

HERTFORDSHIRE AND MIDDLESEX BRANCH

NEWSLETTER

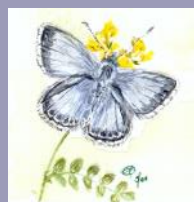
ISSUE 86

Spring 2023

TABLE OF CONTENTS

	Page
Chair's Intro.....	2
Garden Citizen Science Project	4
Photographic Competition Winners.....	5
Links to Recordings of Online Meetings.....	7
Help Create Wild Spaces for Nature.....	8
A New Butterfly Bank in Hemel Hempstead,	8
Butterfly League Table.....	10
Paradise for Pollinators.....	12
Four-spotted Moth.....	13
Butterflies and Moths Need YOUR Help.....	16
The Orange-tip Butterfly.....	22
How to Submit Records.....	27
Branch Contact Details and Internet Locations	28

In the pdf version of this document, active hyperlinks are displayed in bold blue font - clicking on this will take you directly to the source. For those reading the printed version, the full internet location is detailed below each link



Chair's Intro, by Malcolm Hull

Welcome to the New Butterfly Year

Spring is always my favourite time in the butterfly year, full of promise for the season ahead. Butterflies got off to a slow start, with very few sightings before the first sunny week in April. But Spring species are now out in force. You can find out what's flying right now on the [Sightings page](#) of our website. Follow the butterfly season as it progresses and please do share your own sightings.

[<https://www.hertsmiddx-butterflies.org.uk/sightings-new.php>]

Members Day

Over 50 members gathered in Welwyn for our annual Members Day. Guest speakers Mike Slater and Nick Bowles provided some interesting insights into the world of butterflies.

I was particularly struck by Nick explaining the success in identifying habitat requirements for the Duke of Burgundy in the Chilterns and the difficulties in providing suitable breeding sites. Plenty for us to grapple with as we try to encourage this species to return to Herts!

Mike described a very active conservation effort, conserving and creating new habitats around the county over many years. His book "Butterfly Conservation – The Warwickshire Approach" sold well, so hopefully it will inspire similar efforts in Herts & Middx.

The winning entries in the annual photographic competition were announced and the images are shown on [pages 5-7](#).

Join One of our Butterfly Walks

We have a full program of butterfly walks and moth events planned for the Spring and Summer. It's a great way to see a wider range of species, hone your identification skills and learn about habitat requirements. Many of our walks target one or two key species, but all are planned to allow you to see a good range of butterflies. All walks are suitable for beginners as well as experts and there is usually no charge.

Our Big City Butterflies staff will be busy, with more walks than ever planned in Inner London, where there are some surprisingly good sites. So have a read through the program and select some walks (some need advance booking). I hope to see many of you during the year.

This year we have several new walks, including looking for Dingy Skipper at Shrub Hill Common in Hemel Hempstead. At Hounslow Heath we will be searching for Green Hairstreak. This is a species which recolonised our part of London in the last few years and Hounslow is its best site. Come along and see if you can take a better photo than mine!



Green Hairstreaks mating
Photo © Malcolm Hull

Landscape Projects

Butterfly Conservation's strategy is now focusing more on improving butterfly numbers in areas like ours. We are working up plans for a project in the area around Hemel, Berkhamsted and Tring, also including Hexton in the north. Site visits are taking place and there is much form-filling required to obtain the necessary approvals and funding. If all goes well we hope to have plans well advanced by the Autumn. Conservation, restoration and creation of new habitats for Species such as Green Hairstreak, Duke of Burgundy, Dingy and Grizzled Skippers are at the heart of the plan. We also propose to engage with as wide a number of people as possible to provide an understanding of what we do and how they can enjoy seeing butterflies in the towns and countryside. We are also working up a second plan focussed on the Beane Valley between Stevenage and Hertford, home to many of our Grizzled Skipper colonies. More on this in the Autumn, but please do get in touch if you have thoughts or suggestions. Read more about our plans for Wild Spaces, the other strand of our new strategy on [page 8](#).

Can you Help?

If you'd like to contribute ideas, give feedback on Branch activities, start your own Wild Space, please do get in touch, either with me or any of the committee members.

If you have a few spare hours and would like to do more to help butterflies, there's a list of potential tasks on the [Can You Help?](#) page on our website.

[<https://www.hertsmiddx-butterflies.org.uk/canyouhelp.php>]

Garden Citizen Science Project - Can you Help?

Are you interested in helping to save important flower visiting insects all from the comfort of your garden?

My name is Morgan Morrison, and I am a PhD student at Royal Holloway, University of London. I work on pollinator conservation and citizen intervention.

I am looking for participants for my citizen science study 'Optimow'. As members of a Conservation group, your interests and existing knowledge could be great participants for my study. My research is looking to explore the best way you can mow your lawn to make your gardens a better place for important pollinating insects. The study would only take 15-20 minutes a week, all from your garden in May.

If you are interested in taking part, you can sign up using the following link to the **Google form** for more details and to register your interest.

[<https://forms.gle/mhySH8vQ5zqn9eSB7>]

Any questions, don't hesitate to drop me an email at morganmowing2023@gmail.com

Please note: This email has been created for the study and is not my academic email. If you're apprehensive to click unknown links please Google 'mark brown lab optimow'. This will provide you with information.

Thanks in advance,

Morgan Morrison

Twitter: @morgsmorrison73

Branch Photographic Competition Winners

UK Butterflies Category

Painted Lady
by Annie Sutcliffe
Stevenage, 29 July 2022



UK Moths Category

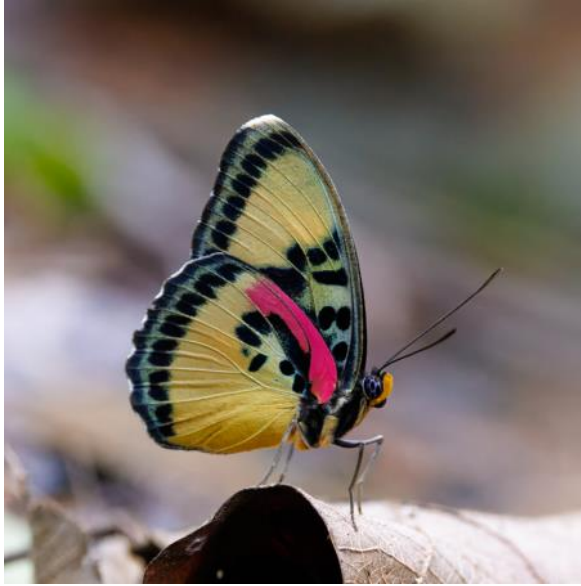
Yellow Tail
by Ian Flack
Bayfordbury, 12 July 2022

Immature Stages Category

Spindle Ermine larvae
by Ian Flack
Bayfordbury, 6 May 2022



Behaviour Category
Knapweed Fritillary repelling, by Tim Alps
Var, France, 19 May 2022



Non-UK Category
Crocker's Forester, by Ian Small
Ghana, May 2022

Note - this image shows one of over 100 species that Ian described in his recent online presentation about Ghana's wonderful forest butterflies - you can watch the recording on our YouTube channel by clicking [here](https://youtu.be/G9LEPtA-81M). [<https://youtu.be/G9LEPtA-81M>]

Recordings of other recent online presentations can be accessed via these links:

A Meander through the Alps by Roger Gibbons

[<https://www.youtube.com/watch?v=eg3PkMEWUuE>]

Herts & Middx Butterfly and Moth Records in 2022 by Andrew Wood

[<https://www.youtube.com/watch?v=CXk7Jsr6ys>]

Links to the videos of all the Branch online talks can be found on the **Videos** page of the Branch website.

[<https://www.hertsmiddx-butterflies.org.uk/youtube-new.php#OnlineTalks>]

Help Create Wild Spaces for Nature, by Malcolm Hull



Wild Spaces is an exciting new initiative Butterfly Conservation is launching across the UK. It's a chance for all members and supporters to do their bit to help create butterfly- and moth-friendly places.

Gardens, allotments, school grounds, parks, street verges, golf courses and any open space can be included. The target is ambitious, we plan to create 100,000 new spaces in total over five years!

Right now you can

- Sign up for the Garden Butterfly Survey.
- Register your Wild Space, or pledge to create one.
- Subscribe to the free Wild Spaces newsletter to get some great tips.

Coming this summer is the Wild Spaces hub – an online facility which will be a good source of ideas and inspiration.

In Herts & Middx we plan to do everything which we can to support this initiative. If you'd like to discuss ideas, help us to promote the initiative in your area, or just find out more, just contact Malcolm Hull, or any member of the Committee.

Find out more on the **BC Wild Places** website

[<https://butterfly-conservation.org/wild-spaces>]

A New Butterfly Bank in Hemel Hempstead, by Malcolm Hull and Christine Ridley

Dacorum Borough Council have created a new chalk bank to encourage Small Blue, Dingy Skipper and other local species.

The 15,000 sq ft bank is located in Spring Fields, a public park open space on Galley Hill in Warners End, Hemel Hempstead. The site was chosen because of its proximity to existing Dingy Skipper and Small Blue colonies and its favourable south-facing aspect. Butterfly Conservation advised on the design, construction and choice of seeds.

To create sustainable habitat, the first task was to modify the soil to create an environment with low fertility where alkaline-loving plants could thrive. Although chalk is the underlying bedrock in the area, it is often covered with glacial deposits and fertile soils. Firstly, the existing grass was surveyed to check the existing vegetation, which was principally coarse grass. This was cut low and then removed using a turf-stripping machine. Crushed chalk was brought in by lorries from Pitstone Quarry – 300 tons in all. It was then transferred in smaller vehicles to the new bank and covered across the area to a depth of around 15cm.



Once construction was complete, we were keen to plant wildflower seeds as quickly as possible, as the chalk sets hard after the first rain. A group of volunteers from Dacorum Environmental Network, Friends of Halsey Fields and Butterfly Conservation carried out the sowing on a frosty day in early December. Seeds in the mix included Kidney Vetch, Birds foot Trefoil, Rock Rose, Horseshoe Vetch and another dozen native chalk wildflower nectar sources.

Construction of the Butterfly Bank
Photos © Malcolm Hull & Christine Ridley

In this case there are no local rabbits, so the site is unfenced. We shall be monitoring how the vegetation develops and keen to see how the butterflies respond. We are grateful to Dacorum Council who not only provided the site, but also carried out the work and designed an interpretation board which will be installed on the site. We have given several presentations on the bank to the Dacorum Environmental Forum, Dacorum Rotary Club and Malcolm Hull was interviewed on

the subject by Dacorum Community Radio. We are hoping to work on more sites in Dacorum as part of our Chilterns Landscape-Scale project, which is currently at the planning stage.

Butterfly League Table, by Andrew Wood

I was recently sent the Annual Report of the Hants & IOW Branch and was struck by their feature of a “league” table of butterflies. I decided to steal this (their general layout is based on our report so it seems a fair exchange).

The table is based on the number of tetrads (2km squares) in which a species has been recorded over the past 5 years. There are 660 tetrads that include Herts & Middx though a number of those tetrads are only partly (sometimes only slightly) in our area as we share a border with Essex, Buckinghamshire, Bedfordshire, Cambridgeshire and Surrey.

As you can see, Small White always seems to be our most widespread species. There isn’t a complete correlation between the number of tetrads and the number of records (one record being any number of butterflies seen at one location on a particular date). There are many more records than tetrads for many of the rare species as they tend to attract lots of observers to areas like Therfield Heath for Adonis and Chalkhill Blue and Dark Green Fritillary and Waterford Heath for the Grizzled Skipper.

Species	Tet-rads	Rec-ords	Positions (by tetrad)				
			2022	2021	2020	2019	2018
Small White	490	5630	1	1	1	1	1
Large White	482	6611	2	2	2	3	2
Meadow Brown	461	3954	3	4	5	4	4
Comma	457	3780	4	7	7	9	5
Peacock	455	3771	5	5	3	6	13
Gatekeeper	442	3551	6	6	4	5	7
Red Admiral	440	2763	7	3	6	2	11
Speckled Wood	426	4145	8	12	12	10	3

Species	Tetra ds	Reco rds	Positions (by tetrad)				
			2022	2021	2020	2019	2018
Small Tortoiseshell	414	2044	9	9	8	7	10
Brimstone	389	2866	10	8	13	11	12
Green-veined White	376	2152	11	10	9	12	6
Holly Blue	376	3621	12	13	10	14	9
Common Blue	366	2054	13	18	11	13	8
Ringlet	319	1486	14	11	14	15	14
Orange Tip	313	1627	15	17	17	17	15
Marbled White	294	1175	16	15	16	16	18
Painted Lady	270	710	17	16	18	8	16
Small Copper	269	810	18	14	15	18	17
Large Skipper	228	756	19	19	20	19	19
Small Skipper	186	639	20	21	21	21	22
Small Heath	168	969	21	20	19	20	21
Brown Argus	116	474	22	22	22	22	20
Essex Skipper	96	227	23	23	23	23	26
Purple Hairstreak	94	264	24	24	24	25	23
Silver-washed Fritillary	83	254	25	25	25	24	25
Clouded Yellow	55	90	26	30	26	28	28
Purple Emperor	42	82	27	27	28	27	27
White-letter Hairsreak	34	56	28	26	27	26	24
White Admiral	24	85	29	29	29	29	29
Brown Hairstreak	20	58	30	32	32	34	36
Small Blue	19	65	31	33	31	31	30
Dark Green Fritillary	18	106	32	28	30	35	31
Chalkhill Blue	13	169	33	31	33	32	33
Green Hairstreak	10	49	34	33	34	30	32
Dingy Skipper	9	45	35	35	35	33	35
Adonis Blue	6	94	36	37	37	37	n/a
Grizzled Skipper	5	60	37	36	36	36	34
Duke of Burgundy	1	1	38	38	n/a	n/a	n/a

Paradise for Pollinators, by Malcolm Hull

This Spring, Sandridge Parish Council have been encouraging the sowing of wildflower seeds across their area, just north of St Albans. Free seeds have been made available and over 80 residents have taken up the packs to plant in their gardens. In addition, all schools in the parish have been planting seeds in their grounds. Nine public parks and gardens managed by the parish and the parish churchyard have also been seeded.



The aim is to provide a good mixture of native wildflowers which will provide both nectar and caterpillar foodplants. The main mix chosen was **Landlife flowers butterfly and bee mix**. This includes Birds foot Trefoil and Kidney Vetch, larval foodplants for blue butterfly species found locally. Yellow Rattle, which weakens coarse grasses and allows other wildflowers to thrive is also included in the mix.

[<https://www.wildflower.co.uk/products/wildflower-seed-mixtures/butterfly-and-bee/lwb-butterfly-bee-100.html>]

To help the wildflowers get established in existing grassy areas, a turf stripping machine was hired. A group of council staff and volunteers removed areas of turf before the seeds were sown. Small signs have been placed in the newly seeded areas explaining that these areas are now pollinator patches and should not be regularly mown. The grounds maintenance contract is being amended to provide for an annual grass cut in late August. The cut grass arisings will be removed, to help reduce soil fertility, which is essential if the wildflowers are to thrive.



Rebecca Pannese of Sandridge Parish Council with Turf Stripping machine
(photo © Sandridge PC)

Free seeds were handed out at a public launch of the event on 14th March at the Marshalswick Community Centre, with presentations by Tim Hill of Herts & Middx Wildlife Trust, Malcolm Hull of Butterfly Conservation and

Anne Wingate of St Albans Bee Keepers. There's more information and photos of the project at:

<https://www.facebook.com/SandridgeParish/>

Butterfly Conservations Wild Spaces initiative ([see page 8](#) for more details) is aimed at encouraging more people to take actions like this. If you'd like any help or advice then please get in touch at malcolmhull@hertsmiddx-butterflies.org.uk

Four-spotted Moth, by Sharon Hearle

Four-spotted Moth (*Tyta lutuosa*) is one of Butterfly Conservation's Threatened Species in the new strategy and is found on the northern boundary of Hertfordshire with Cambridgeshire.

The Four-spotted moth, a scarce and vulnerable species, was once widely distributed on farmland and verges in southern England. The larvae feed on field bindweed (*Convolvulus arvensis*) found in dry, sandy/chalky thin soils in open, well-drained sites. Survey work between 2010-2022 has identified declines on farmland and roadside verges where the moth is found. Road verges have become increasingly rank and overgrown; tree and hedge planting has reduced suitable habitat, and margins next to crops are generally unsuitable due to herbicide use.



Current surveys have confirmed abundant adults and there are larval records on south facing banks of a network of roadside ditches dug by landowners to prevent illegal hare coursing in Cambridgeshire close to the Hertfordshire border. Liz Goodyear, Andrew Middleton and others have also found new colonies of Four-spotted moth in Hertfordshire close to the Cambridgeshire border on private land along arable margin with those sown wildflowers. The new ditches and margins are also rich in arable flora and provide valuable nectar for the adult moths and other species. *Tyta lutuosa* was recorded in 2022 along a 4-mile length of flood relief channel near Peterborough where the upper south facing bank, crumbling soils with abundant field bindweed and regular mowing created ideal conditions. The

moth has quickly adapted to new habitat opportunities in Cambridgeshire and Hertfordshire and the creation of highly suitable breeding habitat for *Tyta lutuosa* is vital for its long-term future. We now have further evidence of how to provide this.

Hertfordshire surveys in 2023

It was a good year for Four-spotted in 2022 and the heatwave was in its favour and often the only green plant to be seen was Field Bindweed. It is possible that the moth will turn up in new areas in 2023 and this year might be a good opportunity to search other areas close to the Cambridgeshire border. The moth was previously found in the parish of Ashwell close to Arbury Banks. The following parishes are also suggested Hinxworth, Edworth, Wallington, Bygrave and Newnham. There is a reasonable chance of recording other interesting species including Small Blue, Dark Green Fritillary and a number of other day flying moths. If you do find Four-spotted moth it is particularly useful if you can undertake 15-minute timed counts and photograph the habitat.



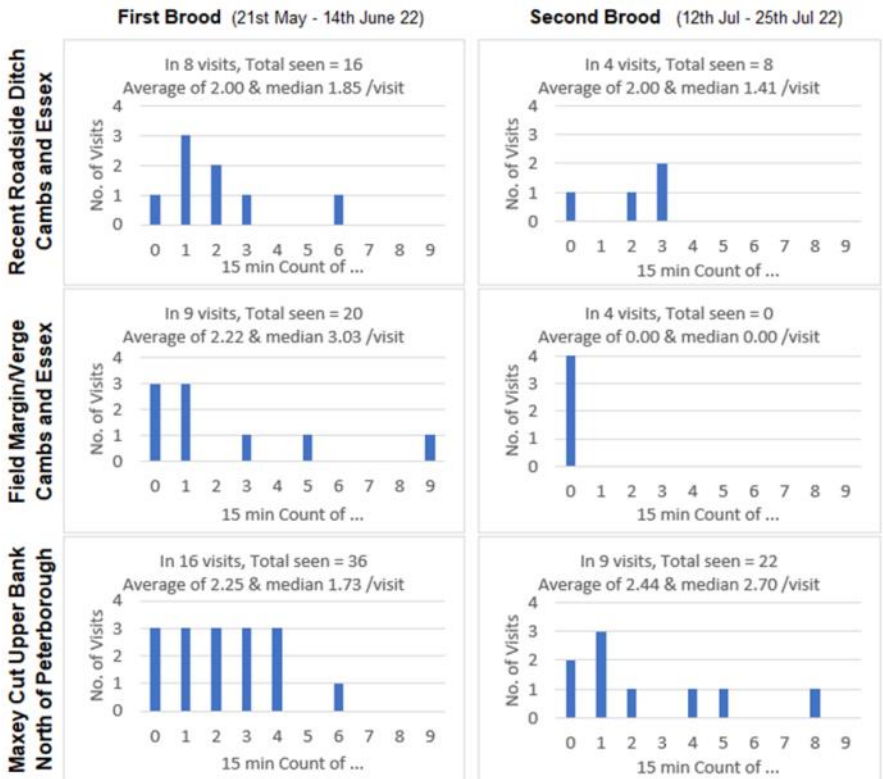
Cambridgeshire field edge ditch newly dug in 2017 and now a haven for arable flora and Four-spotted Moth. Photo © James Lowen



River edge bank near Peterborough with abundant Field Bindweed and Four-spotted moth present in 2022
Photo © Sharon Hearle

The data below is the result of 15-minute counts in Cambridgeshire and Essex in 2022 and it will enable us to begin to understand how the moth is faring. Please contact shearle@butterfly-conservation.org if you would like any further details or help. There is also a factsheet on BC's website [here](#).

[<https://butterfly-conservation.org/sites/default/files/four-spotted-psf.pdf>]



Butterflies and Moths Need YOUR Help

The following material is largely drawn from the main Butterfly Conservation website. It provides valuable information about how you can make a difference - editor.

Get Gardening

Over the last century, four species of butterfly and more than 60 moth species have become extinct. Three-quarters of British butterflies are now in decline and two-thirds of common and widespread moths saw numbers fall in the last 40 years.

Butterflies and moths form an intrinsic part of our natural world. Yet they are threatened by habitat degradation and loss, climate change and pollution. Helping butterflies and moths will not only ensure they are around to be enjoyed by future generations, but it will also improve and enrich our whole environment for people and wildlife.

Luckily, there's plenty we can do to help them in our gardens. And this will benefit you too – not only will your garden, allotment or balcony attract more butterflies and moths, but you can also give yourself a pat on the back for helping to conserve and, even increase, numbers of these declining species.

You can make a huge difference simply by growing a few choice plants, providing butterflies and moths with a garden refuge where they can stock up on nectar. But it's not just nectar that butterflies and moths need. They lay eggs on plants, which hatch into caterpillars that eat the plant before pupating and then emerging as an adult. Many common garden butterflies, such as the Red Admiral, Comma and Small Tortoiseshell, lay eggs on stinging nettles, but other butterflies breed on more garden-worthy plants.

Gardening with butterflies and moths in mind is one of the most rewarding things you can do in your own backyard, and once you've done the initial job of planting the plants, you get to sit back and enjoy the show. You don't need to be an expert gardener to provide a refuge for butterflies and moths. In fact, you don't need green fingers at all. Nor do you need a large garden – a courtyard, small balcony or even the area outside your front door will do.

Simple dos and don'ts of gardening for butterflies and moths:

Do:

- * Grow lots of nectar-rich flowers between March and November.
- * Choose different plants to attract a wider variety of species. Place the same types of plant together in blocks.
- * Prolong flowering by deadheading flowers and watering well. Well-watered plants produce more nectar.
- * Grow caterpillar foodplants for butterflies and moths.
- * Let an area of grass grow long.
- * Allow a patch of 'weeds', such as Dandelion and Bird's-foot-trefoil to flourish.
- * Leave bare patches of wall, fence or earth, or place large stones in sunny borders, so butterflies can bask.
- * Create a shelter-belt of trees, plant a mixed, native hedge, which will protect butterflies and moths from the wind.
- * Grow climbing plants up walls and fences, where butterflies and moths can shelter from the rain and frost.
- * Make a log pile, where butterflies and moths can hibernate. Some moths breed in dead wood too.

Don't:

- * Use pesticides, especially those containing neonicotinoids, as these can remain in the plant for several months and potentially harm butterflies and moths which drink nectar from the flowers.
- * Buy peat-based compost. Peat bogs are home to many species, including the Large Heath butterfly. Check the label before you buy and choose peat-free alternatives.
- * Be too tidy – leave borders intact over winter, allow leaves to accumulate under hedges and create a 'wild' area that you don't touch very often. These areas will provide shelter for insects to hibernate and rest.

Gardening for Butterflies

Gardens can act as important stepping stones between nature reserves and other natural habitats by offering abundant supplies of nectar and food plants.

Butterflies will visit any garden, however small if they can feed on suitable nectar plants and a well thought out garden can attract many species of butterfly. If you manage your patch to create breeding habitat you may see even more.

Nectar provides butterflies and moths with energy to fly and find a mate. In spring, it helps butterflies refuel after winter hibernation or a gruelling journey to Britain from southern Europe or Africa.

In autumn nectar helps butterflies and moths to build up their energy reserves so they have the best chance of surviving hibernation or the journey back to warmer climes. Another way to help butterflies is to allow them to breed in your garden - only with the right foodplants can they lay eggs of the next generation, and so the more we grow for them, the more butterflies there will be.

Tips on how to attract butterflies:

- * Butterflies like warmth so choose sunny, sheltered spots when planting nectar plants.
- * Choose different plants to attract a wider variety of species. Place the same types of plant together in blocks.
- * Try to provide flowers right through the butterfly season. Spring flowers are vital for butterflies coming out of hibernation and autumn flowers help butterflies build up their reserves for winter.
- * Prolong flowering by deadheading flowers, mulching with organic compost, and watering well to keep the plants healthy.
- * Don't use insecticides and pesticides - they kill butterflies and many pollinating insects as well as ladybirds, ground beetles and spiders.
- * Don't buy peat compost. Peat bogs are home to many special animals and plants, including the Large Heath butterfly, which is declining across Europe. There are now good alternatives to peat available from garden centres.

The best plants for summer nectar:

- * **Buddleia** (The butterfly bush). Very easy to grow in almost any soil. Different varieties will flower in pink, red, purple, and white. Usually in bloom through July and August. These shrubs need pruning well in Spring as they can grow 5' to 8' from the

ground in a single season.

- * **Verbena bonariensis.** Stems up to a metre tall support heads of lilac-purple flowers from August to October. Easy to grow from seed, plant March to April in well-drained soil. These can provide useful height at the back of a border. Only half hardy so can be a short-lived perennial.
- * **Lavender.** Flowers are a purplish-blue in colour and grow on spikes through the summer. Plants can be used for edging beds or grown to form an attractive, low-growing hedge. It thrives in a sunny, sheltered position in well-drained soil. Lavender should be planted in April or May and pruned back to encourage bushy growth.
- * **Perennial Wallflower** (Bowles Mauve). Produces a profusion of sweet-scented purple flowers from April all through the summer. Wallflowers make great bedding plants and will grow well in full sun or light shade. Plant in well-drained soil.
- * **Marjoram** (Oregano). A perennial herb, growing from 20 to 80cm tall. White, pink or purple flowers grow on spikes from June to September. A good edging plant and useful ground cover, requiring little maintenance. The smaller varieties also do well in rock and alpine gardens.

Nectar plants

Want to know what else you can do to make a difference in your garden? Download our [list of nectar plants for butterflies](#) in order of flowering month. Even if you plant just one, or go all the way and plant the full list, the butterflies and bees will thank you for it. There are plants here for every sort of garden from big to small, from urban to wild.

[<https://butterfly-conservation.org/sites/default/files/butterflynectardownload.pdf>]

Caterpillar Foodplants

Caterpillars need foodplants to survive, and butterflies will be attracted to your garden to lay their eggs. Another benefit is that the more caterpillars you have, the more birds you are likely to attract to feed on them too. A [List of butterfly caterpillar foodplants](#) is available to download.

[<https://butterfly-conservation.org/sites/default/files/butterflyfoodplants.pdf>]

Gardening for Moths

Gardens are important places for moths, especially as intensive agriculture is limiting the number of suitable habitats in the countryside. There are likely to be over a hundred species in just an ordinary urban back garden! So the way you manage your garden can really help moth conservation.

There are many ways that you can make your garden more suitable for moths and encourage beautiful garden species. Firstly, remember that moths (and other wildlife) cannot live on bare surfaces like concrete, decking or gravel. So limiting the amount of hard landscaping and increasing the area given to plants will immediately make your garden more moth-friendly.

One of the easiest ways to make your garden better for moths is simply to stop working so hard! Moths and their caterpillars need fallen leaves, old stems and other plant debris to help them hide from predators, and especially to provide suitable places to spend the winter. It's very helpful to delay cutting back old plants until the spring, rather than doing it in the autumn, and just generally be less tidy. If you want your garden to look tidy in the summer, try leaving some old plant material behind the back of borders or in other places out of sight. Many moth caterpillars feed on the native plants we consider weeds, so tolerating some weeds and long grass in your garden can also be very beneficial to moths.

Pesticides and herbicides can be harmful to moths or the plants on which their caterpillars feed. Organic gardening is very beneficial for moths and all other wildlife, but if you can't go completely organic just cutting down on the use of chemicals as much as possible will be helpful. This can also benefit your garden by increasing the 'good' insects that help to control pests.

Having a wide variety of plants in the garden will also make it suitable for a wider range of moth species. Try to have a mixture of large and small flowering plants plus a few shrubs, and a small tree if you have room. Your choice of plant species can also make a big difference. Flowers with plenty of nectar will provide a good source of food for adult moths, while certain plants can provide the necessary food for caterpillars.

Moths in your garden

Your garden is home to many beautiful moths which have important

roles in the garden ecosystem. Even a small garden can easily support over a hundred species of moths, and you may find many more if yours adjoins other suitable gardens or has trees nearby. Our downloadable leaflet shows [a selection of the moths](#) that could be in your garden.

[<https://butterfly-conservation.org/sites/default/files/garden-moths-leaflet-a5-10pp-aw-march-2015-final.pdf>]

Foodplants

To make your garden a good habitat for moths it is important to try and provide food for the caterpillars, as well as nectar-bearing flowers for the adult moths. Some moth caterpillars will eat the leaves of a fairly wide range of plants, but most are restricted to a few types of plant or even just one plant species. A garden with a greater variety of plants is likely to provide a home for more types of caterpillars. The native plants which are most likely to attract caterpillars are those which already occur in the locality, so it is worth noting what plants grow in nearby fields, hedgerows and verges, or on local urban brown-field sites.

There is a [list of foodplants](#) available to download.

[<https://butterfly-conservation.org/sites/default/files/moth-foodplant.pdf>]

Nectar plants for moths

Most moths need to refuel with nectar to give them the energy they need for flying. Some flowers have more available nectar than others, so by choosing the best plants you can make your garden a better feeding station. You should aim to have plenty of nectar-bearing flowers out in as many months as possible, including early spring and late summer and autumn. Night-scented plants are particularly good for moths, and actually evolved their night-time perfume to attract moths to pollinate their flowers. Download our [list of nectar plants](#) for moths and take it to your local garden centre for inspiration.

[<https://butterfly-conservation.org/sites/default/files/mothnectar.pdf>]

The Orange-tip Butterfly, by Ian Small

For me, the Orange-tip butterfly is the true harbinger of Spring. Although they can perhaps be seen as early as March, they usually appear in April with their peak flight period in late April and early May.

The males are very conspicuous, not least because of their bright orange wing-tips, but also because they patrol widely and can be seen in many gardens and parks, but also along forest rides. This behaviour is, of course, the search for a mate.



Male Orange-tip
Photo © Ian Small

Female Orange-tips are far less conspicuous, as they lack the orange colouring to the tips of the upper forewings, and instead have grey wingtips. They are also far more secretive, at least until they have been mated, after which they become a little more obvious as they go in search of suitable foodplants on which to lay their eggs. In flight, it is very easy to confuse a female Orange-tip with a Green-veined White, as the size and shape are similar and both have green-looking undersides. As the name suggests, for the Green-veined White, however, that green colouration is organised into distinct veins, unlike the underside of the Orange-tip. In general, the Orange-tip has a more purposeful flight, being less 'flappy' than the Green-veined White, but this cannot be used as the sole means of identification.



Female Orange-tip Photo © Ian Small

The orange colour of the male wingtips is in fact a warning to potential predators, as the butterflies accumulate bitter mustard oils from the

caterpillar foodplants. We can assume that once a bird has tasted an Orange-tip, it would likely avoid repeating the experience. Clearly, the females lack these bright warning colours, but they are not defenceless. The undersides of both sexes share an elaborate green-looking mottling on the underwings, which affords a tremendous degree of camouflage to the resting butterfly. Even in the male, the forewings can be drawn completely behind the hindwings when the butterfly is at rest, so all trace of orange disappears. This camouflage is particularly effective when the butterfly rests on the flowers of cow parsley or of garlic mustard, one of its principal caterpillar foodplants. If you are lucky enough to get a close view of the underside, then you will see that the apparent green colouring is in fact an elaborate mixture of yellow and black scales.

The male's searching for a mate takes them throughout the countryside and into most gardens. However, they rarely stay long unless flowering crucifers are present. Although Honesty and Rocket will detain them in a garden, they are unlikely to linger in the absence of either Garlic Mustard or Lady's Smock. Although the females will lay eggs on all of these species, they are far more likely to survive on the latter two. Lady's Smock is the most common foodplant on heavy soils, and Garlic Mustard on dry sites.

Males will fly as long as the sun is shining in their search for a mate.



A female Orange-tip rejecting the advances of a male by raising her abdomen.

Photo © Ian Small

They will investigate anything white, and often 'check out' Green-veined Whites. They are quickly rejected, however, as they lack the pheromones of the female Orange-tip, and the search is continued. Such is their determination, males have been known to force their way through dense foliage if they detect a female. Mating will follow if the female is still virgin, but if not, then she will repulse the male's advances by raising her abdomen.



Mating Orange-tips. This close-up shows that the 'green' mottled pattern of the underwing is made up of a combination of yellow and black scales. Photo © Ian Small

After mating, the female will begin the task of finding suitable host plants on which to lay her eggs. Flowering crucifers are her target and she will fly purposefully along rides, glades, field-margins etc. in her search. Potentially suitable plants appear to be first identified by sight, but she simply has to land on the plant to know for sure. Chemical sensors in her feet respond only to suitable plants, and if nothing is immediately detected, she will quickly move on to another potential host.

Several crucifers are used, especially Cuckooflower (*Cardamine pratensis*) in damp meadows and Garlic Mustard (*Alliaria petiolata*) along road verges and ditches. Occasionally, it uses Hedge Mustard (*Sisymbrium officinale*), Winter-cress (*Barbarea vulgaris*), Turnip (*Brassica rapa*), Charlock (*Sinapis avensis*), Large Bitter-cress (*C. amara*), and Hairy Rock-cress (*Arabis hirsuta*). In addition, it lays its eggs on Honesty (*Lunaria annua*) and Dame's-violet (*Hesperis matronalis*) in gardens, but larval survival is thought to be poor on these plants.

Once a suitable plant is located, a single egg is laid on the underside of a flower bud. Although this is very pale and translucent at first, the colour turns pink and then orange after just a day or two. They

stay this way for a week or two, during which time they can be quite easy to find. Isolated, unshaded, flowering plants are favoured, often close to a hedgerow or bank. Only large crucifers have sufficient food for even a single Orange-tip caterpillar.



Orange-tip egg Photo © Ian Small

When the egg hatches, the small caterpillar burrows into the flower, where it feeds on the developing seed. Before long, it will feed only on the seed-pod of its plant, and becomes beautifully camouflaged as it does so. It usually lies along the pod, eating inwards from the tip as it does so.

When young, the caterpillars are said to be cannibalistic, but this is likely to be rare as females lay only a single egg per plant and seem able to detect the presence of another egg (or caterpillar) and simply reject the plant.

As with many butterflies, predation is high at these early stages. The eggs and young caterpillars appear to succumb mainly to invertebrate predators that climb the foodplants at night. Once larger, then birds become a major predator, as does the parasitic fly *Phryxe vulgaris* (which is the same fly that also parasitises the Small Tortoiseshell at the same stage of its lifecycle).



Orange-tip caterpillar
Photo © Ian Small

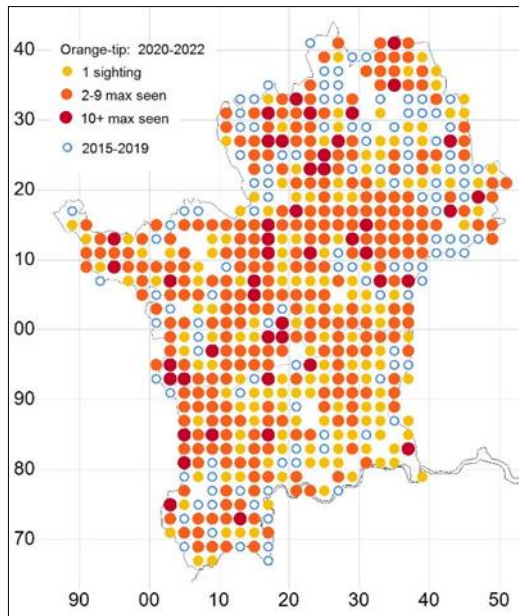
The caterpillars that survive then leave the foodplant to pupate. They are almost impossible to find in the wild, but are likely to be in the bushes

and tall vegetation where virgin females sit in Spring. Most images of the pupae derive from captive-bred stock. Although I regularly have Orange-tips breeding in my garden (where they use Garlic Mustard) I have yet to find a pupa. I suspect that the caterpillars are able to travel quite some distance from their host plant before selecting a suitable one on which to pupate.



Orange-tip Pupa
Photo © Dean Morley

I reproduce below the latest distribution map for the Orange-tip in our Branch area (from 'Butterflies of Herts & Middx 2022', sent to all members). It is clearly a very widespread species throughout our area, yet there are still squares where there was only a single sighting last year or no sightings at all. Why not try to see if we can record it in some of those squares this year - remember, you can record any of the lifecycle stages, so finding an egg or a caterpillar is as valid as having seen the adult butterfly.



How to Submit Records

Our preferred method for record submission is the phone app called **iRecord Butterflies**. It is completely free and is available for Apple and Android devices. iRecord Butterflies will guide you through the identification of any butterfly than you see in the UK. You can compare you own photo with those from the app's extensive image library, filter species by colour, pattern and size, and see distribution maps and identification tips for each butterfly species.

[<https://butterfly-conservation.org/our-work/recording-and-monitoring/irecord-butterflies>]

Other apps such as **iRecord** and **iNaturalist** will also work in the same way as does the web based Butterfly Conservation tool BNM Online Portal.

[<https://irecord.org.uk/home>]

[<https://www.inaturalist.org/>]

Once you have identified the butterfly, simply enter a few simple pieces of information, such as the number that you saw and a place name (important so that the sightings can be checked on maps) and submit. The app will automatically calculate where you are (using the GPS in the Smartphone) and provide a grid reference for your sighting.

All your records go into a holding area where they are verified by us before being added to the county and national databases.

Further information is on the Branch website [here](#).

[<https://www.hertsmiddx-butterflies.org.uk/recording-index.php>]



Committee Members

Chair: Malcolm Hull

11 Abbey View Road, St. Albans, Herts. AL3 4QL..... 07768 154324
malcolmhull@hertsmiddx-butterflies.org.uk

Branch Organiser: Liz Goodyear

7 Chestnut Avenue, Ware, Herts., SG12 7JE (01920) 487066
elizabethgoodyear@talk21.com

Membership Secretary & Newsletter Editor: Ian Small

59 Penn Way, Letchworth, Herts. SG6 2SH.....(01462) 677654
ian-small@virginmedia.com

Records Collator: Andrew Wood

93 Bengoe Street, Hertford, Herts. SG14 3EZ 0776 5098824
zoothorn@ntlworld.com

Moth Officer: John Murray

Field End, Marshalls Heath, Wheathampstead, Herts. AL4 8HS (01582) 833544
J.B.Murray@open.ac.uk

London Contact: Paul Busby

113 Southbourne Gardens, Ruislip, Middx, HA4 9TA 07749 709422
buzz113@hotmail.co.uk

EBG Liaison: Roger Gibbons

7 Lowlands, Hatfield AL9 5DY gibfam@ntlworld.com

Publicity Officer: Alex Lewis lemsfordalex@gmail.com

Millhoppers Reserve Managers:

Paula Reid 0796 2874455 or reidpaulaj@yahoo.co.uk

Christine Ridley 01442 386322 or chrisridleysen@yahoo.co.uk

Chris Hilling cosmosra@tiscali.co.uk

Webmaster:

Peter Clarke, 13 Lyndale, Stevenage. SG1 1UB peter.clarke4@ntlworld.com

Branch website: <http://www.hertsmiddx-butterflies.org.uk/>

Facebook: [http://www.facebook.com/](http://www.facebook.com/ButterflyConservationHertsMiddlesex)

[ButterflyConservationHertsMiddlesex](http://www.facebook.com/ButterflyConservationHertsMiddlesex)

Twitter: https://twitter.com/Bc_HertsMiddx

Instagram: <https://www.instagram.com/hertsmiddxbutterflies/>

The magazine is produced by the Hertfordshire and Middlesex Branch of Butterfly Conservation (Company limited by guarantee), registered in England (2206468). Registered Office: Manor Yard, East Lulworth, Wareham, Dorset BH20 5QP. Butterfly Conservation is a charity registered in England & Wales (254937) and in Scotland (SC039268). VAT No. GB 991 2771 89 The views expressed in the magazine are not necessarily those of the Committee or the National Society. Copyright 2023.