

HERTFORDSHIRE AND MIDDLESEX BRANCH NEWSLETTER

ISSUE 78 Spring 2019

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**Butterfly
Conservation**

Saving butterflies, moths and our environment



Chair's Report, by Malcolm Hull

Welcome to the Spring edition of our Branch newsletter. Reading the sightings page on the Branch website over the last few months, I've been thrilled to learn about the ever increasing numbers of records of Brown Hairstreak eggs. This species really does now seem to be establishing itself in our area (see article on [page 12](#)). More recently the number of Spring butterfly records in February and March has been higher than ever, with three Camberwell Beauties a real highlight.

But all this is in stark contrast to the gloomy headlines in the news. As well as climate change and plastics in the oceans, examples of headlines which have worried me include

- The UK is one of the most nature depleted countries in the world, with our government set to miss the majority of its environmental 2020 targets for improvement.
- The world is heading for the biggest mass extinction of species since the dinosaurs.
- Insect populations in parts of Western Europe have crashed by two thirds in the last 40 years.

Although these are depressing, my conclusion is that our work promoting a healthier environment is becoming more important than ever. Recording, providing information and practical conservation are all vital and they can make a real difference. Our membership has grown rapidly, we are in a good financial position and there is much work to do. Our Branch is in a good position to increase the scope and scale of its activities. This can only really be achieved by more of our members becoming involved with our work. A list of tasks which you could help with is set out from [page 3](#). Please consider if you are able to spare even a few hours to help and if so contact the relevant committee member, whose details are set out on the back cover of this newsletter.

The year got off to a great start with Heritage Lottery funding approved for both our main projects. The creation of chalk grassland habitat in Greenwood Park near St Albans is planned for this Spring. See the article on [page 14](#) and details of the Public Launch on 26th May in our Events Programme.

For several years its been our ambition to do more in the London area,

so I am delighted that BC has now employed May Webber as the Project Development Officer for Big City Butterflies (BCB). May is looking for ideas of sites in the project boroughs we can work with and other opportunities to develop BCB. May will be joining several of our London events during the year, see her article on [page 10](#) for more information.

We have another action packed Events programme for the year which is enclosed with this newsletter and also available on the Branch website. It will be kept updated on the website as new events are added during the season. Please do come along and feel free to bring friends and family. All events we organise are free and don't require prior booking. When partnering with other organisations, charges and booking are sometimes necessary and details of these are set out in the Events Programme.

Our recent Members Day in Welwyn was a great success, with four excellent speakers and a record attendance from members. Many thanks to everyone who attended and assisted with all the arrangements on the day. Nigel Agar retired from the committee at the AGM after many years service. On behalf of the Committee I presented Nigel with a canvas print as a thanks for all his work. The print was of a Peacock on Blackthorn, photographed by Elizabeth Debenham, who is also a branch member.

Can you Spare a Few Hours to Help ?

This year our Branch is stepping up efforts to conserve butterflies and moths. As well as beginning two major projects, we are completing our five-year survey of butterflies in the two counties and much more. If you could spare even a few hours to help with any of the tasks below, please do get in touch. Previous experience is not essential, we will provide any training needed. Contact details – are all on the back page.

Publicity Contact – Liz Goodyear	We need a press officer who can help draft and distribute news and event info to the press and social media. We don't yet have an Instagram account and would like to get one started.
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Practical Conservation Contact – Paula Reid	Join our monthly work parties at our own butterfly nature reserve at Millhoppers Pasture, near Tring. More help is always appreciated with managing hedges, cutting grass, clearing streams and much more.
Events Contact – Malcolm Hull	Our publicity stall is a great way to share information and gain support by attending events, usually in the Spring and Summer. We currently get to 3 or 4 events each year but with extra volunteers on the stall and organising behind the scenes we could do more. Can you help with an event in your area? With extra help we can attend the Rickmansworth Festival on Sat 18/ Sun 19 of May. Could you help at the Herts and Middx Festival of Wildlife on Sat 27/Sun 28 July at Panshanger Park near Hertford
Big City Butterflies Contact – May Webber	May Webber needs help identifying suitable project sites and to support at events such as the Tower Hamlets Summer Festival on Sat 29 June.
Four spotted moth project Contact – John Murray	We need volunteers to help record and conserve our rarest moth species
Health and Safety Officer Contact – Malcolm Hull	We currently have a vacancy for this role. It involves providing guidance to help us keep safe while helping butterflies and collecting information for records
Joining the Committee Contact – Malcolm Hull	This involves attending around 5 evening meetings a year, contributing ideas and helping to run the Branch. Potential new members are welcome to join for a trial period to find out more about what is involved.
Big Butterfly Count Contact Malcolm Hull	BCs most high profile event of the year, with 100,000 people participating in 2018. This year to be launched by Chris Packham. We need help publicising it, distributing leaflets, telling your family/ friends and of course, taking part.

<p>Recording Contact – Andrew Wood</p>	<p>There are two transect walks which we are keen to re-establish at Wood Lane, Pirton and Northaw Great Wood.</p> <p>In several OS squares where butterfly numbers are under recorded and we'd like members to visit</p> <p>TL0412 (Jockey End/Gaddesden Row); TL0810 (Between NE Hemel Hempstead/SW Redbourn); TL0816 (Between Markyate/Kinsbourne Green) TL1420 (Bendish/Breachwood Green/Luton Airport); TL3636 (Between Reed and Newsells) TL3830 North of Hare Street/East of Wyddial) TL3426 (West of Westmill/south of Aspenden)</p>
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Members' Day 2019, by Ian Small

Our annual member's event was again held at the Civic Centre, Old Welwyn, and attracted a large audience of over 80 people. Proceedings began with the formalities of our Branch AGM, after which 3 committee members (Roger Gibbons, Ian Small and Andrew Wood) each showed a selection of their excellent photographs from 2018, covering butterflies from France and from Panama and local moths.

The first talk of the day was on “**Big City Butterflies**”, presented by the recently-appointed project officer, May Webber. May gave a very enthusiastic and engaging overview of this Heritage Lottery-funded project, more details of which are in May's article on [page 10](#).

During the lunch interval, members were encouraged to view the entries for the photographic competition and vote for their choice of winners, as well as visit the sales stalls and buy raffle tickets.

The first afternoon presentation was “**Saving the UK's wildlife, one garden at a time**” by Jim and Joel Ashton (the Butterfly Brothers). Having had a long-held interest in butterflies and other wildlife, they were witnessing ecological loss first hand. With their passion for gardening, they realised they could do something about it (and get paid for it !) and began a business in 2006 to create habitats for wildlife. From small beginnings, their business has thrived, they now employ a further 5 people, work all over the country and have been appointed

Butterfly Conservation Ambassadors.

Their richly-illustrated presentation, which they gave in ‘tag-team’ fashion, covered a series of case-studies, illustrating the range of garden types they had worked on and the transformation between before and after, not just in the appearance, but importantly in the richness of wildlife that rapidly colonised the newly-created habitats. Many of these can also be seen through their website and YouTube channel (<https://www.youtube.com/channel/UCx2IOL8qHn5RDVwUC0jbTeA/> featured).

Before the interval, Sapphira recited her poem ‘Chrysalis’ (see [page 9](#))

The final presentation of the day was “**Roots of Rockingham - the Chequered Skipper Project**” by Susannah O’Riordan. Susannah explained that this work is part of the much larger ‘Back from the Brink’ project, which is jointly managed by 7 conservation partners (one of which is Butterfly Conservation) and heavily funded by the Heritage Lottery fund. This project focusses on the protection of highly-threatened species where they are found. There are 19 programmes running across England, 12 of which are focussing on a single species, the rest on multiple species targets.

The Roots of Rockingham project is one of those focussing on multiple species, involving several of the partner organisations. The site was the former English stronghold for the Chequered Skipper, before it became extinct in England in 1976. [There is still a well-established population in the west of Scotland]. The reasons for the previous loss are not fully understood, but likely include habitat isolation, loss of sunny, sheltered open spaces and possibly also a change in hydrology.

The former English colony was found in woodland rides and glades, where eggs were laid on wood false brome. In contrast, the Scottish colonies are found in more open, damp grassland, where eggs are laid on purple moor grass. Prior to any re-introduction there was a lot of work to be undertaken. This included e.g. climate modelling to identify source sites closely matching Rockingham, donor population surveys, disease risk assessments (to avoid inadvertent introduction of any non-native pathogen) and of course vegetation surveys. This was in addition to all the work to survey sites and develop relations with the site owners across the multiple woodland blocks in the target area.

Everything came together, and during 2018 the required number of butterflies (mainly female) were translocated from Belgium (where they

share the the same foodplant as the former English colony) to Rockingham.

Although egg searches were subsequently performed, no eggs were found. This is perhaps not surprising, given the number of available foodplants and the small number of butterflies. Everyone is hoping that 2019 will mark the emergence of the first Chequered Skippers in England for over 40 years.

Following the presentations, raffle prizes were awarded and the winners of the photographic competition announced. The winning photographs are shown below.



Winner - UK Butterflies
Category

Glanville Fritillary
© Paul Cross



Winner -
non-Adult Category

Caterpillar of the Pale
Tussock Moth
© Roger Seymour



Winner
non-UK Category
Red Cracker freshly emerged from pupa
© Ian Small

Winner -
UK Moths Category
Yellow-barred Brindle Moth
© Dee Cullen



Winner -
Behaviour Category
6-Spot Burnet Moth
© John Gilbert

Chrysalis

By Sapphira

*As somewhere it ends,
Somewhere else it's begun
With a quivering flicker
At the breaking of dawn*

*In the promise of sunrise
The stillness of night
With serene declaration
His new wings take flight*

*As the chrysalis forms
Peace be still, have no fear
A supreme transformation
Is ever so near*

*To emerge pure and free
With an all-knowing calm
Just as somewhere it ends
Somewhere else it's begun*

Butterfly Conservation would like to thank all businesses and individuals who helped raise £763.15 (£803.65 including gift aid) as part of Sapphira's #BurlesqueAPeel including Maxim, Maskerade Bespoke, Juju's Bar & Stage, London Academy of Burlesque and Party Superstores. [An equivalent sum was donated to the mental health charity Sane through the same event.] Our condolences go to Liam, Maxim, Leeroy, Claire and Theresa as well as family and friends with the news Keith Flint's passing.

Sapphira in her butterfly costume (with her husband) at Members' Day



Big City Butterflies, by May Webber

Hello! My name is May Webber. I am Development Officer for the exciting new project, Big City Butterflies. First, a little bit about me!

I have been passionate about butterflies and moths for as long as I can remember. At the age of 11, I became a member of BC (Upper Thames Branch) and I purchased my first moth trap aged 13. Since then, I have been volunteering with many wildlife organisations and submitting sightings to county moth recorders.



I regularly travelled across the UK in search of rare species, courtesy of my mother, who would be designated driver! A personal highlight was seeing the Large Heath in the Lake District. At the age of 12, I had a sharp eye and won the title of “top egg spotter” in my Upper Thames Branch!

I graduated with a Biological Sciences degree in 2016. During my time as a student, I volunteered with Blanca Huertas, curator of butterflies at the Natural History Museum. I certainly prefer working with live insects than with dead specimens, but it was a fascinating opportunity to learn the importance of museum collections and get my taxonomy up to scratch!

With my experience of volunteering in London, I was thrilled to get the job as Project Development Officer. This pioneering project will inspire Londoners to discover butterflies and moths, and connect with their local green spaces. This is something close to my heart as it has been a constant battle of mine to convince people that London is rich in Lepidoptera.

London has more than 1,568 Sites of Importance for Nature Conservation (SINCs) with >3,000 parks and open spaces, so the potential for engagement and conservation is huge! The people we reach through this project will have opportunities to learn how they can help butterflies and moths to thrive alongside them. But BC needs help to make important discoveries in return.

We will be asking Londoners to help us determine how populations of butterflies and moths in the capital are faring through increased recording efforts.

The inner London boroughs within Herts & Middx branch are Tower Hamlets, Hackney, Islington, Camden, Westminster, Kensington & Chelsea, Hammersmith & Fulham and Brent, also the City of London. These boroughs hold many brilliant sites for Lepidoptera, which will play key roles in allowing BC to test new approaches to urban conservation.

Big City Butterflies project aims include:

- Increase quality and connectivity of green spaces
- Increase levels of recording and monitoring
- Engage with new audiences
- Engage people in the rich diversity of butterflies and moths to make a stronger connection with their local green space.

These aims will be met through habitat management workshops, public events, community engagement, and school workshops, which I will be coordinating.

For example, an application has been submitted to have a pitch at the Tower Hamlets Summer Festival on 29th June (see Events Programme for full details), a festival celebrating the outdoors, which will reach new audiences and hopefully sign up new members.

Although it is just the first month in my role, I have received such a warm response from many potential collaborative partners across London such as; The Conservation Volunteers, Holland Park Ecology Centre, Meanwhile Gardens, Tower Hamlets Cemetery Park, Barbican Wildlife Garden, and many more.

I have no doubt this project will be a success and I look forward to sharing the journey of the project with you! Many thanks to the Heritage Lottery Fund, without whom this would not be possible. Please do contact me with ideas at MWebber@butterfly-conservation.org.

View from Afar....., by Brian Cassie

Hello to the Hertfordshire and Middlesex Branch of Butterfly Conservation from a great admirer of your dedication to butterflies and their habitats. I have been reading your Autumn 2018 Newsletter and I am delighted with the variety of projects and field trips that are reported and, of course, with the wonderful enthusiasm you all seem to have for Lepidoptera. It's quite marvellous. Never in a century would any of my field buddies spend a moment searching for hairstreak eggs and you devote entire trips to things like this.

My home is in Foxboro, Massachusetts, U.S.A. and I have a small corner lot very close to the center of town which has attracted sixty-nine species of butterflies (at least) in the thirty-one years I have lived here. That must seem unfair to you but we do have about 115 species of butterflies on the Massachusetts list...so you see I have a fair number yet to encounter. Milkweeds, butterfly bushes, zinnias, Liatrus have all pulled in interesting butterflies over the years.

I was in England in the summer of 2017 and did several Big Butterfly Counts, my very favourite being a count on Gilbert White's property in Selborne on July 25. I also loved counting butterflies at RSPB Minsmere Reserve. I would very much like to come on one of your chapter's field trips sometime soon.

I wish you all a great season of sunny days in the field and spectacular sightings.

Despite living so far afield, Brian is a Life Benefactor of Butterfly Conservation. Thank you for reaching out to us and of course we would welcome you at any of our meetings should you be visiting the UK - editor.

Brown Hairstreak Egg Hunts, by Andrew Middleton

After the exciting discovery of a Brown Hairstreak colony well into Middlesex at Ickenham Meadows / Stafford Road Open Space in the summer 2018, this was followed up by a successful Branch egg-hunt in December., with a day-total of 14 eggs across maybe a third of the site.

Stephen Reisbach had been working through sites to the south of

Heathrow, and had found eggs at Hanworth Park (4), Upper Haliford (1), and Raleigh Park Open Space (3). Stephen considers Hanworth Park may have a colony as eggs have been found in two winters.

The Yeading Brook connects the Ickenham area with these sites a few miles further south, which link to Surrey colonies. So far only one egg has been found on reasonable amounts of blackthorn, by Paul Busby at Brookside Playing Fields, Hayes.

I have never yet found an egg on abundant blackthorn in Enfield or around Epping Forest over the last 20 years, however on a cold New Year's Day I set off for Fryent Country Park, 10km east of Ickenham. I spent maybe four hours searching, and was amazed to find one egg on low suckering blackthorn, and one chest height on mature blackthorn. Somewhat surprisingly, Liz Goodyear and I were unable to add to that total on 2 or 3 more visits involving many hours searching. Leslie Williams is involved with managing this site and has been most interested and helpful.

So, our next target had to be Horsenden Hill between Ickenham and Fryent, which had large blackthorn hedges around several fields. Liz located 2 eggs on low suckering growth, then on a second visit I spotted one at head height on old growth. Not an overwhelming presence, but one doesn't know how many eggs a 10m thick hedge may hold.

So back to Ickenham to get more info on how strong this colony may be. We paid 2 or 3 visits and in total 50+ eggs have now been found on this 120ha area which spans 1km.

The oddest thing is that similar looking sites just to the south of Western Avenue yielded no eggs. This was hindered somewhat by snow and eggs being of the same colour, and by feet being frozen solid. The only speculative difference I can identify is that the clay may be poorer here as the geology moves to the heathier soils towards Hounslow and Heathrow.

As to where Brown Hairstreak eggs are laid, I know from experience how many eggs are found on low suckering growth, but sometimes this six-footer gets fed up with bending over, and looks at higher blackthorn twigs. Well, most of the Ickenham eggs were from waist to over head height, and on old growth. As Liz says, not reading the books, these females. Then maybe at this site the suckering blackthorn

is topped prior to egg-laying, with few eggs low down, and few eggs lost.

Along with other members, we logged several visits to potential sites where blanks were drawn, all adding to the background info. It's great that Branch members got out looking this winter, with several sites now south of Heathrow, a good population at Ickenham, plus some satellite finds onto the London clay at Horsenden Hill and Fryent CP, and all worth searching for adults this summer.

Update on Small Blue Project, Greenwood Park, by Malcolm Hull

In December we learnt that our application for Heritage Lottery Funds had been successful. Plans are now being made to create sustainable habitat for the Small Blue in St Julian's Meadow, Greenwood Park in Chiswell Green, near St Albans. 60 tons of chalk have been ordered and our contractor is getting ready to start construction early in May. Phil Sterling from BC head office in Lulworth has provided advice on the best means of construction. He has also donated Kidney Vetch and Horseshoe Vetch seed, harvested from the successful Weymouth relief road project in Dorset.

Branch members and children from the local Killigrew Primary School have volunteered to plant and seed the new chalk bank. Another Branch member, Emily Bagnall, has designed two great new display boards which will be erected nearby with the permission of the site owners, St Stephens Parish Council, who have been supportive throughout.

There will be a public launch of the new bank, as part of the Sustainable St Albans on Sunday 26th May – see Events Programme for details. There will be a short indoor talk explaining the project, followed by a walk round the meadow to see the new chalk bank and late Spring butterflies. Many thanks to all who have been involved in getting this project to happen.

Thoughts on 2018, by Peter Clarke

It was a most interesting year for butterflies in 2018 with the extremes of our weather obviously being a major contributory factor. This article refers to some observations I made in the Stevenage area during the year.

At the start of 2018 I was hoping to find some fresh Red Admirals locally but as indicated in my article in the previous newsletter they were nowhere to be seen. The cold weather in the early Spring probably killed them off if any adults did emerge or awaken before then. The very cold conditions in Europe during this period undoubtedly reduced immigration to the UK accounting for the relatively low numbers in the Summer.

According to my three local transects, all the adult hibernators fared poorly, as indicated in the following table which lists the percentage declines in abundance compared to 2017:

1. Painted Lady -87%
2. Comma -86%
3. Essex Skipper -74%
4. Brimstone -71%
5. Small Tortoiseshell -68%
6. Red Admiral -67%
7. Peacock -58%

Very few adult hibernators were seen in April, the first month of the transect season as most of them, I suspect, died due to the cold weather in late February and March. Although the fine weather in the Summer might have produced a recovery of some sort it is likely that some larval food-plants (e.g. nettles) were in an unhealthy state due to the drought. Many larvae probably perished through lack of high quality nutrients in the food-plant.

The drought appears to have speeded up larval development of some species. In the case of the Meadow Brown, a large number of males were smaller than normal. Females, on the other hand, were not affected in the same way because they are known to emerge later and over a much longer period. There were reports of second brood

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Common Blues being unusually small but I did not notice the difference locally. The warm weather continued into the Autumn facilitating new generations of Common Blue and Small Copper. I saw a third generation Common Blue on 21 October near Aston and some fourth generation Small Coppers in Knebworth Park including a specimen as late as 17 November (easily my latest ever record).

The Small Copper had a very successful season in the Stevenage area and I encountered many specimens of the ab. *caeruleopunctata* – those with the blue/silver ‘badges’ inside the orange band on the hindwings. Of photographs I took of over 50 individuals in 2018, about half were of this aberration. Another very successful species in the area was the Brown Argus of which several were often seen at a site compared to just the odd one or two in the past.

What will 2019 bring us? Will some species suffer from the drought in 2018, particularly those single-brooded species which emerged in the first half of the year?

Where have all the Small Tortoiseshells Gone? by Malcolm Hull

Results from the Big Butterfly Count have highlighted a decline in the numbers of Small Tortoiseshell butterflies. This year around 100,000 records were collected from across the UK during the period 20th July – 12th August. These showed that Small Tortoiseshell had fallen by 32% since 2017 and is now only the tenth most observed species, down from 4th in 2014. The decline is most acute in England and the reasons for the slump are not clear. No such concerns were expressed about the Peacock, which was the fourth most commonly spotted butterfly.

What Might Cause This Decline?

Concerns about declines in Small Tortoiseshell numbers are nothing new. In Herts & Middx, its numbers fell dramatically in the late 1990’s, remained low for a decade and only showed any sustained recovery after 2012. The species is quite susceptible to parasites and particular concern has been expressed about *Sturmia bella*, a non-native species whose arrival in the UK appears to have coincided with the Small Tortoiseshells decline.

I am lucky enough to have Small Tortoiseshells and Peacocks regularly

in a shed which forms part of my house. This state of dormancy is usually referred to as hibernation. My casual observations were that a good many Small Tortoiseshells go into hibernation before the Big Butterfly Count has started and that nowadays most of both species are hibernating before the Count is finished. However most butterfly text books tell a different story “in Autumn, (Small Tortoiseshells) begin to search for hibernation sites, as early as mid-August.” (Emmet & Heath). Butterfly behaviour can often change over time, but this view is still widely held – both Small Tortoiseshells and Peacocks “come in during late summer/early autumn” according to the December 2018 issue of the All Aflutter E-Newsletter from Butterfly Conservation.

The Shed

To test this theory, I set up a transect within a part of my house, known as the shed or cellar. The house is located in suburban St Albans. It’s an early 20th century brick built structure, constructed to restrict heat gain. The shed is on the ground floor, unheated and with approximate dimensions of 3 meters by 1.5 meters. It is used purely for storage, is unheated and has no electric light. It also has little natural light and two small “arrow slit” type windows which contain no glass. The walls are substantial and it is protected from solar gain by a first floor attic area. It seems highly attractive to hibernating Small Tortoiseshells and slightly less so to Peacocks. No other butterfly species have been recorded in the shed.



St Albans House with “Shed” on left”



Close-up of “Arrow slit” windows

Overall Results

Year	Small Tortoiseshells	Peacocks	Total
2018/9	13	3	16
2017/8	23	0	23
2016/7	35	1	36
2015/6	17	2	19
2014/5	14	6	20
2013/4	28	1	29
Average	22	2	24

Table 1: The maximum numbers of butterflies recorded hibernating in the shed in recent years

Regular transects have been running only since July 2016. But casual observations go further back. For example my earliest complete record, for the winter of 1995/6 shows 6 Small Tortoiseshells and 1 Peacock. Although I don't have records from each individual year, the overall totals of hibernators in the last six years have been well above the average for the previous two decades.

Hibernation Period - Entrance and Emergence Times

My records from 1995 showed that the sole Peacock left hibernation on 19th March and its successor went into hibernation between 3rd and 17th September. For many years I imagined that hibernation took place at the start and the end of the butterfly season. Historically that may have been correct, but regular transects over the last 30 months have produced some interesting results.

- Small Tortoiseshells can start to emerge in February, depending on weather conditions. Their emergence is staggered, but mostly complete by the third week of April.

In the early warm Spring of 2017, Small Tortoiseshells began emerging in early February and had largely all flown by the first week of April, a period of 8 weeks. In 2018, Spring got off to a cold start with two snowfalls in a very cold March. This was followed by a very warm April with the hottest ever UK April temperature recorded on 20th April. Small Tortoiseshells didn't begin to emerge until 30th March and had all flown by 20th April, a period of just 3 weeks.

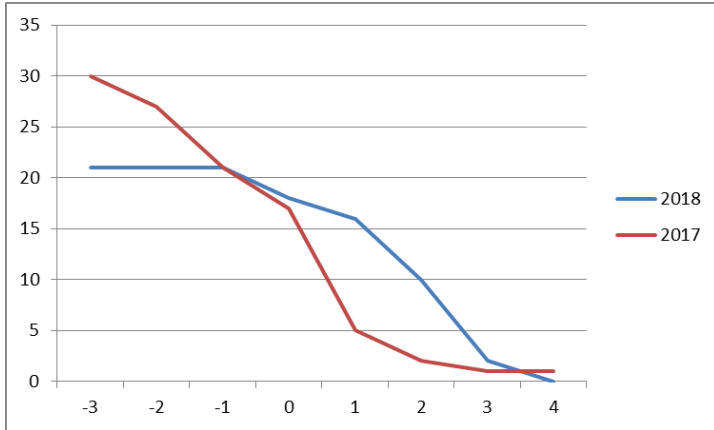


Fig 1: Small Tortoiseshell emergence by Transect Week

- The next generation of Small Tortoiseshells can start going into hibernation as soon as late June. Going into hibernation can be staggered over a considerable period, sometimes lasting until October.
- Hibernation dates are highly variable. In 2017 all the Small Tortoiseshells were hibernating by 7th July. In 2018 hibernation was complete by 5th August. But in 2016 the last five did not enter hibernation until mid October.

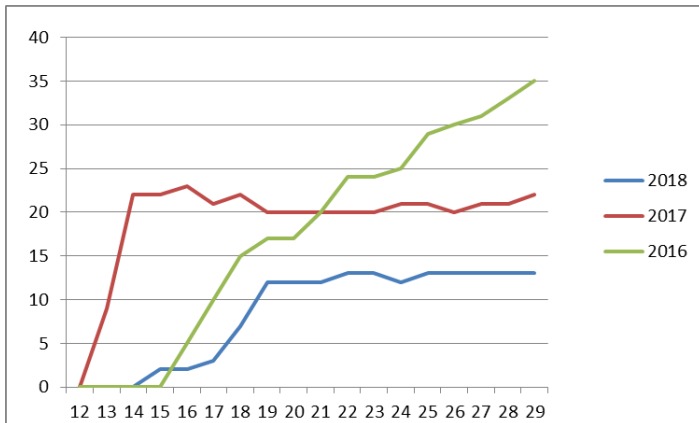


Fig 2: Small Tortoiseshell hibernation, by Transect Week

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Data on Peacock behaviour is less plentiful. Lower numbers attempt hibernation in the shed, they seek darker recesses than many of the Small Tortoiseshells and appear to be less successful at surviving. Tentative conclusions are

- Peacocks are more predictable in timing their hibernations, mostly entering during the last week of July or the first week of August.
- Peacock Emergence dates also appear more consistent, most recorded being from mid March until mid April.

Comparison to Other Locations

I am not aware of any other regular hibernation records, so I have compared my findings with data of butterflies seen on the wing. Data from the local branch of Butterfly Conservation is published in an Annual Report, covering Hertfordshire as well as North, West and Central London.

The 2017 data (black bars) shows very few Small Tortoiseshells were seen on the wing after the first week of July. This would imply that most were in hibernation by that time. This ties in with my observations and suggests that early hibernation was the dominant trend across all or the majority of the two counties.

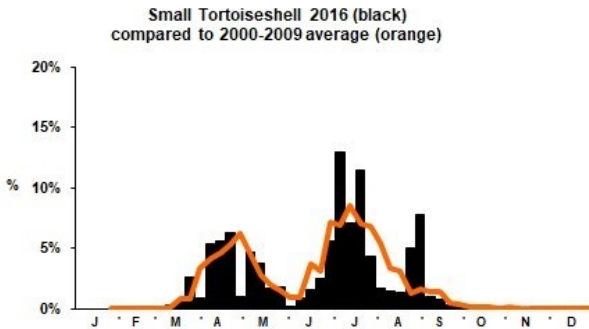
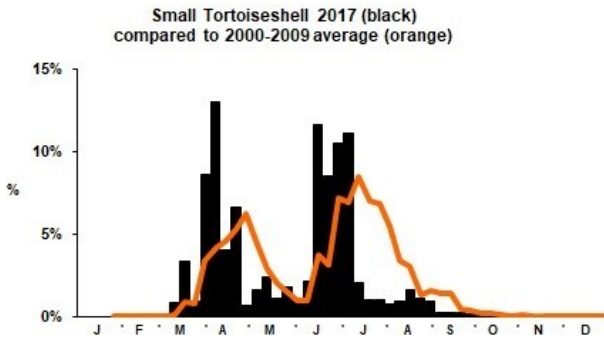
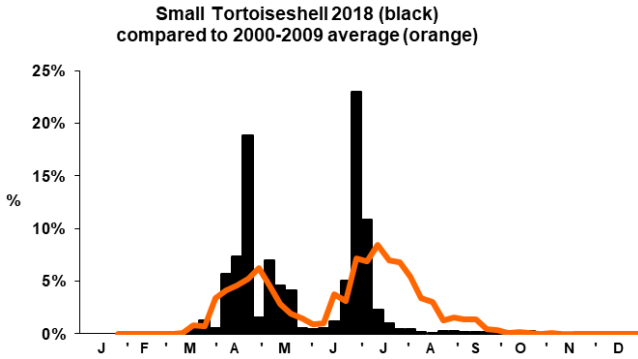
In contrast, the average count from 2000-2009 (Orange line) shows that during that period the butterfly flew in much in greater numbers in July and well into August. Although there are signs of a possible second generation in August during this decade, its numbers are low. An alternative explanation for this small peak is that it is caused by Small Tortoiseshells emerging briefly from hibernation for a late summer feed (behaviour which I have observed).

The corresponding report from 2016 presents a somewhat different picture. First generation individuals were on the wing in numbers until late July. There was a distinct second brood in the second half of August.

Again there is correlation with my data, with an initial burst of Small Tortoiseshells entering hibernation in mid/late July and a significant number added in late August and September.

I suspect the same is happening in Dorset and quite possibly much of southern England. The Big Butterfly Count results from 2018

particularly cite a decline in Small Tortoiseshells in England during the Count period.



Sources: Hertfordshire & Middlesex Butterflies 2016, 2017 and 2018
by Andrew Wood

Conclusions

Small Tortoiseshells are now routinely going into hibernation much earlier than generally acknowledged. In 2017 most local Small Tortoiseshells in my area of St Albans were hibernating well before the Big Butterfly Count had begun. In 2018, entry into hibernation was largely complete by the end of the first week of the Count. Had it not been for an exceptionally cold March, the Small Tortoiseshells flight period would probably have finished earlier. There has not been a second generation of Small Tortoiseshells of any size in the St Albans area in either 2017 or 2018..

The records of just two years can hardly be said to constitute a trend. The prospect for a future increase in Small Tortoiseshells on the Count will depend on the species producing a second generation, which it did as recently as 2016. Total numbers of Small Tortoiseshells hibernating in my shed over the last six years are encouraging, suggesting that the species may be prospering by adjusting its flight season.

Whether it is hibernating earlier as a way of avoiding parasites, or as a response to climate change, or as a result of an influx of migrants is not really known. Some sources suggest that the parasite is most active during July. It attacks the Small Tortoiseshells when the caterpillars are at a juvenile stage, so it is possible that the first brood caterpillars which are active in late April and May are relatively safe, whereas second brood caterpillars active in the summer are more vulnerable. Restricting themselves to a single brood and going into hibernation at an early stage during the Summer, could be the Small Tortoiseshells response.

One shed on its can give an indication but certainly not the complete picture. It would be really useful if other volunteers are willing to keep records based on the UK Butterfly Monitoring Scheme transect methodology. The average transect walk takes just 5 minutes. If anyone reading this article is willing to help, please do get in touch.

This is a summary of the full article which is available on the Herts & Middx Butterfly Conservation website (<http://hertsmiddx-butterflies.org.uk/SmallTortoiseshells.pdf>).

Butterflies Abroad, by Dee Cullen

Last summer I visited Lesvos in Greece in mid July, and the Kandersteg in the Bernese Oberland in Switzerland in late July.

Greece:

Lesvos is the third largest island in Greece, situated very close to the Turkish mainland. It is popular with birdwatchers, charter flights in the Spring are full of them apparently. I did see some flamingos from the bus going to the airport but not many birds except, for lots of nesting swallows at the hotel. It is a green and beautiful island, the landscape dominated by olive groves and is unspoilt and quieter than some more popular Greek islands.

The main purpose of my visit was a yoga retreat. We had yoga in the early morning and early evening, leaving plenty of time to explore, swim and laze about during the day. I was staying just a ten minute walk from the beautifully preserved small town of Molyvos, a UNESCO world heritage site perched on a hill, topped with a fortified castle. The castle was built in Byzantine times and added to over the years .

I knew from previous visits that Swallowtails like to congregate around the castle, so that's where I headed most days. The cobbled streets wind their way to the top. Each time I took a different route, enjoying seeing new and hidden areas. The views as I got higher were spectacular. Many rests were needed as it was very hot!

I saw many species of butterfly. The Southern Comma, Brown Argus, Small and Large Whites, tiny blues that I never identified, what I suspect was a Large Tortoiseshell, but I didn't get a photo, Red Admirals, Turkish Meadow Browns. There was a Skipper that I saw regularly which was defying my attempts to photograph. From a poor photo I got help from a really good site called eurobutterflies and its helpful and patient author Matt Rowlings, It was a Mallow Skipper.

Another useful reference was from Lesvos Birding a website that had posted a useful list of all the butterflies species found on Lesvos.

The showiest were the Swallowtail and Scarce Swallowtail. They liked to fly around the castle ramparts, at times they would circle around me too! Looking at them you can see where aeroplane designers might have got their inspiration.

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One afternoon I returned to the hotel to find that a Scarce Swallowtail had flown into the hotel lobby through an open window. It didn't seem to be able to fly properly. It was quite an experience to get so close to it. I put it in the garden on some flowers in the hope it would get nectar and fly off. It was gone when I came back from a swim and I hope it did.



Up close with a Scarce Swallowtail

Another tiny butterfly that I found just outside the hotel door was a Geranium Bronze. Apparently they occasionally find their way to the UK on imported geranium. I looked for eggs and caterpillars but didn't find any. I saw interesting beetles, lizards and freshwater turtles too.



Geranium Bronze

Switzerland:

A week later I was in the Swiss Alps, We were returning to a village in a valley called Kandersteg in the Bernese Oberland. I was with my husband and son and we walked every day. The village had an outdoor public pool which was fabulous so that was a refreshing end of day treat. It was like here, very hot with thunderstorms. The place hasn't changed in the twenty years I've been visiting. It is very clean unspoilt, and sparsely populated. The traditional methods of farming continue, cows and goats up on high pastures with clanging bells around their necks. The old wooden buildings are plentiful. Everywhere you look there is a beautiful view, and a butterfly! A visit to the Swiss alps obviously has other attractions too, the wildflowers and alpine meadows are full of exquisite plants some of which are rare. This is no doubt linked to the rich variety of butterflies as they have perfect habitats.

I saw a bewildering number of fritillaries and blues in the main. My strategy for identification was to take as many photographs as I could and then pore over my Collins guide, the Eurobutterflies site and Matt was helpful again in a couple of cases



Just a few of the Blues

The list of butterflies I saw is long, and I can't always be sure that the ones I saw are the same as those we see at home. So on the face of it I saw plenty of Chalkhill Blues and Silver Studded Blues but on closer inspection they aren't all what they seem. Some were Damon Blues and Eros Blues.

The same goes for fritillaries, for example, I thought I'd worked out what a certain fritillary was, I was sure it was a high brown, to be told no it's a Niobe!

I also saw, Titania's, Pearl Bordered, Silver Washed, Dark Green and probably others.

I also saw some Large Walls in some cases they were very worn, and a few Heaths. Many spotted burnet moths and silver Y moths too. For the first time I also saw -a very worn -Apollo. It has a noisy fluttery manner of flying, and is moth-like in behaviour.

As we left, I was still taking photos of butterflies as there were Chalkhills on the train platform!

Distinguishing Between the 'Whites' by Ian Small

One of the most challenging things for butterfly enthusiasts, whether they are new to the interest or have been watching butterflies for many years, is to be able to reliably distinguish between the different forms of 'white' butterfly, particularly in Spring, when 5 separate species can all be flying. It is important to accept that identification may not always be possible, especially if you only see the insects in flight and are unable to approach them closely. However, there are some useful pointers which I will try to share in this brief article.

The most-difficult to distinguish are the Green-veined White and the female Orange Tip (which lacks the bright orange of the easily-

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identified male). Both are of a very similar size, both have a dusting of black scales on the tips of the forewing upperside, both have forewing spots and the hindwing undersides appear mottled green. They inhabit the same habitats and even share some larval foodplants. On close inspection, the prominent veins of the Green-veined white are very distinct from the wonderful mottled underside of the Orange Tip, but one has to get fairly close (or use binoculars) to confidently make this distinction. I have tried distinguishing them in flight, as the Green-veined white can sometimes be ‘flappier’ and less purposeful, but this is not a reliable difference.



Female Orange Tip



Green-veined White

Both the Small- and Large-Whites lack any patterning on the hindwing undersides. However, size alone is not a reliable means of distinguishing them - despite their names! Although, on average, Large Whites are of course larger than Small Whites, you can get unusually small Large Whites and unusually large Small Whites! The most obvious distinction is that Large Whites have prominent black wingtips, with the black markings extending down the edges of the wings - these are often visible in flight, simplifying identification. In



Small White



Large White

contrast, the wingtips of the Small White have only a compact dusting of black scales, confined to the wingtips.

The final potential ‘confuser’ is the female of the Brimstone. Unlike the bright yellow male, the female is much paler, particularly the overwintered females in Spring. They are a similar size to Large Whites, but lack any black markings, thus even if you only seem them in flight, this should allow you to make a positive identification. At rest, their distinctive wing-shape distinguishes them from all the other ‘whites’.



Female Brimstone

Branch website: <http://www.hertsmiddx-butterflies.org.uk/>
Facebook: <http://www.facebook.com/ButterflyConservationHertsMiddlesex>
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NB it helps the editor if you can submit an electronic copy of your article (but don't worry if you can't).
Files can be sent by e-mail to ian-small@virginmedia.com
or send an article by post - address on back cover

I look forward to hearing of all your exciting butterfly or moth observations and anecdotes from what we all hope will be an excellent year for all our Lepidoptera and other wildlife.

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