Kent & South East London

The Adonis

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Butterfly Conservation

Saving butterflies, moths and our environment

Committee Members

Chair - Roland Brown
Vice Chair, Website & I.T - Ben Kirby
Branch Secretary - Deborah Ault
Treasurer - Bill Eldridge
Membership Secretary - Jackie Kirby
Conservation Officer - Simon Ginnaw
County Butterfly Recorder - John Bangay
Micro Moth Recorder - David Shenton
Macro Moth Recorder - Ian Hunter
Committee Member - Trevor Manship
Branch Newsletter Editor - Olivia Currie
WCBS Champion - Vacant
UKBMS Transect Officer - Dean Ashby
Social Media - William Malpas
President - Dick Vane-Wright

Notes

Members Day 2025: Save the Date!

We will hold a Butterfly Conservation Kent & SE London Branch Members Day 2025 on **Saturday March 8th** at **Lenham Community Centre**. Further details to follow in due course, but we'd love for as many members as possible to join us as we look forward to the coming spring.

Newsletter

In an attempt to reduce printing in the future, *Adonis* newsletters will be sent by email if one has been provided. If you still wish to receive a hardcopy, contact membership@butterfly-conservation.org to opt in.

Cover photo: White-spotted Sable, Steven Lofting

Chair's Welcome

Welcome to this edition of *The Adonis*! I am privileged to have become the new chair of the Kent and SE London Branch of Butterfly Conservation, and I'm joined by a clutch of similarly new faces on the branch committee: as you see from the facing list of members we welcome Treasurer Bill Eldridge, Newsletter Editor Olivia Currie, Social Media Editor William Malpas, and Secretary Deborah Ault. We are delighted to see *The Adonis* emerge from its recent hibernation, and look forward to working together with you all for the benefit of butterflies, moths and their habitats in Kent and SE London.

This edition arrives as we look back on a far-from-vintage year in which butterflies and moths have been in the headlines for all the wrong reasons. From the turn of the year, reports from late winter and early spring moth traps were of low counts. That inauspicious start was then followed by the generally awful weather we experienced through the key spring and early summer period. A dearth of insects, of all kinds, became a topic of much public discussion and, although the weather improved somewhat in late summer, it sadly wasn't a great surprise when the Big Butterfly Count reported the lowest numbers in the 14 year history of the scheme. Butterfly Conservation subsequently declared a Butterfly Emergency – if you have not already done so, we are all invited to add our signatures to the open letter to the Secretary of State for Environment, Food and Rural Affairs calling on them to take action. This *annus horribilis* has certainly reminded me to cherish all species – should I ever feel tempted to take Meadow Browns or Large Yellow Underwings for granted, a short reflection on the recent fortunes of the Small Tortoiseshell (see *Butterfly Commentaries*, within) restores a more appreciative perspective.

Whilst we may feel powerless in the face of 'big' factors driving decline (habitat loss and fragmentation, climate change and the impact of pesticides), the other side of that coin is that, where we do have agency to make a difference through our actions, it has never been as important to do so. And there is much we can do – I hope you find some helpful pointers in those directions within this edition of *The Adonis.* We look back at some of the ways in which communities and volunteer groups have made an impact through our flagship projects *Kent's*

Magnificent Moths and *Big City Butterflies*. We look forward to some nascent conservation work, for example focused on brown and white letter hairstreaks. There is an article about wild space creation in our gardens, an introduction to how one might get involved with transect walking, and much more besides. One thing that you, sadly, won't find, is a calendar of winter conservation tasks: instead, please keep an eye on our website and social media channels for information of such activities when we know them.

Should there be things you'd like to see in future editions, we would be delighted to hear your comments and suggestions.

Roland Brown
Branch Chair

Jim Flegg, OBE, 1937–2024

We were very sad to learn of the death of Dr Jim Flegg, OBE, past President of Butterfly Conservation Kent & S E London Branch.

James J.M. Flegg, a graduate of Imperial College London, worked for many years at East Malling Research Station – his OBE was awarded in 1997 for services to horticulture. Notably, he was a prolific author of many papers on nematodes. However, he was perhaps even better known as a leading ornithologist, broadcaster (a presenter for *Coastal Ways* and *Country Ways* TV), and an author of many papers and books on birds, plants and natural history. Involved in the early days of Dungeness Bird Observatory (of which he eventually became Chairman of Trustees), he became president of Kent Ornithological Society in 1977. Among other appointments, after a period as Director of Kent Wildlife Trust, he held the major position of Director of the British Trust for Ornithology (1995–1998). It is a little sobering to note the opening statement of a short paper that he published in 1970, concerning the work of the BTO:

> One of the prime objects of European Conservation Year is to bring home to Man the importance of maintaining a balanced and diverse environment—a Continent fit to live in. This is essentially a pragmatic age, and one in which technological advance often outstrips ecological understanding: environment, pollution, conservation are words now common, but until very recently were unheard outside natural history circles.

Jim, who was widely appreciated for his kindness and helpful nature, was born in Hong Kong on 23rd April 1937. He died, at his home near Maidstone, on 7th May 2024.

Richard I. Vane-Wright
President

Kent & SE London Website

As many of you would have noticed, our website had seen better days. It was beginning to look a bit out of date and needed some care and attention.

At the first committee meeting under our new Chairman, a working group was set up to look at the website and our social media, with the intention of making them relevant and interesting to our members. We also needed to coordinate with the Adonis team.

We started by removing content from the website which was no longer relevant and adding new items, such as a welcome note from the Chair, revising the committee details and highlighting upcoming events. We are always happy to hear from members about relevant events which could be added to the site. We have also produced a feature article, ‘A beginner’s guide to moth trapping’, which we hope will be the first in a series of introductory guides. If there are any topics you would like to see covered please let us know; contact: bill.eldridge@butterfly-conservation.goassemble.com

Social media is a much quicker moving resource than the website and we got off to a flying start with posts about Large Tortoiseshell sightings. These generated great interactions and interest from the BBC in mainstream media, leading to a film crew descending on a wood near Tonbridge.

We also liaised closely with BC Central to make sure we were up to date on any policy positions or research activity regarding the Large Tortoiseshell.

Bill Eldridge
Treasurer

Big City Butterflies Update

We are now in the final year of the Big City Butterflies project, and are working to ensure its long term legacy. Where we have directly supported habitat improvements, 10-year management agreements are established with land managers to help ensure their long-term success. Support networks will be established to ensure continued volunteer recording once the project finishes.

The development of an inner London Landscape Plan recognises the value of working in urban habitats for species conservation and for engaging with a wide audience including individuals, community groups and land managers. The plan sets out landscape-scale actions for priority species and opportunities for stakeholder engagement. It will also be used to help inform borough and pan-London biodiversity and nature recovery plans.

Habitat improvements have been supported on 30 sites over the last year including four Kent and SE London sites in Greenwich/Lewisham. A comprehensive community planting scheme at Blythe Hill Fields in Lewisham has established a new woodland zone and enhanced grassland with native shrub planting. This has provided shelter and additional food sources,

including larval foodplants Buckthorn and disease-resistant Elm. Chair of the Blythe Hill Fields Friends group, Mike Williams, commented:

> "Overall the project feels like a great success, and it's brilliant that Butterfly Conservation has made all this possible with your generous support – not just the hugely valuable donations of trees, whips and plugs, but also the expert consultancy and advice and community engagement."

New woodland zone at Blythe Hill Fields, Steve Bolton

Similar tree and shrub planting was also completed at Beckenham Place Park to enhance woodland and grassland habitats. We have worked closely with community groups in Greenwich to enhance existing long grass areas with seeding, which has been a great success at Avery Hill Park. A large area with fine grasses, but very little wildflower interest, was scarified and seeded in autumn 2022. Only the existing Yarrow appeared in 2023 but by 2024 we now have abundant Yellow Rattle, Birds-foot Trefoil, Ox-eye Daisy and Red Clover. A new transect there recorded 19 species and 1144 butterflies in 2023 including nearly 600 Meadow Browns and over 200 Small/Essex Skippers.

Avery Hill transformation from 2023 (left) to 2024 (right), Steve Bolton

We have been reviewing and collating new butterfly data, with 12 new iRecord surveys established last year. We can report that 653 butterflies of 20 species

were recorded over 48 surveys. Meadow Brown, Small White, Gatekeeper and Holly Blue were the most numerous with a few records for Small Skipper and Small Copper. These data will be used in species distribution analysis and help to plan conservation work, with ongoing surveys allowing trends to be calculated. Eleven new transects were established, recording 27 species across inner London, with the highlight being 2500 butterflies of 26 species recorded at Shrewsbury Park in Greenwich, including Green, Brown & Purple Hairstreaks – one of the highest total counts in London.

Brown Hairstreak at Shrewsbury Park, John Denton

Steve Bolton
Conservation Officer

Kent's Magnificent Moths

The End of the Project Celebration Event by the Westgate Towers Wall Art Mural unveiling in Canterbury Highstreet, Jim Higham

Kent's Magnificent Moths was a project led by Butterfly Conservation, which engaged with organisations and volunteer groups across East Kent from April 2021–March 2024.

When this project was being developed back in 2019, East Kent was chosen as our region, as they had the greatest concentration of threatened moth species that Butterfly Conservation was working on within the UK, with eight selected as priority species.

Hundreds of people received training on how to identify these eight rare moth species. This increased awareness of the moths, and coincided with four of the species naturally being able to increase their range to colonise multiple new habitat sites. Their populations are doing better and the moths are less

endangered than they were. The other four priority moth species remain threatened, but active work to protect their habitat is continuing beyond the end of the project, with additional foodplants added to increase their habitat and help secure their future as breeding species in Kent.

Below is a table of the eight priority species, and what was discovered or done to help them during the project.

KMM Priority Species	Species Photo	Conservation Success #1	Conservation Success #2
Bright Wave	 Rebecca Levey	Bright Wave Moths were discovered breeding in chalk grassland which is a new habitat for them in the UK which increases their Kent population's size by an amazing 850%.	Butterfly Conservation and Natural England volunteers spent 255 hours of their time managing Stodmarsh NNR specifically to restore habitat areas for the Bright Wave Moth that were being invaded by scrub.
Sussex Emerald	 Rebecca Levey	Sussex Emerald caterpillars were discovered inland in Kent, away from their typical coastal	Sussex Emerald caterpillars were also found in East Sussex, confirming the species is

		vegetated shingle habitat for the first time	breeding in Sussex for the first time
Fisher's Estuarine Moth	 Mark Joy	Areas of habitat for the Fisher's Estuarine Moth have increased in size by the planting of 388 rare Hog's Fennel Plants that were grown by volunteers and project partners.	A new breeding site was discovered for the Fisher's Estuarine Moth which helps to join up their populations with a new corridor of habitat along the North Kent coast.
Marsh Mallow Moth	 Rebecca Levey	Eight sites in the Romney Marsh landscape received over 100 Marshmallow plants to encourage Marsh Mallow Moths to disperse and form populations in new habitat areas	A new farmland breeding site was discovered for the Marsh Mallow Moth in Kent during torchlight surveys along 1km of ditch banks which are being sensitively managed for wildlife.

Straw Belle	 Alfie Gay	Winter work at a key site in the Folkestone Downs was funded in partnership with Natural England to restore Straw Belle habitat by bringing cattle grazing back to chalk grassland.	71 volunteers were trained in how to identify and survey the Straw Belle and other moth species in their chalk grassland habitat and they have been discovered at a new site in 2024.
Black-veined Moth	 Mark Joy	In 2023 the highest number of Black-veined Moths were recorded since conservation work began decades ago, with two new breeding metapopulations discovered.	Volunteers successfully found a dozen Black-veined Moth caterpillars during surveys in recently restored chalk grassland, which confirms their breeding habitat requirements are becoming less specialised.
Fiery Clearwing	 Mark Joy	Training more than 75 volunteers in Fiery Clearwing egg surveying has led to the	As more people are now actively looking for and recording Fiery Clearwings, the number of

		discovery that Fiery Clearwings are increasing in distribution and breeding away from their coastal habitats.	known Fiery Clearwing breeding sites has increased by 185%.
White-spotted Sable	 Mark Joy	White-spotted Sable identification walks have led to an 197% increase in submitted sightings, with caterpillar searches continuing into the autumn and confirming a new breeding area in the Blean Woods landscape.	Goldenrod foodplants were grown by volunteers and partner organisations and planted across woodland sites in the Blean landscape to encourage the White-spotted Sable Moth to spread in distribution through the landscape.

Rebecca Levey
KMM Conservation Officer

Elm Trees and Kent's Plan Tree: Is Help at Hand for the White Letter Hairstreak?

A Gloomy Introduction

The last 50 years have not been kind to the White Letter Hairstreak (WLH). The data paint a frankly catastrophic picture of decline for this pretty little butterfly (87% 1976–2016 nationally, 95% 1990–2016 in the southeast region – select your period and region as you will, it's all bad). Nor need we look far for the underlying cause: Dutch Elm Disease (DED).

It's bad enough that elm is the species' sole foodplant. It's worse still that, with larvae emerging before leaf burst in March, to feed on flowers and seeds, they are reliant on trees of flowering age. Yet such flowering trees are exactly what DED hits hardest. Whilst it's true that elm remains locally common across Kent, as small suckers and in hedges, trees typically start to succumb to the disease whilst teenagers, around 5m high, when their bark starts to become attractive to the bark beetle *Scolytus*. The beetle in turn acts as a vector for the pathogenic fungi *Ophiostoma ulmi* and *Ophiostoma novo-ulmi,* with decline and death usually following quite soon. Indeed the familiar skeletons of dead and dying elms, looming above otherwise healthy-looking hedges, is a depressingly helpful field sign that often nowadays draws our attention to the presence of elm at a distance when other features remain invisible. Just a few short years may pass between the attaining of flowering age and death. The WLH butterfly thus relies on the few older, larger trees that somehow remain in the landscape, or on adolescent trees cycling

Elm skeletons above a hedge, Roland Brown

through their growth-flowering-death cycle at a rate that manages to perpetuate the presence of flowering age trees.

A large elm near Canterbury and its near neighbour: The shape of things to come? Roland Brown

Hope for the Future?

Whilst the impact of DED certainly makes for a gloomy backdrop, there are nevertheless reasons for optimism – things may not be quite as black as they might seem, and realistic conservation possibilities now exist.

One such reason to be cheerful is that both the White Letter Hairstreak and Larger Elms are undoubtedly under-recorded. I am too young properly to remember elm as the majestically distinctive, landscape-shaping tree it apparently once was. John Constable, for one, had a penchant for elm and included some fine specimens in many of his more famous works; for example, *The Haywain*. Reflecting on our elms today, I wonder if this grandiose, Constable-esque image has lodged itself in the public imagination in a misleading way. Perhaps I'm lucky in my (Canterbury) location, but, reflecting on the elm-spotting habit I have now developed (safety note: scanning roadside trees from a car is bad for the neck!), whilst I search in vain for glorious Constable-sized trees, I nevertheless stumble across a

John Constable: The Haywain, National Gallery

surprising and encouraging number of medium-sized elms. They typically present as understated, undistinctive trees, often overshadowed by larger neighbours – trees one might easily walk past. And I think people have done just that. Flowering elms may have been enormously reduced, but they are not nearly as rare as one might think.


White Letter Hairstreak, Tim Melling

The White Letter Hairstreak, too, might easily be walked past. Although they might descend to nectar, especially on bramble, they spend much of their time flying erratically about the treetops in July. Unless particularly well-attuned to their appearance and behaviour (something I can't yet claim), or at least alert to the exciting WLH possibility (something I can now claim, as now I hope we all should), we might well not register the significance of a fleeting observation. That sounds like a recipe for general under-recording, and the sparse recent Kent records from recent years tentatively suggest as much, featuring a suspicious proportion of nature reserve sightings, in Pegwell Bay and Wye Downs. Whilst a bias towards nature reserves might seem to make perfect sense, if demanding habitat requirements exist, it might equally arise when records rely on particularly Lepidoptera-literate recorders, who gravitate towards nature reserves. When we consider that the White Letter Hairstreak in fact has remarkably few habitat requirements, beyond the presence of elm trees, that rather backs up an under-recording explanation. This ecological simplicity is, of itself, another Reason to be Cheerful for the WLH, since it opens up any number of sites as potentially viable to support a colony – say small groups of trees in our urban areas or in open, otherwise unpromising arable farmland – and further suggests that we really could create valuable habitat simply by the modest planting of trees.

A third Reason to be Cheerful is Kent's Plan Tree. Plan Tree is Kent County Council's Tree Establishment strategy. The strategy sets an ambition for Kent to extend tree cover by 1.5 million new trees and increase the county's average canopy cover to 19%. Furthermore, it seeks to restore the health of existing

woodland and trees and to afford greater protection from loss. Among Plan Tree's many laudable strands, of particular interest here is the Elm Heritage Kent Project – as was thoroughly discussed in a meeting at Lees Court, Faversham in late May, attended by a great diversity of experts and stakeholders. We heard that, building on many years of research and painstaking, systematic breeding projects, various disease resistant elm (DRE) cultivars with a good level of resistance to DED are now available. The Plan Tree team has applied to the Local Authority Treescape Fund for over a hundred DED resistant standards (approx. 2m in height), to be planted emerging from hedgerows or as single isolated trees, and for a few hundred DRE 'feathers' (2–3-year-old saplings with a few side-shoots). The White Letter Hairstreak should be delighted to now find itself a flagship species, as Kent's Plan Tree collaborates with Butterfly Conservation Kent & SE London in starting to identify sites on which to plant resistant cultivars, for maximum positive impact for the butterfly.

Where might we plant?

The likely under-recording of the WLH suggests we need not hold too tightly to the recent records. And the butterfly's modest ecological needs suggest there could be value planting in all sorts of places – that could mean almost anywhere! This is very encouraging for Plan Tree – but as we in Butterfly Conservation seek to help the project by suggesting specific sites with the WLH in mind, it makes for a rather open-ended brief. A few more factors would help to get us started.

The Lawton principles (more, bigger, better, more connected) provide food for thought, as ever. The limited dispersal ability of the WLH, and its simple habitat requirements, suggest building on the 'more-connected' principle. Might we secure corridors for the butterfly in parts of the Kent countryside where it is known, or suspected, to occur? A corridor comprising nodes of suitable flowering-age trees no further apart than WLH dispersal distance (within a mile or less) would guarantee continuous elm access. A corridor might connect recent records, extend out from recent records into promising countryside, or simply be sited in 'elm-y' areas with only historic records but where there is reasonable hope the butterfly might have hung on. Building on the existing

pattern of flowering age elms, DRE planting could help grow out a corridor either by creating entirely new nodes, or by stabilising those smaller existing elm groupings that seem particularly vulnerable to being snuffed out by DED one of these years.

It remains early days, but some logical corridors are starting to take shape on paper in the Kent Downs area near Canterbury. The area not only contains some of the county's few recent records, but fresh 2024 sightings have provided further excitement. It also has the advantage of a commendable engaged network of farms in countryside stewardship schemes, hence finding sympathetic landowners in key areas can be built into plans from the outset. Having now roughly visualised, at a high level, a few logical corridors – several miles long, based on linking recent sightings, land ownership and our local knowledge of existing elm groupings – farmers in the vicinity have now been invited to express interest in the exercise. The hope is to now open up a next stage of finessing, surveying local elms further and finalising the corridor with specific planting locations – whether that is supplementing existing hedgerows and spinneys, or planting fresh sites. I look forward to updating on this work in future *Adonis* articles as we transition from plans-on-paper to spades-in-the-ground this winter.

There are, of course, other areas of Kent that have similarly attracted early attention for possible DRE planting, including, but not limited to, the Royal Military Canal, Herne Bay, Pegwell Bay, Northwood, Capel and Orlestone.

Get Involved

Visualising possible elm corridors requires improving our knowledge of existing elm locations, which is inherently local work. Simply exploring your area to look for elm trees, and/or the WLH, represents a great example of how BC volunteer groundwork could make a big impact by suggesting elm corridor possibilities into Plan Tree consideration. Why not treat yourself to a walk today? Upload your Elm records to iNaturalist, and the branch would love to discuss the patterns they throw up and possibilities for WLH conservation. There may be other factors to bring into the equation, for example species other than the WLH. Moths such as

the White Spotted Pinion might similarly benefit from planting of DRE, as might the enigmatic Large Tortoiseshell.

Roland Brown
Chair

Butterfly Commentaries 2024

Much wisdom is often contained in the simple observations of those passing comment on things around them. There has already been increasing concern about the health of our insect population, especially that of bees and butterflies. In 2024, this was heightened with the very wet start to the year, which was likely not to bode well for our butterfly population. What follows is a small selection of some of the anecdotal observations which appeared via the Branch social media accounts:

"Where have all the butterflies gone?"

The plight of our native butterflies is a subject which has been in the national news for several years now. There are occasionally higher level news articles about climate change and the biodiversity crisis, or Natural History programs which talk about species declines. But rarely are such circumstances visible to the general public.

Early 2024, primarily through its weather conditions, proved to be a difficult start for many butterfly species. This did not result in a complete wipe-out, but it did result in fewer on the wing – meaning them being less likely to be seen.

Most of us will see butterflies just because they are there, and not because we explicitly went out to find them. Those who explicitly sought them out might still have been able to find them eventually, but even then, perhaps not, depending upon where they live.

And so, through much of the first half of this year, there were many people who would usually see butterflies whilst simply going about their usual lives, who this year did not. Some of these curiously posted, “Where have all the butterflies gone?”.

The recently released UK Butterfly Monitoring Scheme interim update said that the national average butterfly recordings for April, May and June 2024 were down 40% as a result of poor weather and late emergence of the summer broods. The update adds that the numbers remained lower than the previous year, and the last decade, and remained so, only starting to show some signs of recovery with the warmer period around the start of August.
The article ends with the observation that friends and family have been asking “Where are all the Butterflies this year?”.

"Have not been seeing the usual Butterflies when collecting the children from school"

One particular weekday activity when butterflies might usually be noticed could be the collection of children from school. The collection of children is key because, apart from in the height of the summer, there would not usually be many butterflies flying in the morning, when they are taken to school.
As well as thinking about the time of day, we also need to consider here the time of year when such observations might be made.


Brimstone, Allan Drewitt

It would be unusual to see the odd Brimstone, Peacock or Small Tortoiseshell awake from their Winter sleep, much before April. By May, Large White might be spotted, or the odd Orange-tip might be seen skipping along hedgerows. Perhaps the odd Small White or Green-veined White might also be seen in May. June does not usually reveal much more, apart from the rarer species you would not normally encounter on a routine walk. By July, we reach species which present larger numbers, such as the Marbled White, the Meadow Brown and the Gatekeeper. We may also see the Comma and some more Small

Tortoiseshells. August brings repeats of the Brimstone, the Peacock, the Large White and the Red Admiral.

There are 42 butterfly species resident in Kent and South East London, but unless you are really lucky, you are unlikely to spot many other than those mentioned above on your walk to or from school.

And so yes, how many butterflies could be seen on the school journey would normally vary through the year. But the statement provided allows for this, and less have been seen than normal. Butterflies have not been where they would normally be, in the numbers they would normally be, at the times they would normally be. This is not evidence provided via the submission of records, but it is still evidence – evidence provided via a new and powerful medium.

"Shame to see Buddleias with no butterflies"

Quite a few sources have recounted a similar theme, linking to either the relatively recent past, or to the long gone past. Those linking to the longer past have described memories of Buddleia bushes teaming with such profusions of Red Admirals, Painted Ladies, Peacocks, Commas and Small Tortoiseshells that it was quite impossible to count how many were actually on any one bush.

Over the last few years, the numbers present on Buddleia bushes have diminished, reflecting the known decline in butterfly populations. Some have even mentioned seeing bushes this year with no butterflies present at all – something they have never seen before.


Comma on Buddleia, Andrew Cooper

It is usual for there to be days when the weather conditions mean that no butterflies will have been flying. But it is not usual for there to be good conditions and no butterflies: something seemingly observed this year. What can or can't be seen on Buddleia bushes is not definitive, but it is a significant indicator.

We do need to be a little cautious that there may have been some timing issues at play here. With our weather patterns somewhat disrupted this year, it is possible that the Buddleia bushes were blooming a little earlier than usual, whilst many of their attracted butterfly species were running a little later than usual. However, there have been more recent reports of butterflies visiting late blooming Buddleias, but still in lower numbers than usual. And so, Buddleias with no butterflies has certainly been an unnerving butterfly feature this year.

"Have seen more Large Tortoiseshells than Small Tortoiseshells this year"

You may have seen the articles about the unusually high number of Large Tortoiseshells seen in Kent this year. Along with this has been the reported evidence of the successful breeding of the species here this year. One of those who has been engaged first hand with the Large Tortoiseshell observed that they "have seen more Large Tortoiseshells than Small Tortoiseshells this year".


Large Tortoiseshell, Adam Gor

The percentage increase in the Large Tortoiseshell sighting records for 2024 in Kent and South East London has been huge. However, to keep the numbers in perspective, there are, as of 20th August 2024, 19 Large Tortoiseshell records in iRecord. It is suspected that this number will exceed 30 when all records have been entered across all recording systems. This compares with 1,322 Small Tortoiseshell records received in 2023.

The Large Tortoiseshell count varies from year to year. Over the last few years, the numbers were as follows: 2019 – 7; 2020 – 8; 2021 – 7; 2022 – 1; 2023 – 13. The 2023 number is interesting, though we hadn't paid much attention to this as, at the time of writing, I hadn't completed the 2023 verification. But, in hindsight, it looks like it might have been a step towards the high number that we have seen this year.

Returning to the Small Tortoiseshell, there have long been warnings about the plight of this species. Once very common and widespread, it has been

struggling for many years now. Suggestions are that there may be a link between the apparent climate change of the south of England and the viability of the third brood of the Small Tortoiseshell. It is not so easy to pick up the trend of this species, as our overall count of records for all species has been steadily growing from year to year. This, however, has been due to increasing numbers of recorders rather than increasing numbers of butterflies (please see footnote[1]).


Small Tortoiseshell, John Bangay

The Small Tortoiseshell numbers for the last few years were as follows: 2019 – 922; 2020 – 1744; 2021 – 1772; 2022 – 1926; 2023 – 1322.
You can see that our Small Tortoiseshell count dropped between 2022 and 2023. Not revealed in these numbers is the fact that our total record count increased from 65,000 to 84,000 between those same two years. Hence the Small Tortoiseshell decline is worse than initially implied.
And so, that original observation about seeing more Large Tortoiseshells than Small, although not numerically sound, sums up a complex situation quite succinctly.

John Bangay
County Butterfly Recorder

[1] Our two main considerations about the health of the population of any one species is to consider the extent of its population, as measured by the number of tetrads (4km squares) it occupies from year to year, and the abundance of its population as … measured by the maximum counts on each individual record (and not the sum of the records). We don't use the sum of the records because the same person, or many different people, may be counting the same butterfly, especially at popular sites. Also, with species that live for several days or weeks, the same butterfly may be counted over many visits. You will probably recall that the Big Butterfly Count asks you to record the maximum count of each species you have seen at any one time, rather than adding them up over the full 15 minutes. This is to avoid duplicated counting.

Moth Commentaries 2024

No lepidopterist expects their sightings to be the same year on year. The negative effects of the cooler and wet first half of this year have been commented on frequently by observers. Catches of moths in traps and observations in the field have overall been much reduced. Despite this, when suitable warm and humid conditions did occur, resident moths emerged in good numbers.

Moth migration also varies year on year. Last year, Convolvulus Hawkmoths were two a penny. This year, they are few and far between. Where I am based, on the coast, there have been regular influxes of Silver Ys. There continue to be some amazing individual records. Two years ago, the tortrix *Eana argentana* was recorded at Sandwich Bay and Dungeness on the same night. Although not the most stunning looking of moths, the interesting thing was that its only known UK breeding site is Glen Tilt, in the highlands of Scotland. Amazingly, Sandwich Bay recorded another on August 1st this year.

Eana argentana, Ilia Ustyantsev

The value of regularly recording moths, even in your garden, was shown by a fortunate recorder near Ashford. He had the first record in the UK of the micro *Dryadaula heindeli.* Remarkably, there was another the same night in Hythe. Another garden recorder near Folkestone recorded the beautiful Minsmere Red Underwing in early September; this is possibly only the second UK record.

Willowherb Hawk-moth, Adam Gor

One of our regular recorders was lucky enough to find the extremely rare Willowherb Hawk-moth in their trap. Another was reported from the Dungeness area. It is not only regular recorders who get rewarded: some weeks

later, the record was trumped when a member of the public found a Willowherb Hawk-moth caterpillar. At the end of August, I received a photograph taken by a member of the public in Deal of a moth resting on his car. It was an Oleander Hawk-moth – one of those sensational species few of us are lucky enough to see in the UK.

Some of our rarer resident species have also been recorded in new areas within Kent. This includes Straw Belle and Fiery Clearwing.

Straw Belle, Rebecca Levey

Ian Hunter
Kent County Macro Moth Recorder

Do Some of our Grass Skippers Occasionally Feed on Legumes? A Call for New Observations

My love affair with butterflies recently went diamond: 75 years. I have never been much of a field-worker, and regard myself a poor naturalist. Instead, my thirst for knowledge about butterfly biology has been assuaged by book learnin' – with all the risks that the insouciant apostrophe implies – books (and 'papers') contain errors of omission as well as commission; this little paper is concerned with the former.

The larvae of most butterflies feed on 'dicots' – seed-bearing plants that start vegetative life with a pair of cotyledons – their first, embryonic leaves. Nested within the great 300,000-species-radiation of the flowering plants is a major subgroup – the 'monocots' – seed-bearing plants that start out with just a single

cotyledon. The monocots make up almost one quarter of all flowering plant species, and include orchids, lilies, palms, bamboos, gingers, bananas, reeds, sedges, various others – and, of course, the grasses (Poaceae).

Butterflies are currently thought to have diverged from other Lepidoptera a little over 100 million years ago (Chazot *et al.*, 2019). Diversification into the 15–20,000 butterfly species that now exist appears to have involved just two major but separate 'radiations' utilising monocots – the 'browns' (Satyrinae), and the 'true skippers' (Hesperiinae, together with the Heteropterinae, Trapezitinae and a few other lesser-known groups of Hesperiidae). Within the Satyrinae there are a few exceptions to monocot-feeding – most notably the spectacular *Morpho* butterflies of South and Central America, only some of which feed on monocots (most *Morpho* utilise dicots, including various legumes).

However, in my cosy, book-fuelled vision of butterfly biology, I long believed the same was not true for the Hesperiinae, which I thought were ever-faithful to their single-cotyledon hosts – fully justifying their collective American vernacular, grass skippers. All my boyhood sources (including W.J. Stokoe's compilation for the *Wayside and Woodland* series – which I see I first acquired on the 9th August 1951), only reported various Poaceae. However, doubt crept in recently when I reviewed Dubi Benyamini and Eddie John's (2020) excellent book on Levant butterflies. In their account of the Silver-spotted Skipper (*Hesperia comma* Linnaeus, 1758) they listed three genera of grasses as hosts – and, without comment or discussion, four genera of legumes (Fabaceae: *Astragalus, Coronilla, Lotus* and *Onobrychis*). In my review I commented "... there are a few obscure records of *H. comma* feeding on various 'legumes' – but this is so unexpected (to me at least) that it would have been nice to have some discussion, questioning – or confirmation if the authors have first-hand information." Although I am quite often in contact with both authors, no further information has been forthcoming.

Well, maybe in the UK, the Silver-spotted Skipper does only feed on grasses? In fact, current opinion says it's monophagous on *Festuca ovina* (e.g. Easterbook *et al.*, 2022; Clarke, 2024). Harry Clarke's view is based on work by some of our most accomplished butterfly ecologists (Bennie *et al.,* 2013, and references therein) – although he notes the *Festuca* in question is

probably *F. ophioliticola* Kerguélen, 1975, not true *F. ovina* L., 1753. But has the Silver-spotted ever been recorded from anything other than grasses in the UK? The rare work of Rev. J. Seymour St. John (1890, p. 8) lists its hosts as *Lotus corniculatus* (Bird's-foot Trefoil), *Ornithopus perpusillus* (Bird's-foot) and "other leguminous plants"! Of course, one might easily dismiss this as erroneous – but St. John lists only grasses for our four other grass skippers (image from p. 8, above). The source of St. John's information regarding the host plants of the Silver-spotted was the redoubtable Edward Newman, in one or other edition of his *Natural History of British Butterflies and Moths* – which, unfortunately, does not give any further insight regarding the reliability of these records. At Newman, the trail goes cold.

Hesperia thaumas (linea).
Holcus lanatus—Meadow Soft-grass
Brachypodium sylvaticum.

Hesperia lineola.
On grasses; probably *Holcus lanatus.*

Hesperia actæon.
Calamagrostis epigeios.
Brachypodium sylvaticum.
Agropyron (*Triticum*) *repens*—Couch Grass.
" " *junceum*—?
" " *pungens*—In confinement.

Hesperia sylvanus.
Luzula vernalis (*pilosa*)—Broad-leaved Wood-rush.
Holcus lanatus—Meadow Soft-grass.
Dactylis glomerata—Cock's-foot Grass.
Agropyron (*Triticum*) *repens.*—Couch Grass.

Hesperia comma.
Lotus corniculatus—Bird's-foot Trefoil.
Ornithopus perpusillus—Bird's-foot.
Also on other leguminous plants.

So, is there any better documented evidence of British Hesperiinae feeding on anything but grasses? Towards the end of his remarkable life, the celebrated naturalist and former Director of the Raffles Museum (Singapore), Michael Tweedie (1907–1993) published a short note about finding and rearing two larvae of the Essex Skipper (*Thymelicus lineola* Ochsenheimer, 1808) on common melilot. His text (Tweedie, 1988, in full) stated:

From John Curtis's 'British Entomology' (1824-1835)

"On 23rd June 1987, I beat two green larvae from clumps of melilot (*Melilotus officinalis* L.) found on a river bank near my home [Barn House, Rye, Sussex]; there was no grass or other herbage growing up through the clumps. The larvae continued to thrive and grow, feeding only on melilot, and both pupated on 30th June. On 8th and 9th July the pupae hatched, producing Essex Skippers, a butterfly which flies in good numbers at the locality. All my text books give various grasses as the foodplant and no alternative is mentioned."

I don't think Tweedie's record can readily be dismissed. Accordingly, I would like to ask members of Butterfly Conservation to contact me if they have existing personal knowledge of any of our five grass skippers feeding on dicotyledonous plants. And equally, I would encourage any members with an interest in rearing butterflies in captivity to investigate, in any way ethically acceptable, if our Hesperiinae will feed, or can be raised on dicots – perhaps paying particular attention to the Silver-spotted and Essex skippers, and Fabaceae including *Lotus*, *Ornithopus* and *Melilotus* – but never forgetting the possibility of those 'other leguminous plants'. In any attempt to do so, Henwood & Sterling (2020) will surely prove invaluable, even inspirational.

In writing this little note I must thank my good friends Michael Boppré and John Tennent for help with literature. To Barry Henwood, and friend and former colleague Malcolm Scoble, I am forever indebted for drawing my attention to Michael Tweedie's note on the Essex Skipper. All of them are good in the library, as well as in the field.

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Morpho: https://www.flickr.com/photos/kimon/33405883422/ (Wikimedia Commons ©Kimon Berlin)

Text from St. John (1890): BHL – https://www.biodiversitylibrary.org/item/73886#page/5/mode/1up

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Richard I. Vane-Wright
President

The Brown Hairstreak: Climbing Back From Oblivion

The Brown Hairstreak is a species which was once relatively common, faded away, was gone for some time, reappeared, and is now gradually spreading back from west to east.

But how, you might ask, can a species which became extinct in our area return? The answer is, of course, artificial boundaries. Although the Brown Hairstreak became extinct within our Branch area, it did not become extinct in the neighbouring area to the west. Why this was the case is much more difficult to explain. It may be down to very marginal differences in change of land use and climatic conditions between the east and west. Perhaps, in the time since its effective retreat westward, conditions have changed again, enabling it to re-colonise eastward.

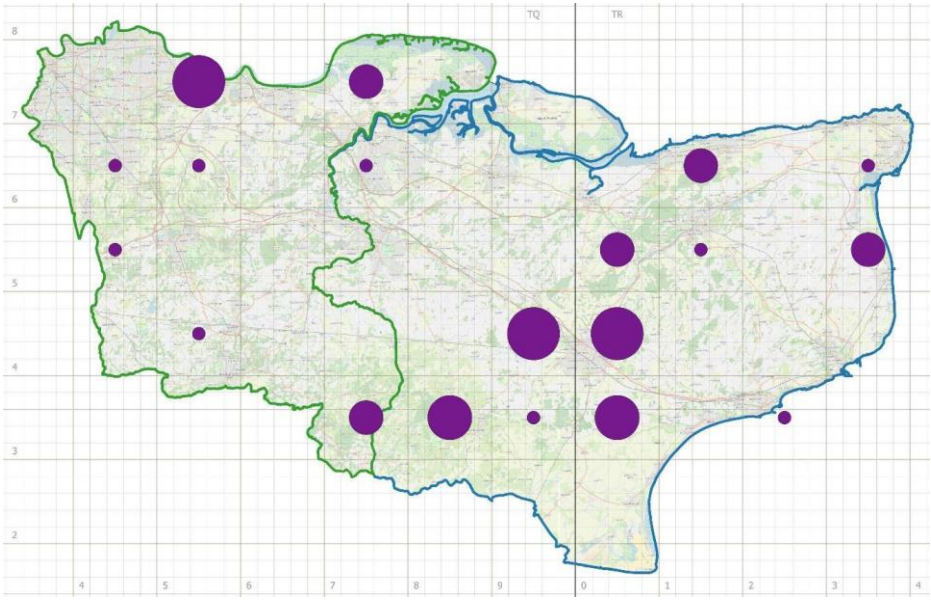
The majority of our longer term knowledge about the Brown Hairstreak comes from the writings of J.M. Chalmers-Hunt. It is presented in his 3 volume work,

Brown Hairstreak, John Bangay

The Butterflies and Moths of Kent, published between 1961 and 1981. His work to preserve the history of both butterfly recording, and the now dead activity of butterfly collecting, was quite extraordinary. He sought out journals and other archived materials containing records of butterfly and moth sightings across the county. Although previously described as common, by the time of Chalmers-Hunt's 1960s publication, the Brown Hairstreak had become mainly confined to the weald of South East Kent. He does mention it previously being established in the Hamstreet Woods and Woodchurch Area in the 1940s, being common at Bredhurst in 1948, and being in the Wye/Brook area, High Halden and Hoad's Wood in the early 1950s.

Although diminishing significantly, sightings of the Brown Hairstreak continued up to the early 1970s. In 1970 eggs were found in hedgerows north of Orlestone Forest. In 1971 two larvae were found in Hoad's Wood. But these were the last known sightings of this species, and mark the beginning of its disappearance from Kent and South East London.

Provided below is a map giving the pre-1972 locations of the Brown Hairstreak in our Branch area. It is plotted at hectad level (10k squares), with the dots scaled according to the number of records per hectad.



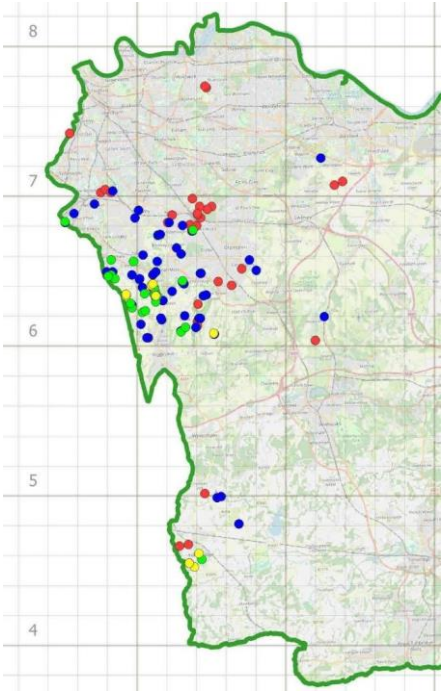
Eric Philp, of Maidstone Museum, as research for his book *The Butterflies of Kent*, organised via the Kent Field Club a re-surveying of the county butterfly landscape. He did this between 1981 and 1990. During this survey, he and his extensive team did not encounter any Brown Hairstreaks.

It was not until late 2015 that David Gardner, the then Chairman of our Branch, started his search for signs of the Brown Hairstreak's return. He had initially searched promising habitat around the Shadoxhurst area, a former stronghold of the species. However, what he did next was to examine the Surrey maps depicting the current flight areas for the Brown Hairstreak, showing where it was approaching our Branch boundary. This revealed a close approach near Biggin Hill. David set off to explore a promising small lane with Blackthorn hedges, and there, after much searching, he found two Brown Hairstreak eggs – significantly more difficult to find than a needle in a haystack! He took photos, which he sent to the Surrey Butterfly Recorder for confirmation, which he subsequently received. This marked recognition of the Brown Hairstreak's return to Kent and South East London.

In late 2017 Fred O'Hare and Martin Wills found more eggs not far from David Gardner's original find. In 2018 Eric Barlow found 3 adults nearby, and later Fred O'Hare and Keith Perry found over 400 eggs. From 2019 to 2020 there were sightings at new places, indicating the beginnings of the eastward spread. These included those seen at Cudham by Ewan Shilland, Downe by Colin Brotherwood and Keston and West Wickham by Cliff Robson. Further expansion in 2020 was noted in the Bromley/Orpington area with eggs reported in Ninehams Wood by Bob Harrop, and in Jubilee Park by Peter Smart.

Returning all the way back to 2016, a second wave of ingress from Surrey occurred close to Edenbridge, with a sighting of an adult by Bob Eade. A further 3 were reported by Bob in 2017. Soon after these reports, David Gardner found eggs at a site at Crockham Hill. A further sighting occurred in 2021 not far away at Bough Beech. Then, in 2022, at Four Elms.

This map is an extract of the far West of the Branch area. It carries a simple dot for each place where a sighting has occurred. This could be either an egg or an adult butterfly. The colours are yellow for 2015–2018, green for 2019–2020, Blue for 2021–2022, and Red for 2023. The oldest records take precedence, to show the evolution of the spread.



The map quite clearly shows the spread from the incursions around Keston in the north, and around Edenbridge further south. As can be seen, the northern incursion so far appears to have been more vigorous than that in the south. However, it should be noted that perhaps there has been less resources in searching for the butterfly around the more rural area surrounding Edenbridge than in the more populated areas further north.

Note that the two dots at Shoreham (one red, one blue) indicate that the Brown Hairstreak has already crossed outside the ring of the M25. There was a question at the 2023 National Recorders meeting in Birmingham about whether major roads were a barrier to the spread of the Brown Hairstreak. At the time I was unable to answer this question. Since then, the spread beyond the M25 has provided the answer. Back to the map, there have been questions about whether the Blue dot just below Dartford, and then the subsequent nearby sightings at Hawley and Hextable, might have been a crossing southward over the Thames from the Brown Hairstreaks resident on the Essex side of the river, rather than eastward from Surrey. On the same theme, we ought also to be questioning the red dot at Shrewsbury Park, Greenwich, and whether this is a south westward spread from Essex, or a north eastward spread from Surrey. However, I am not sure how we could tell.

Much of the recent work to understand the spread of the Brown Hairstreak has been coordinated by Steven Lofting, before and since he became our Regional Conservation Officer. Significantly, he has coordinated much of the surveying activity, especially the egg counting. Of particular mention is the ongoing effort in Elmfield Wood, Bromley, aimed at understanding population expansion through the use of replicable egg counts. The results for the last 3 years have been so: 2022 – 20, 2023 – 39 and 2024 – 137. This not only demonstrates an increasing count, but one which seems to be accelerating.

We must also mention the many people who have not been part of centrally coordinated groups, but who have simply taken it upon themselves to go out and look for this butterfly. And even more impressively, to go out in the cold of the winter, with a spyglass, to search in spurs of prickly blackthorn hedges to look for those tiny sea urchin-like eggs. And, when done, to record their results. Because, without that last vital step, we would not know what we now know about the return of the Brown Hairstreak.

John Bangay
County Butterfly Recorder

Denge Woods Field Trip

12th May 2024

In an highly unpredictable spring, Rebecca Levey chose a surprisingly nice May morning to lead a small group around Denge Woods in pursuit of the Duke of Burgundy and friends. Bonsai Bank was glorious, the mosaic of scrub and more open areas providing superb habitat for botany, butterflies and moths alike – including our target the Duke. Rebecca explained how the habitat has been created and maintained through some excellent management, whereby a dedicated BC branch volunteer group works with owners of Forestry England to manage scrub islands. We saw a dozen Dukes, alongside many other butterflies including Green Hairstreak and Dingy Skipper. Day flying moths, for which we were armed with nets, pots and ID guide cards, included Birch Mocha, Green Longhorn and we had great fun distinguishing Mint Moth from the Common Purple and Gold. But the star of the show was the White Spotted Sable, whose goldenrod foodplant was much in evidence – at least it was once one got one's eye in!

White Spotted Sable, John Rowland

So distracting was the display of butterflies, moths and botany, including a huge number of lady orchids, that we quite ran out of time and never got across to the second planned Duke stronghold subsite, The Warren. Perhaps next year!

Roland Brown
Branch Chair

Wye Downs Field Trip

9th June 2024

Black-veined Moth, Matt Livesey

Early arrivals at our meeting point, the charming Crundale Church, had the opportunity to look down into the valley and get an early feel for some of the habitats we would shortly be visiting within the Wye Downs. Even half a mile away, you could see grassland in various states of grazing management, some blending promisingly into light scrub. With appetites thus whetted, the group began to walk through Crundale Bank, hearing from leader Dan Tuson how he had worked with local farmers within stewardship schemes to help them create the outstanding grassland habitats. It seemed hard to believe that steeply sloping fields like this could ever have been in arable production but it was apparently the case. It was certainly an encouraging thought that habitat of this quality could be created in just a couple of decades of careful management.

Armed by Rebecca Levey with nets and day flying moth guides, we were given a brief tutorial in Black-veined Moth habits so we could record with confidence, including their characteristic fluttering when disturbed for just a few yards before resettling. Progress was delightfully slow on our circuit around the valley, since the botany was as compelling as the lepidoptera and we were constantly being detained by interesting finds. Pride of place goes to a remarkable Four-spotted moth, which found Rebecca's net, despite being entirely unexpected here. Botany included declining chalk downland species such as Dyer's Greenweed, alongside an impressive display of orchids.

Four-spotted, Rebecca Levey


Group Shot, Dan Tuson

Dropping down into the valley, walkers were deployed systematically for a Black-veined Moth count across a known stronghold field. We completed the circuit across fields more recently seeded with an appropriate wildflower mix, allowing us to explore their rapid development, comparing and contrasting with the longer-established grassland. In total 30 Black-veined Moths were recorded across the route, although it was too early in the flight period to read much into the count, it was certainly enough for everyone present to make their acquaintance.

Many thanks to Dan Tuson for leading the walk and his fascinating insight into some of the outstanding habitat management within his farm network. Thanks also to Rebecca Levey for lending her expertise to a most enjoyable morning.

Roland Brown
Branch Chair

Shrewsbury Park Field Trip

13th July 2024

I was joined by transect walker John Denton who knows the site well and established a new transect last year recording an incredible 2500 butterflies of 26 species. The guided walk was timed to hopefully see as many species as possible and promoted via the local Friends group.

I was concerned the rather cool 19 degrees and cloudy conditions on the day might result in not much butterfly activity, but was pleasantly surprised to see numerous Skippers, Meadow Browns and Gatekeepers on the first patch of

bramble/long grass we encountered. Passing through the amenity grass area we entered the newly established meadow areas where, only a few years ago, very few butterflies were recorded. This area now supports many butterflies including Skippers and Meadow Browns where occasional cut and collect has been introduced. We then ventured into a lovely sheltered glade where the most species on the site are normally recorded, with Green-veined White, Marbled White and Ringlets (pair seen mating) added to the list.


Marbled White, Steve Bolton

Walking along a sunny woodland path we spotted Red Admiral and Holly Blue and then entered the old overgrown allotment area with sunny glades ideal for Speckled Wood. With views across London we then entered another open grassland area with Large Skipper seen in long grass and many Meadow Browns nectaring on two large thistle patches. Heading back up to the car park we scanned a sunny woodland edge and were pleased to add Purple Hairstreak to the tally for the day of 46 butterflies of 13 different species.


Pair of Ringlets, Steve Bolton

Steve Bolton
Conservation Officer

High Elms Country Park Field Trip

14th July 2024

High Elms Country Park is a rich complex of ancient woodland and chalk grassland. It has a unique history as the former home of Sir John Lubbock the Fourth Baronet Avebury – a naturalist and friend of Charles Darwin, who lived at neighbouring Down house. Many early records for the site span back to Darwin and Lubbock's studies and letters.

Branch members were treated to a warm sunny trip around the estate, taking in the sunny chalk grassland and dappled shady rides and glades of the woodland, yielding sightings of a range of common species, alongside the magnificent Silver Washed Fritillary and White Admiral. Also seen was a plethora of orchids including broadleaved helleborine and other rare plants including yellow bird's-nest.

Steven Lofting
Regional Conservation Officer

Broadleaved helleborine, Steven Lofting

Ileden Downs Field Trip

21st July 2024

Ileden Downs is a recently created grassland site, on the North Downs Way just above the A2 east of Canterbury. It is part of a network of grassland within the East Kent Downs farm network, coordinated by Natural England farm adviser Dan Tuson, who was also our field trip leader on a dry but cloudy day.


Group shot, Roland Brown

Dan explained the history of this landscape level project, and how the high-quality habitat created has attracted, alongside the more usual suspects, some entirely unexpected arrivals. A prime example being today's target, the Bright Wave moth, previously recorded at just a few sites coastally, apparently with some highly restrictive habitat requirements. Not having read the books, however, the Bright Wave has somehow made its way to Ileden and found something to its liking. Exactly what it is thriving on remains as yet incompletely understood, Rebecca Levey explained. The impressive botany we found on site certainly creates many options. The group, comprising all ages, was big enough to perform a thorough, if relaxed and slightly unscientific, sweep across the extensive site and found several hundred adult Bright Waves.

The site is rightly known for its Small Blue population, and a decent if not overwhelming number were seen alongside a remarkably high density of its kidney vetch foodplant. Other noteworthy finds included Sussex Emerald. In discussion following the excitement of the find of this eye-catching green moth, we learnt how the moth relies not only on wild carrot, but also, at certain stages of its development, on ragwort. Hence the two plants growing alongside one another here, much left unmolested across the winter, had made this good habitat.


Sussex Emerald, Emma Loder-Symonds

Roland Brown
Branch Chair

White Hill and Fackenden Downs Field Trip

4TH August 2024

Eleven of us assembled in the lay-by on an overcast morning, which felt slightly cool at 17C. As we headed up the downs there were no butterflies in flight which didn't bode well.

We all got excited when we saw the first single Gatekeeper and then a quick flypast of Silver-washed Fritillary. It was a slow start, but luckily the weather improved as the walk went on and the sun broke through the clouds to raise the temperature to around 22C.

Marbled White, Nicky Wilson

As we continued through White Hill downs, Gatekeepers became more numerous and we started picking up Meadow Browns flitting across the low vegetation. It wasn't long before we caught sight of our first male Chalkhill Blues, which were beginning to warm up and start moving around; then we also added Small White and a stunning male Marbled White which performed well for us.

We also saw good numbers of Common Green Grasshopper and Dark Bush Cricket close to the main path giving good views.

Along the clearings at White Hill we totalled around 40-50 Chalkhill Blues, with the majority all being males. In fact we only spotted two females – were they late this year? Another impact of a cool wet Spring, maybe.

Chalkhill Blue, Nicky Wilson

In overall numbers we had 20-30 Gatekeepers, 15-20 Meadow Browns, two Silver-washed Fritillary and a single Peacock.

We moved onto Fackenden Down, with similar numbers of Gatekeeper and Meadow Brown. The best find was a single Small Blue along the lower path and a Large Skipper. On the way back through White Hill with warmer weather, we added three male Brimstone, another Large Skipper and three Speckled Wood, bringing our butterfly total to 11 species.

On the day flying moth front, we had Jersey Tiger, Five- and Six-spot Burnet and the small but beautiful purple and yellow Mint Moth.


Six-spot Burnet, Nicky Wilson

Being August it was quiet for bird species, we had several Chiffchaffs, Kestrel, Buzzard and Coal Tits.

An excellent field trip, even though the overall numbers of butterflies were definitely down this year.

Trevor Manship
Committee Member

Moth Evenings at Sandwich Bay Bird Observatory

These evenings are an opportunity to have a look at a wide variety of moths in close up. They occur once a month during the summer – ideally after a night with a new moon. We run these events with free entry but provide cakes and ask for a voluntary donation to our funds.

The trap is operated the night before and a variety of moths are potted up to allow close examination. We tend to meet outside. Once these moths have been looked at we invite the participants to look into the rest of the trap's contents before all the moths are released. This year we have held events on June 8th, July 6th and August 10th with two more scheduled for September 7th and October 5th.

Our first Moth Evening this year started earlier than usual with some activities for children but it was interesting to see some of the adults enjoying the colouring sheets as well! There were 35 attendees and 150 moths of 40 species to look through, ranging from Privet Hawkmoth down to the tiny Diamondback, which is actually a migrant species.

Alder Moth, Ian Hunter

Pride of place went to the Observatories first record of Alder Moth, shown here in a photo.

The day of the July event saw the wind increase notably. The weather and the unforeseen clash with a football game involving England at the Euros meant that we were a very select bunch of hardy enthusiasts. Fortunately, because the night before had not been so bad, we were able to look at a good range of species in the comfort of the Observatory building. Pine Hawkmoth was added to the range of hawkmoths from last

time. There were a couple of migrants including Red-necked Footman and the very scarce pyralid *Sciota rhenella*.

The portents were good for August 10th with 18.2°C recorded on the previous night at ground level and, although the temperature dropped, the wind also dropped so the catch over the two traps was a healthy 424 individuals of 116 species. Migrants were thin on the ground with just one Silver Y and one Diamondback, but a *Sitichroa palealis* was notable. Attractive residents included Orange Swift, Miller and Black Arches. About 40 people attended on a lovely evening and made short work of the cakes provided.

Ian Hunter
Kent County Macro moth recorder

Walking a Transect

Now this really does sound like a particularly dangerous thing to be doing. Especially if your mind is conjuring up all sorts of horrible ideas about what a "Transect" might be. Well, generally speaking, a Transect isn't a dangerous thing, although sometimes, perhaps, it can be. So, what is a Transect?

It's a line used for taking biological readings of the presence of plant or animal life, in a way that is repeatable in a reliable manner. Once a Transect has been established, the readings can be taken, over and over, and the results compared.

Typically, for something like butterflies, they wouldn't be taken over and over on the same day, as that would be rather tedious. They

might be taken weekly or monthly, or perhaps annually. From these, trends may become apparent. The term commonly applied to visiting and taking readings from a Transect is “Walking a Transect”.

Presumably, one doesn’t just turn up, wander along it, then go elsewhere. There is more to it than that, isn’t there? The reassuring answer is yes, there is more to it. Because the Transect to be walked is intended to be repeated, without alteration, perhaps for many years, effort first goes into the establishment of the Transect. There are two principal schemes under which Butterfly Conservation conducts Transect Walks. These are the UK Butterfly Monitoring Scheme (UKBMS) and the Wider Countryside Butterfly Survey (WCBS). They have two quite distinct measuring aims. The UKBMS is established over sites with known important populations of butterfly species, and aims to monitor their abundance, and hence the health of those known colonies. The WCBS covers randomly chosen 1km squares across the country, chosen irrespective of their butterfly populations, and aims to monitor the distribution of butterflies across the country. This provides some measure of how the presence of butterflies may be evolving as areas cool or heat with the changing of our climate, and perhaps other influencing factors. Hence, as you can see, there is careful deliberation about where new UKBMS sites might be established, whereas a more randomised approach will be applied to selecting new WCBS sites.

Having chosen a site, the route across the site will be plotted. This is broken into “Sections”. Typically, a Transect will be broken into between 8 and 10 Sections, but there can be more for a large UKBMS site. These are plotted on a map, and remain permanent for the duration of the Transect. The Section numbers are important, and are fundamental to subsequently recording the survey results on the survey forms.

UKBMS surveys are performed once per week from the first week of April to the last week of September. However, you may also wish to record from late March, and until early October. UKBMS Survey Week 1 is considered to be the week from April 1 to April 7, no matter which days of the week these are. WCBS requires a minimum of 2 surveys, one in July and one in August, which

must be at least 10 days apart. However, you can choose to do as many WCBS surveys in the year as you wish.

There are rules about the minimum weather conditions on the day of survey for your records to be accepted. The temperature must be at least 13C. Between 13C and 17C there must be at least 60% sunshine. It must not be raining. The survey time must be between 10:45 and 15:45.

When walking the transect, the recording form is used to make a note of all that is seen. There is a header to this form to note some basic information about the visit. This includes your name, the name of the Transect site, the date, the weather conditions and the start and end times for the walk. From the recorded start and end times, your walking speed is deduced, helping the receiving system to estimate, by species, the likely density of butterfly population present.

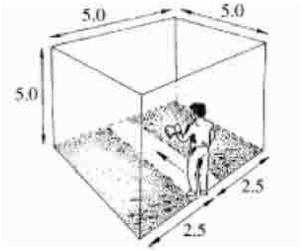
The main body of the form contains rows for each species you may encounter, and columns for each Section of the Transect. At the head of each column is a space to enter the % sunshine at the time you start that Section.

BUTTERFLY TRANSECT - WEEKLY RECORDING FORM

Site Name:		Date:		Start Time		% sun			
						Mean Temp			
Recorder:		Week No.		End Time		Wind Speed			
						Wind Direction			

SECTION	1	2	3	4	5	6	7	8	TOTAL
% sun									
Small Skipper									
Essex Skipper									
Large Skipper									
Dingy Skipper									
Grizzled Skipper									
Clouded Yellow									
Brimstone									

You are required to walk at a slow, steady pace, counting all butterflies seen up to 2.5m either side of the Transect line, up to 5m ahead of you, and up to 5m above the ground. If one side is blocked by a wall or hedge or other obstruction, it is okay to count up to 5m on the other side. Always follow exactly the same route each time you walk. Do not stop by a favoured hotspot to improve



your count. Record butterfly numbers, by species, by section as you go along. You should try to avoid double counting any butterflies you see. Typically, you would not count any butterflies that appear from behind you, as you are likely to have already counted them. However, if they are of a species you have not yet recorded for that section, then do count them. The best way to keep your count is to use the tally method. One vertical line for the first 4 individuals seen, then a diagonal bar through for the fifth.

All of this has been about recording butterflies. However, whilst performing your butterfly surveys, you may well also encounter day flying moths. Assuming you are able to identify them, please do also record these in the same way, each species on their own line, on the recording form. For example, you might see the Six-spot Burnet, the Cinnabar, Mother Shipton, Burnet Companion and the Silver Y.

When home from your Transect, you will be able to use your paper based transect form you filled in at the time as the source to enter your data into the UKBMS/WCBS online system. This gets your data recorded for the HQ of Butterfly Conservation to use, alongside the data from all the other Transects across the UK. They perform the analysis work to find out what is going on: to establish the trends, species by species, season by season and year by year, which species are prospering, which are declining, and where. Your collected data are vital.

Above, I have concentrated on UKBMS and WCBS. However, the same Transect approach is used for more specialised individual projects when they are required to check on the health of individual butterfly colonies. This is typically an activity conducted by specialised project teams organised by Butterfly Conservation HQ, but also by other conservation organisations such as the Wildlife Trusts, BTO and Natural England.

There is also no reason why you should not adopt aspects of the Transect method if wishing to monitor butterflies in your garden, or in a wild space you help to look after. Having an organised and repeatable process can add both purpose and a degree of reliable comparability to your results. You will, however, need to decide which system to use to record your results.

Now back to my rather flippant comment about walking a transect sounding like a dangerous thing. Well, it does rather depend upon where you are doing it. One of my WCBS squares is a fruit farm. Because it is private land, I do have to seek permission to gain access to conduct the survey. This, though, entails agreeing a date and time for the survey, which avoids me being there when they are spraying. Not something they do often, but I shouldn't be there when they do. Other Transects might be on farms with livestock. Animals can be dangerous, especially cows with young calves. Coastal paths can be dangerous, as can river banks and barbed wire fences. All sorts of situations, where you are concentrating on a particularly interesting butterfly, might be dangerous. So please do be careful when you are Walking a Transect.

John Bangay
County Butterfly Recorder

Photographer's Corner

I first got interested in photographing butterflies when we were working to save Kingsmead Field in Canterbury from housing development. While the pictures of people using the field were important to show value to the community, it was vital to be able to show also the beauty of the plants, insects and wildlife that had made it their home.

Butterflies were a key part of this. I started by focusing on the colours and patterns of the butterfly itself, then realised that it was key to try to allow the personality of each butterfly to come through. It had to stir an emotion if it was to resonate with the councillors, who would ultimately be making the decision on the future of the field.

Moving forward 10 years, here are a few things I have learnt.

1. There is nothing more frustrating than going out on a sunny day and finding that virtually no butterflies will sit still since they are always up in the air.
   I therefore generally go out early and find the butterflies that are warming themselves up in the morning light. Often they will have the added bonus of a coating of dew which always adds special effects. It can also work to go out at dusk as they are settling down, as this can deliver exciting shots too.

2. I am a big fan of backlight. If you have the dew on the plants (and butterfly), it will create some wonderful refraction caused by the early morning low light.

3. Try and look for particular behaviour since it is often that which conveys personality. Two butterflies looking at each other, or a number of butterflies all on one plant. For example, I once took a photo of three heath fritillaries all on one leaf, two facing away, and one towards me.
   Take some shots of butterflies flying. It's challenging at first but with practice, it's both achievable and very rewarding since a lot of behaviour is expressed in flight.


Three Heath Fritillaries, Simon Pettman

4. A great shot can be ruined by a bad background, and a good shot can be made with a brilliant background. It is not always easy to control, but in general the smoother, less complicated the backgrounds, the better the resulting shot in my experience. Butterflies are already dramatic and they don't need extra drama from the background, unless it really adds value.

So, what do I use? I primarily carry two lenses for my camera: a 100mm macro lens and a long 90-280 lens. If I am taking butterflies in flight, I will take many shots in rapid succession hoping that one of them is okay. I also often have a

tripod with me. It just means that if the butterfly is in the perfect position, you have a better chance of getting a really well focused shot.


Marbled White, Simon Pettman

There are, of course, challenges and frustrations. It is often the case that a butterfly is looking just perfect but out of reach; just too high in a bush, at the back of a big patch of brambles, or simply that to reach you would have to cause damage to other plants. So, for those, you just leave them in peace and say “next time”.

Simon Pettman

Adapt and Create Gardens for Butterflies and Moths

Gardening is and always has been an adaptive and creative activity. Adapting to changing factors is the very essence of this much-loved British past-time. Where once we followed a purely aesthetic-led motivation, now those at the forefront of new gardening insights and skills are ensuring the needs of wildlife are built into the foundations of good garden design and planting schemes, ensuring sustenance and habitat for our all too depleted wildlife.


Brown Argus on bergenia, Eleanor Read

Our butterflies and moths desperately need this change. Their larval foodplants have been habitually grubbed-out and leaf-litter scraped up and binned. Repeated populations of these precious insects lost in wheelie bins and council green-waste pasteurisation processes. For decades, front gardens have been paved over to make space for cars, chemicals have been overused on gardens

and farmland, and now with the challenge of climate change, it all culminates in a very sorry state of wildlife crisis.

Now it's on us gardeners and garden owners to adapt and learn to create and nurture habitat-rich safeholds for our rapidly declining butterflies and moths. By doing this, we will be supporting a far wider range of biodiversity, so our efforts are never in vain. Our gardens constitute a vast network of spaces across the country that we can shape and influence. They can offer so much change for good, if we get just a little creative! So, what do we need to think about?

Overwintering Eggs, Caterpillars and Pupa

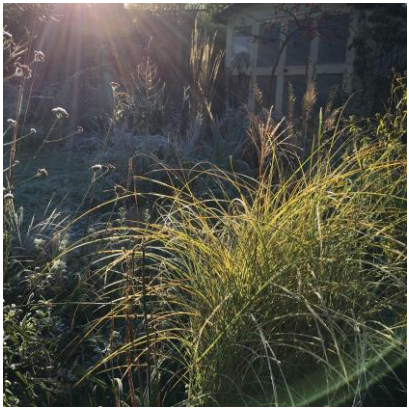
Every species has evolved its own adaptations for surviving the cold winter months, where food is scarce or non-existent. Their methods are intricate and often unique to each species.

A small number of butterflies and moths, whose next generation overwinter in their egg stage, lay those eggs on the caterpillar's foodplant, which tends to be a woody shrub or tree. At the end of August the Brown Hairstreak carefully selects a place to lay her eggs on Blackthorn (*Prunus spinosa*), either in the fork of a branch, beneath a thorn or close to a new growth point. She needs those eggs to remain there, intact until May. Knowing this, we may decide to be more careful with our pruning, looking out for the 0.7mm ivory white circular eggs and leaving those that we find well alone. Such knowledge is at our fingertips, with pictures and carefully researched information to help us learn to identify what we have in our gardens and how to protect and nurture it.

Most species time their egg-laying so that the emerging caterpillars have time to bury themselves in the soil surface, or curl up in insulating leaf-litter, before the first real drop in temperature, and lay dormant in this form until spring. Other species reach the stage of chrysalis and overwinter that way. What is commonplace is that these eggs, pupa or caterpillars will be on, or most likely in the ground directly below their caterpillar foodplant.

As gardeners, if we think these points through, we really ought not to be cutting back and raking up spent or dying vegetation in late summer, autumn or winter. The movement #DoNothingForNature is a thousand times more virtuous than the annual autumnal obsession many gardens and the life within them continue to suffer from, with everything razed to the ground and debris cleared to leave a bare ground, with no blanket of spent stems and fallen leaves to protect and insulate it from deluges of rain, freezing wind and plummeting temperatures.

Leaving drying and dead plant material uncut and standing all winter is something all gardeners should relish. It means we're not walking around working on saturated soil, harming its structure. We're not damaging the overwintering caterpillars, chrysalids and myriad other lifeforms beneath our feet. Soil insulated with this thatchy vegetation is warmer, which allows for easier regrowth of leaves of vital foodplants in those random warm spells we often have throughout winter. Such opportunistic emerging leaves could be a life-saver for late or early emerging caterpillars. Spent vegetation, both standing and that which falls and cloaks the ground, forms shelter for insects and slows the transit of rainwater through the soil, lessening the loss of natural nutrients. It keeps the soil warmer, maintains a more even temperature within that life-rich top layer of earth, contributing to greater soil health. The cherry on the cake (as if one were needed!) is that dried plant stems adorned with dewy spider webs and seed heads crowned with frost and back-lit with low winter sun also happen to look beautifully evocative – far more interesting than bare earth, so even the aesthetic remit wins.



Spent seedheads, Eleanor Read

Overwintering Adult Butterflies and Moths

While most butterflies and moths overwinter as caterpillars or pupate ahead of winter as chrysalids, a hardy few overwinter as winged adults. Of these, their natural resting sites would be caves, cracks and hollows in trees and unused

burrows in the ground. But these are hard to find in a human-centric, tidy landscape. We can help by leaving dead or dying tree trunks standing, even if you cut them a little shorter to ensure they won't fall. Standing, slowly decaying wood is so scarce in our gardens, parks and woodlands, yet many thousands of our wild fauna have evolved over thousands of years to utilise these very structures in this state of decay, in many intricate and pivotal ways. Use old dead tree trunks to grow honeysuckle (*Lonicera periclymenum*) or clematis on. The former is a caterpillar foodplant for the Early Grey and Twenty-plume Moth, the latter for the Small Emerald and Haworth's Pug. Both plants look beautiful when grown this way and are great nectar providers for moths too.

Choose a quiet corner of the garden that you can leave well alone and pile unwanted logs or branches, old wooden boxes, or stack unwanted plant pots upside-down and create a waterproof roof with an old compost bag. I use the black side outermost, so it doesn't catch the eye, then weigh it down with an old coconut doormat. There needs to be places that butterflies and moths can easily climb inside of, to rest within the dry recesses, and importantly climb out of when the temperature warms up again. Whatever scale you do this on it will aid some moths or butterflies looking for sanctuary. The important thing is not to disturb this area, particularly during cooler months,

Caterpillar Foodplants

A vital link for these now fragile life cycles is the foodplant for their caterpillars, which, due to perceptions of 'weeds' inherited from our past, are now chronically scarce in gardens and public green spaces. Thankfully there's a growing number of online plant nurseries who are propagating these native wildflower plants sustainably, so they are easily purchased in seed form, plug plants, or larger specimens. A quick search and you'll find the plants you're looking for.
Common sorrel (*Rumex acetosa*) and sheep sorrel (*Rumex acetosella*) are main foodplants for caterpillars of Small Copper and day-flying Forester moth.

Common knapweed (*Centaurea nigra*) is both nectar and larval foodplant for the lime-speck pug, while its dried seeds are a preferred natural food for migratory goldfinches.

Birdsfoot trefoil (*Lotus corniculatus*), or 'Eggs and Bacon', is a favourite of Green Hairstreak, the migratory Clouded Yellow, Common Blue, Dingy Skipper and caterpillars and the main foodplant for our day-flying Six-spot Burnet moth caterpillar, as well as being a good nectar plant. Easily grown from seed, it can cover a sunny free-draining area of soil relatively quickly, so once you've got enough, simply mow or snip off the ripening seedheads to prevent further spreading, or alternatively allow it to spread to create a much-needed wildflower meadow area.


Common knapweed, Eleanor Read


Ringlet on birdsfoot trefoil, Eleanor Read

Like birdsfoot trefoil, legumes, such as horseshoe (*Hippocrepis comosa*) and kidney vetch (*Anthyllis vulneraria*), both key foodplants for Chalk Hill Blue, Adonis Blue, Dingy Skipper and Small Blue, enrich the soil with nitrogen that they extract from the air. Horseshoe vetch is the sole foodplant for the caterpillar of the Chalk Hill Blue butterfly, a butterfly confined to calcareous grassland in southern England. Clovers (*Trifolium spp*) also fix nitrogen in this way, among them red clover (*Trifolium pratense*) is food for caterpillars of Clouded Yellow, Pale Clouded Yellow and Silver Y moth caterpillars. As such, these pretty wildflowers are excellent for improving soil health on nutrient deficient fast-draining chalk soils in our gardens.

Hoary rockrose (*Cistus oelandicum*), *Helianthemum nummularium*, gorse (*Ulex europaeus*) and our native broom (*Cytisus scoparia*) are larval foodplants for Brown Argus, Green Hairstreak, Holly Blue and Long-tailed Blue. *Galium* species such as bedstraws, woodruff and cleavers feed Hummingbird Hawk-moth, Red Twin-spot Carpet, Barred Straw and Elephant

Hawk-moth caterpillars, the latter also feeding on fuchsia and rosebay willowherb.

This is the tip of the iceberg. Once you begin looking there is so much choice of caterpillar foodplants to suit your garden's soil and your local butterflies and moths. Beautiful contemporary borders, romantic soft planting schemes, all are easily achieved with plants attractive to the butterflies and moths present in your area. If a little extra colour is required, consider opting for those garden plants that are very closely related to our native ones, as they too are often useful caterpillar foodplants and will have simple, nectar-rich flowers. A growing number of small independent nurseries are specialising in growing these very closely related near-native plants, so it's worth asking the questions.

Grow your caterpillar foodplants close to sheltered and undisturbed areas, ideally with loose soil and mixed leaf litter covering close-by, so that caterpillars don't have far to travel for places to burrow, to begin their pupa phase.

Elephant Hawk-moth caterpillar, Eleanor Read

Nectar Plants – needed from early spring until early winter

When selecting good nectar plants for butterflies it's worth remembering a good-sized landing platform with direct access to nectar is what these large-winged beauties need. This means avoiding long slim trumpet-like flowers, or overly hybridised flowers with so many petals the nectar-producing parts are completely inaccessible and of no value to pollinators. Instead choose those that have numerous simple flowers, either clustered into flat plates, called

Phlox ‘Starfire’, Eleanor Read

umbels or corymbs, such as yarrow (*Achillea*) and elderflower (*Sambucus*), or clustered into panicles or cones, like Phlox and Buddleja.

Achillea ‘Gold Plate’ has an abundance of vibrant yellow flowers in August and September that glow in low light, making them highly visible for night-flying moths.

Phlox ‘Starfire’ has vibrant crimson flowers, a spicy perfume and is adored by hummingbird hawkmoths. I have it beside both *Sambucus* ‘Black Lace’ and *Achillea* ‘Gold Plate’ and the colours are beautifully dramatic. *Buddleja* ‘Black Knight’ has a perfume which many of us associate with butterflies and has dark indigo flowers. It’s well suited to thin, chalky soils or any free-draining soil and doesn’t get as large as most *Buddleja*, so it's good in smaller gardens.

Sambucus black lace, Eleanor Read

The archetypal daisy flower-head form is present across a huge array of plants. The large single daisy flowers of *Echinacea* are actually comprised of hundreds of individual nectar producing florets which make up that central dome, surrounded by petals. Meanwhile a plant with small but multiple daisy flowers, such as Aster (often referred to as *Symphyotrichum*) are also very attractive to butterflies and being late flowered are great sources of nectar late into the autumn. If you’re wanting attractive ground cover for a sunny well-drained spot try *Teucrium* x *lucidrys*, a low-growing, woody-based evergreen perennial which continually replenishes its nectar, and is often visited here by the Essex Skipper.

Not all of our night-flying moths feed on nectar, some of them metamorphose into winged adults purely to find a mate, reproduce and lay the next generation of eggs. But for those moths that do feed at night we need to be growing night-scented plants in our gardens that are highly visible in the dark. A beautiful and easy to grow large twining evergreen climber is *Trachelospermum jasminoides* (often called Star Jasmine), whose clusters of small white star-shaped flowers release their heady perfume into the evening air from June to August and is loved by the Hummingbird Hawk-moth, Silver Y, Privet Hawk-moth and Pine Hawk-moth.

For a drought resistant, tall, night-scented perennial choose evening primrose (*Oenothera fruticosa*). Or add a romantic cottage garden look with white campion (*Silene latifolia*), a delicate native biennial whose pure white flowers glow prettily in the evening gloom, as does sweet rocket (*Hesperis matronalis*), which has a delicious fragrance on late spring and early summer evenings and as a short-lived perennial can be allowed to seed about the place, or grown easily from seed each year.

There has never been a time when such a wealth of excellent digestible research is so readily and freely available to us all, and it coincides with our wildlife being in dire straits. We wildlife-championing gardeners and garden owners are rebooting our thinking on gardening and using this wealth of knowledge at our disposal, and we should make every inch of our garden spaces count. If we all do this, we can recreate a long-lost network of habitats, sustenance and sanctuary right across the country, for these ultimately delicate and captivating winged lifeforms.

Eleanor Read
Garden Designer
https://www.beautifullybalancedgardens.co.uk