small

White did far better in its second broad but too late for the count. In late July, secondbrood Wood Whites began to emerge and in greater numbers than last year at most sites.

August was disappointing, with one notable exception - Brown Hairstreak. Seen first on 20 July, early for our region, the following emergence was exceptional. It's difficult to judge this species on the basis of adult sightings (better to wait for winter egg counts) but 2020 was extraordinary on two

levels. First was the high number of individuals reported, initially males along the rides at Grafton Wood (nectaring on Angelica), then more females than we've seen for several years. Second was the large number of reports from elsewhere, stretching from The Lenches in the south to Redditch in the north

Autumn

September and October brought the surprise appearance at several sites of Small Copper in decent numbers, especially on heathland but also in Bridgnorth Cemetery. Increasingly, this species produces a third brood in our region and more were seen in Autumn than earlier in the year. Individuals lasted well into October (final record from Prees Heath on the 25th). Hopefully, they bred and will see a revival in their fortunes.

As is often the case, a few Brown Hairstreaks struggled into October (final sighting on the 7th). With egg-monitoring delayed by Covid-19, we don't know if more sightings will mean more eggs but still an encouraging year for this species, our Butterfly of the Year.

Article by Mike Williams Publicity & Marketing

#### The Awards

#### **Butterfly of the Year**

Brown Hairstreak. Other nominees were Orange-tip, Peacock, Silver-studded Blue and Small Tortoisehell

#### **Most Improved Performance**

Small Tortoiseshell. Other nominees were Peacock, Small Copper, Dark Green Fritillary, Large White and Small White.

#### **Wooden Spoon for Worst Performance**

Common Blue. Other nominees were Brown Argus, Grayling and Purple Hairstreak.

#### Most Remarkable Aberration

Gatekeeper seen at Prees Heath



Common Blue (Rosemary Eustace)

## Worth the effort

A Wyre Forest volunteer explains the wonder of work parties.

In the summer of 2017, I attended one of Worcestershire Wildlife Trust's Wildlife Discovery Courses (this one on butterfly identification and run by Mike Williams). I thoroughly enjoyed the day, being greeted by a table full of wonderfully varied and weirdly named moths, having an introductory talk on butterflies and – most of all – searching for butterflies in Wyre Forest.

#### Motivation

The following autumn, I went for a walk around Wyre Forest and saw a poster on a tree advertising work parties. I'd been thinking about volunteering for some months, as I'd decided a couple of years earlier that wildlife education and conservation was going to be promoted to my main hobby. I'd always enjoyed being in woodland and, after watching wildlife programmes narrated by David Attenborough, who cannot be in awe of the weird and wonderful solutions that evolution comes up with? However, I'd never taken the extra step until I started to learn to identify things around 2015.

I was largely ignorant of the number of conservation organisations and the fantastic work that their employees and volunteers do. Rather than getting upset about losses in habitat, biodiversity and abundance – and not acting – I love that getting involved is solution-focused.

#### Work experience

During my first work party I was told what we were doing and was then left to work at my own pace.

Although much of the work is done when wildlife is less active, there are still the occasional wildlife encounters: often a bird, a spider or an insect will take my attention away from the job at hand. I have also found that I become much better acquainted with the plants of an area by staying and working in one place, rather than walking past – and often missing – things. And it would be rude not to ask a few questions when one's surrounded by people who know much more than oneself...

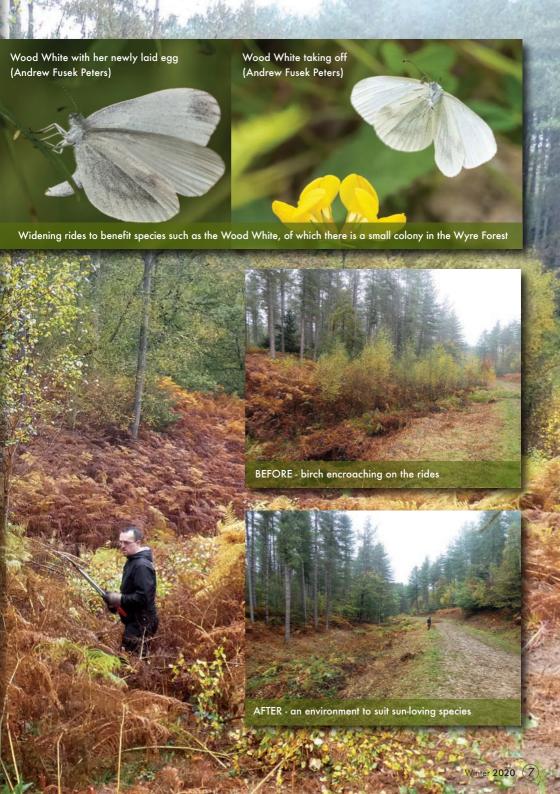
By doing the work parties, I also gain valuable experience. I am happy in my current job, but I don't want to retire having stuck to the same indoor career. I intend to do a conservation course in the near future and the varied tasks I've undertaken will provide a sound practical basis.

#### Satisfaction

I've worked in the fitness industry since 2007; I used to be a personal trainer, but now only teach group exercise classes. What I like about the work parties, from an exercise perspective, is that many of the tasks (such as carrying branches) work every major muscle group in one go. Although you can work at your own pace, the work is also like an interval training session, with periods of lower and higher intensity work, such as dragging birch regrowth uphill versus strolling back empty-handed, repeatedly lowering and raising the heart rate. It certainly ticks the boxes of strength/endurance and cardiovascular exercise.

Most of all, it's great to know that the work done by Butterfly Conservation, while targeted, doesn't just benefit butterflies and moths but is also great for tens of thousands of species of invertebrates as well as for plants, fungi, birds, mammals, amphibians and reptiles.

Article by Mark Wrench



### West Midlands Moth Atlas



uring the planning of the Moths of the West Midlands book, there was talk of creating an online moth atlas. The idea attracted funding and approval from the Branch committee. Craig Slawson was appointed to develop the software and meetings were held Staffordshire, with a selection of County Moth Recorders plus Peter Seal, to discuss what we'd like to see and what we'd like the atlas to show and do

Eventually, consensus was reached and the atlas was slowly developed. The plan was to provide a link to it within the Branch website. However, just before the project was handed over, very sadly, Craig died and

all the development with him, so we were back to square one.

#### Website design

After some thought, Jim Wheeler was approached and we're delighted he has agreed to start over with the work. He has developed other moth-related websites includina Norfolk Moths, Suffolk Moths and the Moth Dissection site. As I write this, we've just looked at the very beginnings of the website development under an administration log in. I'm not sure how long it will take to reach its final form, but hopefully not too long now.

The original plan was to produce an online atlas for four counties: Staffordshire, Worcestershire, Shropshire and Herefordshire. People viewing the site will be able to select a species and see its distribution mapped out, and then select their own county for more detail, zooming in and

possibly accessing records. (Details are still to be agreed and information may be blurred or zoom limited for critical species.)

#### Recorder involvement

People will be able to view their own records within the map. Alongside will be phenology graphs and we also plan to populate the pages with species descriptions and allow anyone to upload photos. Such photos will vetted be bv administration team for correct identification, and also so that they meet a minimum quality standard, but they will allow further participation for local recorders

For me, it's a way to recognise some of the hard work that recorders perform, so they can see their efforts alongside everyone else's but on a local scale. All records will come from Butterfly Conservation Head Office and will comprise verified records sent in by your County Moth Recorders; the plan is to do a data refresh annually. In the case of Herefordshire, I have just sent a huge new county sync file to Head Office and hopefully this will be used for the start of the atlas

We hope to bring you an update in the next Comma. Watch this space.

Article by Peter Hall,
Herefordshire County Moth





## The Garden Moth Scheme

The Garden Moth Scheme (GMS) is a citizen science project open to anyone from the UK and Ireland interested in recording moths in their garden. Its origins date back to 2003 and it began in the West Midlands.

Dave Grundy recognised that many of us were regularly recording moths in our gardens and that the focus of recording at that time was on the unusual and rare, rather than more common species. He organised the initial scheme, which started with just 20 West Midland gardens, to record a weekly count during the 36 summer weeks of around 200 common and easily recognisable species. The number of participants soon increased and in 2006 the scheme was extended to cover the rest of the country. Subsequently, a winter scheme was launched for those keen to record moths the whole year round.

The rest, as they say, is history. The GMS has consistently received records from over 300 sites across the UK and Ireland since 2010. With over 1.7 million records, the database is a statistician's dream, resulting in four peer-reviewed publications in journals.

#### My own experience

On a personal note, I was one of the original recorders in 2003 and I have just completed my 18th year of summer recording and my 11th year of winter recording. Using a Robinson 125W trap in a rural location has produced an average of 3,516 moths over the 36-week summer season and 108 moths over the 16-week winter season. Summer numbers have been fairly consistent: extremes in weather make winter numbers more variable.

I try to trap on a Friday night and to use the same garden location. Obviously, consistency is the key to the science, but allowances are made for human practicalities. I always look forward to seeing and recording what has arrived, with the GMS giving extra purpose and motivation. I enter the more unusual species that are not on the GMS list onto the i-record site. I also send the recording



Robinson trap set up in Winter (Michael Southall)

sheets to my county moth recorder to enable verification and addition to the National Moth Recording Scheme.

#### How the results are used

The strength of the GMS comes from the size of the volunteer recording group, which is supported by commercial sponsors to help cover the costs. Regional co-ordinators over the 13 regions help to spread the workload. Quarterly newsletters (including a Puzzle Corner) are produced and sent out by email over the season, followed by an annual report. Members are invited to write articles for publication.

Regional results are compared, analysed and graphed alongside weather patterns. Individual species can be studied for flight season abundance and distribution. I was particularly struck with a chart for the Nut-tree Tussock, which showed two broads in the South but only one in the North, with a gap in between where the species is thinly spread.

An annual conference is usually held in the spring, although unfortunately not in 2020. It is a chance to meet other recorders and has interesting speakers and stalls for books and equipment.

Article by Michael Southall

HOW YOU CAN HELP: New GMS members are always welcome. If you fancy having a go, see www.gardenmoths.org.uk for details. There's also a Facebook page and group with regular postings, mainly for help with identification. I continue to find it fun to take part in. As for everyone else, 2020 had a great impact on my life.





**Currant Clearwing** 

Red-tipped Clearwing

# Surviving 2020 with Clearwings

was told by my employer to work from home during the first lockdown and even beyond. I also spent about a year in Norfolk before moving back to Herefordshire and, although the county itself is nice, the area in which I lived did not meet my expectations and came with certain challenges. Staying at home at all times could potentially have had a serious impact on my mental health, so I was desperate to look for activities I could do from home.



#### Using pheromones

I've been trapping moths using light traps for the last three years, so I got in touch with the local Norfolk Moths Facebook group. Norfolk is a very active county for moth-recording: it has over two million records of moths and a great and helpful community. The group

encouraged me to add pheromone lure traps to my repertoire. The main supplier of pheromone lures in the country (Anglian Lepidopterist Supplies) is based in Norfolk, so it was easy to place an order for a full

set of lures (supplied in bungs or vials) and a special trap.

Pheromone lures are used slightly differently from light traps. You usually use them for catching day-flying moths, such as **Clearwings**, by exposing artificial female pheromones to lure in the

males. When using a pheromone trap, although you can leave the trap alone for a short while, it is not recommended to leave it for an entire day, as insects may get desiccated in it, especially if the weather is hot. It is also important to know that pheromone lures may have negative effects on populations, so don't overuse them. In fact, after I caught one species, I did not use the same lure again at the same location in the same year.

#### Counting the catch

I started with the **Emperor Moth** lure and had great success. It's an amazing moth (see page 25) – great that, with pheromone lures, it's possible to see specimens close up.

After that, the 'Clearwing season' arrived in May. Almost all Clearwings are categorised as Nationally Scarce, although in reality they're terribly underrecorded, due to their elusiveness. They're very fast flyers and easily mistaken for wasps or bees, as they mimic those insects.

All Clearwing species are traditionally thought to be good indicators of the environment:

Red-belted indicates old apple trees (so traditional orchards)



- Yellow-legged indicates mature oak trees
- Six-belted indicates Bird's Foot Trefoil (so high quality pastures for wildlife)

Finally, and most impressive-looking, the **Hornet** Moth breeds in various species of poplar.

#### Looking forward

Within one season, I managed to catch eight Clearwing species in my garden in Norfolk, an outstanding result that suggests we may need to view Clearwings in a different light. It was very rewarding, and such a great tool for keeping my mental health in shape during these challenging times

Now, with my experience of pheromone lures gained in Norfolk, I can't wait to find out what's around Mortimer Forest in the next 'Clearwing season'

#### Article and photos by Linda Magyar





#### Less scarce than we thought?

Linda's experience was not unique, with Clearwings reported in more gardens and in other places far from their known locations. Jason Kernohan, Rob Williams and I found a total of eight species around Kidderminster and Stourport, including Orange-tailed at several sites - this wasn't recorded outside southern Worcestershire until 2019. The new pheromone lure for Lunar Hornet, one of our larger Clearwings, led to several garden records from across the region.

That's plenty of evidence to suggest a review of Clearwing distribution in our region is overdue. Currently, most species are classed as uncommon or rare but that increasingly seems untrue. Another article on Clearwings is scheduled for the Spring 2021 Comma. Meanwhile, if you want to try recording Clearwings next summer, you can order pheromone lures from www.angleps.com

Mike Williams

## Freezing the action

Essex Skipper in the Flower Garden at Stokesay Court







A professional photographer shares some of his successes.

Since I last wrote for the Comma back in early 2019, my love of butterflies and (because of Covid-19) butterflies within Shropshire and the West Midlands, has only increased. I would be far from calling myself expert and have had to rely on the



Branch and its excellent Facebook group to steer me in the right direction when my enthusiastic identifications have veered away from the species I am actually trying to photograph.

#### Catching the moment

The community aspect of my enterprise, which is now mainly concerned with butterflies in flight, has been fantastic. Chasing sightings and reports has meant that, for a while, lockdown could be forgotten. This process began in April, when only local walks were allowed. As you remember, it coincided with a glut of warm weather and one of our earliest butterflies, the **Orange-tip**. At the top of our lane, among the banks of forget-me-nots, I found myself pausing as my wife walked on with Lola, our dog. All I wanted, and there were thousands of out-of-focus shots, was to catch the moment when the male lifted off.

To say I have become addicted to colour would be an understatement. Butterflies are the ultimate aerial specialists and, in my book, easily trump birds in flight.

#### Seeing some firsts

In May, I had the help of a local expert at the Bog car park on the Stiperstones, which turns out to be a





Small Pearl-bordered Fritillary at Brook Vessons

hotspot for Green Hairstreak. They are tiny, making them doubly difficult to frame mid-air.

In June, I went to Brook Vessons for Small Pearl-bordered Fritillary, which are both shy and zig-zaggy in flight - on top of that, the boggy ground meant wet feet. Little did I know that the other orange jobby I saw when I returned a few days later was a first for the area - a Dark Green Fritillary

In July, I finally heard of Marbled Whites at Brown Clee – a Shropshire first for me. And the experts told me that the **Skipper** in the Flower Garden at Stokesay Court was an Essex -

CONTINUED ON PAGE 14 >

Andrew Fusek Peters is a professional wildlife photographer and author of many books, the most recent of which is Hill & Dale, My Shropshire Year, published last October by Yew Tree Press. See www.andrewfusekpeters.com for details.



Brimstone in the garden







## **Event Calendar**

#### Give Something Back

Throughout 2021, the Branch will run its Give Something Back campaign to encourage people to give something in return for the pleasure and solace that butterflies and moths bring to their lives. This has been particularly evident recently, when we've stayed home more and focused on the simpler things in life. You're all already making a big contribution by belonging to Butterfly Conservation but we hope some of you will want to do more. Here are six simple ways you could help:

Record the butterflies and moths you see. Recording is vital to our work and has never been easier – visit www.brc.ac.uk/irecord (or you can even get an app for your phone). If you're a keen photographer who visits many different places, take that extra step and send in your records – it really helps.

Create your own Place for Pollinators. Many of you have already done this but, for more ideas, see https://butterfly-conservation.org/how-you-can-help/get-involved/gardening (and the gardening sections of the Branch's publications). Subject to easing of Covid restrictions, we're also looking for members to open their gardens to the public this year (see page 3). If you think you can inspire others by showcasing what you've achieved, please get in touch.

Become an active volunteer. The Branch is entirely run by volunteers and, without the help of our members, we could not achieve a fraction of what we

do. How about taking part in our survey and monitoring programmes, helping to run events near where you live, staffing our information stalls at events and shows, or doing practical work at our reserves and other key sites? Think how you'd like to get involved and contact the appropriate

like to get involved and contact the appropriate committee member (see page 27).

A Share your discoveries and observations. Tell us how you became involved with Butterfly Conservation and what butterflies and moths mean to you. We're always keen to welcome new contributors to *The Comma* – just email Marian Newell at comma.editor@newellporter.co.uk. You can also find us on Facebook and Twitter (see page 2).

Extend your knowledge of butterflies and moths. The Branch has published two books, Butterflies of the West Midlands and Moths of the West Midlands (available from www.naturebureau.co.uk/bookshop), and a guide to 40 top local sites, Walking with Butterflies. By buying these publications, you will learn more about the species seen in our region and help to fund our work.

Consider further financial support for our work. With a great track record of helping butterflies and moths to survive, we have ambitious plans to restore several lost populations (including our new Lost Fritillaries project) that require extra funding. If you can contribute, even in a small way, that would be such a great help. Do contact me if you would like more information about any of these suggestions.

Mike Williams Publicity & Marketing



#### Coronavirus Volunteer Code of Conduct

- · Maintain minimum 2m social distancing at all times
- · Sanitise hands before entering and leaving site
- Maintain hygiene standards as defined by activity coordinator
- Strictly adhere to the basic rules
- Support work party leaders by notifying them of any issues that arise
- Do not share vehicles, tools, equipment and refreshments
- Do not attend if you or anyone in your household is displaying symptoms of Covid-19

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

#### Scarlet Tiger Project Work Parties, Stourbridge

Every 3rd Fri: 15 Jan,19 Feb, 19 Mar 10am at a location posted on the notice board at the northern (crematorium) end

of Roman Road (SO885834)

Contact Joy Stevens: 01384 372397,

joystevens@blueyonder.co.uk

#### **Staffordshire**

#### Cannock Chase Work Parties – Dingy Skipper

Sun: 24 Jan

In partnership with Staffordshire County Council.
11am outside Rangers Bungalow, Marquis's Drive,
Staffordshire, WS12 4PW (SK005153)
Creating glades in birch woodland to provide
cover and protection

Contact Rob Taylor, Countryside Ranger: 01543 370737, 07817 122760, robert.taylor@staffordshire.gov.uk

#### Herefordshire

#### Ewyas Harold Reserve and Common Work Parties

Sat: 16 Jan, 20 Feb, 20 Mar

Contact Ian Hart: yellowrattle4@aol.com

Tue: 12 Jan

Contact Lucy Morton: 07503 220191, Imorton@butterfly-conservation.org

10am at the northern Cwm Hill end of Ewyas Harold Common, adjacent to the top cattle grid (SO382302). Approach from Abbey Dore off the B4347 (SO384306). Bring gloves, hand tools,

lunch and a drink.

#### **Haugh Wood Work Parties**

Sat: 6 Feb, 6 Mar

10am in the reserve car park on minor road from Mordiford to Woolhope (SO592365)
May run a second team if enough volunteers book
Contact Kate Wollen (07786 526280,
kate.wollen@forestryengland.uk) or
Robin Hemming (07501 020605,
robinhemming@btinternet.com)

#### **Shropshire**

#### **Prees Heath Common Work Parties**

Wed: 3 Feb, 3 Mar

10.30am on the access track opposite the Steel Heath turning off the A49 (SJ557363) Contact Stephen Lewis: 07900 886809, phwarden@sky.com

#### **Stepping Stones Work Parties**

Wed: 13, 20 and 27 Jan

Volunteer work parties for the benefit of the Small Pearl-bordered Fritillary, as part of the Stepping Stones project in South Shropshire. Please contact Stephen Lewis for details if you would like to help: 07900 886809 or phwarden@sky.com

#### Telford Millennium Nature Reserve Work Parties

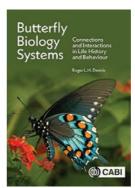
Volunteer work parties are due to be held over the autumn and winter.

Please contact Peter Mcnee for details if you would like to help: 07730688924 or Peter.Mcnee@groundwork.org.uk

#### **Book news from another Branch**

Peter Hardy, Butterflies for the New Millennium record co-ordinator for Greater Manchester, sent us news of two new titles, both with specialist appeal.

The first, his own Thirty Years of Butterflies in Traditional Lancashire and Cheshire, has extensive data and analysis on changes in distribution and abundance since 1990. (9781784567071, Upfront Publishing, £45)



The second, Butterfly Biology Systems by Roger L H Dennis, explores key topics and contentious issues related to life history and behaviour. This 500-page work is the culmination of a lifetime of study by a well-known expert on butterfly biology. (978178 9243574, CABI, £150)

#### **Butterflies of Bolivia**

Hartlebury Common Local Group plans a talk by Mike Southall at **8pm on Monday 1 March**. Depending on Covid-19 restrictions, this will be either at Stourport Sports Centre or via Zoom Contact Mike Williams: 01299 824860, wmbutterflies@gmail.com

#### **UK Moth Recorders' Meeting**

This will be on **Saturday 30 January**, via Zoom due to Covid-19 restrictions. An exciting line-up of talks has been organised, including 'The State of Britain's Larger Moths' by Dr. Richard Fox and 'Insect Declines in the Anthropocene' by Professor David Wagner from the University of Connecticut. A great opportunity to hear from world experts, the meeting is open to anyone interested in moth recording and conservation. There will be a meeting for County Moth Recorders at 1 pm, after the main meeting, also via Zoom.

For details and booking, visit https://butterfly-conservation.org/moths/uk-moth-recorders-meeting. If you have any questions, contact events@butterfly-conservation.org.



## Confessions of a Volunteer

As a conservation volunteer of over twelve years, I've often been asked why I do it. I could answer that 'I want to give something back', 'I want my grandchildren to be able to enjoy a healthy natural world', or even that 'it helps me to keep fit and active', and of course these are all good reasons. But the truth of the matter is that I volunteer because I get so much enjoyment out of it. I get to spend lots of time outdoors, in beautiful surroundings and in the company of like-minded people, all with different backgrounds and interests, so there's lots of conversation and laughter.

#### Beating back the 5 Bs

I've been given a variety of tasks, including beating back the '5 Bs': bracken, balsam, bramble, blackthorn and birch. I've maintained footpaths, hedges and fences, made bee beaches and cleared ponds. I've done heather dances with the trimmings of old plants to disperse the seeds on scrapes (it actually works!) and collected and scattered wild flower seeds. No two work parties are the same.

And then there are the surveys. When I see or hear something new, I always like to find out what it is; surveys are a brilliant way to learn. I've counted beetles and glow worms on heathland and surveyed flowers in meadows. I've been out at 5am monitoring breeding birds and, most recently, I've been involved in butterfly transects.

#### Sheer joy

Most important of all are the moments of sheer joy and wonder: to hear the first cuckoo of the year, and then to hear it calling until dusk falls, when the tawny owl takes over; to



see the heart-stopping luminescence of the glow worm, shining for all it's worth; to stand in a patch of clover surrounded by Marbled Whites, or to picnic in a meadow to the hum of bees, the music of warblers and the company of Peacocks and Painted Ladies. So, when I'm asked again why I volunteer, I shall reply that it's an act of sheer self-indulgence!

Wendy Wilkins, volunteer with Butterfly Conservation, Woodland Trust and both Staffordshire and Worcestershire Wildlife Trusts (also an active member of Stourbridge RSPB local group).



#### Worcestershire

#### **Ankerdine Hill Dingy Skipper work party**

Sun: 17 Jan

10am in lay-by on A44 close to the Martley turn-off (SO736557).

Contact Mike Williams: 01299 824860,

wmbutterflies@amail.com

#### **Grafton Wood Work Parties**

**Every Wed** 

10am at Grafton Flyford Church Running two distanced groups of six to tackle two coppice plots and extensive ride work Contact John Tilt: 01386 792458, john.tilt2@btopenworld.com

#### Grafton Wood Brown Hairstreak Egg Searches

Sat: 30 Jan

10am at Grafton Flyford church

Contact Simon Primrose: 07952 260153,

simonjprimrose@aol.com

#### **Malvern Grayling Work Parties**

Mon: 8 Feb, 22 Feb

10am in North Hill Quarry car park, WR14 4LT

(SO771469)

Contact Mel Mason: 01684 565700, mbg.records@btinternet.com

#### **Monkwood Work Parties**

1st Sun: 7 Feb, 7 Mar

3rd Thu: 21 Jan, 18 Feb, 18 Mar

10am in the reserve car park (SO803603), usually finished by 3pm. May run a second team if enough volunteers book

Contact Phil Adams: 01905 610830.

pdadamsrainbow@amail.com

#### **Penny Hill Landfill Site Work Parties**

Sun: 14 Feb, 21 Feb

10am at the site entrance off Pudford Lane, Hillside, Martley (SO752613) Contact Mike Williams (01299 824860)

or Trevor Bucknall (01905 755757)

#### **Trench Wood Work Parties**

Sun: 31 Jan, 28 Feb, 28 Mar

10am in the reserve car park (SO930588) Contact Matthew Bridger 07801 568334,

bridge 1805@btinternet.com

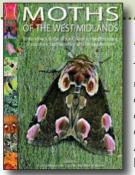
#### **Wyre Forest Work Parties**

Sun: 10 Jan, 14 Mar

Wed: 20 Jan, 3 and 17 Feb, 3, 17 and 31 Mar Wednesdays are joint events with Natural England 10am in Earnwood Copse car park on the B4194 Bewdley to Kinlet road (SO744784) Bring your own gloves and refreshments – tools

and hand sanitiser will be provided Contact Mike Williams: 01299 824860,

wmbutterflies@gmail.com



#### **Moths of the West Midlands**

The first-ever book on the moths of the West Midlands, this covers all of the region's macro moths (over 600 species, including newly recorded ones) and many of the micro moths that are regularly recorded. The book is lavishly illustrated with over 700 photographs, from local photographers wherever possible, plus up-to-date distribution maps, habitat information, adult flight periods and larval food plants. As well as species pages, chapters cover the area's special moths and moth hot-spots, attracting moths, gardening for moths, and recording techniques.

This major new title has been produced by members of the West Midlands branch and all profits from the sale of the book will help conserve moths and butterflies in the region.

- ISBN: 978-1-874357-92-6, Flexibound, Jun 2020 Edited by: Tony Simpson, Ian Duncan and Mike Williams
- Cost: £23.50 + £4 p&p from www.naturebureau.co.uk Format: 234 pages, 1000+ colour photos, colour distribution maps

## Inspired by their sightings

When we saw members of the Facebook group sharing beautiful artworks they'd created offered publication in the Comma. We asked each artist to tell us a bit about the subject they portrayed and the technique they used.



I've been painting with acrylics for a while and, having been a member of Butterfly Conservation for about ten years, I started painting pictures of butterflies from photographs that I'd taken throughout the UK.

This painting shows the first Purple Emperor I ever spotted, over 15 years ago at Fermyn Wood Country Park in Northamptonshire. A species I'd always wanted to see, having been interested in butterflies from a young age, it has a special place in my heart. Finally seeing one for real, right in front of me, was an exciting experience I'll always cherish.



#### Small Tortoiseshell by Peter Salmon

This picture shows a Small Tortoiseshell butterfly on a dandelion. It's a painting I did about 30 years ago using water colours on a piece of A4 printer paper. I don't paint very often and this is probably the last picture I painted. I remember it took me ages to do! If I can get motivated again, now that I am retired, I must get the brushes out and have another go!



### **Marsh Fritillary**

This is painted in watercolour from a photo taken at Strawberry Banks in Summer 2020. Butterflies are a new interest for me, my usual focus being underwater photography. So I've only done a couple of paintings of butterflies and this is probably the better of the two. This year's flight season provided some excellent subjects and this Fritillary was one of the most beautiful and memorable for me.

## **Small Copper**

I followed this Small Copper as it dived to the bottom of a crop of barley in a field near Leominster. It's an exquisite butterfly and I wanted my painting to capture the beauty of it, shining like a bright little gem among the barley. I've painted it in watercolour using a range of brushes. It's my best work because it's bright and bold, like the Small Copper itself, which is my favourite butterfly.





## **Buff-tip Moth**

This is Twiggy, a Buff-tip moth, and was drawn with fine-liner pens and a little pencil colouring. One of my favourite moths, this species is a superb mimic of broken Silver Birch twigs.



### **Peacock**

This is a watercolour that I recently painted. It was based on a photograph I took at the Venus Pool Reserve in Summer 2020. I was inspired by the striking colours and the bold eye markings. Peacocks have a 'Hey look at me!' attraction to them, and could rival some tropical butterflies' wing displays. I've painted other butterfly species, but this one was such great fun to do, and is currently my favourite image.

#### **Pearl-bordered Fritillary** by Richard Clifford

I did this drawing while off work during lockdown, working from a photo I took last year at Earnwood Copse in the Wyre Forest. I was out butterfly spotting with my wife, Jill, and we saw this Fritillary on a fern. It sat still for quite a while, allowing me to compose the shot, which was awarded front cover in Worcestershire Wildlife Trust's calendar competition.



The picture was drawn using Faber Castell Polychromos coloured pencils on Faber Castell mixed media paper.











#### Fundraiser: hand-made butterfly earrings

I've been fascinated with butterflies since I spotted a 'different' butterfly in our back garden in North Shropshire that turned out to be an Essex Skipper. I've always been creative and my interest in butterflies led me to design and make butterfly earrings.

I draw each one by hand and then bake them to seal them.

My designs are based on actual sightings but, being hand-made, each earring is unique, as is each butterfly. The fittings are silver-plated and hypo-allergenic.

To help raise funds for West Midlands Butterfly Conservation, I'm selling the earrings at £12.99 a pair and donating £3 of that to the Branch. If you'd like details of the range, please email me at beebizze.cm@gmail.com

Caitlin Morgan





The natural world appeared oblivious to Covid-19, while we tried to adapt to a 'new normal' and other ways of observing and monitoring our local wildlife. 'Stay at Home' and 'Stay Alert' limited access to the wider countryside but presented a new opportunity to look more closely at the wildlife on our door-step.

This led to the idea of the Garden Butterfly Watch - a citizen science project set up to discover the butterflies, moths, bees, hoverflies and other insects in and around our gardens. By the end of May, local recorders had reported some unexpected sightings.

#### February/March

Following a mild and wet winter, Storms Ciara, Dennis and Jorge brought gales and the wettest February on record. Only four sightings were reported in February 2020, compared with almost 200 casual sightings in

February 2019.

However, in March, the four species that hibernate as adults (Peacock, Comma, Brimstone and Small Tortoiseshell) were first to emerge in gardens, followed by Small White and Holly Blue. Very few moths were reported but Bumblebees (Early, Buff, Tree, Common Carder and White-tailed) were present in good numbers, along with Tapered Drone Fly and Dark-edged Bee-flv.

Further afield and before lockdown, early sightings of Orange Underwing around birch trees on the slopes of the Malverns heralded the arrival of spring. Small Copper emerged at the end of March.

#### April

opportunity to

'Stay at Home' seemed more bearable when April turned out to be the sunniest for at least a century. Many more Peacocks were reported but they came second to

the Orange-tip, one of the first species to emerge from its chrysalis in spring. Later in the month, orange eggs of this species were easy to find on nearby Lady's Smock and look more closely at Garlic Mustard.

the wildlife on our Holly Blue, a common garden butterfly, door-step was the third most abundant species. Last year, I was surprised to see a Holly Blue laying eggs in the flowers of Alder Buckthorn in my garden, right next to Brimstone eggs on the leaves. It wasn't a one-off: this year, I was astonished to see an egg laid on a standard grafted Fine-leaved Buckthorn (Rhamnus

frangula), planted last autumn, in preference to the many

## **Brown Argus** Comma caterpillar -(Jane Taverner) 5th instar (Sue Wolfendale)

#### Butterflies & Day-flying Moths Around the Malverns 2020

- Photos and articles from more than 100 contributors
- 2011-20 trends from 15 local transects
- Reports from new and established sites

114 pages, £10 including postage, free ID guide.

Email mbg.records@btinternet.com for payment details. All profits contribute to the Malvern Hills Lost Fritillaries Project.



## **Butterfly Watch 2020**

hollies in the vicinity.

Small White, Large White, Green-veined White, Speckled Wood, Small Tortoiseshell and Comma were well reported. Red Admiral, our first migrant species, was seen on several occasions; these might have emerged late last autumn and survived the mild winter, rather than early migrants that usually arrive from the Continent in May or June.

More moths were reported, including many Bee Moths and Herald Moths. The first migrant Silver Y moth arrived this month

Perhaps most exciting were the numbers of **Emperor** Moths seen using a pheromone lure. Arguably the most majestic and attractive of all our day-flying moths, this species has rarely been recorded around the Malverns (there are some historical records from Castlemorton Common). Recent sightings of males in the middle of Great Malvern suggest it may not be as scarce as thought, but rather good at hiding and only willing to emerge in response to a female pheromone.

There was discussion on the Branch Facebook group about the ethics of increasing numbers of recorders using lures, possibly upsetting populations of moths that may travel long distances in response. Mike Williams, however, carried out an interesting experiment in Stourport-on-Severn, showing that marked Emperors may quickly learn and only seldom return to the same lure site

April's warmth caused a lot of insect activity. It seems the open hills and commons are not the only places to find a wealth of insects, particularly the Hymenoptera (bees, wasps and ants) including 31 species of bees, some solitary like the Andrena and others cleptoparasitic like the Nomada. One, the Little Nomad Bee, is about the size of an ant and lays its eggs in the nests (containing grub and pollen) of the Common

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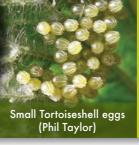
Mini-miner Bee – both recorded in local gardens. The Hairy-footed Flower Bee was the most common garden visitor, taking nectar from lungwort plants.

Many wasps were out and about, including the metallic lewel Wasp. It is known as a Cuckoo Wasp because it lays eggs in the nests of other solitary wasps, where its grubs eat the host's grubs and pollen food store.

Further afield, the Small Yellow Underwing moth appeared in Woodford's Meadow.

#### May

A local recorder [Jess Sly] discovered an interesting caterpillar, which she named 'Peter or Petra', in a packet of mangetout or sugar snap peas on 17 April. It looked like a member of the Lycaenidae family (Hairstreaks, Coppers, Blues and Metalmarks). It





developed into a pupa on 24 April and emerged as a male Long-tailed Blue on 10 May - so Peter, rather than Petra, originated from the Continent.

Further afield, Dingy Skipper was recorded at a new site in Lulsley; this was next to a local recorder's garden and between two known sites (Knapp and Papermill Nature Reserve and Knightwick). The last of the spring species then appeared on local sites, including Common Blue, Brown Argus, Small Heath, Small Copper and Green Hairstreak, plus Speckled Yellow, a widespread moth.

#### In summary

Twenty-six butterfly species were recorded in gardens between April and September, compared with 32 by casual recorders all around the Malverns. Individual gardens recorded up to 20 species, just two short of the 22 recorded by John Lane in 2019 in a single garden on Abbey Road. In addition, over 100 dayflying moths were recorded around the Malverns (most in local gardens), along with more than 40 bees, 23 flies (mainly hoverflies) and 12 wasps.

Article by Mel Mason



(Mel Mason)











Long-tailed Blue pupa (Jess Sly)



Long-tailed Blue adult (Jess Sly)



Long-tailed Blue caterpillar (Jess Sly)

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Species	Jan	Feb		•	May			Aug	Sep	Total
Brimstone			25	66	9	1	9		2	112
Brown Argus						1	1		2	4
Comma			32	21	4	15	24	3	5	104
Common Blue					3		1	2	1	7
Essex / Small Skipper							2			1
Gatekeeper							80	32		112
Green Hairstreak					2					2
Green-veined White				15	18	3	20	7	2	65
Holly Blue			9	120	46	6	41	14	3	239
Large Skipper					3	2	2			7
Large White				45	30	41	86	45	35	282
Marbled White						1	3			4
Meadow Brown					5	64	75	18	2	164
Orange-tip				169	35					204
Painted Lady								14	3	17
Peacock	4	2	50	114	15	3	70	5	3	266
Purple Hairstreak						3	7	3		13
Red Admiral				5	5	11	30	5	8	64
Ringlet						14	13			27
Silver-washed Fritillary						2	7	1		10
Small Copper						1	7	2	1	11
Small Tortoiseshell	2	2	21	25	26	55	25	20	8	184
Small White			3	60	15	18	47	110	70	323
Speckled Wood				33	16	6	7	8	9	79
White-letter Hairstreak						2	5			7
Total	6	4	140	673	232	249	562	289	154	2309
		1					l	I		

#### In a Malvern Locked-down Garden (sung to the traditional tune,

In an English Country Garden)

How many kinds of butterflies go by In a Malvern locked-down aarden? We'll tell you now of some you can spy Those we miss you'll surely pardon. Holly Blue, Brimstone, Peacock, Orange Tip on Lady's Smock Brimstone in Spring Speckled Wood on the wing Small and Large White as well and the pretty Tortoiseshell In a Malvern locked-down garden.

How many kinds of bees buzz on by In a Malvern locked-down garden? We'll tell you now of some you can spy Those we miss you'll surely pardon. Hairy-footed Flower Bee Flying round your cherry tree Box-headed Blood and the Common Mourning Bee Carder and Furrow too Mining, Mason — join the queue In a Malvern locked-down garden.

How many sorts of moth flutter by In a Malvern locked-down garden? We'll tell you now of some you can spy Those we miss you'll surely pardon. Angle Shades and Herald Moth Beautiful, and don't eat cloth Muslin and Mint Silver Y also glint And the grand Emperor Drawn in by a scented lure In a Malvern locked-down garden.

Song by Liz Lloyd

The Black Hairstreak is found only in thickets of Blackthorn in woodlands on heavy clay soils between Oxford and Peterborough in the East Midlands of England.

## Rarities here



With overseas travel reduced by 2020's restrictions, this issue's trip takes us around our

ur butterfly summer of 2020 was in a large part influenced by the lockdown restrictions. We usually split our summer between birds and butterflies but the idea of bird hides did not appeal this year. Back in 2016, we saw and photographed 54 species of butterflies. It seemed unlikely that we could match that this summer but we would give it a go!

We got off to a good start and by the end of the first lockdown we had seen 11 species in our garden. A socially distanced meeting with family on Prestbury Hill near Cheltenham on 14 May added another 10 species, so we were on a roll. By 3 June we'd seen 24 species in the West Midlands and Gloucestershire so, on 4 June with national restrictions eased, we took our first out-of-region trip.

#### Black Hairstreak in Northamptonshire

Glapthorn Cow Pastures is one of the best in the country for **Black Hairstreak**. We headed off on a damp and cloudy morning. The site was easy to find and our directions soon led us to a patch of dewberries with well-trodden grass in front of it, indicating previous viewings. We immediately spotted a basking Black Hairstreak on the dewberry plants, so job done within 10 minutes of arriving!

We spent another hour or so walking through the wood and saw several Black Hairstreaks high in the trees but only one other specimen at eye-level. We were fortunate, therefore, with our early sighting. We met the local recorder and he

commented that the day was unusual as recently the butterflies had been coming down to feed regularly on the dewberries because there was no privet in bloom.

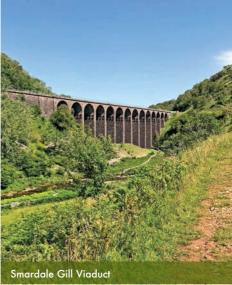
As the hot summer continued, we saw more and more species, including a **Purple Emperor** basking on a chap's leg in Oversley Wood, Warwickshire, and our first **Clouded Yellow** for five years in Coombe Hill Meadows, Gloucestershire. By 30 July, when we photographed a **Brown Hairstreak** in Grafton Wood, we were on 49 species.

#### Scotch Argus in Cumbria

Back in 2016, we took a trip to Arnside Knot in Cumbria to see **Scotch Argus** and were delighted at how many we saw. We decided to repeat that trip but, on checking with the chairman of BC Cumbria, we discovered that, for unclear reasons, the Scotch Argus population at Arnside had crashed. His advice was to go to Smardale Gill where the population was thriving. This meant an additional hour on the road but,

## in England





on 31 July, we left at 6.30am and arrived at Smardale Gill three-and-a-

half hours later!

It was a gloriously sunny day and, as we walked along the disused railway line towards the viaduct, we spotted our first Scotch Argus. By the time we reached the viaduct, we'd seen at least a dozen specimens, all posing well for photographs. The scenery by the viaduct was spectacular and there were at least 100 Scotch Argus flying about us but, in the more open environment, very few were landing. We arrived home around 7pm, pleased with our day and our total of 50 species now photographed.

#### Long-tailed Blue in Sussex

Was that the end of the summer? Well, not quite! I'd heard reports of Long-tailed Blues – a species that we had never seen – on Whitehawk Hill, near Brighton. Consequently, 11 September was another long day! We arrived in the vicinity of Whitehawk Hill to find that it's a piece of open land surrounded by a

housing estate, so parking was a bit of a nightmare. Eventually we found ourselves walking upwards, past houses and allotments, to a scruffy patch of land surrounding a radio mast. There were perhaps six people there and they were watching a male long-tailed Blue warming itself in the morning sun.

I took a few photographs then wandered away from that patch. We soon spotted another individual nectaring on everlasting pea and, within an hour we'd seen about a dozen of these stunning butterflies. All of the specimens that we saw were males, in pristine condition. females were reported a few days later. This really is a beautiful little butterfly and we were very alad that we

had made the

effort to see it.

The warm summer ended with 51 species seen and photographed. The hardest species to photograph, as ever, was the **Large Heath** but the highlight was undoubtedly the Longtailed Blue!

Article and photographs by **Alex and Irene Barclay** 

The Scotch Argus is common and widespread in Scotland but is very restricted in the southern part of its range, especially in England where it is found in just two isolated sites.



#### Seasonal dimorphism

Map - spring form (Tamás Nestor)



Map - summer form (Tamás Nestor)

## Polymorphism



Comma, Hutchinsoni (Bob Eade)



Comma, normal form (Andrew Cooper)

#### Part 2 Other variations

Collowing on from my article on melanism in the last issue. I thought an article on other variations in moths and butterflies might be of interest. Enormous numbers of 'morphs', 'variations' or 'aberrations' have been described. In the 19th and early 20th Century, collecting and naming them was a very popular pastime. Aberrant varieties can conveniently be divided into a number of separate categories.

#### Seasonal dimorphism

The most notable example is the Map butterfly (Aeshna levana). Although not occurring in Britain, it is common throughout most of continental Europe. The spring and summer forms are markedly different; this is thought to be caused by the length of exposure to sunlight in the larval stage. The spring type has a resemblance to a Fritillary and the summer one is similar to a White Admiral; for many years they were thought to be two different species.

In Britain, some common examples are the Comma and Holly Blue butterflies and the Early Thorn and Engrailed moths.

#### Geographical polymorphism

Some species vary depending on

#### Geographical polymorphism



Large Heath - Scottish form, scotica (Rob Sol)



Northern Brown Argus - northern form (lain Leach)



Large Heath - southern form, davus (Peter Withers)



Northern Brown Argus southern form (lain Leach)

## and aberrations

latitude. In butterflies, examples are the Large Heath and Northern Brown Argus. The underwings of the former in northern Scotland are almost spotless. The southern form of the latter lacks the white spot on the forewing.

Examples in moths are the Oak Eggar and Yellow Shell. Generally, where there is variation due to latitude, the northern forms are darker

#### Sexual dimorphism

Common butterfly species where there are differences between sexes are the Browns (Satyrinae), where the males often have less orange markings (such as the Meadow Brown and Gatekeeper), and the Blues (Lycaeninae), where females are generally blue-brown and the males bright blue. In moths, notable examples are the **Emperor** moth, the Four-spotted Footman and species in which the females are apterous (wingless), such as the day-flying Vapourer.

#### Intrasexual dimorphism

Some species exhibit two different forms only in the same sex in a significant proportion of their populations. In British butterflies, examples are the female Clouded Yellow (about 5% are the pale helice form) and female Silverwashed Fritillary (5–15% are the valezina form). Strangely, the

CONTINUED ON PAGE 26

#### Sexual dimorphism



Four-spotted Footman, male and female (Paddy Matthews)



Gatekeeper, male (Paddy Matthews)



Gatekeeper, female (Paddy Matthews)



Vapourer moth, male (Paddy Matthews)



Emperor Moth, male (Paddy Matthews)



Vapourer moth, female (Paddy Matthews)



Emperor Moth, female (Paddy Matthews)

#### Find out more

There is an excellent review of variation in butterflies by Peter Eeles, which is well worth reading. You can find it at www.dispar.org/reference.php?id=17

#### Intrasexual dimorphism



Clouded Yellow – helice form (Iain Leach)



Clouded Yellow – typical form (Bob Eade)



Silver-washed Fritillary, female
- typical form (Colin Pumfrett)



Silver-washed Fritillary, female – valezina (Bob Eade)

CONTINUED FROM PAGE 25 ►

valezina variant carries the dominant gene, so one would expect it to be far more common than the typical form. Interestingly, Frederick Frohawk, a Titan of entomolgy at the turn of the 20th century, named his daughter Valezina. (Ed: as has Matthew Oates)

#### Generalised polymorphism

Multiple variations in moths are common. Examples include the Large Yellow Underwing, Sallow, Common Marbled Carpet, Lunar Underwing and the Ingrailed Clay, where the forewing markings are rarely identical. This seems mainly to be a feature of very common and widespread moths. Interestingly, the hindwing markings rarely show variation

#### Gynandromorphism

This is where part of the butterfly is male and another part female; when the split is half-and-half, this is known as bilateral gynandromorphism. This aberration is very rare but particularly marked in the Blues.

#### Rare aberrant varieties

These are caused by recessive genes, for instance the 'white' **Red Admiral** featured in a previous issue. This variation also occurs, very rarely, in **Gatekeeper**, **Small Copper** and all the **Fritillaries**.

Article by Paddy Matthews

## Generalised polymorphism



Sallow (Paddy Matthews)

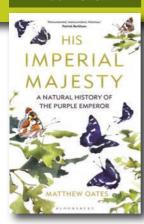


Lunar Underwing (Paddy Matthews)

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ISBN: 9781472950123
 Author: Matthew Oates

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I had this book on my 'to buy' list for some weeks when a gift copy arrived through the post from a good friend. I took to reading it immediately.

butterfly, loosely mapping the course of the year from mid-June when the adult males first appear. Chapters then detail summer ega-laying and the autumnal habits of the first and second larval instars, leading to the quieter five months of the third instar's winter diapause. These conclude with the frenetic spring-time growth and development of the now sun-loving and very hungry final instar caterpillars: 'the horned gods that rule the sallow trees'.

#### An expert and fanatic

Few butterfly enthusiasts won't recognise Matthew Oates as an all-round butterfly expert, as well as a Purple Emperor fanatic. This book amasses five decades' worth of his experience into its 416 pages. It's packed full of information gleaned mostly from Oates' own painstakingly obtained and recorded observational data and some experimental studies, as well as from other Purple Emperor champions.

As a young girl who had obsessively memorised the contents of The Observer's Book of Butterflies, I used to gaze longingly into the upper reaches of the lone oak tree in my parents' garden wishing to catch a glimpse of this prized butterfly, having to settle instead for watching Wall Browns nectaring on the nearby flowers of leggy privet bushes (and, looking back, how lucky I was). Twenty-five years later I saw my first, an adult male in Fermyn Woods, my search assisted greatly by the emerging and generously published information on the butterfly's ecology detailed on The Purple Empire bloa\*.

The book bursts with knowledge and I found myself going back and making notes on key information, assisted by the helpful summarising chapters, 'Looking for Purple Emperors' (as adults) and 'Looking for Purple Emperor Eggs and Larvae'. The information on the 'Empress' is fascinating, an enigma herself regarding behaviour, egg-laying and food plant choice. Indeed, a better understanding of the ecology and habitat preferences of the larvae will be the key to unlocking many of the mysteries of this butterfly and better assisting its conservation

A chapter on 'The Purple Empire' is enhanced greatly by an appendix, detailing the history and current status of the Purple Emperor, by region and county. I read, intrigued, about my home county of Staffordshire and how the species looks to have very recently colonised. The closing chapters summarise conservation issues and the future of the butterfly.

#### A myth buster

Oates' book should shatter any residual truisms about the butterfly's haunts and flight period. The Purple Emperor is essentially a butterfly of sallow-rich scrubland on alluvial and clayey soils; an impressive colonist and, fundamentally, a generalist species: boom, myths busted.

After the initial two chapters charting the history of Purple Emperor hunting, the book follows the lifecycle of the

#### A pleasure to read

The book is a pleasure to read. I like Oates' turn of phrase, his jovial nature and seemingly inexhaustible spirit. I found myself smiling throughout and occasionally emitting an aching belly-laugh (be prepared when reading the chapter 'Adventures with Remarkable Caterpillars', in particular). Butterfly enthusiast or not, this is a wonderful read. Don't be without a copy.

#### Review by Helen Ball

\* apaturairis.blogspot.com

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.