Herefordshire Newsletter

No. 15 March 2023

Mike Southall—Chairman West Midlands Branch, Butterfly Conservation

I am just reflecting on our recent Branch Committee meeting held again at Grafton Parish Hall as I watch the snow fall outside. The meeting overran my agenda timing by some distance which was a combination of a good attendance, a lot of ground to cover, and the Chairs desire to let everyone have their say. My daughter has since sent me a file on how to Chair a meeting and I hope to improve the time keeping next time. My



apologies to any committee members inconvenienced, and in my defence, I did spend most of my working life sat on a tractor.

A budget discussion formed a large part of the meeting, and the branch was able to allocate funds in Herefordshire to Ewyas Harold meadows, and Woolhope Dome Wood White management. A Herefordshire Grayling survey and an interpretation sign board for Haugh Wood were put forward by Martyn Davies and approved. Bringsty Common Manorial Court was given money as a gesture of goodwill following some unbudgeted contractors work on the Common. The meeting agreed to start a Grayling Action Group, as proposed by Jenny Joy, as it is feared that this declining resident may be lost from our region. It is planned to quickly gather more information about the butterfly's status and habitat requirements from across the West Midlands.

Rhona Goddard Butterfly Conservations Conservation Manager for the Midlands gave an update on the Saving Butterflies and Moths 2021-26 Strategy. Nationally there are now 71 Threatened Species and 114 Landscapes for BC staff to prioritise. Only 12 of the named threatened species can be currently found in our region. Three butterflies, Wood White, Pearl-bordered Fritillary and Large Heath. Nine moths, Large Red-belted Clearwing, White-barred Clearwing, Yellow-ringed Carpet, Barred Tooth-striped, Silvery Arches, Current-shot Borer, Brown Sweep, Greenweed Fat Body, and Scarce Aspen Knot-horn. Except for the Large Heath all these species have been recorded in Herefordshire. A few are local residents, but many of these records, which can be found on the West Midlands Moths online atlas, are historical. There may be a chance with some targeted field work to re-find some of these threatened species. Any records of these threatened species would be much appreciated. A small donation to become a golden cinnabar member of our moth site gives more information about individual records, who, when and where, and helps to pay for the sites upkeep.



I hear that the moth meeting and social organised by Robin Hemming and others in Hereford was well attended and was hoped to lead to some regular moth trapping events in Herefordshire.



Saving butterflies, moths and our environment

Two of the local Landscapes named are Stiper Stones, Long Mynd and Stretton Hills and North Herefordshire and South Shropshire Woods and pastures amalgamated, and Malvern Hills, Wider Wyre and West Worcs woods amalgamated. This may be stretching the term landscapes more than a little, but it should allow BC staff more scope for improvement works at more sites.

The other element of the strategy is to transform 100,000 Wild Spaces in the UK for people butterflies and moths. To this end Butterfly Conservation have employed a Wild Spaces Manager in the Engagement and Volunteering Directorate. His name is Stephen Gray. Steve has worked in the environment sector for over twenty years and is currently living with his family somewhere in rural Herefordshire.

John Tilt gave a presentation about the increase in butterfly recording in the region. He opened the West Midlands Butterfly and Moths website and showed in the recording section the transect trends and how these results can be used to manage habitat. Many of the transects are within Herefordshire and a map shows where they are. Last year's 2022 results can be found on the website combined with yearly trends. The big butterfly results are also shown in this section. John emphasised the need to utilise the records and their trends to manage habitats better for butterflies and moths.

The West Midlands branch had a 7.5% increase of membership in January to 1830 households and 2498 individuals, although this figure fell slightly in February, we remain the largest of the 32 branches.

As an aside, I happened to notice that the Americans have renamed the introduced Gypsy moth to the Spongy Moth. This has been done because the Romany people there see the term "Gypsy" as a racial slur. Spongy refers to the sponge like yellow egg masses laid by the female. This made me think about which of our common lepidoptera names might be up for scrutiny. Should we be looking into the family background of some of our species named after people? Can we still use colour or size or gender to describe species? Is Old Lady still an appropriate name? and who was Mother Shipton anyway? The mind boggles: I concluded that it is probably best to leave things alone, except perhaps for the Common Fanfoot, whose name could be changed to the Very Scarce Fanfoot, and the Scarce Footman to the Not-So Scarce Footman or possibly Slender Footman- to end on a positive note.

Mike Southall

PS I have often felt sorry for the Dingy Skipper and Drab Looper what these names must do for their self-esteem? - Ed

Mother Shipton was an English Prophetess born in a cave near Knaresborough in Yorkshire - Ed

Editors Ramblings

Welcome to Newsletter 15 and I hope that you are reading this from your own copy which should have arrived by email, because that will mean that the blight on the delivery of these has been sorted at least in part. The data protection act may have been necessary in some form or other but not allowing me to keep email addresses on my computer (In a password protected list) is a major inconvenience when trying to get information out directly to you. You can rest assured that the only information that I send out will be directly concerned with the conservation of Butterflies and Moths or details of the working of the Herefordshire Group which as members of BC you are welcomed to attend and have been put in place to hopefully enhance your membership of the organization.

Later in this newsletter I hope you will find an article on the formation of the "Grayling Group" which will attempt to bring together interested parties to conserve known colonies of what is a rare inland species and far from common in the West Midlands. As well as on-going conservation I hope that they will look for other colonies and one such area is the West of Herefordshire uplands. It may be possible to organise a more targeted search next year but any help you can give by looking in these areas this year and reporting your findings even negative ones would be appreciated. Helpfully, I hope (!), I have put together an article on the butterfly in this issue.

The Pearl-bordered Fritillary reintroduction continues to make progress and I hope that Mel Mason will provide an insight it to its hoped for success this spring in a later issue of the Comma as at

least one of the sites is in Herefordshire. If you happen to be in the area it is vital that you stay on the main paths. If you want to photograph the butterfly find a patch of nectaring plants near to the path and wait for the butterfly to come to you and not the other way round, it usually works.

I need help in other ways too! I would like articles or just short personal pieces about something which has attracted you to butterflies or some encounter you may have had that was special to you. It may be a small area perhaps with a nice view where you have seen butterflies that others could visit and enjoy; we all know about Haugh Wood but it cannot be the only place! I like reading these pieces and I know other people do as well. I would also like to encourage more of you to produce artwork or maybe poetry for inclusion in the next newsletter: your copy or other material needs to be with me by end of September. If we are talking of artwork then a good quality photograph would be fine with details attached. Please don't hide your light under a bushel, let us all enjoy it. To show you what I mean I have included some artwork produced by John Norton who was curator of Ludlow Museum in the 1980s. He produced some beautiful line drawings of butterflies used in early West Midland's branch publications. I hope the duplicating and computerisation does them justice.

Hereford Local Group We started this group before lockdown and we had begun to put on events for the Herefordshire member's with a member's evening and the production of a "Herefordshire Newsletter". It is worth pointing out that the production of this news letter costs Butterfly Conservation nothing, it is produced locally and all the contributors do so at no charge. However, now is the time to get things going again. It would help if those of you reading this let us know what you want us to put on for you. An annual members evening, walks to see unusual species or for beginners to help with identification of the species you may see in your garden or when out for a walk in the local area, articles about Gardening for Butterflies and Moths, Competitions for children and/or adults. Please let us know.

In an attempt to get things going I will lead two trips this spring and summer, hopefully some other of our experienced members will volunteer to join us and help you get to know your butterflies. The first trip will take place on Saturday, 6th May when we will go in search of the Pearl-bordered Fritillary on Ewyas Harold Common and also visit the BC reserve just below the common. Later we will have a stroll around the South side (or part of it) of Haugh Wood on Sunday 6th August. It is hoped that the latter would be suitable for people with limited mobility as well as able-bodied. If necessary we can split into two groups. Details for both of these are given below.

I think that is all I wish to say at the moment but I hope I can give you details of other free events which you may like to attend, especially moth events. If you have an email address but received this newsletter by post please let us know so we can save postage and paper copy production costs on your copy of the next newsletter due in October and also details of other events we may organise in the near future.

Please feel free to write a piece for the next newsletter and send it to me, all contributions gratefully received!! Copy by 20th September 2023 please, but I can always try and squeeze in something which comes in after that date.

Enjoy your butterflies and moths this year. My year started on 1st Jan 2023 when I saw a Red Admiral flying along the south facing edge of a woodland, however, I should point out that I was in North West Switzerland visiting a son and his family. What a delight on New Years Day.

Martyn Davies

Herefordshire Group Walk Ewyas Harold Common

2.30pm, Saturday, 6th May 2023

Meeting location: The northern Cwm Hill end of Ewyas Harold Common adjacent to the top cattle grid at OS SO382302. Approach from Abbey Dore off the B4347 at OS SO384306

Looking for the Pearl-bordered Fritillary and others.

Check for details 07932 182757

Herefordshire Group Walk Haugh Wood South

2.30pm Sunday 6th August

Meet in the Forest Enterprise Car Park at the top of the hill on the Mordiford— Woolhope Road. I am hoping this will be suitable for disabled members and friends!

Identification of the common species.

Early 2023 Records: Herefordshire

I have received these records so far for the early months of 2023:

Brimstone 10 records, Comma 6, Peacock 3, Red Admiral 10 and Small Tortoiseshell 5.

All of these insects hibernate as adults, so they are amongst the first butterflies to be seen in spring. Small Tortoiseshell are sometimes found indoors or in log sheds. Red Admiral used to be thought of as summer migrants, but, with milder winters, there is evidence that they can now survive our winters. Commas, with their jagged wing edges, resemble leaves, and probably gain some protection by this camouflage. The yellow colour and shape of brimstones mimics those yellow leaves found on ivy climbing walls and trees.

It remains to be seen what impact the hot weather/ drought in July 2022 will have on our insect populations in 2023. All we can do is to continue to record what we find and report our findings.

Pictures of the "Hibernators" from top right round to bottom left: Brimstone, Comma, Peacock, Small Tortoiseshell and Red Admiral.











Personally, I seem to spend quite a few summer days recording butterflies in Haugh Wood. Penny and I are part of the group who monitor the population of butterflies by a system of weekly counts along 2 fixed routes, one in Haugh Wood North, the other in the South. The transects are coordinated by Kate Wollen of Forest Enterprise. Having access to Herefordshire butterfly records via i-record has highlighted one or two areas much less visited than Haugh Wood. Here are some suggestions for exploration:

- a) Ewyas Harold Common: a top spot for Pearl bordered Fritillary. Grizzled skipper also found there. Early May a good time to visit. Whilst on the common visit the beautiful BC Ewyas Harold Reserve, on the South West border of the Common. Details on the BC website.
- b) Hergest Croft/ Hanter Hill area outside Kington. Records of Dark Green Fritillary and Small Pearl-bordered Fritillary in June 2022. This area lies to the west of Kington and may yet yield other interesting sightings.
- c) The Doward. Several HWT reserves full of interest. White Rocks reserve is one of the remaining strongholds for Grizzled Skipper. The Doward, is an area in the parish of Whitchurch in south Herefordshire, England, consisting of the hills of Little Doward and Great Doward and extensive woodland. It is within the Wye Valley Area of Outstanding Natural Beauty, on the border with Monmouthshire. Wales.

 Bob Hall

Moths and more from the Black Mountains.

There are about 20 moths found on the Black mountains in the west of the Herefordshire, which are either found no-where else in the county or only rarely elsewhere. Most are dayflying and so can be identified without a moth trap. The majority feed on Heather or Bilberry.

The best places to look for these moths are Hatterall Hill, the Black Darren/Red Darren, the upper Olchon Valley/Cats Back and anywhere on the top. Three nice summer weekend walks! Take a net to prevent frustration and trips on the heather. Midday to early afternoon on warm sunny days in July being the best time. Also walking through the heather rather than staying on the path is best as many moths are easily disturbed from the undergrowth.

Remember to keep a record of where and when, and a photo may be needed for verification and let your county recorder know.

If you are really keen it would be great to get some records of night flying moths but you will need a moth trap and generator. [There is car parking below the Cats Back, The Darren and Hatterall Hill which gives ready access to the lower slopes.]

Fox Moth, Oak/Northern Eggar, Emperor moth, Grass Emerald, Smoky Wave, Small Argent and Sable, Grey Mountain Carpet, Gallium Carpet, Striped twin-spot Carpet, Chevron, Northern Spinach, Beautiful Yellow Underwing, and Scarce Silver Y are all day flying moths or are easily disturbed from the undergrowth.





Fox Moth

Oak Eggar/Northern Eggar

Emperor Moth







Grass Emerald

Smoky Wave

Chevron







Small Argent and Sable

Striped Twin-spot Carpet

Grey Mountain Carpet

Light Knot Grass, Dark Brocade, Autumn Green Carpet, Small Autumnal moth, Northern Rustic, Silurian and Haworth's Minor which are mainly nocturnal moths have been recorded in the past. Quite a few of these moths haven't been recorded for years although all are probably still present. However

there is not so much to excite the Butterfly enthusiast - lots of Small Heath, Meadow Brown, Hedge Brown, Large Skipper, Small Copper, Holly Blue and occasional Dark Green Fritillary.

Botanists amongst you look out for Mossy Saxifrage flowering in the Black Darren and also Meconopsis cambrica [Welsh Poppy] which also grows wild on the screes. There is also a small [secret colony] of Lesser Twayblade.

Bird life is good too. In the summer there are breeding Peregrine Falcons, Red Grouse and Golden Plover, as well as Sky Larks, Meadow Pipits, Snipe and Cuckoos. You maybe lucky and see a Merlin flying low over the heather.

Dr Paddy Matthews

For a number of issues now Dr Matthews has been providing us with notes from "Under the Black Mountains" and I really appreciate his efforts as that part of Herefordshire is so different to the majority of the county. As he suggests more records of any Lepidoptera would be welcome. Problems with moth identification can often be sorted quickly by sending a photograph taken on a mobile phone to the moth recorder Peter Hall—information of how to contact him is on the last page of this document. The book "The Moths of the West Midlands" produced by the West Midlands Branch of Butterfly Conservation is excellent - Ed

Ewyas Harold Meadows Reserve & Ewyas Harold Common - Update Autumn 2022 / Winter 2023

We were informed in December 2022 that Ewyas Harold Meadows Reserve successfully received Local Wildlife Site status, following a Local Wildlife Site survey carried out by Sue Holland in Summer 2022 as part of Herefordshire Wildlife Trust's Wilder Hereford Project.

The designation as a Local Wildlife Site is an acknowledgement of the reserve's botanical and invertebrate diversity at a county level. The underlying limestone geology in some areas of the meadows give rise to some interesting flora including Dwarf Thistle *Cirsium acaule* and Yellow Wort *Blackstonia perfoliata*. It is a great achievement and credit to all Butterfly Conservation staff and volunteers that have contributed towards the management of Ewyas Harold Meadows.

Monthly Saturday and Tuesday work parties have continued over Autumn 2022 / Winter 2023 to particularly control invading hawthorn and bramble scrub in the meadows. We have a great local grazier on board whose two ponies and sheep have grazed the meadows this year too.

Following on from achieving Local Wildlife Site status we met with Sue Holland at the reserve to discuss management guidance, in addition to existing annual management, on the reserve to ensure we can manage the reserve to sustain the botanical diversity, as well as continue to create areas of bare ground and achieve optimum sward structure for the availability of larval food plants and roosting habitat through grazing. Management of the invading scrub is key and over the next year, in addition to continuing work parties with volunteers, we will be working with contractors to work on tackling some of the scrub mechanically, in addition to annual thistle topping and cutting of the hay meadow.



Dwarf Thistle, Ewyas Harold Meadows, Sue Holland 2022



Pony taking a break from grazing Ewyas Harold Meadows, Natalie Norton 2022





As well as working on the meadows, we have continued to work in partnership with Ewyas Harold Common Trust with Butterfly Conservation volunteers carrying out practical conservation work, led by Dean Fenton, on adjacent Ewyas Harold Common. The work parties have cleared scrub to maintain flight paths and connectivity between the common and the meadows for Pearl-bordered Fritillary. As you can see in the before and after photos on the previous page the volunteers have done a great job.

Ewyas Harold Meadows Work Parties – Autumn 2023 / Winter 2024

We can't guarantee the weather on work parties but even if it does rain on a Ewyas Harold Meadows reserve work party it can be followed by a wonderful rainbow!

Work parties are held every

1st Tuesday of the month (except January) and 3rd Saturday of the month.



Clear blue skies on a Ewyas Harold Meadows Work Party, Natalie Norton 2023

Ewyas Harold Meadows Tuesday Work Parties						
Date	Time					
Tuesday 3 rd October	11:00am – 3:00pm					
Tuesday 7 th November	11:00am – 3:00pm					
Tuesday 5 th December	11:00am – 3:00pm					
Tuesday 9 th January	11:00am – 3:00pm					
Tuesday 6 th February	11:00am – 3:00pm					

Meeting location: The northern Cwm Hill end of Ewyas Harold Common adjacent to the top cattle grid at OS SO382302. Approach from Abbey Dore off the B4347 at OS SO384306.

What to bring: Heavy duty gardening gloves, lunch, and a drink. It is advisable to wear sturdy footwear including wellington boots, walking boots or ideally steel-toe capped boots. Wear clothing appropriate for the outdoors in all-weather including warm and waterproof clothing. Hand tools can be provided but

are in limited supply please contact the work party leader prior to attending the day if you require hand tools.

Contact: Natalie Norton, nnorton@butterfly-conservation.org / 07485372199.

If you are interested in attending a work party, please contact the work party leader prior to the day so that the work party leader can contact you should the event need to be cancelled at short notice e.g., in the event of poor weather conditions.

Ewyas Harold Meadows Work Parties						
Date	Time					
Saturday 16 th September	11:00am – 3:00pm					
Saturday 21 st October	11:00am – 3:00pm					
Saturday 18 th November	11:00am – 3:00pm					
Saturday 16 th December	11:00am – 3:00pm					
Saturday 20 th January	11:00am – 3:00pm					
Saturday 17 th February	11:00am – 3:00pm					
Saturday 16 th March						

The contact for the above work Parties is Dean Fenton;

County Leader Dean Fenton fenton@littleburyfarm.co.uk 01568611575

Date for the Diary! Ewyas Harold Meadows and Common Survey Day Tuesday 9th May 13:00- 16:00pm

We will be carrying out timed count and habitat condition surveys for Dingy Skipper, Grizzled Skipper, and Pearl Bordered Fritillary. It will be held on Tuesday 9th May starting at 13:00pm - 16:00pm. It will be open for anyone to attend who is interested in getting to know about identification and habitat requirements of these species, as well as training on the survey techniques.

The Grayling

The Grayling is a master of camouflage and subterfuge. When at rest the colour pattern of the underside of the hindwings allows the butterfly to blend into its stony/rocky backdrop with ease and when you are out trying to photograph one it is very difficult to spot if it moves away from where you first located it. Not only that but it rests facing into the sun so as not to cast a shadow or with its wings angled in such a way as to maximise the heating effect of the sun or minimise overheating. The forewing undersides have large eyespots which will deter predators but when resting for more than a few seconds the forewings are pulled down behind the camouflaged hindwings. When it flies it is a distinctive, large butterfly with a strong looping and gliding flight, during which the paler bands on the upperwings are visible.



A Grayling at rest only the underside of the hindwings visible

Distribution

A look at the distribution map shows that it is very much a butterfly of coastal areas with far fewer inland sites. In the West Midlands it is found on or the Long Mynd/Stretton Hills/Stiperstones area of South West Shropshire; it may also still be found on North Hill at the Northern end of the Malverns although very few were seen there last year. In neighbouring Gloucestershire it was found on Cleeve Hill above Cheltenham, part of the Cotswold escarpment and at some old industrial sites in the Forest of Dean. There are no known colonies in Herefordshire! So why is there an article in the Herefordshire Newsletter about a species which is not found here? This is where you come in. Some parts of this county are very under-recorded and it may be at some suitable habitat the butterfly still exists and we are asking that if you are out and about you look out for it. While walking the hills you

could also target accessible rocky outcrops, hill forts or other places where bare habitat and its foodplants is present in sheltered/south facing places such as old quarries or ancient monuments (where you can gain access permission). If present, look for the presence of males and females (as females indicates breeding habitat might be present where you saw them) and/or try to look for egg-laying females.

It may be that Graylings travel further than we think. In the Long Mynd area in Shropshire people sometimes see Graylings nectaring in their gardens a few kilometers away from known sites. As a number of the grayling colonies in this area live on rocky outcrops where the main/only nectar source is heather, it maybe they travel down to gardens when they emerge before the heather is in flower. We are asking local people in this area this year to record what flowers see them feeding on if they see them nectaring in their gardens, and then visit occupied sites where heather is the main nectar source and see if it is out – that might help to prove this idea.

Flight Period

There is one generation each year and it is on the wing from mid-July into August in the West Midlands.

Grayling	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Egg												
Larva												
Pupa												
Adult												

When to see the different stages of the Life-cycle

Life Cycle

Eggs are laid singly on a grass blade or on nearby debris. Small, semi-isolated tussocks of grass amongst bare soil seem to be the most favoured places. The larvae feed at night during September and October, and retreat to the base of the grass-tussock during the day. In November they enter diapause, which can be thought of as a period of suspended animation when the environmental conditions are unfavourable, ie Winter. They spend the winter either on or below ground level; they have occasionally been found in earthen cells below stones. The larvae may also feed occasionally in winter when conditions are mild, and then they recommence feeding in March, both during the day and night. Pupation occurs early in June when the larva burrows into the soil and excavates a small cell lined with silk.



The larvae feed on a variety of grasses, but more commonly on Sheep's Fescues (*Festuca ovina*) and Red Fescue (*F. rubra*), Early Hair-grass (*Aira praecox*), Tufted Hair-grass (*Deschampsia cespitosa*) and Marram (*Ammophila arenaria*).

Flowers visited - Nectar Sources

Generalist, adult nectar sources include: Bird's-foot Trefoil (*Lotus corniculatus*), Bramble (*Rubus fruticosus*), Carline Thistle (*Carlina vulgaris*), Heather (*Calluna vulgaris* / *Erica* spp.), Marjoram (*Origanum vulgare*), Red Clover (*Trifolium pratense*), Teasel (*Dipsacus fullonum*).



Egg above, caterpillar below





Chrysalis or Pupa

Habitat

Grayling colonies can range in size from fewer than 50 adults to thousands on larger stretches of suitable habitat. Little is known about their dispersal ability, but they appear to be highly colonial and adults are sometimes seen away from their breeding areas. The males are very territorial whilst the females are secretive, and are generally only seen when flying between tufts of grass to lay eggs. Habitats are characterised by sparse vegetation, sheltered sunny spots and plenty of bare ground in

open situations. Many colonies occur in coastal habitats such as sand dunes, saltmarsh, undercliffs and clifftops. Inland colonies are found on lowland heathland, limestone pavement, scree and brownfield sites such as old quarries, railway lines and derelict industrial areas.

Personal Encounters with Grayling

Three are worth mentioning:

- 1. Braunton Burrows on the N. Devon coast is an area of sand dunes with large areas of Marram Grass, the tall spikey grass found in such areas. It has a large colony there and it was possible to photograph the adults with their wings open when they were displaying prior to mating. This is normally impossible as the moment they land after any flight they shut their wings and almost straight away pull the forewings down behind and between the hindwings. In large areas of sand dunes there can be very large colonies of the butterfly.
- 2. On Cleeve Common overlooking Bishops Cleeve and Cheltenham the butterfly is common on some of the areas of bare rock created by quarrying in past times. Sometimes they have small red "protrusions" by the back of the head these are mites of the species *Trombidium breei*, "studies have shown that these mites are harmless to the butterfly, having no detectable effect on the flight performance, orientation ability or lifespan".
- 3. Finally back in the 1980's I accidentally entered an abandoned part a working quarry where the two commonest species were Grayling and Clouded Yellow! For the time being the site will be kept secret until we have permission to search it for the Grayling. The quarry ceased working in 2008 and it could be that the butterfly is still there. This site is in Herefordshire.

What can you do?

We would like you to look out for the butterfly during July and August if you are out walking among the hills in the west of the county. If you see it please let us know as soon as possible we may be able to visit the site to confirm your record. If possible take some photographs as you get closer, even a small butterfly in the middle of a large photograph might be sufficient to identify it and less chance of disturbing the "beast". Make a note of where you are and let us know by

email attaching any photographs you may have managed – not easy!!! Best to let us know by email but telephone is an alternative if we are around.

The chart at the top of the next page shows the decline of the species in the West Midlands, this will probably be true for most other areas of the country. It is for that reason the West Midlands Branch of Butterfly Conservation have established a "Grayling Group". The idea is simply to see how best to conserve what we have and to try to find new sites in other counties The purple squares on the map show where the Grayling is found currently in Central West Shropshire and on the Malvern Hills on the Worcester/Hereford Border.

Any help you can give and records you can complete will be much appreciated. **Martyn Davies**



Braunton Burrows, Devon

Adult wings open



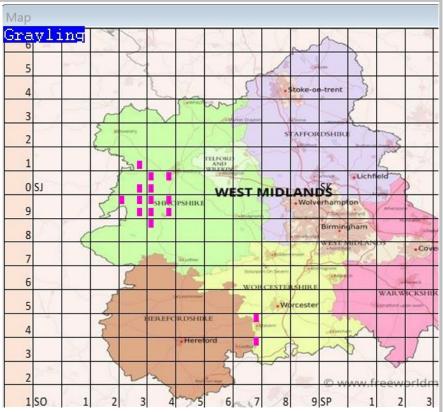


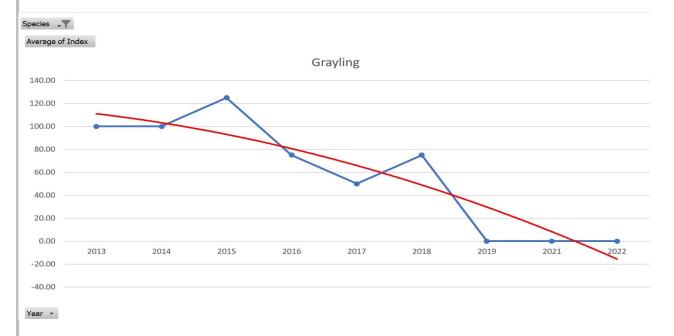
Cleeve Common Quarry and Mite infested adult



A pair of Grayling mating, showing the eye spots before the forewings disappear.







With Grayling records please inform either Martyn Davies or Bob Hall details at the end of the Newsletter under the list "Your Local Officers" at the end of the newsletter. Thankyou.

Marbled White

A butterfly that always lifts my spirits upon seeing it in flight is the Marbled White. Growing up in Herefordshire in the 50s and 60s. I could usually see at least one or two on a summer walk, without too much trouble; and I suppose if I'd made a special effort and gone actively seeking them, there would have been good numbers flying. It was, however, a good hundred miles away that the species really took hold of me and turned my casual interest into unbridled elation upon chancing on a large field full of marbled whites in the south of England. To see the fascinating marbling of black and white in profusion, flying over a very large field that day forty years ago has subconsciously



imprinted the same elation every time I see one. But to get back to sightings locally, we could hope to see some most years on our regular walks in Haugh Wood. At no great distance away, we expect to see good numbers on the neighbouring Broadmoor Common, which they seem to like.

One location for which we have kept Marbled White records is Garway village common (not Garway Hill common). We recommended to visit this location as being somewhere that seems to suit them well; and we were well rewarded on a sunny morning in late June 2018 by counting 45. We returned in June 2019 which accounted for 23; June 2021 for 13; and July last year, again 13. Now, this butterfly is by no means a rarity locally – far from it, but whenever I glimpse that distinctive mottling, the old thrill is never far away. For comparison, in 2022 at this location, Meadow Browns numbered 30+ and Ringlets 35+, these being too numerous for accurate counting.

If Garway common gave fewer sightings in 2022 of Marbled Whites, it was more than made up for in the number of Small Skippers flying on our visit. The number seen was in excess of 30, and probably considerably more. This is a location we will continue tovisit in late June/early July.

Jeremy Soulsbury





The underside of a male marbled white, the female is brown where the male is black.

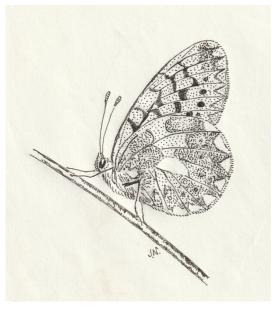
The delightful Black and White image was drawn by John Norton MBE. An article about him follows this article. - Ed

John Norton 1924-2002

"Former curator of Ludlow Museum. An enthusiastic naturalist and curator interested in everything within the natural world. In 1983 he was awarded the MBE for 'services to museums'. He is remembered as a true gentleman and a fine curator. "

Friends of Ludlow Museum

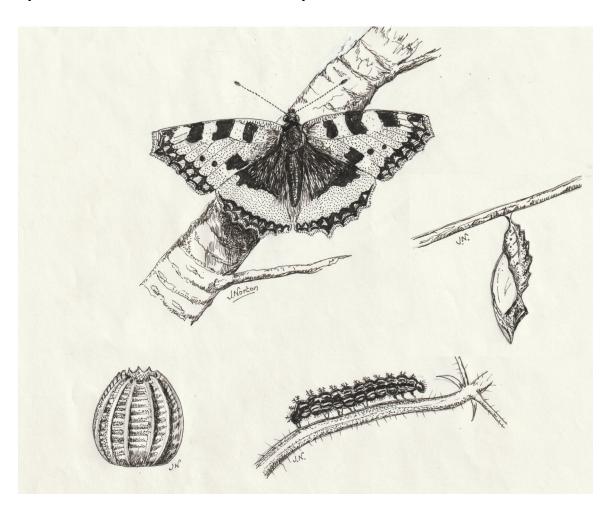
Two more of John's beautiful illustrations of Butterflies. A Pearl-bordered Fritillary and a violet on which the butterfly lays its eggs below.





As well as helping illustrate West Midlands branch material John must have had another connection with Herefordshire as his funeral took place in Bromyard! I am assuming that he lived in or near the Herefordshire town- Ed

The life cycle of the Small Tortoiseshell drawn by John in the 1980's



Will we be able to feature some of your artwork in the next issue? Maybe get your children or grandchildren to draw a butterfly from their imagination, bright colours to attract a mate or camouflaged for protection. Send any to the editor and I will get them into the next Newsletter. Name and age of children should be written on the back.

The Elephant Hawk-moth Project

Belatedly here is a resume and the findings of the Elephant Hawk-moth project which has run for a number of years now in and around the borders of Herefordshire. But before I give you details of our project I must first thank the people who helped by marking these beasts and keeping records.

So thanks to Robbie Ledlie, Linda Moseley, Gill McNamara, John Tilby, Rick Benson-Bunch, Alan Hooper, Linda Magyar, John Goldrick, Ian Wright, Sarah Cadwallader, Steve Watkins, John Walshe, Sue Harrold, David Griffiths, Martin Ward, Dave Pearce, Phyl King. My apologies if I have missed anyone off that list.

It is also true to say that during the duration of this project my personal circumstances changed when I took on a big responsibility nothing at all to do with Lepidoptera!



Captured 24/6/21 and marked, it was recaptured in the same location two days later. East Hereford City

OK so that is the preamble out of the way: what did we do and what did we achieve? We asked people who ran moth traps if they would mark any Elephant Hawk-moths (EH-m) using a code letter

and number and then record date and location. What were we looking for? There were basically a small number of outcomes I wanted to try to establish:

- 1. How many of the moths I trapped each year were recaptures
- 2. How long could they live for
- 3. How far would they travel
- 4. Did they travel in any particular direction i.e. North, South, etc.

Now there are certain things that need to be remembered when looking at these records. Firstly moth trapping is not the commonest overnight activity in Herefordshire, so trappers are few and far between, also if you have to get up and go to work 5 days a week you may restrict your trapping to a Friday and or Saturday night for convenience. Also there were a number of trappers who run more than one trap thus getting a greater number and range of species on each occasion, who with the best will in the world simply have no time left for marking individual moths and quite understandably didn't join in. No criticism implied at all: I am lucky in this respect as I am retired and can run the trap more often. Another issue is that the EH-m flight period can coincide with the main period of the year when people take a holiday. With all these provisos here are the results for my trap. It was the number I caught in 2018 that triggered my querying the number and frequencies of individual moths recaptured. So from 2019 onwards I marked the individual moths so that each could be recognized if recaptured.

Year	Days trap operated	Moths marked	Average number of Moths / Day trap operated	Moths Recapt'd once	Moths Recapt'd Twice	Moths Recapt'd Three times	% moths recapt'd at least once	First Date	Last Date	Number of Days between fist and last
2018	13	58	4.46					3.6.18	22.7.18	49
2019	30	151	5.03	21	3		15.89	2.6.19	3.8.19	63
2020	63	134	2.13	24	8	4	26.87	255.20	5.8.20	71
2021	38	53	1.39	10	2		22.64	6.6.21	24.7.21	49
2022	29	49	1.69	3			6.12	16.6.22	28.7.22	43

The results I obtained are listed above.

Days Trap Operated This varies depending on the weather and me actually being in Hereford to operate and not being away. On nights when rain is forecast I will run the trap under the carport rather than in the middle of the garden. Does this alter the results?

Moths Marked This is a straight forward record of moths marked.

Average number of Moths / day trap operated. In 2019 the trap was operated on 30 days during the flight period and 151 moths marked. This means that I averaged 5 moths every day I operated the trap.

Moths Recaptured Each moth is recognizable by their individual mark, this enables us to see how many moths return to my garden. It is worth noting that some moths may be recaught but that it is not necessarily the next time the trap is run. In 2020 moth number 264 was caught and marked on 24th June and recaptured on the 25th, 28th and 29th but not the 26th or 27th even though the trap was run on those two nights. Why not?

- 1. Too busy feeding up somewhere else
- 2. Mating
- 3. Patrolling in an area away from my trap

A second moth, moth 277, was caught and marked on the 26th June and then recaptured on the 28th and 29th but then was recaptured on the 10th July. A gap of 11 days and this despite the trap being run of every one of the intervening nights. Where had it been? There are undoubtedly lots of

possibilities and of course we will never know. Radio trackers have been used on Painted Ladies but their weight and the weight of a battery limits the length of time that they last and can be followed.

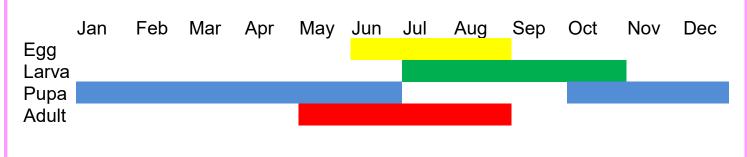
As you would imagine the number of moths recaptured more than once is far less as predators such as bats and birds take their toll on the population, but a study of the results reveals some interesting figures. Why did the recapture rate be so much higher in 2020 than in the previous year or subsequent years? Was it that there were fewer predators about that year, or more nectar sources available in or near my garden? Scientific Research often creates more questions than answers even something as simple as this exercise!

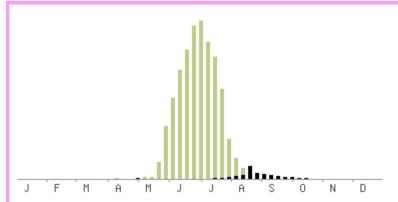
	Trap I	Run	Moth	S	Longest time be-	Diagram ata tha
Location of Trap	First date	Last Date	Marked	Recap- tured	tween mark and re- capture (days)	Please note that first and last dates may be
2021						affected by
Moccas	17.7.21	5.8.21	7	0	+	weather in
Newent	1.7.21	22.7.21	8	1	6	different areas
Lugwardine	11.6.21	13.8.21	29	3	7	holidays, work,
Red Marley	6.6.21	30.7.21	21	0		illness, etc.
Colwall - JG	24.6.21	27.7.21	17	0		iii ic33, cto.
Colwall - IW	16.6.21	27.7.21	29	1	5	The important
Kidderminster	8.6.21	13.8.21	5	1	10	part is that mor
Hereford - MD	6.6.21	21.7.21	50	14 *	16	people took par
Hereford - RL	13.6.21	19.6.21	3			in 2021.
Hereford - GM	9.7.21	9.7.21	1			111 202 1.
2022						
Lugwardine	17.6.22	29.7.22	50	6	14	
Hereford	16.6.22	28.7.22	49	2	13	
				*Include	es 4 off site	

First and Last Dates The variation here is interesting and is obviously dependent on the weather during some stage of the life cycle. In particular what is the trigger for the pupa to complete its development after hibernating through the winter. Is it that the temperature reaches a certain height? How long i.e. for how many days must it be at that temperature to trigger development.

2020 was an interesting year in a number of ways some already mentioned. On the 10th May I trapped an E H-m which was not recaptured, the next E H-m was not trapped until 25th May, 15 days later despite also running the trap on 10 of those days. I did not run the trap on the 11th which indicates that the weather forecast was not good. This I think illustrates the problems of an early emergence as the moth that emerged early would have little or no chance of finding a mate and probably did not survive long enough in the area as it was not recaptured at all. One of either the weather or predation was the likely reasons for this.

Length of Flight Period Early emergence due to good weather triggering final development of the pupa and then good weather during the flight period coupled with availability of nectar and perhaps fewer predators will increase the length of the flight period. All of this is well known and with that in mind 2020 would appear to have been a good year and 2022 the least good. One word of caution is that although the trapping dates for first emergence are reasonably accurate for each year as I was trapping regularly before the irst E H-m appeared, the final date might be earlier than it should be because of holidays preventing trapping when the moths were still flying.

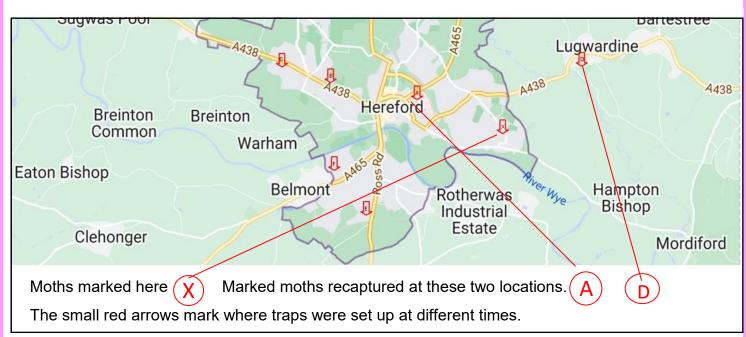




The bar chart above indicates the weeks during the year when the adult moth numbers are at their peak and in black the larval numbers in the West Midlands. Based on records submitted by recorders over the years How far do they travel? The second part of the project was to try to find out how far from their point of trapping would E H-ms fly and was there a favoured direction of travel? For this to happen I needed hundreds of people allover the county trapping marking and recording and unfortunately, and probably not surprisingly, that did not happen.

We all know that Painted Ladies travel hundreds of miles across Africa and Europe and that Monarchs migrate northwards across North America from Mexico. I was once able to watch Painted Ladies coming off the sea onto the Greek Island of Alonnisos in the North West Aegean and later we saw thousands flying over the sea as we made our way back to Skiathos by boat; the butterflies all travelling northwards. On a more local note using mark and release

methods Wood White butterflies have been shown to fly, again, northwards through the 1000 acre Haugh Wood. Do butterflies and moths have a predisposition to fly northwards, or is their movement away from their emergence site random? Could we detect this in E H-ms. The biggest single factor governing our success would be having enough regular trappers around a site where they had been marked: this proved impossible. However there were some volunteers running traps within Hereford City and again a small group in Colwall and we did have some success, some moths marked in one place turning up in another.



2020			Released at :-	Recapture	ed at :	-	
	221	9.6.20	X			14.6.20	Α
	232	14.6.20	X	15.6.20	X	4.7.20	Α
2021	F13	1.7.21	X	3.7.21	X	9.7.21	D
		1.7.21				16.7.21	
	F27	10.7.21	X			20.7.21	Α
	F32	13.7.21	X			16.7.21	Α

Chart showing where moths marked at "X" turned up in other locations "A" lower end of Aylestone Hill and D In Lugwardine overlooking the Lugg Valley.



F27 marked at point X (10.7.21) on the map above and turned up at point A (20.7.21) looking like it had led a hard life!

The table at the bottom of the previous shows what happened to six moths trapped, marked and released in Hampton Dene in 2020 and 2022. Four of them, two in each year were marked and subsequently turned up at the lower end of Aylestone Hill. A journey of about one mile the quickest was moth F32 which completed the journey in a mere three days, whereas moth 232 was not recaptured until twenty days had elapsed. The journey would have taken them through a number of gardens and other urban situations, and no matter how long the journey took it is quite a substantial one for an animal so small as E H-m. The life span of moth 232 is also worthy of note as twenty days is quite an achievement for something running the gauntlet of a whole host of predators and looking for nectar sources in an urban environment.

A walk along the summit of the hills within the city boundary and on the western edge of the Lugg Valley look down onto the Lugg Flats and across to the village of Lugwardine on the eastern edge of the valley. One of my co-investigators lives in Lugwardine and I was surprised one evening when I noticed a small but very bright light on the far side of the valley. I soon realized that this was his moth trap light. An E H-m leaving my garden and heading north east would eventually reach the western edge of the valley and the light may well appear sufficiently strong for them to head towards it especially at night and not the early evening when I saw it; even then it stood out. It is quite possible that some evolution of the compound eye of E H-ms has taken place and that has evolved in such a way as to enhance the brightness in some manner yet unknown. The journey across the Lugg Flats to reach the distant light would be fraught with danger with bats and birds out looking for food, but two moths, F13 and F15, both marked on the 1st July in Hampton Dene did make it to Lugwardine. F15 remained close to the trap where it was first marked as was trapped again on the 3rd July before turning up in Lugwardine six days later. F15 must have travelled by a more scenic route or made a detour as it took fifteen days to complete the same journey.

Colwall Contingent Three moths marked in 2021 and 2022 made the short journey between two people trapping in Colwall. They moved through an urban/village environment in basically a South-Westerly direction. Whilst we obviously have no knowledge of the way they went there is a plant nursery en route which could have had flowers at the time nectaring and producing scent which could have attracted the moths!

The third trap was situated on the slopes of the Malvern Hills but no moths marked there turned up in either of the other two traps.

Conclusions Given time and a sum of money to buy and fit radio-trackers, which could be done, it would be nice to



One of the moths which journeyed across Colwall

knowx, when they leave the area where they were trapped, if there is a general trend to move northwards. Because of the lack of people able to trap, mark and record we were unable to answer that question.

We did show that at times the number of moths being retrapped in the same place as they were originally marked could be as few as 0% and as high as 25% This could change for the same trap site where one year it could be as low as 6.14% and in another year as high as 26.87%. Why? What was different? To answer that would require a lot of time but it does have implications when you are considering a site for protection or purchase as a reserve, or simply encouraging butterflies and moths to stay around your garden so you can enjoy seeing. One moth marked in Hampton Dene on the 26th June 2021 was re-trapped twice afterwards the first time on the 1st July and the second time on the 22nd July, which meant it had lived for nearly four weeks and all that by drinking, as far as we know, nothing but nectar. So why didn't it come to the trap on any one of the other occasions the trap was on?

There are a number of reasons for including this report in a Herefordshire Newsletter, not least of which is the fact that the work, or most of it, was carried out in Herefordshire. Another reason is that many of the people who have bought the book 'Moths of the West Midlands' may have noticed a reference to the fact that this work was taking place and they will now know that we tried! (see 'Moths of the West Midlands' P218 under the heading **8 Become a Citizen Scientist.)**

I have thoroughly enjoyed carrying out the mark and release and I would very much like some of the Hereford moth trappers to either join in with me or at least let me know if any moth I mark turns up in one of their traps over this summer and beyond. I hope that the others who have joined in have enjoyed and this article will help them enjoy it more as they have contributed to it. Citizen Science is important as it may lead to more detailed and far better funded professional based research at a university or other research establishment. Equally as important it enables amateurs to join in help run a project and feel part of it. This is turn can lead to increased enjoyment and understanding of the subject under investigation. Not all of the ideas being researched come from professional scientists, but given the funding and the time they may be able to take it to a higher level. That in turn may lead to a better understanding of whatever is being studied and how to improve its chances of a successful conservation programme if necessary.

I will happily discuss any idea for a Citizen Science project involving Lepidoptera if anyone has an idea they think they would like to investigate. There are other sources of information and inspiration available as well as the two books produced by the West Midlands Branch of BC. There is the wonderful **West Midlands Moths** web-site (https://westmidlandsmoths.co.uk) and also the **UKMoths** (ukmoths.org.uk) and of course Butterfly Conservation's web-site (butterfly-conservation.org) and UK butterflies (www.ukbutterflies.co.uk) another excellent site.

First Date	Last Date	Length of Season	
28.5.2016	10.8.2016	75	2016
20.5.2017	31.7.2017	73	2017
18.5.2018	10.8.2018	85	2018
25.5.2019	31.8.2019	99	2019
10.5.2020	15.8.2020	98	2020
31.5.2021	17.8.2021	80	2021

Finally a picture of "Nellie" (yes you have guessed it "Nellie the Elephant) looking at the first and last records of E H-m in Herefordshire using information from **West Midlands Moths** web site



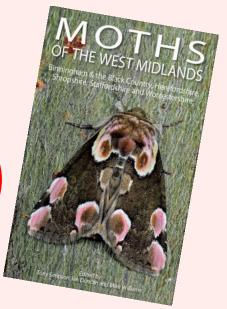
Martyn Davies (on behalf of all those who took part in the project.

We need you to pass on your records to our recorders. Whatever it is, whenever you saw it and wherever you were please don't keep it to yourself. If you can get a photograph send that as well. Modern mobile phone photographs are very good.

Special Offer!







I have a few copies of both books available to callers to collect - save the postage next time you are in Hereford. All money direct to Conservation work

martyn.davies808@gmaol.com

Collection Only

01432 266703

Herefordshire Group Walk Ewyas Harold Common 30pm Saturday 6th May 2023

2.30pm, Saturday, 6th May 2023

Meeting location: The northern Cwm Hill end of Ewyas Harold Common adjacent to the top cattle grid at OS SO382302. Approach from Abbey Dore off the B4347 at OS SO384306

Looking for the Pearl-bordered Fritillary and others.

Check for details 07932 182757

Herefordshire Group Walk Haugh Wood South

2.30pm Sunday 6th August

Meet in the Forest Enterprise Car Park at the top of the hill, just off the Mordiford—Woolhope road . I am hoping this will be suitable for disabled members and friends!

Identification of the common species.

Check for details 07932 182757

Don't forget these two walks, put them in your diary or on the calendar!

Beginners very welcome.





Butterfly Walk

Tutors; Martyn Davies and Bob Hall

This is an ideal way to discover butterflies that can be found in the county. Under the expert guidance of Martyn and Bob we will learn about the lifecycles of the species found in wood and meadow and how to identify them in the field. We will be taking a walk around Haugh Wood to search for the summer species (plus a few moths I am sure as well!)

20th May 2023

2 to 5pm Location: Haugh Woods

To book or for more info tim@clan-cic.org www.hbrc.org.uk







Big Garden Wildlife

12-14th May 2023

To book or for more info

tim@clan-cic.org

www.hbrc.org.uk





www.hbrc.org.uk

Spend time in your garden or

to see whats about. We are

looking for anyone whether

expert or beginner to have a

closer look at whats about in

their local area. You can spend

any time you have and there will

be experts on hand to help out.

For more details visit the website

nearby open space and take time



CLaN CIC registered company 10153234

Bookings are coming in so if you are interested contact Tim and book soon, leave it and you may be too late.

Your Local Officers and Work Party Organisers.

Conservation Officer & Ewyas Harold Reserve Mgr Ian Hart yellowrattle4@aol.com 01981 510259

Moth Officer Robin Hemming robinhemming@btinternet.com 01568 797351 peter.herefordcmr@gmail.com Moth Recorder Peter Hall

Butterfly Recorders Bob Hall & Ian Draycott randphall@gmail.com 01432 850623 martyn.davies808@gmail.com **Newsletter** Martyn Davies 01432 266703 Regional Conservation Officer Rhona Goddard rgoddard@butterfly-conservation.org 01746 762364

Midlands Landscape Officer Natalie Norton nnorton@butterfly-conservation.org 07485372199



These people are working to help the conservation of lepidoptera in Herefordshire - Thankyou

