

UPPER THAMES BRANCH

Hairstreak

ISSUE 113 | SPRING 2022



**Butterfly
Conservation**

Saving butterflies, moths and our environment

Upper Thames
Branch



www.upperthames-butterflies.org.uk

Material for consideration for inclusion in future editions of *Hairstreak* is always welcome. Copy dates are:

1st January for the Spring Issue
1st April for the Summer Issue
1st August for the Autumn Issue



Please send material to the email address below, and attach any photographs as individual .jpg (or similar) files or provide a link to either a cloud-based storage location or to a location provided by an email file transfer agent. Microsoft Word is the preferred hosting word processor for all articles.

Contact details are: **Derek Haynes, Newsletter editor**
Email: newsletter-editor@upperthames-butterflies.org.uk

Contents

Chairman's Notes.....	3
New Year – Fresh Start – Renewed Hope	5
Working From The Ground Up.....	7
Hunt The Small Blue in 2022	9
An Audience with His Imperial Majesty.....	14
Upper Thames Branch AGM 2021	16
A Brief Look Back At 2021.....	18
Calling All Citizen Scientists.....	19
News From The 10K Squares.....	21
Buddleia – Friend Or Foe?.....	24
Regional Action Plan Update.....	26
Churchyard Recorders Wanted	28
Micros Are Amazing and Recommended Videos.....	29
Slow-cooked Hearty Hairstreak Pie	32
Spotlight On SU77 & SU76	36
Conservation Tasks Spring 2022.....	37
Save Our Species.....	38
At Last – Let's Get quizzical	39

Opinions expressed in the articles in this newsletter do not necessarily reflect the views of the Branch or the Society

Cover image: 'Hibernator Montage' by Derek Haynes and Lorraine Evans

Butterfly Conservation. Company limited by guarantee, registered in England (2206468). Registered Office: Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP. Charity registered in England and Wales (254937) and in Scotland (SCO39268). VAT No GB 991 2771 89

Chairman's Notes Dec 21

The Climate Crisis that was raised as such an important issue at COP26 finally also raised the perhaps equally important and certainly entwined matter of the Extinction Crisis. I'm unimpressed with all the pledges to 'go away and think about doing something later'. I really hope that there will be more focus on the very real need to act to conserve living creatures: especially the smaller ones that everything else depends upon.

Of course, the fact that politicians are trying to keep big business 'on-side' and offend no-one that makes their countries money, we can decide to act. That's why your committee agreed to spend more of your branch funds on conservation work this winter than ever before. If this newsletter arrives with you in the second week of January (and the electronic version should), we will already have completed 20 winter conservation tasks, with 16 more to come between now and March. The success of these events depends to a large extent on members coming along to help. Your efforts to conserve habitat will make a huge difference (however long you stay at the event – we know some think the 10:00-15:00 span a bit too much). Obviously, as a conservation society, this work to maintain habitats is our primary focus and I'm so grateful to all the members that turn out with us (and our fellow conservation societies) to help keep them in good condition. For details, please see <https://www.upperthames-butterflies.org.uk/events>

Reports on our conservation tasks feature at our Twitter feed <https://twitter.com/UpperThamesBC> and on our Facebook page <https://www.facebook.com/Butterflies.Berkshire.Buckinghamshire.Oxfordshire> and there is everything else related to the branch on our website at https://www.upperthames-butterflies.org.uk/main_index.pl

There are myriad tasks run by other organisations that I know our fantastic members join in with. There is no question that unmanaged habitats will change and almost all will become inhospitable to the wildlife that thrills us, so this work is essential. If you doubt that, consider that we have lost 75% of our butterflies in the last 40 years (source: <https://butterfly-conservation.org/butterflies/the-state-of-britains-butterflies>) and that was despite BC and many other conservation bodies working hard to save them on the small amounts of land they control.

Our committee also does a large amount of planning and admin work. So, we are grateful to David Hastings who came forward to offer to help the committee and Derek Haynes who has taken over the newsletter editorship along with Lorraine Evans who will assist with the layout and preparation of the paper copies. (And here is another reminder to the few that have specifically requested the paper version that it costs us more to manufacture and post these than your subscription provides - approx. £8 per annum). Unless we are specifically asked to send paper copies, we will send

electronic copies; and we can only do that if you told Butterfly Conservation that you are prepared to receive email from them. If you know anyone who is a UTB member but doesn't get *Hairstreak* please ask them to let Head Office at BC know that they will take emails containing the link to *Hairstreak*. Contact: info@butterfly-conservation.org. Extra expenditure, on top of our normal outgoings, was possible thanks to those of you reading the electronic version of our newsletter (or increasing your donation to pay us for the above-subscription costs of printing and distributing paper copies). The electronic copy will be more comprehensive, containing links to many online things in a way that is not possible in a paper copy.

In addition to paying towards the costs of those 41 conservation tasks, our extra revenue allowed us to invest in a longer-life battery pack for the Brushcutter that transect co-ordinator Mark uses at tasks at our own Holtspur Bottom reserve and elsewhere. This battery will last 4 times longer than the previous model, allowing 6 hours of continuous operation. It's a shame that Mark is only human and doesn't last that long in continuous operation! We bought more tree stakes and guards for Peter's Elm tree project, which has now reached the grand target of 295 Elms planted and tended. (see <https://www.facebook.com/Butterflies.Berkshire.Buckinghamshire.Oxfordshire/photos/pcb.4437700419640941/4437699129641070/>)

I would like to thank each of you that submitted records, grew plants, led a guided walk, helped with a survey, organised something for us, came along to a conservation task or attended a UTB Zoom meeting and showed us your support in 2021.

Our volunteers are also involved in various schemes with many other large organisations, as we have the expertise and, above all, the data to truly inform their decision-making about habitat management. However, despite our amazing recording efforts, almost everyone tells me that they see fewer butterflies and moths each year; and each issue I ask that you might consider how you could help them recover their numbers and expand their ranges.

Evidence shows that directed conservation effort will convert dwindling numbers into expanding populations (see <https://butterfly-conservation.org/our-work/conservation-projects/landscape-scale-conservation-for-butterflies-and-moths-report>). So please consider attending the conservation tasks and the training sessions we run. Check our events page regularly and join us in the field; those already there would love to welcome you into their warm embrace and although with Omicron raging it seems slightly dangerous to say this, we expect to run even more events for you in 2022 than before. guided-walks@upperthames-butterflies.org.uk

I hope to see you there and to enjoy our butterflies and moths together!



Nick Bowles
Chairman

New Year – Fresh Start – Renewed Hope

Welcome to this edition of *Hairstreak*.

I have taken over as editor from David Ferguson, and wish to express gratitude to David for his past work in producing this newsletter.

My aim is to reach out to as many individuals and groups as possible, in my efforts to procure a wide range of articles for *Hairstreak* that will hopefully resonate with our audience in order to incentivise them to become engaged themselves – perhaps in terms of active participation in ongoing environmental initiatives, or maybe simply to go out with enthusiasm and confidence to enjoy what our diverse and lush region has to offer us lovers of butterflies and moths.

And there's probably no better place to start than with you, the reader. It is my belief that everyone may have something to offer, though they possibly may not even realise it. Consider for a moment some of the following:

- Do you have a favourite walk, which perhaps takes in a variety of habitats and is perhaps home to one or more of our less-widespread species? Could you take us on a 'virtual tour' of that walk, sharing your experience and knowledge?
- Are you a butterfly or moth photographer? Would you be willing to share any tips you might have picked up along the way to improve the efforts of fellow enthusiasts?
- Do you specialise in the 'study' of certain species? Could you help the rest of us to better understand that or those species, perhaps with some specific 'site intelligence'?
- Do you get involved in UTB-organised activities/site work or guided walks? Would you feel confident in providing a piece on some recent such work (with maybe a photo or two)?



Pitstone Quarry, Bucks © Butterfly Conservation Upper Thames Branch 2021

- What works for you in the garden, with regard to how you actively encourage visitors of the four-winged kind? For example, the flowers or shrubs that you grow to attract pollinators, or the plants that you grow to feed hungry caterpillars? And perhaps what has proved not to work so well?
- Are you able to provide any fascinating anecdotal (humorous or factual) material, which may provide some 'light relief' to the reader: either specifically relevant to our region, or perhaps more generic?
- Do you draw butterflies or moths, at any life-cycle stage? – like this delightful watercolour of a Chalkhill Blue by Janette Petts, inspired by her visits to Holtspur Bottom Butterfly Reserve.



© Janette Petts

- Are you good at crafting quizzes or 'tabling' thought-provoking conundrums (subject-related, naturally)? I am sure our readers would rise to the prospect of such challenges. Or perhaps you are a budding poet, who has created a suitable ditty to bring cheer to us all?

All work submitted would be very welcome and given due consideration for inclusion in a future edition of *Hairstreak*.

Please bear in mind that articles don't need to be 'polished', nor do they need to be of any specific initial length. Microsoft Office would be the preferred platform for your work (with separately attached photos of your own, which will have copyright attribution).

Please take note of the deadline for copy for each of the 3 editions per year, which you'll find on page 2 of this newsletter.

Together, we can strive to ensure that our newsletter is always rich in material, and a publication that our readership is itching to view each and every time. **Please take note...** we would nevertheless much appreciate your sending material to us as soon as possible, to avoid our having to deal with a host of articles at the last minute.

And if you have feedback (good or bad) on our revised newsletter format, please do let us know.

Lastly, I am indebted to Lorraine Evans for her involvement in the design and layout of *Hairstreak*.

Thanks for your attention, and best wishes to you all for the coming season.

Derek Haynes
newsletter-editor@upperthames-
butterflies.org.uk

Working from the ground up... be part of a habitat success story!

About 6 miles south-east of Swindon, in Oxfordshire, at the National Trust's Ashdown Estate on the North Wessex Downs AONB, a large area of calcareous grassland has just been earmarked for restoration. This adjoins privately owned grassland that has been managed exclusively for species conservation.



Sally-Ann Spence FRES FLS, of Berrycroft Farm, Ashbury, an entomologist and ecologist, has obtained permission from the National Trust to manage and improve the Ashdown grassland for the benefit of wildlife.

Sally-Ann is a livestock farmer in her own right, working alongside her husband who has an arable farm. She has built a research centre with a fully equipped laboratory, based on their farm, and spent over two decades researching restorative management techniques for calcareous grassland and increasing its associated biodiversity.

Sally-Ann has used this knowledge to successfully restore a large area of her own grassland and, having worked previously with Nick Bowles and Matthew Oates to obtain species data, many rare and previously unrecorded species are now rapidly increasing there. Some of this land adjoins the proposed site at Ashdown, which will potentially lead to further interesting research work on topics such as the dispersal rates of species as conditions become more favourable.

Gillian Taylor, a UTB member, currently records for Butterfly Conservation in SU28, and furthermore on a wider countryside transect on the Ashdown Estate.

The purpose of this article is – optimistically – to encourage other UTB members who live in the area to become engaged in the more extensive recording of butterflies (in

particular) on the Ashdown Estate, working with Sally-Ann (and alongside Gillian) to help monitor species and provide data which will be included in the restoration management plan.

The Upper Thames Branch will have relevant sightings records from recent years, to give a base from which the levels of success can be determined.



Gillian is willing to brief any UTB member who is perhaps keen on the prospect of participation in this commendable initiative, with regard to her own experience and knowledge of the area as a recorder – and can be contacted at mjgc.taylor@btinternet.com

Sally-Ann, who is an Honorary Associate at Oxford University Museum of Natural History, and a founder of both the Dung Beetle UK Mapping Project and Dung Beetles for Farmers, can be contacted at berrycroftclub@gmail.com for further information on her proposals. An outline of her successful calcareous grassland restoration research work on her own farm can be viewed on her website www.berrycroftclub.com.

An opportunity of being a part of this exciting work to restore calcareous downland for the benefit of wildlife, and to assist with monitoring the success of that work, is one that ought not to be passed over.

Further to this initiative, which demonstrates the enormous potential benefits of co-operation between recorders and landowners, we ask that anyone who records officially in an area that includes private land to consider the benefits of contacting landowners, either directly, or indirectly through the Branch Committee.

Landowners may well be heartened by the prospect of data to assist in their own efforts to improve their land for wildlife, and, to that end, might be open to the idea of wider controlled access to their land.



Hunt the Small Blue in 2022!

I took on the vacant role of species champ for the Small Blue in 2020. My report on the UTB website tells why, and what I hoped to bring to the role:

<https://www.upperthames-butterflies.org.uk/Reports/SmallBlueReport2020ASpragg.pdf>

From my own perspective, the most interesting part of that report was the section at the end relating to the Small Blue and its foodplant, the Kidney Vetch. However, the report was still work in progress when it was released on the website in Spring 2020, so the most interesting part has not yet been made publically available. The report provided a list of 64 UTB locations, contained within a total of 18 10km squares, where the Small Blue was as yet unrecorded, but data up to and including 2019 indicated that it was likely to be found, based on analysis of records for Kidney Vetch. In 2020, the Small Blue was indeed recorded for the first time in three of those 10km squares (SU29, SP41, SU77), as far as I am aware simply because of chance observations, rather than as the result of anyone reading my report and acting on it.

This was very encouraging, and I decided that a follow-up article in the newsletter might pay further dividends. My own preferred style of butterfly recording is to use Ordnance Survey software to plan circular walks rather than visit specific sites; it allows me to cover more ground, and optionally to do so in under-recorded territory. So I decided to revisit and study my list of predicted locations, in order to identify prime candidates for which I could provide more information and suggested circular walks, hopefully to appeal to like-minded people, or people who live close by.

Figure 1 (right), adapted from a similar graphic in the report on the website, shows a schematic of Small Blue occupancy of UTB territory:

- The blue, green and red dots show all 1km squares where the Small Blue has been recorded in the 20 years up to and including 2020. (Records for 2021 were not available at the time of writing this article). Blue, green and red respectively indicate where the Small Blue appears to be stably established, may have gained new ground, and may have lost old ground. It is clear that the majority of these 1km squares are clustered along and adjacent to the Chiltern hills.

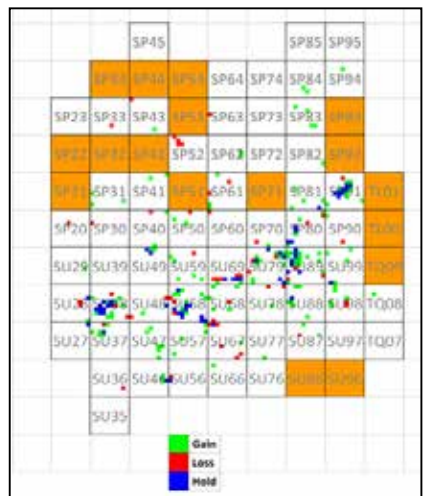


Figure 1 – Small Blue occupancy of UTB, recorded and predicted

- The 10km squares coloured orange indicate where the Small Blue is as yet unrecorded in UTB territory, but is likely to be found, based on a revised analysis of all data up to and including 2020. There are now 17 such squares (three were removed by the 2020 sightings, and two new ones have appeared). Most are to the north of the Chilterns backbone. All but two of them are grouped into contiguous clusters of two, three or four 10km squares.

Table 1 (below) breaks down each of those 10km squares into at least one smaller square where the data actually indicate that search for the Small Blue is likely to be fruitful. Bold indicates a 1km square, italics indicates a 2km square (or “tetrad”).

10kGR	SqN	Sq#1	Sq#2	Sq#3	Sq#4	Sq#5	Sq#6	Sq#7	Sq#8	Sq#9	Sq#10
SP22	2	<i>SP2628</i>	SP2523								
SP21	6	<i>SP2412</i>	SP2315	SP2314	SP2111	SP2515	<i>SP2216</i>				
SP34	2	<i>SP3844</i>	SP3542								
SP32	4	SP3322	SP3122	SP3123	<i>SP3228</i>						
SP44	7	<i>SP4248</i>	SP4143	SP4041	<i>SP4640</i>	<i>SP4244</i>	SP4141	<i>SP4242</i>			
SP42	4	SP4527	<i>SP4824</i>	<i>SP4022</i>	<i>SP4420</i>						
SP54	1	SP5841									
SP53	4	SP5936	SP5530	SP5030	SP5631						
SP51	1	SP5610									
SP71	1	<i>SP7010</i>									
SU86	1	SU8669									
SP93	2	<i>SP9032</i>	SP9131								
SP92	10	SP9922	SP9822	SP9722	SP9821	SP9920	SP9823	SP9723	<i>SP9024</i>	<i>SP9022</i>	<i>SP9222</i>
SU96	2	SU9368	SU9468								
TL01	10	TL0018	TL0819	<i>TL0014</i>	TL0019	<i>TL0218</i>	TL0919	TL0219	TL0119	TL0014	TL0114
TL00	2	<i>TL0404</i>	<i>TL0204</i>								
TQ09	2	<i>TQ0694</i>	TQ0291								

Table 1 – 10km squares with Kidney Vetch records but no UTB Small Blue records

Caution is required with the target 10km squares (more than half of them) that cover UTB county boundaries. The analysis is based on squares and thus some of the locations identified in Table 1 are on the wrong side of the UTB boundary. Although there are no UTB Small Blue records in any of these squares, it is entirely possible, and in some cases certain (for example, Totternhoe and environs in SP92), that there are records held by the adjacent branch of Butterfly Conservation.

For the purposes of this article, I have studied all the 1km squares using Anquet’s Outdoor Map Navigator software, and selected my top five suggestions. They are all promising-looking locations that are wholly within UTB territory, and offer enjoyable circular walk potential. For each one, a map fragment surrounding the target 1km square (or squares) is provided, along with brief notes. All the maps were created using 500m as the scale unit of length and are © OpenStreetMap contributors (see openstreetmap.org); data is available under the Open Database License (see opendatacommons.org).

SP3322 (map right):

With Chadlington to the North and the River Evenlode to the South, and traversed by the Oxfordshire Way, SP3322 has plenty of circular walk potential and looks an attractive location.



Map data © [OpenStreetMap](#) contributors. Map tiles © OpenStreetMap Foundation under CC-BY-SA licence

SP4041 (map right):

With Balscote to the West and Wroxton to the East, SP4041 includes two quarries, one disused, and offers splendid circular walk potential.



Map data © [OpenStreetMap](#) contributors. Map tiles © OpenStreetMap Foundation under CC-BY-SA licence

SP4141 (map right):

With Wroxton to the West and Drayton to the East, SP4141 offers equally good circular walk potential.



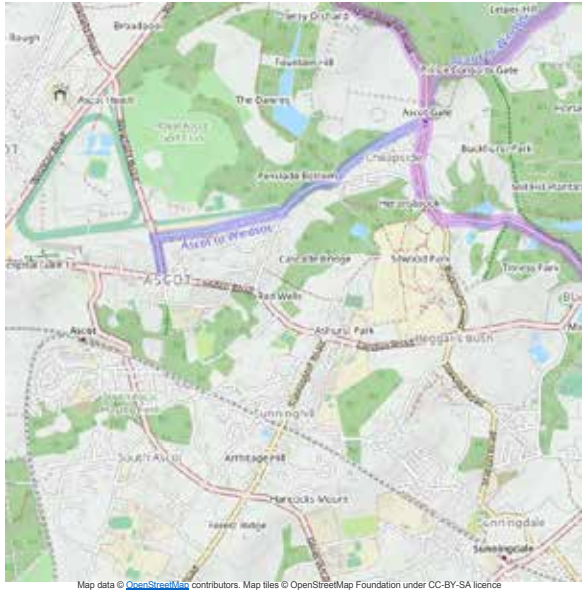
SP5530 and SP5631 (map right):

These two 1km squares are both diagonally bisected by the A43 where it passes the parish of Hardwick with Tusmore, just a couple of miles north of Cherwell Valley services. The territory to the East of the A43 appears to offer an interesting excursion, with plenty of footpath and bridleway rights of way.



SU9368 and SU9468 (map below):

Two adjacent 1km squares between Ascot and Sunningdale. This looks like a pleasant semi-suburban location for a hopeful wander, especially if one happens to live in the vicinity anyway.



Please don't hesitate to get in touch with me, Andy Spragg, for further information, at small.blue.champ@gmail.com

Andy Spragg



An Audience with His Imperial Majesty



As I sat by a mountain stream in Switzerland on a lunch break 30 years ago, a beautiful butterfly appeared from the surrounding woodland and settled within touching distance. This was my first encounter with a Purple Emperor and I had to wait twenty years for the next one, in a forest in Germany, when I was on holiday. Both sightings are still vividly imprinted on my memory and so it was on a rainy afternoon in October 2018 that I decided, on the spur of the moment, during a Butterfly Conservation AGM to take on the role of Species Champion for this enigmatic and unusual butterfly.

At the time my knowledge about the Purple Emperor was fairly basic but I soon discovered there were experts around who seem to have dedicated their lives to an insect they call His Imperial Majesty. My predecessor as Species Champion, Dennis Dell, who had moved to Northamptonshire, is a mine of knowledge. Part of his 'Purple CV' involved breeding the butterflies for many years in Switzerland! Two other remarkable people are Mick and Wendy Campbell whose knowledge of Purple Emperor sites in the Upper Thames region is unsurpassed. Mick has an uncanny eye for spotting potential Purple Emperor habitats. There is something he can see in the way that willow trees, the caterpillar food plant, are arranged in terms of their juxtaposition to the tall oaks that the males use to establish their

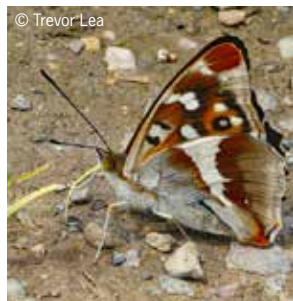
territories. Another factor he looks for is how much sunlight the willows get; too much and the growing larvae can overheat and become dehydrated; too little and conditions become too cold. A Purple Emperor wood needs the right level of humidity and shelter from strong winds, while having plenty of open rides to allow sufficient sunlight and space for the adult butterflies to perform their courtship rituals and territory disputes. The insects are also attracted to high points in the landscape so a woodland on a hill is a desirable residence, even if only a slight rise is present.



On dog poo in Bernwood Forest 14/07/21 © Peter Law

One of the main strongholds for the Purple Emperor in the Upper Thames Region is Bernwood Forest in Oxfordshire, north east of Oxford City. This large ancient woodland was set aside in Anglo-Saxon times as a royal hunting land. Today the forest is smaller and fragmented. One of the best places to see the Purple Emperor in Bernwood Forest is near the main car park, along the ride that is lined with willows. As well as in the main wood, former pieces of Bernwood Forest

where the Purple Emperor can be seen regularly include Stanton Little and Great Woods, Rushbeds Wood, Oakley Wood, Piddington Wood and Waterperry Wood. Open rides lined with willow trees are the best places to see the Purple Emperor on calm sunny days with not too much wind.



The flight season usually peaks between the last week in June to late July and tails off in August. The key to success

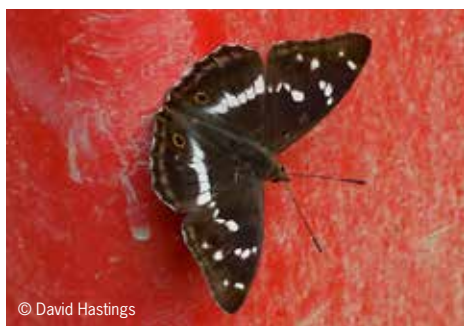
in seeing the butterfly is to look up, to watch the insects soaring and diving in the forest canopy. Sometimes photo opportunities occur when the butterflies visit the ground to suck the nutrients and salts from faeces (dog and fox are popular) or from rotting animal carcasses. These unusual butterflies definitely don't have a sweet tooth and will sometimes content themselves with drawing up salts from gravel paths or mud (as shown in the photo above).

A number of sightings each year are singletons, often fairly close to well-established colonies, but a significant proportion of sightings are often some distance from known populations. One butterfly last year was recorded in the centre of Oxford where it spent over an hour probing for salts and nutrients on a windowsill! Purple Emperors are powerful flyers, so perhaps it is no

surprise that they stray from their established colonies, perhaps looking for new territories. That's one of the many fascinations of this butterfly, their unpredictability and their ability to surprise.

Hopefully you will get to see these magnificent insects when you visit one of their strongholds this summer, and you never know when one will turn up out of the blue! Or, perhaps... the red – as the species often seems attracted to shiny objects, as the top photo below demonstrates, taken last year by David Hastings of an individual poised on a dog waste bin in Bernwood Forest. And David 'got lucky' again, as shown by the inquisitive nature of the specimen who wanted to 'get close up and personal', beneath!

Martin Robinson



Upper Thames Branch AGM 2021

Thanks to COVID-19, once again our Annual General Meeting had to be held on-line and it took place during the morning of 23rd October, starting at 10.35am. Far fewer people joined the meeting than did so in 2020 (circa 30 Branch members altogether this time, including most of the Committee).

Chairman Nick Bowles started off the AGM by giving his annual report on Branch activities. As in 2020, recording had been very good during the year and those records allow us to give advice to help our butterflies and moths. In 2021 we felt able to resume conservation work during the winter period and 13 tasks had been booked between the AGM and Christmas with many more to follow in early 2022, details all available on the website. Our work includes going out to help other organisations who do conservation work on private sites and we also do a lot of tasks with Chiltern Rangers who are really good at getting schools involved. Please join us if you can. We are also in desperate need of qualified First Aiders so please let us know if you have a First Aid certificate.

Our training for targeted recording had to stop due to COVID-19 but for this year we plan to introduce sessions on Zoom, hopefully on a Thursday evening with a practical training exercise at the weekend. This will be arranged for each county so that people don't have to travel too far. Full details are on the website. We would urge members to make more use of the website because

information there will always be more up-to-date than in *Hairstreak*. On the subject of the newsletter, we hear that some people haven't been receiving it. Please let both ourselves and Head Office know if that is the case. *Hairstreak* editor Dave Ferguson is stepping down and Sally Hughes has kindly stepped in to take over the role¹. Dave was presented with a Richard Lewington print in thanks for all his work for us.

Our reserve at Holtspur Bottom had an excellent year with 30 butterfly species recorded there along with two more "possibles". Thanks to everyone who helps with the work parties there.

Priority moth recording during the year included the rediscovery of Silvery Arches in Berkshire, while surveying for larvae of Striped Lychnis went very well indeed. A web-based moth atlas for the Upper Thames area is under preparation this winter by our three County Moth Recorders, similar to the Norfolk Moths website, and will hopefully come online sometime during 2022.

Nationally, BC have launched a new strategy. More and more help is being asked for from land-owners so we in turn will need more people to help us. One thing that would be of immediate assistance is for a photographer to attend work parties. We need help with other things too so there is likely to be a way you can help no matter what you can offer. Thanks go to all our members and it is fantastic that we are able to achieve as much as we do.

We then moved on to the administrative part of the AGM. The Minutes of the previous one (published in the Spring 2021 issue of *Hairstreak*) were accepted as correct by a show of hands. **Branch Treasurer Chris Woodrow** then gave his brief report on the state of our finances. Chris reported that in the year under review (1st April 2020 to 31st March 2021) our finances continued to show a healthy position and a full set of accounts had been published in the most recent edition of *Hairstreak*, to which everyone was referred.

Total income for the year increased by £12,266.91 to £28,518.95 when compared to the previous one, while total expenditure increased by £2,350.55 to £12,561.52. Increasing Branch membership resulted in an increase in the subscription funds received from Head Office (up £528 to £8,715), while income from donations and grants increased by £14,482.46 overall principally due to a legacy donation. The review of the Higher-level Stewardship Scheme by Natural England, which had resulted in us receiving a double-payment in the previous year, reverted to normal in 2020-21 with us being allocated £683.88 for our Holtspur Bottom reserve.

Expenditure for the year was principally for conservation work in our region and for small items of equipment, with the increase over the previous period being accounted for by a Branch donation of £10,000 to Head Office to support our Regional Officer post.

Income for the year exceeded expenditure by £15,957.43 which, together with the balance carried forward from the previous year (£13,923.06) resulted in a balance in hand at year-end of £29,880.49.

Branch Secretary Dave Wilton then conducted the final part of the AGM, the Election of Officers. A request was made for a vote *en bloc* for David Hastings to be formally elected to the Committee and for Grahame Hawker, Chris Woodrow & Dave Wilton (who were standing down in turn under our rotational system) to be re-elected to the Committee. This was proposed by David Dennis, seconded by Hugh Ellerton and agreed unanimously by those present. The Upper Thames Branch Committee then comprised Nick Bowles (Branch Chairman), Grahame Hawker (Vice-Chair), Brenda Mobbs (Membership Secretary), Dave Wilton (Secretary) & Chris Woodrow (Treasurer) along with Peter Cuss, Kat Dahl, David Hastings, Stuart Hodges, David Roy, Margery Slatter & Sue Taylor.

That concluded the formal part of the AGM, which ended at 11.25am.

Dave Wilton, Branch Secretary

FOOTNOTE:

¹Derek Haynes has taken over as *Hairstreak* editor with effect from this (113) edition.



A brief look back at 2021 in the South East

Extract from Butterfly Conservation's 'South East Update' to Committee. Here are just a few of the highlights & achievements from the South East Region in 2021...

- Our **Kent's Magnificent Moths** project was launched. It is BC's biggest ever area-focussed moth project, and our team has already generated more than 3,300 'people engagements'.
- The **Big City Butterflies** project was launched and is already delivering lots of action on our side of the river, including school visits, site advice and habitat creation.
- In Sussex & Surrey the **Wood White** was found in more places than ever before, including a Surrey churchyard.
- The **Fiery Clearwing** was found by our Kent Moth team to be massively more widespread than we previously knew. 2,733 eggs were found across 30 different locations
- The UK's most easterly **Brown Hairstreak** colony was found in West Kent. This butterfly continues to spread in the region.
- Brown Hairstreak eggs (including this one, right) were found for the first time ever at our **Bentley Station Meadow** reserve by Steve Lockett
- **Adonis Blue** and **Grizzled Skipper** had their best year so far at our Magdalen Hill Down reserve.



- Sussex gained two new rare and beautiful species. In addition to the **Lace Border** (left), the **Sussex Emerald** moth was finally confirmed to be a Sussex species, with caterpillars found at Rye Harbour.
- On the South Downs two colonies of the rare **Lace Border** moth (left) have been found – a new species for Sussex and for the South Downs National Park
- We rediscovered the **White-spotted Sable** at Blean Woods National Nature Reserve. **Striped Lychnis** searches took place across 7 vice-counties, recording 1,365 larvae.
- As part of our targeted habitat enhancement work, BC in the South East is growing, planting or sowing more caterpillar **foodplants** and more **nectar plants** than ever before.

Calling all Citizen Scientists

There is a fairly long list of moths in the Upper Thames region that are considered priority species for our efforts in recording and conservation. Some of these species we survey for every year; however, with the resources available, we also need to change our focus from year to year on which other species to concentrate on. Last year a great team of volunteers carried out an extensive and very successful survey on the scarce Drab Looper moth. The team was able to map the exact distribution of the species and get an accurate picture of how suitable the habitat was within its range. This information will be immensely valuable in future conservation efforts.



Forester moths © Peter Cuss

This summer we are looking for citizen scientists to help with two other species. Firstly, **The Forester**. This beautiful day-flying moth is declining, and many colonies have been lost through development, agricultural intensification or unsuitable land management. The aim is to recruit volunteers who will join a group email so that each volunteer can see which sites have been searched to ensure we are not duplicating our search effort. The volunteers then look for the moth independently and record the grid

reference and maximum number of Forester seen. We are also keen to get a better understanding of the exact requirements of the species so we would also want to record what the management regime is for the site and how rich it is in plants that are a suitable nectar source, plus any other information such as if the site is in danger of development. A photo of the site is always good, too.

The second species is the **Striped Lychnis**. We survey for this species by looking for the brightly-coloured larvae sitting on its foodplant (dark mullein). Most will be found in or close to the Chilterns, but we are also interested in looking in the Berkshire downs to see if it can be found in that area. What we need here is an accurate grid reference, the total number of caterpillars seen and how many flower spikes of the foodplant are on site. Some sites are large, but many are just roadside verges.



Striped Lychnis larva on dark mullein
© Peter Cuss

Would you like to help with the surveys for either (or both!) of these species? Do not feel that you have to be an expert to take part, as all the help and information on how to survey will be supplied. So even if these are unfamiliar species to you, you will soon get the hang of finding and recording them. You would be free to do as much or as little as you like depending on how much time you have, and it is always great to get your children (or grandchildren) to help.



The rare and beautiful Clifden Nonpareil moth, otherwise known as the Blue Underwing

At the end of these surveys all the information you have helped to collect would be correlated and go into a report that builds on our knowledge of these priority species that will help to conserve them for future generations. If you are interested or would just like a little more information please email me on: pj.cuss@gmail.com

Peter Cuss
UTB Priority Moths Species Champion

FOOTNOTE:

Fancy dipping into the fascinating world of moths?

This is a reminder that Upper Thames Branch have a moth trap loan scheme for its members. If you fancy having a go at seeing what moths are in your garden why not have a go? The traps are free to borrow for a season, all we ask is you record the species you see. Help is available with ID'ing your catch. The traps can be picked up from Caversham (Berks) or Westcott (Bucks).

Details available from Peter Cuss, email: pj.cuss@gmail.com



News from the 10K Squares

Since 2013, towards the end of each year, I have been sending an email to all 10K Champions, inviting them to send a short review of the butterfly year in their 10K square(s). I try to make it clear that I don't want all 50+ of them to submit reports, nor do I wish to inflict report-writing on those who like observing and recording butterflies but don't like writing reports. Typically, several reply to say that they haven't done much recording in the past year, and between 7 and 12 send in a report.

This year, 2 Champions sent a report and 6 promptly replied with messages like "I'm afraid my 10K activity this year has been zero", "COVID destroyed all my enthusiasm for recording, but I'm planning to embrace 10K recording again in 2022" and "I did very little recording this year, not even in the garden. Hopefully I will do better next year". So now I am wondering whether the disruption of COVID has led to a general decrease in recording, or was 2021 just a rather nondescript butterfly season, making it hard to find much to write about? Anyway, here are the reports which I did get.

Martin Robinson is the 10K Champion for SU88, which lies due south of High Wycombe and is bisected by the River Thames into two roughly equal halves, the northern half being in Buckinghamshire and the southern part in Berkshire. The year 2021 started relatively poorly weather-wise, with cool overcast days in May and many of the spring butterflies being affected. Particularly scarce were Small Tortoiseshells, so much so that he did not record a single specimen in his 10K square, although he did see a few when walking transects in other parts of Buckinghamshire and Berkshire. Peacocks, by contrast, did well, and he observed over 40 individuals in early August, feeding together on Hemp Agrimony in a sheltered sunlit glade in a chalkpit just north of Warren Row. The Whites generally had a good year and Common Blues were plentiful, particularly in June. Of the Browns, Small Heaths continued their upward trend in SU88 but Ringlets had a relatively poor year, although Meadow Browns were even more common than usual. There was a relatively poor showing for Speckled Woods across all four months of recording.

This year, fellow recorder Peter Ogden introduced Martin to a site that was new to him, called Strawberry Bank. About three quarters of this land is within the northern-most border of SU88, while the remainder of the site lies within the southern border of Peter's 10K square, SU89. This south-facing chalk grassland has been cleared of scrub by Chiltern Rangers in the last few years and is now home to 28 species of butterfly, including Adonis Blue and Chalkhill Blue, both of which are new to SU88 in terms of recording. One spectacular sighting this year was a male Purple Emperor in Homefield Wood, which spent a few minutes on the main path through the site, taking up mineral salts from the ground. This was the first time Martin had been able to get a really close encounter with this butterfly, and the sighting was completely unexpected, there having been only one previous record of a Purple Emperor in this wood in the last 10 years!

Some worrying news for one of the tetrads in SU88 is the proposal to build a huge film studio on the Green Belt just to the east side of Marlow. This vast site of high-density buildings will cover over 90 acres... that's nearly five Wembley Stadiums! This area is currently home to 21 species of butterfly, including colonies of Common Blue and Small Heath, the latter only recently established there. Hopefully, common sense will prevail and a suitable Brown Field site can be

found, but the proposal is at an advanced stage and a formal planning application is expected to be submitted in the first quarter of 2022. Watch this (very large) space.

Wendy Wilson's 10K square, SP74, lies to the north-west of Milton Keynes, adjacent to the border with Northamptonshire. As only 12 of its tetrads or part tetrads are within the Upper Thames area, Wendy has also been visiting squares without champions in NW Bucks and NE Oxon. There are too many to do each year, so she selects 2 or 3 in each of the present 5-year recording period (2020-2024). In 2020 she did SP74 and SP73. Last year she targeted SP53 and SP64, most of which are in Northants, and also the west half of SP63 (the east side being well recorded already). Altogether there were 16 tetrads with fewer than 10 records in 2020, and 12 tetrads with none at all. Of these 28 tetrads, 22 now have between 10 and 15 records, and 6 have between 5 and 9 - so it's been well worth doing.

Much of the area is arable farmland with few butterflies, so she sees most of them in villages such as Tingewick, Souldern, Turweston, Newton Purcell and Finmere (and the footpaths just to the west of the village). She has had several unexpected surprises too. After seeing nothing on a half-hour walk along a footpath across fields, she saw 11 species around an overgrown derelict farmstead east of Biddlesden. Most surprising of all were the lovely wide flowery verges along the A43 north of Cherwell Valley Services. She can't walk along them of course, but can where they spill into the lanes at several junctions. At one in SP53 were 12 species including the only Common Blues she saw all year; also there was a Brown Hairstreak egg. To her as a keen egg-hunter this was a huge thrill as it was 2.5 km north of its known range and less than 1km to the Northants boundary.

My own square is SU66, which lies to the south-west of Reading in Berkshire. Highlight of the year was my only sighting of White Admiral. It was on a flowery ride in the conifer plantations to the west of Mortimer and within a few hundred metres of the location of my only previous White Admiral sighting there, back in 2014. Some of my better butterfly sites are along field margins which are not actually rights of way but are regularly used by dog walkers. Post lockdown, there seem to be an enormous number of dogs in the countryside and there appears to have been a backlash against them. At a number of sites, access points have been blocked and signs have gone up, saying 'No dog-walking' or 'Private property, keep out'. One such site is the field next to Padworth Village Hall, which is particularly good for Marbled White, Common Blue, Brown Argus and Small Heath.



We have a number of 10K squares across the 3 counties, particularly in the north and west of the region, where we are looking for one or more volunteers to help coordinate recording. The map overleaf shows whether squares are already adopted, need additional help or are unassigned. If you think you could help, please contact Jan Haseler. (Tel: **0118 9414750**, email: jan.haseler@btinternet.com).

Jan Haseler

10K square status, December 2020

		SP45				SP85	SP95	
	SP34	SP44	SP54	SP64	SP74	SP84	SP94	
SP23	SP33 ?	SP43	SP53	SP63	SP73	SP83	SP93	
SP22	SP32 ?	SP42 ?	SP52 C	SP62 ?	SP72 C	SP82	SP92	
SP21	SP31 C	SP41 C	SP51 ?	SP61 C	SP71 C	SP81 C	SP91 ?	TL01
SP20 C	SP30 C	SP40 C	SP50 C	SP60 C	SP70 C	SP80 C	SP90 C	TL00
SU29	SU39 C	SU49 C	SU59 C	SU69 C	SU79 C	SU89 C	SU99 C	TQ09
SU28 C	SU38 C	SU48	SU58 C	SU68 C	SU78	SU88 C	SU98 C	TQ08
SU27	SU37 C	SU47	SU57 C	SU67 C	SU77 C	SU87 C	SU97 ?	TQ07
	SU36 C	SU46 C	SU56 C	SU66 C	SU76	SU86 C	SU96	
	SU35							

Key		
SP20 C	10K Champion In place	SP62 ?
		More help wanted
		SP30
		Vacant square



Buddleia: Friend or Foe?

We all welcome the prospect of more pollinators visiting our gardens, and the ubiquitous buddleia (alternatively, buddleja), with its nectar-rich flowers, has served Britain well in that regard since its introduction here in the mid-eighteenth century, having originated in central China.



The original 'Butterfly Bush' (*Buddleia davidii*), also known as summer lilac or orange eye, named after the English botanist and clergyman The Reverend Adam Buddle and French missionary Father Armand David, is the most prolific variety in this country, and became one of the first inhabitants of urban bomb sites in the aftermath of World War II. But – despite its having been accorded with several RHS awards over the years – therein lies a big part of the problem: buddleia is considered a potentially invasive plant (being first so designated in the UK in 1922).

When left uncontrolled, most buddleias produce masses of winged seeds (potentially up to 3 million on each plant, every year!) which will disperse locally, carried typically by the wind – though this only occurs once the seeds have

ripened, during the spring after flowering (and which can remain viable for up to 5 years). Buddleia is renowned for springing up in unwanted places, such as on railway embankments, where its presence can – for obvious reasons – be problematic. One presumes that the main reason for this is that such places are often adjacent to the back gardens of private dwellings, where buddleia flourishes yet is perhaps never dead-headed or pruned.

The main issue is that – due to its successful reproduction rate – the buddleia has a competitive advantage over other shrubs and plants outside of the garden, which themselves would otherwise have provided an essential food source for caterpillars. And, of course, a lack of caterpillars means a lack of butterflies – and birds, too. Furthermore, a buddleia doesn't actually support the health and well-being of caterpillars *per se*.



The most recent advice found from Butterfly Conservation (Oct 2012) states that, "... [we] will continue to recommend the planting of buddleia in gardens alongside other butterfly-friendly

non-native plants, but will avoid giving it undue prominence...". And despite its reputation, *Buddleja davidii* is not among the wild invasive non-native plants listed on Schedule 9 (Part II) of the Wildlife and Countryside Act 1981, where 'invasive' is defined essentially as, "... if uncontrolled, would be likely to have a significant adverse impact on biodiversity and/or other environmental, social or economic interests".



The good news is that some buddleia cultivars have more recently been developed and marketed as 'non-invasive sterile hybrids' – though it is considered these varieties won't provide butterflies with the same hosting benefits of native flowering shrubs. I have an allegedly non-invasive RHS-Awarded *Buddleia x weyeriana* 'Sungold' in my front garden (as per the image above), which has wingless seeds yet does attract a good number of butterflies.

Conscientious management of one's own garden buddleia is vital if it is not to have a potentially negative influence over the local ecosystem, and the single most-important task is to prune the shrub heavily when dormant (in the late winter or early spring being the recommendation for most varieties), hence before the seeds

have had the chance to mature and disperse. Deadheading when the first flush of flowerheads is over will incite new growth and flowers, and this is encouraged as being beneficial to wildlife (and nice for us, too!) at that time. The main flowering stems can be pruned in autumn, and disposal of flowerheads and all pruned material should be done in a controlled manner; remember, too, to remove any fallen spent seedheads.

Yet despite all the benefits of all this 'hard work', one senses that some of you will say, "I don't seem to get many butterflies on my buddleia." Well, there could be one very good reason for this. Whilst buddleia does indeed provide a nectar-rich food supply for butterflies and other winged visitors, the adults also need suitable host plants on which to lay eggs on which their caterpillars will feed – so if there are none nearby, you are only likely to attract butterflies that are passing through (including migratory species such as the Painted Lady) or those storing up energy for hibernation (for example, the Peacock). You will, however, attract the attention of bees and perhaps the occasional daytime-flying moth such as the Humming-bird Hawkmoth.

Unless you are lucky enough to live adjacent to a habitat which already supports a number of species, or you are able to provide a mixed habitat yourself, your buddleia may not reward you in quite the way you might have hoped.

So, is the buddleia a friend or foe? Well, that rather depends...

Derek Haynes

Butterfly Conservation: Regional Conservation Manager's Update

The 2021 season included more butterfly and moth searches and surveys than at any time since I joined Butterfly Conservation in 2016.

Almost 500 butterfly transects were walked in the South East last year, counting 558,000 butterflies. The total combined distance walked on South East transects in 2021 was more than 18,000km. Around 90 of these butterfly transects took place each week in the Upper Thames area - an incredible and invaluable level of monitoring wildlife that must be unmatched in any other taxa.

More than 3,000 people undertook a total 8,425 counts for the Big Butterfly Count during the three weeks at the end of July and start of autumn. This was the fifth highest number of counts of any of the UK's 31 BC Branches, with 79,776 butterflies recorded.

The Upper Thames speciality, the Black Hairstreak, was again surveyed by Stuart Hodges and his team of helpers. The data and knowledge Stuart has amassed is as good as for any species in the UK. Stuart's data shows that emergence times have been getting earlier and earlier: Black Hairstreaks are now emerging three weeks earlier than they were in the mid-1980s – an important indicator of change in our shared environment.

Our intrepid moth recorders, led by Peter Cuss, undertook extensive searches for rare moths including Sloe Carpet, Striped



Sloe Carpet © Dave Green

Lychnis, Drab Looper, Silvery Arches and Heart Moth, and the caterpillars of the micro-moth *Agonopterix atomella*. All of these were found and well-surveyed, with the exception of Sloe Carpet which eluded us in Upper Thames and was found at only three locations in the UK last year (in Sussex and Surrey). It lives on old, wild Blackthorn and flies on warm April nights. Unfortunately, the April nights last year were the coldest in 99 years. The Sloe Carpet can hopefully be a target species for searches in spring 2022, and beyond.



Four-spotted © Ian Roberts

The lovely Four-spotted is another moth that it would be lovely to rediscover in our area. Searches for this moth should be a little easier, as it flies on warm

sunny days through the summer. It feeds on Field Bindweed, and seems to like exposed, tree-less areas where the foodplant grows on field edges on flower-rich banks and ditch edges.

The specialist butterflies which still need our help the most are probably the Wood White (in north Bucks), Duke of Burgundy and Adonis Blue (on the Chilterns and Wessex Downs) and the Grayling and Silver-studded Blue (on the Thames Basin Heaths). All of these Upper Thames species were identified in BC's UK Conservation Strategy as being of high priority. Branch volunteers have dedicated so much time and undertaken a huge amount of effort for these species in recent years, and I am hugely grateful to everyone for the progress we've made.



Other butterflies I worry about are the Grizzled Skipper, Silver-spotted Skipper and Chalk Hill Blue - and even the Green-veined White, which might be another species which suffers from climate change. I'm sure the Branch will continue to work to monitor and deliver conservation action for all butterflies.

Some butterflies and moths have been doing really well in recent years. Richer, wilder gardens, parks and verges will be



helping many of our more widespread species. The Brown Hairstreak has massively increased its distribution, and this has been confirmed by volunteers' winter egg-searches. The Jersey Tiger has spread throughout the South East in the last 10 years. The White-letter Hairstreak is bouncing back from the devastating loss of native elms, thanks to the ongoing planting of disease-resistant elm species and good, careful management of Wych Elms. The stunning Purple Emperor and Silver-washed Fritillary are also doing well.

Sadly, I am leaving Butterfly Conservation at the end of March. I am immensely grateful to the supporters and volunteers of our Upper Thames Branch. It has always been a pleasure to work with you, and I am in awe of the enthusiasm, dedication, and effectiveness of all the volunteers who contribute so much to the conservation of our species.

I know the butterflies and moths of Berkshire, Buckinghamshire and Oxfordshire are in the best possible hands.

Steve Wheatley
Regional Conservation Manager
for South East England

Churchyard Butterfly Recorders Urgently Wanted!

Many of the churchyards in our region are an unrecorded source of the butterflies we so dearly love to protect. We currently have approximately 20 people recording the butterflies in 35 churchyards across our region, but there are many, many more churchyards that could be recorded with more volunteers.

These churchyards could potentially hold colonies of scarce butterflies that we as a branch are unaware of.

If you would be willing to devote just half an hour of your time in each of the four months from May to August each year to survey your local churchyard, it would greatly help to expand our knowledge of the species present in our region.

We particularly need volunteers able to cover churchyards in Bucks, West Berkshire and West Oxfordshire; but surveys of any churchyard in our region would be welcome, not just those in the areas mentioned: they are the areas where our coverage is most sparse.

Here's a photo of St. Helens in Benson (where the area shown is left uncut until late in the season, to encourage wildlife), by way of an example of where help would be much appreciated.

Whilst a small number of volunteers have been added to the list in recent times, they have unfortunately only replaced those people who have had to give up due to age or infirmity.



If you would be willing to volunteer a small amount of your time during the summer months to survey at least one churchyard local to you, then please email me at lepidoptera45@btinternet.com, in the first instance, indicating which churchyard(s) you could survey, and I can then check whether or not it is already covered by one of our volunteers.



Many thanks
Chris Woodrow
Surveys Co-ordinator

Micros are Amazing + Some Recommended Videos to watch this Winter

As a small boy the biggest, fastest and most impressive steam trains fascinated me. I completely ignored the many small, slow engines. When steam engines were scrapped and it was impossible to see one, I realised that I should have been looking at all of them, but it was then too late.

I was in danger of doing the same with micro-moths. I was photographing and trying to identify the larger macro moths but dismissing the smallest moths as "...just grass moths, micros". I assumed that they were just too hard to see clearly, all very similar and too small to photograph. This year I realised what a dreadful mistake I was making and thank goodness for that. I have been blown away by their variety and beauty. Micros are small but completely incredible. Luckily I can catch up with micros.



The stunning *Alabonia geoffrella*
(Geoff to his friends)



The beautiful Common Purple and Gold

Some are simple to identify (if that matters to you) and many, many of them are truly beautiful. As with butterflies and larger moths, some are a simple mix of shades of brown but many are strikingly coloured or patterned in the most intricate way. Their lives are frequently astounding and everything about them is amazing.

Many micro-moth larvae live inside leaves, between the outer protective layers, very much as if they were living in the filling of a sandwich. The leaf's surface layers shield them from predators whilst they eat the succulent interior. This feeding produces a visible translucent trace and the pattern of their feeding (and the species of leaf that the damage is in) can be a very good way to identify the larva responsible.



Feeding mine of *Stigmella aurella*
in Bramble © Peter Ogden



A Small China Mark larva in its tube of duckweed leaves floating underwater
© Neil Phillips (iRecord)

Other micro-moth larvae live inside tubes of bits and pieces they pick up and glue around their bodies. If threatened they can withdraw into the tube and hide. Some even do this with bits of pondweeds and live underwater, metamorphosing into adults that live above water, in the air, through which they also fly.



The tube of *Psyche casta*. The larva's head holds it onto a piece of wood. Females of this species are flightless. Some UK species are parthenogenic, with no males at all.



The migrant Diamond-back © Dave Wilton

A group called the Bagworms do the same on land. They build tubes from pieces of bark, sand grains and grass stems, sometimes covering them in lichens to further camouflage the larva within. These tubes can be found protruding from tree trunks and wooden posts, even in winter.

Despite their tiny size there are migrant micro-moth species too. Most years tens of thousands of the Diamond-back moth arrive and some appear in every month.

If you haven't been looking carefully at micros, I strongly advise that you start. An indispensable guide is the Phil Sterling and Mark Parson's book, "Field Guide to Micro Moths of Great Britain and Ireland", illustrated by our own and our favourite

illustrator, Richard Lewington. Currently £29.99 at Atropos books: <https://www.atroposbooks.co.uk/field-guide-to-the-micro-moths-of-great-britain-and-ireland-sbk>

There are hours of fascinating video about Micro-moths on YouTube and probably elsewhere:



<https://www.youtube.com/watch?v=MuzI-FmZreQ&t=1709s>



<https://www.youtube.com/watch?v=uTpwxQ8Ld4>



<https://www.youtube.com/watch?v=fj2r9M4JkmU>

Moths continue to fly all winter, so now might be a good time to consider learning about them and enjoy finding them. Here are some recommended video links:

How to assemble a Skinner moth trap. If you got one for Christmas, this video will be very helpful: <https://www.youtube.com/watch?v=AkrfWpCRdCA>

21 Most Incredible Moth Species: A look at moths from around the world that appeal to this presenter: <https://www.youtube.com/watch?v=Yal1zE3AOXo>

What's the difference between Moths and Butterflies? An entertaining explanation: <https://www.youtube.com/watch?v=kMOpknqDO5s>

A guide to moth trapping – some basic advice for the novice: <https://www.youtube.com/watch?v=E1Y82tZDBFU>

Moth trapping for beginners – more basic advice for the novice: <https://www.youtube.com/watch?v=sgWQV9Yg9Yw&t=422s>

UK Micro-moth Field Signs: The larvae of many micros hide away inside vegetation, but leave tell-tale signs around which allows their presence to be detected: <https://www.youtube.com/watch?v=MuzI-FmZreQ>

Wider Countryside Survey methodology: <https://www.youtube.com/watch?v=CqkTY1R48CE&t=6878s>

... and for the gardeners among us, Butterfly Conservation has produced these short videos about the benefits of a light touch in the garden: <https://www.facebook.com/hashtag/donothingfornature>

And the Butterfly Conservation gardening blog, with similar helpful tips, is here: <https://butterfly-conservation.org/news-and-blog/dig-it-the-secret-gardener-encourages-us-to-do-nothing-for-nature-this-winter>

Nick Bowles

Slow-cooked Hearty Hairstreak Pie

Ingredients:

2tbsp Black; 1tsp Brown; 1tsp White-letter; 1tsp Green; 1tsp Purple

2 eggs - small, brown

30 miles of HS2 for the pastry crust; pinch of East West Rail salt, to season

Also required: one large bowl, of three-county capacity

Preparation time: around 21 years; Proving time: around 5 years

Cooking time: around 10 years; Serves: everyone

Pre-process:

You will have noticed that our newsletter is called *Hairstreak*. The name came about because the Committee decided that the publication should have a name (which it hadn't previously), and their thoughts moved quickly to the fact that **our region held all 5 hairstreaks** and, for some of them, a high percentage of the countrywide colonies. We have about 50% of the countrywide distribution of the Black in just two of our counties, and this is the butterfly that I have championed for the past 21 years. It is now some time since there has been much information about it in our newsletter.

Process:

1. So, the Black is first into the mixing bowl, and whilst stirring this around we realise, perhaps unsurprisingly, that this species was considerably under-recorded in the past. We have now found 29 new colonies... but have we? We now question what the boundaries of a colony actually are, with the textbooks stating that many colonies are small and isolated, around and within woodland.

In fact, the matter of defining colonies and sites is very tricky (in fact, nigh on impossible), exacerbated by early records referring only to colonies.

Furthermore, some sightings are very close to known colonies (yet perhaps beyond the boundaries of what are recognised as the extent of those colonies), and odd records have cropped up over the years away from known colonies, but the butterfly has not been recorded there since (any maybe the exact location hadn't even been revisited). The Black is also now considered to be extinct at some locations where it had previously been recorded.



Way back in the 1950s it was estimated that there were over 12 colonies in and around Bernwood Forest, but could this have been just one colony? Due in part to the loss of several of these colonies during the construction of the M40 motorway, the so-named M40 Compensation Area was developed for butterflies in 1991-92 and quickly became a good site for the Brown and, by 2010, it was probably the best site in the country for the Black. Clearly, for these two hairstreaks, we can provide suitable habitat as mitigation for loss of good habitat elsewhere.

In 2007 we found a new colony of Black at Heath Bridge near the A41 on the Bicester to Aylesbury road, with the nearest known colony 2 miles away. The Wildlife Trust has a reserve just the other side of the road where the Black was found the following year. Over the next six years the Wildlife Trust bought more pasture farmland, and each time they acquire a new site it gives us an opportunity to monitor the hedgerows. Within a few years, the Black was found, and the area where there are now Black records is well over a square mile and only just a little smaller than the Bernwood Forest M40 Compensation Area site. Found all along the hedgerows, I am reluctant to regard this as several colonies.



Black Hairstreak egg © Peter Eeles

Thanks to the efforts of so many, we now have over 1750 hours of observation during the Black's flight season. We have searched for (and found) both eggs and pupae; dedicated Black egg searches have been successful, but timings show that at least 20 hours is needed on average to find each egg. At most sites the Brown exists as well, so the more observant searcher will occasionally find Black eggs. Pupae searching is more

successful, yet little has been carried out: 3 were found at one site in 2015 in 2.25 hours' searching: one was found on 4th June and the butterfly had emerged by 23rd and it was still on the wing on 2nd July; another had disappeared quite quickly, indicating that it had probably been predated by birds; the third had emerged by 22nd June.

Timed counts of adults have revealed considerable fluctuations in numbers. In 2018, for example, we recorded 17 per hour (the best year since we started recording in earnest); yet in the very wet June of 2012 it was less than 1. Overall, the 23-year average is 4.5. There are now 137 1-kilometre squares where the Black has been recorded.

In an effort to retain suitable habitat for the butterfly, we have informed private site owners where Black Hairstreak has been observed on their land from footpaths or roads, this comprising 30 of all known sites.

The Black, which was first recorded at the Calvert Jubilee reserve in 2009, has established a colony mainly in the extensive blackthorn along the old railway line which runs along the north side of the reserve. The Black has a very limited distribution, which helps us concentrate our searching in and just beyond its known range. There are, however, several isolated colonies, and with so many colonies confirmed by only between one and five adults being seen at each site, there are likely to be more colonies yet to be discovered. **Butterfly Conservation has recently raised the priority level of Black Hairstreak from medium to high.**

2. We now turn to rolling out the HS2 pastry cover. In June 2012 we were contacted for priority butterfly information in the vicinity of the proposed route, with a Wildlife Trust reserve at Finemere wood and another at Calvert Jubilee being affected, the latter quite extensively (where we have increased our recording).

3. To this pastry cover we need to add a pinch of East West Rail salt, because the upgrade of this line will also affect quite a few butterflies. **Put the pastry to one side for about five years to prove.**



White-letter Hairstreak © Derek Haynes

4. The Green had become established at the Calvert Jubilee reserve many years ago, in an area that was filled with refuse and covered with callow (a poor quality clay). By the start of the 2014 flight season we had Green and Black, and we knew the Brown was not far away. Was it possible that all five hairstreaks could be at this one site? One person in particular sat and kept watch over the most mature elms that there are at Calvert, close to the car park - and the first notable butterfly to appear

was a Purple Emperor: it appeared to be just sitting there waiting for its wings to dry. There is some willow close by, from which it may well have emerged; then, after quite a long wait, yes, there it was... a White-letter. The White-letter can be found on some of the most mature elms across our region. But which elm is the most likely to see it on? Yes, Wych Elm: it prefers this to English Elm... flowering trees are best, and to find these one needs to be looking at elms during the second half of April, when flowers are most evident. Because of its wide distribution the White-letter is probably the most difficult one to locate, with the added complication that you cannot guarantee that where you saw it last year is where you are most likely to find it this year; often its preferred tree changes from year to year.

Consider the Purple: when is the best time to see it? Actually, it's between 5:30 and 7pm, and since most of our searching for butterflies (including on transects) is carried out between 10am and 4pm, it is regularly missed. I have specifically looked in the evening at hedgerow oaks and found it quite easily, even on an isolated oak which was within a mile of Calvert. Seeing as the Purple is quite widespread wherever there are oak trees (and has been seen at Calvert in the past), we can now add Green, Purple and White-letter to the mix.



Purple Hairstreak © Peter Law



Brown Hairstreak © Derek Haynes

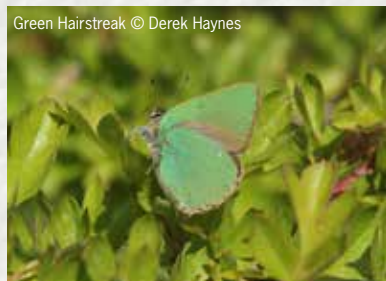
5. One final ingredient: the Brown is still needed. For the Brown we look for the eggs. We appear to have one major colony and there is an indication that it is expanding its range. We can look for eggs on likely blackthorn within its known range and just beyond, to see if it is expanding its area, but we don't have to consider looking for it throughout our three counties. Eggs found only a short distance south of Calvert reserve

encouraged us to get together on a miserable wet day in February 2014, and we searched and searched... until one clever person found two eggs, so we now have all five Hairstreak at this reserve. **This may well be the only site in the country where all five naturally exist.** So, Brown can now be added to the mix, which should be given another good stir. Beat the eggs gently, and add them too.



Brown Hairstreak eggs © Peter Eeles

6. We now need to give this mix a short while to prove: indeed, proving the existence of hairstreaks in the 22 years of my observations has been, to say the least, complicated.



Green Hairstreak © Derek Haynes

The Green is far less conservative with its preferred foodplants, as its culinary requirements are met by any of eight different plants. However, these plants are no longer to be found in the wider countryside, since scrubby downland, moorland and heathland are its preferred locations. It's not to be found where there is any intensity of agriculture, and the colony at Calvert is now quite isolated. For all except the Green it's best to be prepared to stand and wait for

movement in the canopy, to have binoculars to hand, and expect that at the end of your search the constant looking up will have given you a stiff neck!

7. Having now mixed all the ingredients together and proved them, we need to pour the mixture into a very large pie dish, and carefully roll across the HS2 pastry cover, pressing this firmly down all around the dish rim with a wide strong mitigation fork, then sliding this carefully into the oven, pre-heated to 100 degrees, and cooking it slowly for the next 10 years.

So, how will this pie look by the 2030s? Will there be lots off leakages, due to inadequate mitigation or mitigation not fulfilled by the developers? And is it possible that there will be any markedly agreeable flavours within it?

Can any good come of all this? Only time will tell.

Stuart Hodges



Spotlight on UTB Squares (1): SU77 & SU76

A CHANCE FOR OUR 10K CHAMPIONS TO... WELL, CHAMPION THEIR SQUARES

SU77 covers central and east Reading up to Wargrave; I took over this square from the very steady hand of Steph Brown a few years ago. As the square is largely urban, I wanted to point out a few little oases of nature that you can find in and around Reading, which also provide nice, short walks for days out with partners or family.

Highwood Local Nature Reserve and Southlake Park, close to Earley train station, offer mixed lowland woodland, heathland and open space. Further east is Dinton Pastures Nature Reserve, where there has been a confirmed Purple Emperor sighting (not by me, unfortunately). The lucky spotter had been searching the area for days, then gave up and went fishing, at which point a male Emperor fluttered down and obligingly sat on his fishing equipment! The Harris Gardens at the university is worth an afternoon stroll on a sunny day, but my favourite spot in the town is Reading Old Cemetery at the junction of Wokingham and London Roads. Parking in this area is very difficult, so is best reached on foot or by bus. I have observed a wide range of butterflies here, as the spot is largely left wild and undisturbed – there are apparently deer in the cemetery, although I've never seen them! I like to visit in spring to see the wooded edges teeming with Holly Blues and other early butterflies, to get a little boost of positivity ahead of the recording season.



© Simon Fenner

SU76 encompasses Shinfield down to the border with Hampshire. The square comprises villages and towns surrounded mostly by farmland; the largest green space is the Forestry Commission's Bramshill Plantation, which is unfortunately largely devoid of butterfly life. There is currently a lot of development in the area, including a new bypass around Arborfield that cuts close to a previously quiet copse on Greensward Lane, where I was able to record Purple Hairstreaks for the first time a couple of years ago.

South-east of Arborfield is the new, very large Arborfield Green development; however, the embankments on Hazebrouck Meadows (on Biggs Lane) have been filled with wildflowers which attract a lot of butterflies, particular in the mid to late summer. The nearby California Country Park is also always a good butterflying spot, particularly for woodland species.

Sophie Payne

[Ed.: Many thanks to Sophie for this informative article: it's always a pleasure to read about parts of our region which we may be stimulated to visit, whether we live nearby or fancy a short trip out to somewhere we perhaps haven't visited before. And, who knows, in the case of Sophie's Dinton Pastures Nature Reserve, you may be lucky enough to find that Purple Emperor (well, maybe not that one!)]

Conservation Tasks: Jan, Feb and March 2022

You might combine a walk around the site with a brief session of work. Nobody must work for the entire session but obviously you may. There are always a variety of tasks and no great strength is required. Tools and full instructions are provided. **Please bring a drink and a snack**, and dress appropriately for the forecast weather.

Work parties start at 10am unless otherwise stated. At many sites we usually finish around 1pm, although some work parties finish around 3pm.

04-Jan-2022 10:00	Far Kingdom, Princes Risborough, Bucks
06-Jan-2022 10:00	Princes Risborough, Bucks
09-Jan-2022 10:00	Holtspur Bottom, Beaconsfield, Bucks
13-Jan-2022 10:00	Bradenham, Bucks
16-Jan-2022 10:00	Princes Risborough, Bucks
16-Jan-2022 10:00	Aston Upthorpe Downs, Oxon
17-Jan-2022 10:00	Princes Risborough, Bucks
23-Jan-2022 10:00	Holtspur Bottom, Beaconsfield, Bucks
23-Jan-2022 10:30	East Hagbourne, Oxon
24-Jan-2022 10:00	Far Kingdom, Princes Risborough, Bucks
26-Jan-2022 09:45	Arncott, nr Bicester, Oxon
31-Jan-2022 10:00	Westcott, nr Waddesdon, Bucks
01-Feb-2022 10:00	Westcott, nr Waddesdon, Bucks
06-Feb-2022 10:00	Aston Upthorpe Downs, Oxon
06-Feb-2022 10:30	East Hagbourne, Oxon
07-Feb-2022 10:00	West Wycombe, Bucks
13-Feb-2022 10:30	East Hagbourne, Oxon
14-Feb-2022 10:00	West Wycombe, Bucks
20-Feb-2022 10:00	Holtspur Bottom, Beaconsfield, Bucks
22-Feb-2022 10:00	Saunderton, Bucks
27-Feb-2022 10:30	East Hagbourne, Oxon
28-Feb-2022 10:00	Ivinghoe, Bucks
03-Mar-2022 10:00	Strawberry Bank, nr Lane End, Bucks
06-Mar-2022 10:00	Aston Upthorpe Downs, Oxon
13-Mar-2022 10:30	East Hagbourne, Oxon

As these tasks are in the winter there is a chance of their being cancelled at short notice. Please contact the leader to advise of your intention to attend, so you can be warned if the event is cancelled. We will endeavour to inform of cancellation on our website but posting there might be delayed.

More details of the conservation tasks can be found at: <https://www.upperthames-butterflies.org.uk/events>



Dingy Skipper at Incombe Hole, Ivinghoe © Adrian Roach



Aston Upthorpe Downs © David Hastings

Save Our Species

We can all probably do more towards our combined ongoing efforts to protect our butterflies and moths, and help them to thrive. Several articles in this newsletter have asked for assistance, in one regard or another, and on this page we bring those requests together to give a résumé of where that help is perhaps most needed or would be much appreciated at this time.

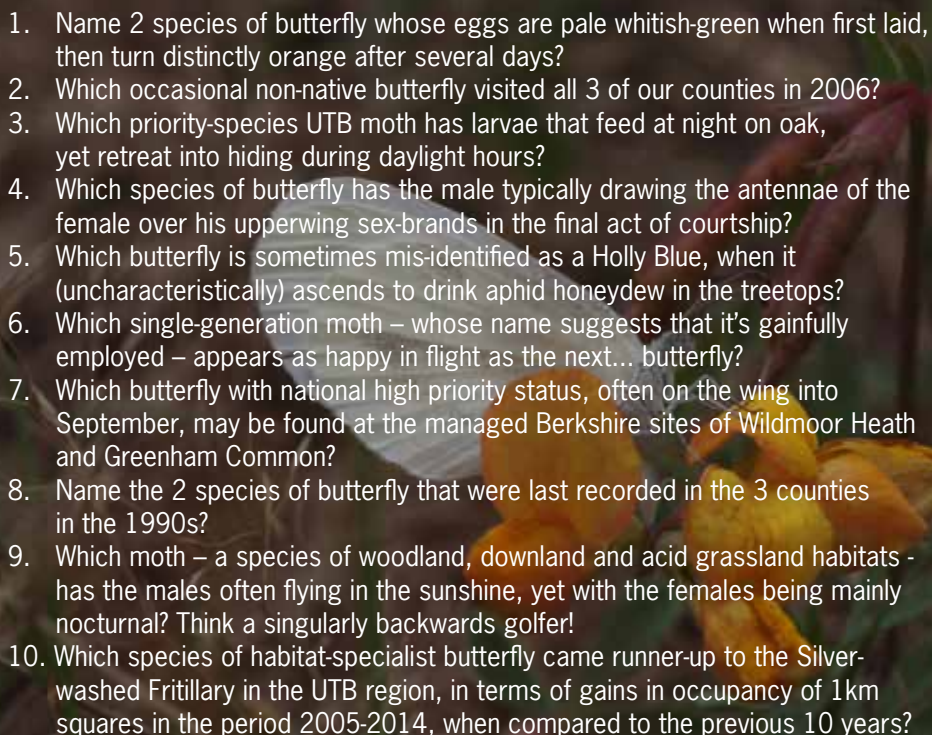
- 1.** Consider heavily pruning invasive buddleia this spring, before its seeds have the chance to mature and disperse.
[Ref. Buddleia: Friend or Foe?]
- 2.** Those who record officially in an area that includes private land to consider the benefits of contacting landowners, either directly, or indirectly through the Branch Committee, in respect of the potential benefits of co-operation in improving landowners' land for wildlife.
[Ref. Working from the ground up...]
- 3.** If you have a churchyard near to where you live, could you spare some time to survey its butterfly population?
[Ref. Churchyard Butterfly Recorders Urgently Wanted!]
- 4.** Are you prepared to give some time to local conservation tasks, especially if you have a First Aid certificate or are a photographer prepared to attend work parties?
[Refs. Chairman's Report & Upper Thames Branch AGM 2021]
- 5.** Can you help with surveying for The Forester and/or Striped Lychnis moths?
[Ref. Calling all Citizen Scientists]
- 6.** Could you discover a new local colony of Small Blues?
[Ref. Hunt the Small Blue in 2022!]
- 7.** Would you consider becoming a 10K Champion in your area?
[Ref. News from the 10K Squares]
- 8.** Please consider making a contribution to the next edition of Hairstreak.
[Ref. New Year – Fresh Start – Renewed Hope]

If you are able to take action or can offer help regarding any of the above, you are about to make a difference. Thank you on behalf of our species.

At Last... Let's get Quizzical

There will be no bouquet, box of chocolates or bottle of wine for the 'winner', but you could nevertheless be rewarded just by the satisfaction of getting all the answers right – or maybe you'll pick up some useful knowledge in giving it a go?

All the questions feature species found (regularly, occasionally or historically) in our region, and answers will be given in the next edition of Hairstreak. Good luck!

- 
1. Name 2 species of butterfly whose eggs are pale whitish-green when first laid, then turn distinctly orange after several days?
 2. Which occasional non-native butterfly visited all 3 of our counties in 2006?
 3. Which priority-species UTB moth has larvae that feed at night on oak, yet retreat into hiding during daylight hours?
 4. Which species of butterfly has the male typically drawing the antennae of the female over his upperwing sex-brands in the final act of courtship?
 5. Which butterfly is sometimes mis-identified as a Holly Blue, when it (uncharacteristically) ascends to drink aphid honeydew in the treetops?
 6. Which single-generation moth – whose name suggests that it's gainfully employed – appears as happy in flight as the next... butterfly?
 7. Which butterfly with national high priority status, often on the wing into September, may be found at the managed Berkshire sites of Wildmoor Heath and Greenham Common?
 8. Name the 2 species of butterfly that were last recorded in the 3 counties in the 1990s?
 9. Which moth – a species of woodland, downland and acid grassland habitats - has the males often flying in the sunshine, yet with the females being mainly nocturnal? Think a singularly backwards golfer!
 10. Which species of habitat-specialist butterfly came runner-up to the Silver-washed Fritillary in the UTB region, in terms of gains in occupancy of 1km squares in the period 2005-2014, when compared to the previous 10 years?

'Tiebreaker': there is a butterfly lurking beneath the questions, but what is it?

If you simply can't wait until next time for the answers, you could try to catch the editor in a charitable mood... via newsletter-editor@upperthames-butterflies.org.uk

And why not come up with some questions of your own, in consideration for a future edition? Or perhaps you can devise a different sort of challenge for our informed readers, to give them something to do on the next wet, dreary day – and one will surely come your way sometime soon? I feel a crossword coming on...

Derek Haynes

In Buckinghamshire, the Bucks Invertebrate Group organises a lot of field trips which include studying butterflies and especially moths. Their list of field trips is available on their website <https://sites.google.com/site/bucksinvertebrategroup/Home>

In Berkshire, the Berkshire Moth Group holds regular meetings on the second Thursday of every month. They organise other events as well. Refer to their website for details <https://sites.google.com/site/berksmoths/Home>

Upper Thames Branch Website

www.upperthames-butterflies.org.uk

<https://butterfly-conservation.org/in-your-area/upper-thames-branch>

Have your butterfly sightings and photos posted on the website by sending them to: sightings@upperthames-butterflies.org.uk

Upper Thames Branch Moth Sightings Blog
<http://upperthamesmoths.blogspot.co.uk>

Follow us on Facebook

<https://www.facebook.com/Butterflies.Berkshire.Buckinghamshire.Oxfordshire>

Twitter <https://twitter.com/upperthamesbc>

Instagram https://www.instagram.com/utb_butterfly_conservation

Holtspur Bottom Reserve

<http://www.holtspurbottom.info>

Upper Thames Branch Officers

Chairman: Nick Bowles 01442 382276 nick.bowles@ntlworld.com

Vice-chairman & Conservation & Recording Chairman: Grahame Hawker
Well Cottage, 22 Brimpton Common, Reading RG7 4RZ 0118 9814405
grahamehawker@hotmail.com

Hon Secretary & Branch Contact: Dave Wilton
25 Burnham Road, Westcott, Aylesbury HP18 0PL 01296 658701
wilton@burnhamlodge.plus.com

Hon Treasurer: Chris Woodrow
39 Old London Road, Benson, Wallingford OX10 6RR 01491 838637
lepidoptera45@btinternet.com

Membership Secretary: Brenda Mobbs 01494 712486 bc.upperthames@gmail.com