

# Cheshire and Wirral ARGUS

The Newsletter of the Cheshire and Wirral  
Branch of Butterfly Conservation

Spring 2020

Issue 102



<https://butterfly-conservation.org/in-your-area/cheshire-and-wirral-branch>



Butterfly  
Conservation

Saving butterflies, moths and our environment

## IMPORTANT ANNOUNCEMENTS

### From The County Butterfly Recorder

With nearly 25,000 butterfly records validated and entered into the County database 2019 was the highest number of records ever sent by the County to Butterfly Conservation's HQ.

However, another 8,000 plus records were excluded because of errors and inaccuracies. Common errors include; missing or incorrect grid references, missing dates and observer details, out of flight season sightings and lack of descriptions/ photographs for rare/unlikely county species.

For all sightings of the following species (which were reported in 2019) I require a photograph and/or a good description of the butterfly seen.

**Essex Skipper:** Now firmly confirmed as a breeding species in the county we are monitoring its expansion. All records should confirm that the antennae tips have been examined and that the undersides are confirmed as glossy black (photo as an alternative)

**Wood White:** A highly unlikely species for Cheshire. Photo essential.

**Marbled White:** A possible but very rare visitor. Description/photo required

**Wall Brown:** A species showing some resurgence in the county. Description/photo required for all sightings away from the Wirral Coast and Cheshire Peak District.

Finally, and with regret, I have decided not to take written records for 2020 onwards. The task of verifying over 30,000 records per year means that I can no longer afford the time to read, decipher, transcribe, and enter records that I receive on paper. Please submit your records through one of the national data capture systems or as a spreadsheet, preferably using the county system which can be obtained directly from me. I realise that for a small number of recorders this will prove impossible to accomplish; to those I say thank you for all your work in the past.

**Rupert Adams, County Recorder**

### County Moth Recorders

For the past few years we have been extremely fortunate in having two highly skilled and committed moth recorders - Steve Hind (micro-moths) and Steve Holmes (macro-moths). The next newsletter will include a detailed account of their achievements; the purpose of this announcement is to inform that they are both resigning, which is understandable - it's a consuming task and they have served their time. But the alarming development is that we do not have any volunteers to replace them. The two Steves have made the job more straightforward, with 'designer spreadsheets' and the new Atlas will help. Are there any volunteers out there? Please contact any committee member.

**COVER IMAGE Northern Brown Argus (*Aricia artaxerxes* nominate subsp.)**

By David Tolliday. St. Abbs Head, Scottish borders, 22nd June 2019. Photo competition 1st prize. This individual is an unclassified aberration, in which the white spots have no centres. They are reduced in the Scottish subsp. *artaxerxes*, but not normally absent, as in this individual.

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## Contact details for Committee Members and Recorders

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<b>Cheshire Macro-moth Recorder</b>	<b>Position vacant</b>
<b>Cheshire Micro-moth Recorder</b>	<b>Position vacant</b>

## Editorial

First I need to emphasise the importance of the announcements on pages 2 and 6. I am afraid that the Covid 19 coronavirus has hit our events schedule. Since field trips are timed to butterfly flight-periods, they will have to be cancelled. If things change radically, we might be able to rearrange Members' Day and the AGM, but it seems unlikely; but please note that we might be able to help you to see butterflies this year (see page 7).

This is a bumper issue - four pages longer than usual. I'd like to keep this as the norm if possible. We have lots of content and contributions from the members, much thanks for those, and thanks to all entrants for the photographic competition. The standard of entries gets higher each year and I'm sure that all readers will agree that the winners are superb examples of butterfly photography. Judging is hard, but we have agreed (and published - see below) some criteria to make the process a bit more straightforward; I hope that helps both judges and entrants. Now read on....

### Welcome to new members!

Butterfly Conservation Cheshire & Wirral gives a warm welcome to our new members who have joined our branch since the last newsletter! We used to print the names of our new members to make the welcome more personal, but Butterfly Conservation received a complaint about that - breach of privacy - so we have been asked to refrain from giving you that personal greeting, but please be assured we welcome you to the branch and encourage you to join in any of our activities. You will get a warm and friendly reception.

## Photographic Competition 2019

Another pleasing set of entries - thanks to all contributors - and, consequently, a difficult task for the judges. You will have already seen the winning entry on the cover (see page 3 for attribution), but the margins between the top entries were very narrow and we have included some of the highly commended images at the end of the newsletter. I thought it might help future entrants if I published the basic criteria for judging, so here goes....

### *Photographic and technical criteria*

- The subject should be in focus, or at least critical (attention grabbing) parts of the subject should be.
- The colour balance should reflect what we can assume would be natural coloration.
- The picture should not contain undesirable 'noise' (i.e. what used to be known

as 'grain').

- The picture should not have been obviously sharpened in post-production.

#### *Aesthetic criteria*

These are obviously more difficult and will inevitably be subjective, but.....

- Components of the background or other objects should not detract or distract unduly from the subject.
- The subject should not be oversized (or over-cropped); some context should be visible, unless extreme close-up is the point of the picture.
- The photograph should not be a 'cliched' presentation
- We consider the difficulty of obtaining the picture - eg. species rarity, postural rarity (*have you ever seen an open-winged shot of a Grayling?*), the inclination of particular species to pose for the camera.

*Remember, the winning entry will appear on the front cover of the newsletter. Having seen past editions, you will know that the required standard is high.*

## **Photographic Competition 2020**

### **Open to all Members of Cheshire & Peak Branch of BC**

Entries must be taken in 2020 in the UK; they must be of butterflies or moths in colour or B & W, submitted by e-mail to the newsletter editor as a JPG file at 300 dpi resolution, A5 size by **October 31st 2020**. Include your membership number with your entry. Entries are limited to three per member, but only one photo from each entrant may be included in the top 3 places. Entries will be judged anonymously by the Branch Committee, whose members may not enter. The winning entry will appear on the front cover of the Spring 2021 newsletter; second and third entries will be on the back cover and inside back cover. First prize - £25 book token. *Obviously, you are requested not to infringe government instructions on travel, but you will have an opportunity to be creative in your garden and those of you with moth traps will be unaffected by the problems.*

## **Events 2020 are Postponed/Cancelled**

We have been advised formally by Butterfly Conservation that, unless the Covid 19 virus epidemic changes radically and official policy is modified, we cannot organise any events that would result in gatherings of more than 25 individuals. The instruction from head Office made two pertinent points.....

- **All meetings, conferences, field trips and other events must be cancelled or postponed until further guidance of the ever changing situation is**

**known. This applies to all staff, branches and volunteers. All butterfly monitoring via UKBMS transects or WCBS squares is cancelled until further notice.**

- **It is important that you consider whether any travel is essential and whether any meeting, field trip or event can be postponed to a later date when the situation is more settled.**

In accordance with these instructions Members' Day will be postponed until a date as yet unknown. No field trips will be organised unless and until the situation changes. Transect coordinators are formally requested not to issue rotas and to ask all transect walkers not to walk their transects unless and until the situation and government instructions change. We apologise to members who are disappointed by these decisions, but you must understand that we are legally bound to comply with the instructions from Head Office.

**BUT, please note: if the travel restrictions are reduced later in the summer, the members of the Committee can give directions, both local and nationwide, to help you find and see any of our resident butterflies 'under your own steam'. So, just ask for advice - email the Editor in the first instance. Obviously, for the more elusive species you will need a slice of luck and we can't give guarantees, but we can help and will be glad to do so, provided that government instructions permit..**

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## **Grayling surveys on the Wirral - volunteers needed**

### **Background**

The Grayling butterfly is Britain's largest 'brown' (*Satyrinae*) butterfly. In northern Britain Grayling are largely confined to the coast. On the Wirral they are found at only two locations; one of these is Red Rocks Nature Reserve.

The Grayling has cryptic colouring which means it is well camouflaged, making it difficult to see them when they are settled. The wings are closed when not in flight and the forewings are usually tucked behind the hind wings, concealing the eyespots and making the butterfly appear smaller. In flight this is a distinctive, large butterfly with a looping and gliding flight, during which the paler bands on the upper-wings are visible.

Adult butterflies are usually on the wing from July and throughout August, having spent nearly a year as a caterpillar and overwintering deep in tufts of vegetation. Regular adult surveys undertaken by Butterfly Conservation volunteers at Red Rocks Nature Reserve reflect a national picture of decline for the Grayling. In order to inform specific on-site conservation efforts, we need to find out more about how the butterflies use the site and what is important to ensure their survival. Cheshire Wildlife Trust and Butterfly Conservation are working together to conserve this species and we need volunteers to help us.



### **Volunteer opportunity**

This is a unique volunteer surveying activity organised in conjunction with Cheshire Wildlife Trust. Adult Grayling butterfly numbers have declined over the years; we need more information about their use of the site in order to inform conservation efforts. The caterpillars feed at night on dune grasses and we will be searching through these grasses in the dark to locate where the Grayling are feeding on the sand dunes. This will involve a lot of kneeling in order to survey accurately. Volunteers will be provided with a photographic and narrative guide to help. There will be a butterfly expert with each group to help locate and identify caterpillars.

We will undertake a single evening survey on 7th May 2020 when the caterpillars are at their largest. The survey will take place from dusk and last for around two hours. We will meet at 20:15 in Hoylake. Precise details will be furnished to all confirmed volunteers nearer the time.

We are looking for volunteers to assist us so we can survey as much of the sand dunes as possible. Volunteers will need to bring a good handheld torch and a head torch if they have one. Volunteers would also need to wear stout waterproof footwear and warm waterproof clothing.

If you would like to get involved please get in touch with Sarah Bennett [sbennett@cheshirewt.org.uk](mailto:sbennett@cheshirewt.org.uk) for more details. All volunteers must be registered with Sarah to take part. Dave Costello (BCS Conservation Officer, Wirral) and Rupert Adams (Butterfly Recorder, Cheshire & Wirral) will both be in attendance.

## **Annus Mirabilis** **by Roger Cope**

The year of 2019 turned out to be a turbulent one for our region. A warm Spring prompted the comment, *This'll be our Summer* from the pessimists. They were right. A flotilla of small inflatables and canoes could regularly be seen paddling merrily around the large roundabout in Bramhall, Manchester, after flooding from the torrential downpours. But against all odds, this turned out to be a super year for me, and one which I am pleased to share with you.

### **14 May : Small Blue**

Close to home, Britain's smallest butterfly can be found in mid/late May near Barrow on Ormsgill Slag Heaps, but I wanted to see a few more classic spring species at the same time. Accordingly, a trip to Pitstone Church End

near Tring was in order, given its proximity to Ivinghoe Beacon, a veritable mecca for butterflies. Upper Thames Butterfly Conservation's *Sightings* pages reported emergences in the second week in May, so, given a good forecast, I headed down.

After early start from Manchester, I found myself wandering around the disused chalk pits at Pitstone at 6.30 am, exchanging pleasantries with dog walkers, suspicious of my presence there at that time in the morning without a dog. I soon located the densest growths of kidney vetch, the larval foodplant, and hung around there for a while. Sure enough, a few Small Blues began to appear as the day warmed up. I was impressed as to how tiny and delicate they





were, no bigger than your little finger nail and at first glance quite similar to Chimney Sweeper moths in flight. Seeing them struggle in even the slightest breeze, I immediately appreciated why these little creatures could only thrive in the warmest, most sheltered nooks.

My thoughts then turned to the nearby Ivinghoe Beacon, specifically around Inchcombe Hole, where allegedly all of the usual Spring suspects were now in good numbers. A five minute car journey later, as I walked down to the Hole, it was abundantly evident that this was indeed the case. The scene was like Manchester Airport; Brown Argus gliding in from the hillside, some lovely dark brown and white Grizzled Skippers on holding patterns around the wild strawberries in the damper areas, and Dukes, like fighter jets, regularly rising from their perches to intercept invaders of their airspace. Grizzled Skippers are another species that have suffered from the decline of coppicing, depriving them their favourite woodland clearing habitats, so it was great to see them in abundance here in an alternative setting. After this tremendous day, it just couldn't get any better?

### 03 June : Heath Fritillary

It did get better. I occasionally attend business meetings in Ipswich and was thrilled to notice (I don't get out much) at London Liverpool Street Station that the Southend train stopped at Hockley in Essex. I knew of a reintroduced colony of Heath Fritillaries there, which was one of three British butterflies I hadn't yet seen, so I excitedly planned a rail trip taking the first train of the day from Stockport at 05.15 and arriving at

0900. After clocking some activity on the Essex BC Sightings page, I rang their contact person and he helpfully confirmed the Fritillaries were out, located in the south east corner of the wood where the Cow Wheat grew.

My plan worked perfectly and at 9am on 3rd June, I was walking to the wood from Hockley station, noting how the well-tanned locals in fitted shorts and polo shirts contrasted with my fellow pasty-faced Mancunians. Google



maps helpfully aided my journey, and when I reached the clearings my eagle eyes soon spotted a perfect roosting female, underside chequered with those impossibly beautiful markings. As the temperature was now just touching 15 degrees, more specimens started to take flight. Soon there were dozens of dark orange and chocolate brown males basking in the sunshine, more or less oblivious to approach, together with the odd paler, larger, female taking in the rays or feeding on the early bramble blossom. I noted the strange head-butting courtship dances and how sedentary the butterflies were. This is thought to be an evolutionary habit from when England was clothed from head to foot in the Wildwood, where most clearings supporting Cow Wheat would be associated with small groups of hunter-gatherers and distant from any others, making exploration unlikely to be fruitful. This colony seemed to be thriving, owing to new understanding of the need to provide a steady succession of habitats to avoid mass starvation cycles from local populations exhausting the rare foodplant resource.

### 18 June 2019: Mountain Ringlet

Having only previously seen one Mountain Ringlet (or "Small Mountain Ringlet" in those days!) in Kintail ages ago, I resolved to pay a visit to Irton Fell near Wastwater, which was reputed to host good numbers most years. The announcement a potential trip on 05 June, however, was treated to a degree of cynicism by Mrs C. "You'll be lucky!", she declared, "the forecast is 10 days rain ... solid !". And rain it did alright. You could almost hear the butterflies hunkered down in the fell-side tussocks muttering "You cannot be serious!". A blocking high pressure system to the East made depressions tracking in from the West stagnate and swirl around endlessly over England, creating a washing-machine effect over the region.

Thirteen days later, after a small window in the precipitation had been predicted, I was driving to Irton Fell, cursing the Satnav after it took me round the coast rather over the Ulpha cut-through. The ample pull-in above Santon Bridge was shared only by another Lepidopterist, readily identifiable by his flowerpot hat and ancient tartan vacuum flask. The morning dawned a bit gloomier than expected, allowing free time to observe the Meadow Pipits catching insects from their lookout posts on the glacial boulders, and to muse on memories of a dicey winter



adventure in Wasdale when I forgot to bring my ice-axe and crampons. At around 11.30am the sun finally peeped out and, right on cue, a number of sooty brown male Mountain Ringlets appeared, smaller and darker than I had remembered, with contrasting bright orange spots. I then

spotted what looked like a Meadow Brown flitting around the tussocks, but closer inspection revealed this to be a female, much larger and paler than the males and more amenable to study. There were a fair number of butterflies on the ridge, which is quite scenic with Wastwater on one side and Sellafield nuclear power station clearly visible to the West.

### Further Adventures on the same Day: Large Heath and Small Pearl-Bordered Fritillary

Still with half a day left, it would have been incredibly rude not to have dropped in to at least one of the jewels around the Silverdale peninsula on the way back.

A quick bob into Meathop Moss en route confirmed the continued existence of a thriving colony of Large Heaths, though the water level was so high that a wrong step off the boardwalk would have quickly led to immortality in the peat. Arnside looked very relaxing in the heat, particularly the beer garden outside the Albion, but there were



more important matters to investigate, namely the colony of Small Pearl Bordered Fritillaries on my old friend, Arnside Knott. I quickly found a secluded glade near the top which seemed to be a highway for a steady stream of these butterflies, and noticed several males hovering above the foliage behind a mound of pine needles. Oh ... Hello! Here was a freshly baked female climbing up a grass stem to dry out! Now, I've seen the Grand Canyon and Niagara Falls, but, dear

readers, they are as nothing compared to the underside of a newly-emerged Small Pearl Bordered Fritillary. A marvellous tapestry of brown, cream, and orange cells, delineated by the finest black lines, punctuated with irregular spots, decorated with pearls within and scalloped around the edges, makes this one of the wonders of the world and a fitting tribute to the moon goddess, Selene. After 10 minutes it opened its wings and finally made its maiden flight. Still enthralled, I



calmed down just enough to notice that the mound was in fact a Wood Ants' nest, well-stocked with defending soldiers who were busy trying to chew away at my feet, shod in a pair of sandals clearly suboptimal to the occasion. What an amazing day!

### 03 July 2019: Masters of the Air; High Brown and Dark Green Fritillaries

Twenty years' ago, High Brown Fritillaries could be seen everywhere on South Cumbria. Now very rare, a report of sightings at Barkbooth Lot near Crosthwaite in Cumbria saw me heading off to investigate. The site proved to be a rough, stony fell-side with a wetland area centred on a lovely natural pond, around which skimmed several Emperor dragonflies. In the lower reaches, there was plenty of bracken amongst the soft

grasses, under which the violets would provide a foodplant for the High Brown and Dark Green Fritillary larvae. Dark Green Fritillaries may be seen in a surprising variety of habitats from coastal dunes to chalk grassland, in accordance with the requirements of their larval foodplants. As the morning warmed up, the air became graced with large, impressive, fulvous-orange butterflies gliding around powerfully and then pausing to bask in the sunshine. Sadly, only one of these was a High Brown,



identifiable by clearly concave outer margins, but the Dark Greens were an excellent consolation prize, the tawny males being joined later by the larger, paler females suffused with a beautiful violet sheen. Some theories say High Browns may have been lately influenced by global warming, disturbing the factors affecting violet growth under the bracken.

### Icing on the Cake in late July

I think you'll all agree; I've been blessed to have had one of the best years anyone would hope for. A short trip to Prees Heath on 8th July, as recommended by the Editor (see Autumn newsletter) yielded Silver-Studded Blue and Purple Hairstreak. But the greatest prize in late July was the sighting of a cracking female Brown Hairstreak from the Piper's Vale colony in Ipswich... on a business trip! To cap it all, it was a one-off, a minor aberration with a lovely small white circle on the underside hind wing to go with its stripy white football socks.

Thank you for reading about my exploits and I wish you the same good fortune in 2020 – though, to be honest, with good planning you can make your own luck!

## Help Protect the Future of Ashton's and Neumann's Flashes

Most North West naturalists will be familiar with the unique inland saltmarsh habitat that forms Ashton's and Neumann's Flashes, on the outskirts of Northwich. The sites have long been recognised for their rare and unusual flora and fauna, but what is less well known is that their only protection is as a Local Nature Reserve.

However, an ambition to further protect the areas by extending the existing Site of Special Scientific Interest (SSSI) status that applies to part of Carey Park, to include the flashes, is being led by Cheshire West and Chester's Ranger Service with support from Friends of Anderton and Marbury (FOAM) and Butterfly Conservation.

Funded by the local branch of Butterfly Conservation, the Tanyptera Trust and supported by National Museums Liverpool a comprehensive invertebrate survey of the flashes is to be undertaken in 2020. The contractor who will undertake the work will be appointed in January and their survey plans will be developed ahead of the spring.

Areas of the flashes that are normally out of bounds will be accessed and we need volunteers to help escort the contractors around the area from a health and safety perspective and also to collect specimens from the traps that will be used. Whilst knowledge of invertebrates would be beneficial it is not a necessity. We do not expect the volunteer work to require an extensive commitment.

Volunteers will have a unique opportunity to see normally inaccessible areas of the flashes and view at close quarters the flora and fauna that depend upon these unique habitats. You will participate in surveying the areas and will accompany leading regional experts. We expect to find previously unrecorded species during the surveys. More importantly your involvement will help build a better picture of the species that use the site and as such provide invaluable information that can be used to build a case and seek SSSI status for the areas.

BC HQ have approved a grant to support the survey work at the Flashes and the contractor, Nigel Jones, a specialist in *Diptera*, has been appointed. Nigel will coordinate all the invertebrate work. The survey is now underway, especially with respect to beetles and a number of unusual species have been found including those that are normally found only in coastal habitats.

For more information about how to be involved please contact Rupert Adams, [rupertadams1@sky.com](mailto:rupertadams1@sky.com).

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## Bees and butterflies - Nantwich in Bloom

Since the mid-1970s Nantwich in Bloom has been adding to the delightful appearance of the historic market town of Nantwich through its floral displays. As a voluntary organisation, it is supported by Nantwich Town Council and by many local businesses and community groups, and has won many awards, including Gold in the Royal Horticultural Society's North West in Bloom competitions for the past nine years.



As well as promoting horticultural excellence, Nantwich in Bloom takes its environmental responsibilities very seriously. In partnership with other local bodies, we actively seek to promote sustainable working practices and act to encourage greater biodiversity.

Last summer, our planting in the heart of the town centre focused on the ecological importance of insect pollinators through our theme of 'Bees and Butterflies'. In one flower bed we established a bee garden where all the plants had a relatively long flowering season and were attractive to insect pollinators. In this bed we installed a garden composter in the form of a beehive, repurposed as a planter. The flight path of the bees leading to the 'hive' was represented by a line of plants particularly favoured by bees as food sources. In a neighbouring flower bed, we created a stylised butterfly using plants that gave bold colours when massed and included marigolds, lavender and *Salvia*, all of which are friendly to pollinating insects. While the bee garden was replaced by the town's Christmas tree, the floral butterfly will continue to blossom throughout winter and spring, having been replanted with primulas last autumn.

As part of our work, Nantwich in Bloom manages a community orchard of forty-five (mainly apple) trees in the park next to the River Weaver. The orchard – the trees themselves and the surrounding grassland vegetation – is important for the biodiversity of the area, for example in attracting pollinating insects. Native bluebells have been planted throughout the site, while dandelions and buttercups also provide a valuable food source for insects. The damp grassland in the spring and early summer provides an important habitat for butterflies. The orchard lies immediately adjacent to a Butterfly Conservation fixed-route recording transect.

More information about Nantwich in Bloom can be found on the Nantwich Town Council website [www.nantwichtowncouncil.gov.uk](http://www.nantwichtowncouncil.gov.uk).

*Malcolm Reid, Nantwich in Bloom Committee Member and Transect Recorder for Butterfly Conservation*



## Northwest in Bloom Awards Success for Gardening Volunteers

Gardening volunteers from Mid Cheshire are celebrating after achieving success in the North West in Bloom awards which were held in Southport at the beginning of November.

The Butterfly Garden and Cheshire Buddleia Collection, based at the Lion Salt Works in Marston, was entered in to the "It's Your Neighbourhood" category for the first time last year and also formed part of Northwich's overall entry in to the North West in Bloom competition.

Free to the public, The Butterfly Garden and Buddleia Collection is located within the grounds of the award-winning Lion Salt Works museum and has been created to promote planting ideas to attract butterflies, moths and other pollinating insects into gardens.

The garden, which is run completely by volunteers, reached Level 4 with judges describing

it as thriving. Going forward the green-fingered helpers will be aiming for the top award of Level 5, taking on-board the judges' comments to make the necessary additions to take the garden to the next level.

Garden volunteer Jill was on hand to receive the award and said: "We can't wait to get stuck in for next year and go that extra mile to try and secure the top marks we need for Outstanding."



designed and created by Brooke Garden Designs in association with Sue Beesley, BBC Gardener of the year 2006. Before the task of creating the garden could begin, the derelict site had to be reclaimed, work which was undertaken over a three-year period by volunteers from the Cheshire branch of Butterfly Conservation and friends of the Lion Salt Works. The original garden was completed in June 2010.

Since the garden's completion several other areas have been added including a woodland edge, an area of coppiced hazel and willow, a wildflower area and a small natural pond.

The garden is now maintained by a small group of dedicated volunteers who meet every first and fourth Sunday of the month.



## Northwest in Bloom at Kingsmead Primary School

Earlier this year Kingsmead Primary School were delighted to be asked to support Northwich BID's entry into the Northwest in Bloom competition, as it was a great opportunity to share all the wonderful environmental projects we do in our school grounds. Pupil tour guides were recruited to show the RHS judges around the school in July. As they toured the grounds, the children explained about different ventures carried out such as the 3 year Polli:Nation project



*Judges admiring the butterfly garden in full bloom and our school kitchen garden full of produce*



in which pupils surveyed numbers and types of pollinating insects visiting our school grounds. Over the 3 years, more insect friendly flowers were planted to encourage pollinators to visit. The children pointed out our stunning wildflower meadows, the raised butterfly garden, bog garden and tractor tyres filled with insect enticing plants. The pupils also showed off the bug hotels, bee houses, hedgehog homes and bird boxes they have built during Science weeks at school.

The judges wandered around our wonderful kitchen garden which was full of vegetables and fruits at the time and admired a bird hide and the sedum roof on our newly built bike shed.

After the tour, the judges looked round a display of work carried out by different classes, whilst sampling school apple and pear juice made from our own fruit trees in school and Naturally Smart coffee sold in school which funds environmental and sustainable projects through the global Naturally Smart Schools network.

The Northwest in Bloom award ceremony was held in October in Southport and was attended by over 500 entrants, all eagerly awaiting the outcome. Northwich in Bloom again achieved a silver gilt award and out of hundreds of schools judged, Kingsmead Primary School was awarded the Environmental Award for Schools.

We are always keen to find other ways to make our school grounds more eco-friendly and since receiving the award, we are already participating in the River Guardians project investigating water quality in our local area, have been busy planting lots more bulbs in our school grounds and our Eco councillors are currently planning some whole school initiatives to help look after our planet.

*Dr Ruth Duberley  
Science Lead, Kingsmead Primary School*



*Bee Orchid in the school meadow*



# Cheshire and Wirral Butterfly Transects in 2019

## Reports from individual recorders collated by Tim Ward

Each week, between April and end-September Butterfly Conservation members head out with clipboard and pen in hand to record butterflies on their standardised transect routes. These transects, whether on nature reserves or just in the local countryside, provide Butterfly Conservation with vital information on how our butterflies are faring year on year, they inform us about butterfly populations in a local and national context and help to guide conservation strategies. The data are submitted directly to BC headquarters, but since this is the most reliable contemporary index of the butterflies of Cheshire and Wirral, we reasoned that the Branch members are entitled to see a summary of what our transect walkers record. See the map for an approximate location of each transect (numbers are in the headings below and the names of the transect reporters are in brackets).

### 1. Elmerhurst (Lyme Park) (SJ962832)

This transect passes through deer-grazed open grassland with occasional trees into deciduous woodland (Elmerhurst Wood) and back into open grassland. In the warm summer of 2018 the predominant species were Small White, Green-veined White, Orange Tip, Speckled Wood and Meadow Brown. These species were logged in similar numbers in 2019, except for Green-veined White, which was present in reduced numbers. Small Skippers and Ringlet were increased in number in 2019. The occasional visitors (Comma, Peacock, Small Tortoiseshell, Red Admiral) were similar in number in both years. Painted Ladies were recorded only in 2019. (Dan Pilkington)

### 2. Cluse Hey (Lyme Park) (SJ961815)

Cluse Hey, covers open grassland, descending into a steep-sided valley, running roughly north-south. The valley sides are scattered with small trees, patches of bilberry and bracken. There was a small colony of Green Hairstreaks on bilberry patches at the start of the transect, with a peak count of 7 in 2018. The principal species on the remainder of the transect were Small and Large Skipper, Large and Green-veined White, Orange Tip, Speckled Wood, Gatekeeper, Meadow Brown and Small Heath. The same species were present in 2019 in slightly greater numbers; the peak Green Hairstreak count was 13. In both years visiting Dark Green Fritillaries, Comma, Peacock and Small Tortoiseshell were present, augmented in 2019 by Painted Ladies. (Dan Pilkington)

### 3. Kerridge Hill (SJ944759)

This new transect has been created following the establishment of a new Cheshire Wildlife Trust Nature Reserve on the slopes of Kerridge Hill. The transect was set up in late August, walked 4 times in September, and has already yielded its first result with the recording of two male Wall Browns fighting over an apparent lek point near the summit; further monitoring in 2020 and beyond will determine whether or there is a viable breeding colony on the hill (there have been sporadic reports of Wall Brown on the hill in the past but none since 2014). (Tim Ward)

### 4. Tegg's Nose (SJ947723)

An exciting year at Tegg's Nose; for the second year running we have seen Dark Green Fritillary on the transect and this year we saw both a male and, a month later, a female searching out patches of violets. This was an excellent year for Green Hairstreak, with the species spreading out from its normal haunts to be seen all over the hill. The main feature of the summer was the large influx of Painted Ladies but Red Admirals, Small Tortoiseshells and Peacocks also did very well. Wall Brown numbers were good, after worries about the health of the colony in previous years, and Small Skippers and Small Heath both did very well. Small Copper numbers were back to normal after last year's explosion, and Large White and Green-veined White numbers were both down. Most worrying was the decline in Common Blues



which had a very poor year, perhaps because their food-plants were burnt to a crisp by the sun in 2018 before they were ready to lay. (Tim Ward)

#### **5. Tytherington (SJ918756)**

The Marlborough and Hall Grove Woods (Tytherington) transect remains pretty much the same as previous years. Holly Blue was first recorded on this transect about four years ago and each year one or two have put in an appearance – 2019 was no exception. Speckled Wood has been recorded on all sections of the transect throughout the year as there are many shady places for the population to breed. Other species recorded are Large White, Small White, Green-Veined White, Red Admiral, Small Tortoiseshell and a solitary Gatekeeper. Missing from the list and recorded in previous years are Brimstone, Comma and Painted Lady – surprising given this year's influx – but they were seen in a garden, adjacent to the transect, nectaring on butterfly-friendly plants. Nectar sources are few on the transect, apart from one garden-escape Buddleia, the usual site for Red Admirals, Peacocks and Small Tortoiseshells. Also of note on this transect is a population of Alder Leaf Beetle and a Golden-ringed Dragonfly, observed trying to lay eggs a few weeks ago. (Julia Harding)

#### **6. Riverside Park, Macclesfield (SJ913745)**

This was the first full year of monitoring on this new Transect which is now fully established with two regular recorders. Small White and Green-veined White numbers were down from last year but Large White numbers were up. Painted Ladies arrived in force, as elsewhere across the country, and there were good numbers of Red Admirals, Small Tortoiseshells, Commas and, especially, Peacocks. Gatekeepers, Meadow Browns and Ringlets also had a good year. Common Blues were present in small numbers but Small Heath were not recorded this year. On the other hand, Small Skippers had a bumper year, with 19 recorded on a relatively short section on 28th June. (Frankie Badcock & Chris McGregor)

#### **7. Danes Moss to Sutton Reservoir (SJ910706)**

This has been a good year for Brimstones at Danes Moss with double the numbers seen in 2018 and for Green Hairstreak with three being recorded. Along the transect as a whole Large and Small White numbers were down slightly. Orange Tip numbers are quite consistent from year to year and 2019 was no exception, but Green Veined White, which had an exceptional year in 2018, were down dramatically this year. Large Skippers at Danes Moss have declined over the last few years and this has coincided with the natural regeneration of birch. Small Skippers were recorded for the first time in 2019 particularly in the meadow at Sutton reservoir, which is now left unmown over the summer. Ringlets are also now seen there in increasing numbers with a record of 11 in 2019. There was an influx of Painted Ladies and Peacocks with Small Tortoiseshell and Red Admiral in good numbers too. Speckled Wood, Comma, Gatekeeper and Meadow Brown numbers tend to be fairly consistent and 2019 was no exception. Small Coppers are seen occasionally with two this year. A Common Blue was spotted for the first time where lime-loving plants have colonised an area of limestone hardcore. (Diana Moss)

#### **8. Bosley Cloud (SJ903635)**

Bosley Cloud is patch of heathland at the top of one of the taller hills in Cheshire. It is surrounded by woodland, meaning that parts are very exposed while others get a lot of shelter. The aim with this transect is to get an idea of which areas are best for different butterflies, in order to inform our management decisions. With this in mind, the transect takes in open, exposed heathland as well as sheltered sun-traps, along with areas of scrub and woodland edges. We started very late in the year, but noticed the influx of painted ladies and large numbers of red admirals. (Matthew Hilton-Webb)

#### **9. Dane-in-Shaw Pasture (SJ878626)**

Orange Tip appeared in good numbers from weeks 2-5 and were last recorded on June 1st. Butterfly numbers were relatively low until the emergence of Meadow Browns in mid-June

and the emergence of Ringlets in late June/July improved the Transect numbers but the latter appeared to have a shorter flight period than expected. Large Skipper was not recorded this year but Small Skipper had a good year. The Whites were mainly represented by Green-veined White with a few Small White and occasional Large White. Common Blue and Small Copper appear to have had a good season on site. It was very pleasing to record Red Admiral, Painted Lady and Small Tortoiseshell on a regular basis whilst the summer brood of Comma was prominent during September. It was however disappointing not to record Small Heath which appeared on the transect for first time in 2018. (Jack Swan)

#### **10. Quarry Bank (SJ834830)**

2019 was a good year in general. Orange Tip and Painted Lady numbers were very high. Small Tortoiseshell numbers were very high, good news for this threatened species, and White-letter Hairstreaks were seen and photographed (confirmed by the County Recorder). Common Blue numbers continue to be good helped by targeted planting of birds-foot trefoil. Summer numbers of Peacock and Brimstone were both low. Large and Small Skippers continue to do well as do Small Coppers. For the second year running Small Heath was also seen on site. Ringlets were seen but only in small numbers. Comma numbers were the highest seen for a number of years. (Derek Hatton)

#### **11. Swettenham Meadows (SJ804675)**

The meadows are a key component of the wider Swettenham Valley reserve, carefully looked after by Cheshire Wildlife Trust. The transect has been walked for many years and supervised by Alan Chadwick since 2010. In Spring it is a good site for Orange Tip and Brimstone and, occasionally, Holly Blue. In mid-summer, Meadow Browns appear in good numbers along with Ringlet and Gatekeeper. Late summer sees Small Copper, Peacock, Red Admiral, Small Tortoiseshell and Comma. This year we had good numbers of Painted Lady. Additional less numerous species are Chimney Sweeper moth (in early/mid June), Common Blue and Small Skipper. If visiting the site, please keep to the paths created by the trust as the reserve has many wet patches of land which are best avoided to keep the many wild flowers safe. (Alan Chadwick)

#### **12. Tatton Park (SJ758819)**

This has been the first year of the Tatton transect. There is a range of habitats along its 4000 metre length including parkland, woodland, meadow and farmland. Recordors were delighted to find 17 different species during the 2019 survey. Spring and early summer saw good numbers of Peacock, Orange Tip and Brimstone. Moving into summer, the transect was dominated by Gatekeeper, Meadow Brown, Ringlet and good numbers of Small Skippers. Painted Lady was present towards the end of summer and as the transect quietened down, Speckled Wood and Red Admiral were seen most often. We only had one sighting of Small Copper during our surveys, but some were seen off transect. Similarly, no Blues were seen during surveys, but certainly Holly Blue were present in other areas of the park, so maybe next year .....? (Mark Sills)

#### **13. Rostherne Mere NNR (SJ743841)**

It was a good year for butterflies here. Fourteen out of a total of 19 species recorded showed increases compared to last year. Both Small Skipper and Large Skipper were up while Orange-tip posted the highest numbers since 2014 with a maximum count of 42 on 23rd Apr. Purple Hairstreaks were recorded in July, but views were restricted to Oak canopies unlike in 2018 when the hot weather forced them down to ground level, providing rare close-up views. Small Copper and Common Blue numbers were up but still remain at a low level compared to historic data. All species of white butterflies were down with the largest declines seen in Large White. Green-veined White is the commonest species recorded within the wet margins and woodland surrounding the mere with 73 on 25th Jul. The national influx of Painted Ladies and Red Admirals was very notable at Rostherne and Small Tortoiseshell, Peacock and Comma also did well. It was also a very good year for Gatekeeper with 124 recorded on 29th

July. Meadow Brown totalled 1098 records during the year, with a maximum of 301 on 15th July. Finally, the thick growth of fruiting Ivy on the wall near the car park provided the perfect habitat to attract many Red Admirals and Commas in late October. (Bill Bellamy)

#### **14. White Oak Wood & Yew Tree Farm (SJ732880)**

2019 was the third year of recording at Yew Tree Farm on the Dunham Massey Estate. Last year the farm changed course from being a conventional Cheshire farm to being managed as a wildlife friendly farm, with herbal rich lays, restored hedgerows and new ponds. These edge type habitats proved very popular with a wide variety of butterflies; we spotted an abundance of browns, whites, painted ladies and some Small Coppers and darting skippers. As it is such a new route, we are not sure what else we might find in the coming years but we were very excited to find that we are seeing more butterflies more often! (Sophie Bray)

#### **15. Nantwich Lake and River Weaver (SJ648516)**

The recording transect in Nantwich Riverside Park, to the south of Nantwich town centre, is about 1.5km long and includes areas of deciduous woodland, scrub and regularly-mown grass. As in the two previous years we have carried out the survey, the dominant species in the early spring is Orange Tip. In the early spring there were also regular sightings of Small Tortoiseshell and Peacock butterflies. In early July significant numbers of Ringlets were seen in the area. Painted Ladies were recorded in small numbers from late June to late August. The more typical butterflies found at this location are Speckled Woods, Green-veined Whites, Small Whites (Green-veined Whites being more prevalent than Small Whites) and Red Admirals. Commas (in small numbers) have also been regularly seen. (Malcolm and Gill Reid)

#### **16. Leftwich Woods (SJ666717)**

The Leftwich transect has sheltered, sunny and warm hollows that often reveal the first sighting of a Comma or Brimstone for the year. Unfortunately the first walk usually reveals evidence that further Elm trees have succumbed to Dutch elm disease. 2019 was different, at least at the start, in that relatively few new disease affected trees were to be seen and soon, as April arrived, flower and then leaf damage caused by White-letter Hairstreak larvae became apparent. The anticipation that this would be a good WLH year was high. Emergence of WLH was normal and numbers soon built up and were maintained with the species present on most suitable Elms, including disease resistant elms, just off the transect, but numbers did not reach the heights of 2018. At the end of their flight season individuals could be seen taking nectar from a small area of Thistle and Knapweed at edge of the transect. Regrettably a number of Elms began to show signs of infection during late summer. Purple Hairstreak, seen at the site for the first time in 2018, was regularly found, but only as individual specimens, on a mature Oak along the transect route. Disappointingly, other than good early numbers of Orange Tip, many of the more common species showed in low numbers and this site did not even enjoy the influx of Painted Lady seen across the county, although high and prolonged numbers of this species along with Comma, Small Tortoiseshell, Peacock and Red Admiral were seen in nearby gardens. Noteworthy was the lack of nectar sources throughout the summer after dandelion and bluebell had died down in late spring, which undoubtedly contributed to the low numbers encountered. Small Copper was not recorded at all, probably because its main habitat became significantly overgrown as summer progressed, and was completely under water for a week in July. (Rupert Adams/Mike Perchard)

#### **17. Marshall's Arm (SJ649719)**

The White letter Hairstreak colony, discovered two years ago, continues to thrive, although viewing this year was more difficult as they did not come down to brambles to nectar. It was a similar story with the much larger Purple Hairstreak colony. Meadow Browns and Ringlets continue to thrive on Eaton's meadow with counts of 500+ and 200+ respectively at the highest peak. More Brimstones were recorded this year, along with more sightings of Common Blue. Small Copper numbers were back to normal but the highlight of the summer was the 100 + Painted Ladies seen in the height of summer. Wall Brown was still seen near

the Blue bridge but few Small Heaths were seen this year. (Paul Kenyon)

### **18. Ashton's Flash (SJ666749)**

Scrub management, by Friends of Anderton and Marbury volunteers, during the winter of 2018/19 saw a significant expansion of suitable habitat for Dingy Skipper and short excursions away from the formal transect during their flight season confirmed their range expansion into the newly created habitat. Numbers on the transect itself remain encouragingly high and egg laying females were also encountered within the clearings that have been created in the nearby Silver Birch stands. A second brood of Dingy Skipper has not been seen yet, but hopes are high. Surveys in March confirmed that the Orange Underwing moth population remains healthy, always a concern when habitat management includes the removal of Silver Birch. Surveys for Six-belted Clearwing moth, using pheromone lures, in June and July showed that this moth has a significant population at the Flash, possibly reaching high hundreds, if not thousands, of individuals flying at peak periods. Meadow Browns were numerous and had an extended flight season. Early specimens were especially dark, almost Ringlet-like. Gatekeepers had an average year, whilst Ringlet recovered a little from their drop in numbers in 2018. Common Blue did not do well, in spite of their bounce back in 2018 and, whilst good numbers in the early summer were repeated with a smattering of late summer records, they were nowhere near their 2018 peak. Small Heath had an average year but Small Copper numbers were well down. Painted Lady numbers were significantly up as the species moved through the county. Finally, a BBC team featured the site during the Big Butterfly Count, focusing on Common Blue and Painted Lady. The item was shown on BBC North West Tonight. (Rupert Adams/Mike Perchard)

### **19. Woolston Eyes (SJ652881)**

A very good year started early and two March counts were completed. April saw record numbers of Orange Tips and 13 were found on the transect. Gatekeepers showed some signs of recovery after two poor years and 60 were present in mid-July. The national influx of Painted Ladies was reflected at Woolston, with record numbers present. The highest transect count was of 14 on 2nd August and on the same day 62 Peacocks were present, the highest for some years. Purple Hairstreaks frequent the oak trees on the transect and these had a good year with around 20 reported, including the first ever whilst actually monitoring the transect during early afternoon. Autumn saw excellent numbers of Red Admiral and Comma with counts of 13 and 14 respectively on 2nd October. The buddleias proved particularly attractive and I plan to plant more seedlings during the winter. (Dave Hackett)

### **20. Sankey Valley Park (SJ592894)**

A good year at Sankey Valley Park, Warrington with twenty species counted and overall numbers up 20%. The most abundant species continue to be Speckled Wood and Small White, which are seen across all seven sectors. This year there have been big increases in Meadow Brown, Gatekeeper and Small and Large Skippers and, of course, the influx of Painted Ladies to the UK was very evident on this transect. Peacocks also seem to be doing well and it has been especially encouraging to see a three-fold increase in the number of Small Tortoiseshells, probably helped by the expansion of large swathes of nettles in several of the sectors. On the downside, numbers of Large White have fallen dramatically and Common Blues have also declined markedly. The vegetation profile of the meadow sector, where most Common Blues are usually seen, has changed considerably this year and only small patches of the larval food plants are evident perhaps accounting for the decline. (Pat Thurston)

### **21. Hatchmere (SJ551721)**

The total numbers of butterflies was significantly up on 2018 here. The key species at this site continue to be Brimstones, Speckled Woods, Green-veined Whites and Peacocks. A number of other species were recorded during the year, although these were only seen in very low numbers - Holly Blue, Small Tortoiseshell, Red Admiral, Painted Lady, Meadow Brown and Comma. The Hatchmere surveys showed a similar pattern to the 2019 Big Butterfly Count

with Brimstones significantly up on 2018 figures (it was particularly exciting to see Brimstones laying on Alder Buckthorn on the wet heathland on a number of occasions). Red Admirals, Small Tortoiseshells and Meadow Browns were also seen on site this year, where none were seen in 2018. Unfortunately, Green-veined White and Speckled Wood numbers were down significantly on 2018. No Large Whites were seen at all in 2019 although they had been seen during numerous surveys in 2018. (Diane Sumner)

### **22. Kelsall1 (SJ523681)**

The early butterflies got off to a good start with Orange-tips out in good numbers followed by Speckled Woods, Holly Blues and Whites in the fair April and May sunshine. The poor June weather ended their flights early though. The highlight of the summer was high numbers of Gatekeepers (and to a lesser extent Meadow Browns and Ringlets) - unexpected as the vegetation last mid summer was so dried out. The end of summer saw lots of Red Admiral, Comma, Peacock, Small Tortoiseshell and Whites - maybe later than normal, given the cool weather in June which may have slowed development? Painted Ladies made the odd appearance. Common Blues have not been common on this route before, but none were recorded in 2019. (Barry Mills)

### **23. Bickerton Hills (SJ495529)**

The transect at Bickerton Hills was started in 2018 and continued in 2019 with some slight modifications to the route walked. In 2019, there were 4 different walkers of the transect, each contributing 1 walk per month on rota. Between April 2019 and end-September, 17 visits were made in total. In 2019, 16 species of butterfly were recorded. The top 3 species were Meadow Brown (35 counts), Small Copper (33 counts) and Painted Lady (31 counts). Other noteworthy species were Green Hairstreak (6 counts) and Purple Hairstreak (7 counts). Additionally, 10 species of Odonata were recorded. In comparison to the previous year (2018), 5 new species were recorded: Brimstone, Purple Hairstreak, Comma, Ringlet and Painted Lady. Green-veined White and Orange Tip were recorded in 2018, but absent in 2019. A total of 211 butterflies was recorded in 2019 compared with 236 in 2018. Given the excellent weather conditions in 2018, this is not surprising. (John Roberts)

### **24. Stretton/Caldecott, West Cheshire (SJ435522)**

After ten years of no nutrient input, the three lowland fields on boulder clay are beginning to diversify with plant species that offer a rich nectar source. This is the second year I have completed a transect, and the same 19 species of butterfly were recorded. Large Skipper and Small Skipper have been abundant for ten years on a patch of rough grassland that is neither cut nor grazed, but they have spread to a grassy area within the woodland. Ringlet was present in the hundreds but was not present at all a few years ago. Purple Hairstreak have their favoured mature hedgerow oaks, but they were seen on six different trees. Small Copper did not do well this year, but Common Blues were abundant in all the locations. Birdsfoot Trefoil had been planted to encourage the species. The wildflower mound (a source of seed) was covered with Painted Ladies, but also Red Admirals, Peacocks, and Tortoiseshells. Common Thistle, Brambles and Ragworts continue to be a really import nectar source, but the most rewarding was the planting of Alder Buckthorn ten years ago and the visit this year by both male and female Brimstones. (Julia Drage)

### **25. Caldby Nature Park (SJ423649)**

This is a small, edge of urban Nature Park with a brook leading to the River Dee, but with regular kingfishers and occasional otters, badgers & water voles, it is a brilliant wildlife resource on our doorstep. 2019 was the first year of monitoring the butterfly transect. We did not have any unexpected sightings. There were Small Copper and Common Blues in small numbers, but we were delighted to see several Commas, lots of Red Admirals and enjoyed the Painted Lady invasion. Early sightings included Brimstone and Orange tips in good numbers along with Speckled Woods and a few Holly Blues, one of which very obligingly landed on my big toe! We are looking forward to next year and better weather! (Jacky Creswick)



**26. Countess of Chester Country Park (SJ397693)**

Poor weather produced a stuttering start to the butterfly year but a good showing of Orange Tip, Whites and a couple of firsts for the transect (Holly Blue, Brimstone) lifted spirits. Then came the wet, cool late spring and early summer when it was a struggle to get into double figures on a transect count. Summer and the butterflies finally arrived at the end of June. On 14th July I recorded 186 butterflies on transect. Meadow Brown was most numerous, followed by Ringlet. July also brought good numbers of Gatekeeper, Large Skippers, Small Tortoiseshells and Peacocks. Small Skipper was recorded for the first time on transect in July. Small numbers of Painted Ladies reflected what was happening nationally; Red Admirals were more common. It was a disappointing year for Common Blue, numbers were very much down on 2018. Speckled Wood was recorded in most weeks as were Commas. (Peter Smith)

**27. New Ferry Butterfly Park (SJ333850)**

Regular recording has now been initiated but has been patchy in recent years and so it is quite difficult to reliably pull out any trends mainly due to lack of data. Nonetheless the summer influx of Painted Ladies was evident, there was a big decrease in Large White numbers, and a decrease in common blue. However it was a good year for Meadow Browns, Gatekeepers and skippers. (Pat Thurston)

**28. Wallasey Sandhills (SJ276925)**

2019 saw the establishment of a transect at Wallasey Sandhills. This is one of two remaining sites in VC58 where Grayling are present. The site is an SSSI, owned and managed by Wirral Borough Council. The transect comprises a diverse range of habitats and species to match, ranging from grassland to woodland and, of course, sand dunes. Brimstone are present in increasing numbers; North Wirral having been a desert for this species in the past. Small Heath are also present in reasonable numbers. There are no comparatives for Grayling given this is the first year UKBMS records have been collected, nevertheless my empirical observations are that the population is declining. Future records will tell. (Dave Costello)

**29. Cleaver Heath (SJ257827)**

This 2km transect, which is mainly along farmland footpaths, yielded similar numbers overall to last year with a few anomalies: Painted Ladies (70 this year, none last year); fewer whites particularly the early ones, and especially the Large Whites; many fewer Common Blues; Commas and Small Skippers were down; Red Admirals and Speckled Woods were up. The overall species count (17) was typical. We didn't see anything we hadn't seen before. This was our third year of the transect. (Alan Irving)

**30. Red Rocks Marsh Nature Reserve (SJ207876)**

This reserve is the second of two sites in VC58 where Grayling can be found. The site is managed by Cheshire Wildlife Trust. Butterfly Conservation has good contacts with CWT via Dave Costello and a dynamic conservation plan for Grayling is taking shape. The site is an SSSI primarily because of the presence of Natterjack Toads. Despite a lot of land management activity over the last 12 months Grayling numbers continue to fall. This is also another site for Small Heath which continue to do well. 2019 was the first year for a while that Dark-green Fritillary has not been recorded. (Dave Costello)

Two additional transects are established, with numbers on blue circles on the map; (31) Marbury (SJ651777) and (32) RSPB Burton Mere Wetlands (SJ314734), but reports for these in 2019 were not available.

*Are you interested in setting up or joining others in walking a transect? Perhaps you have a favourite walk that might work as a new transect? In either case, please contact Tim Ward (see page 4) as soon as you can if you want to participate this year.*

## DSLR versus Mirrorless cameras for macro photography

**Barry Mills**

*DSLR's are dead! Mirrorless is the future!* Anyone who follows photography tech news either in magazines online forums or YouTube etc. can't have escaped the growing weight of "informed" opinion that the era of the flippy mirror in a camera is coming to an end. *Those that have seen the light have already switched to this exciting format and those that remain with their old DSLR's are stuck in the dinosaur age.* In this article I will cover some of the advantages/disadvantages of a mirrorless camera over a DSLR together with my own experience in camera transition and the impact it has had on how I do macro photography.

While "mirrorless" systems have been around since digital photography started to replace film it has only been in the past few years that they have started to become a viable alternate to the higher performing APSC and full-frame DSLR's. In particular the Sony brand third generation of cameras have taken the mirrorless technology onto a new level especially in the area of autofocus. These cameras are now seen by many as now offering better performance than DSLR's in the more demanding areas of sports, action and wildlife photography.

While the two dominant players in the DSLR market Canon and Nikon have dabbled around the edges of mirrorless systems they seem to have adopted a strategy of trying to keep their DSLR sales going for as long as possible – until recently. Both Canon and Nikon (and also Panasonic ) over the past year have now introduced full-frame mirrorless options to compete with the Sony cameras. While their first generation cameras may not be totally on a par with Sony yet (and native lens selection is also limited due to new mounts) they will no doubt quickly get to that position. For those that shoot APSC format there is a wealth of mirrorless options from Sony, Fuji, Canon, Nikon, together with more compact Micro 4/3 systems from Olympus and Panasonic.

*So as a DSLR owner why would you want to switch? Manufacturers offer a variety of feature sets in their cameras but some of the main generic advantages of a mirrorless system include :*

- Compact and generally lighter bodies
- Focus points that cover 95%+ of the sensor area
- Silent shutter
- Live histogram
- In-camera battery charging
- WYSIWYG exposure through the Electronic Viewfinder
- Viewfinder magnification and focus peaking
- No lens calibration focus errors
- In-body sensor stabilisation
- Photo review in Electronic Viewfinder
- Eye/Animal tracking focusing
- Video through EVF and rear screen

*And what could be considered the disadvantages of switching systems for a DSLR owner?*

- Cost of changing camera bodies and lenses (though lens adapters are available)
- DSLR's tend to have much greater battery performance
- Optical viewfinders are always on (an EVF has start-up time)
- Optical viewfinders have no lag (an EVF has a minor delay)
- Many DSLR's are just as compact and weigh similar to a mirrorless body
- Many mirrorless lenses are as large and weigh the same as the equivalent DSLR
- Many native specialist lenses are not available on mirrorless bodies
- Limited lens selection on certain mirrorless systems

My own progress since returning to photography a few years back has probably followed a familiar path: starting with a basic APSC body acquiring some specialist lenses upgrading the body before finally switching to a full frame DSLR. As a Nikon shooter when I acquired my last DSLR, the D850, I thought I had finally achieved the performance and the image quality I wanted from a camera – the rest was up to me to get the best out of the system. No more “GAS” (gear acquisition syndrome) for me!! Until Nikon released their new “Z” full frame mirrorless system that is!

Whilst very happy with my DSLR it did have a couple of drawbacks for me, particularly when shooting macro/butterfly images. It is large and heavy, especially when paired with my main macro lens a Sigma 150mm and carrying the kit around for long periods in the field can be a challenge. I did wonder if the new Z7 body would help me in that respect and, while the feature set was the same as the D850, some on the “informed” opinion suggested the focusing may be inferior. Also would my DSLR lenses work correctly when being adapted? Would the EVF be terrible for macro work? In the end “GAS” got the better of me and I was lucky enough to pick up a second hand Nikon Z7 to give mirrorless a go.

In short I'm glad I changed I've been shooting with the Nikon Z7 since March last year and have been extremely happy with the performance and image output for

*Comparative sizes of full-frame Nikon Z7 (585g)  
and Nikon D850 (915g)*



my macro and butterfly photography. The weight and size difference between the two formats can be seen in the caption above and this has been a significant benefit for me when out and about in the field. Both in terms of handling while shooting and for carrying around. My two macro lenses (Sigma 105mm/150mm) work just as well on the adapter to the Z7 as they do on a DSLR. In fact I think the auto focusing accuracy is actually slightly higher now leading to a greater number of keepers for me. This is also aided by the fact I can move the focusing point right across the frame where I need it rather than being restricted to a central portion as with a DSLR. The EVF is also a joy to use ; both sharp and clear. The in-body stabilisation works well in conjunction with the lens VR and I'm finding it gives benefits in sharper macro shots. I also find having a near silent shutter is a boon when getting close to butterflies – no more flippy mirror noise to disturb them. Battery life I find is OK and I can normally do 600/700 images before a change but it always pays to carry a spare. The only downside for me at the moment is the lack of a native Z macro lens although one is planned on the Nikon road map for future release.

I took some static test shots when I got the Z7 and compared the results with the same lenses on the D850 - I couldn't tell any difference in either quality or sharpness.



Nikon Z7, adapted Sigma 150mm, f11, 1,500, ISO 900



Nikon Z7, adapted Sigma 150mm, f13, 1/500, ISO 450

It's really out in the field that I just feel the Z7 gives me better results. I think that's down to the on-sensor focus giving fractionally more critical focus and also being able to place the focus point exactly where I want, rather than just in that middle zone for a DSLR. The in-body stabilisation (+ lens VR) gives added acuity for macro work.

So is it worth the switch? In my case I've found significant benefits for my macro work and can't really see myself going back to a DSLR as my main camera. Certainly if you are new user starting out in photography then a mirrorless system will be the way to go. Also anyone doing hybrid stills/video shooting then mirrorless is far more flexible. However, if you are an existing Canon or Nikon DSLR shooter heavily invested in kit and lenses then you need to weigh up the costs involved verses the benefits gain for your type of photography. For me it has been.

I'm more than happy to offer any help I can with regard to cameras or macro photography and can be contacted via email at [bamills99@gmail.com](mailto:bamills99@gmail.com)

For those who may use "Flickr" photo sharing site, I've set up a group entitled "Cheshire Butterflies and Moths". Please consider joining and post your local photos for others to see. Flickr is still free to join and you can host up to 1,000 images on the site with this type of membership – give it a go. The group I've set up can be found at: <https://www.flickr.com/groups/3977387@N20/>

## Floods and Swallowtails

It's getting wetter. We are in dire need of protection for thousands of homes and businesses against flooding. Against this background it seems perverse to give attention to the needs of a few butterflies that are also threatened by floods. But we can consider butterflies without stinting our fellow human beings, especially when it is one of our rarest and most beautiful butterflies - the Swallowtail, *Papilio machaon britannicus*. We have a unique subspecies of Swallowtail, a butterfly that is relatively common (as other subspecies) in continental Europe. The problem with *britannicus* is that it is much more fussy than its continental relatives. On the continent Swallowtail larvae feed on a variety of umbellifers (*Apiaceae*), which are relatively common 'weeds', growing in many different habitats. *Britannicus* larvae feed only on Milk-parsley (*Selenium carvifolia*) and this plant grows naturally in the broads and fens of Norfolk, the only places where our Swallowtails are found.

Conservation efforts by various agencies have kept the Swallowtail metapopulation stable in Norfolk, but climate change is going to frustrate those efforts. Gravid female Swallowtails search for their larval food-plant in rapid horizontal flight and they select the tallest most prominent plants to lay eggs. Females lay one egg per plant, hence a paucity of plants spread over large distances would not be productive. Each plant usually hosts several larvae, presumably from different females. It is clear, therefore, that a significant reduction in the number of suitable Milk-parsley plants would impact on the butterfly population. With the level of management that is in place, that should never happen - seeds are readily available and Milk-parsley can be planted in appropriate places with relative ease.

So what's the problem? There are several. The water table is rising, partly due to agricultural drainage elsewhere and partly due to climate change. The areas suitable for habitation are too small for adequate populations and gene flow. Reed cutting can damage the areas suitable for plants. The latter also hinders the butterfly, because the larvae pupate in reed stems. The most important danger is sea level rise with the intrusion of brackish water into the habitats, making the ground unsuitable for Milk-parsley and, it is predicted, this will render the butterfly extinct in due course.

Is there a solution? The proposal is a kind-of reverse Noah's Ark - creation of suitable damp habitat further inland where sea water ingress is unlikely and flooding could be contained. Candidates are Lakenheath, where the RSPB has created 400 hectares of potentially suitable habitat; The Great Fen Project - the joining of Woodwalton and Home Fens with the Ouse Washes, which would comprise 3,700 hectares; the Avalon Marshes in the Somerset Levels. All of these regions can (and hopefully will) be engineered to a suitable state and planted properly with Milk-parsley to create sustainable habitats for Swallowtails.

The only other cloud on the horizon is the potential infiltration of continental Swallowtails of a different subspecies. Immigrant Swallowtails (subspecies *gorganus*), presumably from France, have bred in Sussex in recent years, especially during warmer summers. A colony has not been established, but if climate change progresses, that may happen. If such a colony developed and spread via the various *Apiaceae* plants that continental Swallowtails can use, then we may lose our unique subspecies due to inter-breeding. That, however, would not be as big a disaster as losing the species from the UK altogether.

### Reference

Collins, NM et al (2019) Insect Conservation and Diversity doi: 10.1111/icad.12371

# In search of Cheshire's breeding butterflies

David Tolliday

I retired in June 2018 and needed a project to keep me busy during 2019. With butterflies having been my earliest interest in wildlife, since the age of about 10, the first idea that came to my mind was to photograph all of the known breeding species of butterflies in Cheshire during the year.

Immediately several questions arose with perhaps the main one being what would I accept as a photograph? Could this be a distant view of the butterfly with very little detail being shown, or did it have to be a good quality close-up image. I chose the latter. This then led to do I want photographs of males and females and what about closed or open wings? Of course, the biggest questions of all were what are Cheshire's breeding species, where can I find them and what time of year do I need to go looking?

My first thanks go to Rupert Adams, our county butterfly recorder, for providing me with a list of species seen in Cheshire and where some of the scarcer butterflies may be found. There were 32 species on this list but two, Small Pearl-bordered Fritillary and Silver-studded Blue had not been recorded as breeding in Cheshire since 2013 and 2006 respectively. Three others being Clouded Yellow, Silver-washed Fritillary and Dark Green Fritillary are described as migrants/rare visitors with no records of breeding. This left me with 27 breeding species to find and photograph.

I created a list in date order of emergence and set about planning trips out. I was fairly confident that about 20 species would be relatively easy to locate and photograph, another four could prove to be difficult which left three that I thought I might have trouble with. Two of these, White-letter Hairstreak and Purple Hairstreak are generally only found at the top of Elm and Oak trees respectively. Whilst I might be able to see these, I thought it may be very difficult

to take good enough photographs to satisfy my quality criteria. This left one which I thought I had no chance, Essex Skipper, whose only known breeding location in Cheshire was in a private garden near Alsager.

My quest started in mid-April with a visit to Jackson's Brickworks in Poynton where the only butterfly I saw was a Peacock in very poor condition which had overwintered as an adult. The next day was a trip to Danes Moss, a Cheshire Wildlife Trust reserve in Macclesfield where Speckled Woods and Brimstones were on the wing. Whilst the Speckled Woods were easy to photograph the Brimstones were very flighty as the males were flying around looking for females to mate with.

Two days later a walk along the Middlewood Way in Macclesfield resulted in images of Orange Tips and later that day at Poynton Coppice a Comma was added to my list.

Then came the first speciality, Green Hairstreak, which has a relatively short flight period from mid-April to early May. Fortunately, on the Cheshire and Wirral



branch page of the Butterfly Conservation website there are very detailed instructions on where to find this species at Cut-thorn Hill. Having parked the car and walked to the



exact location where the map indicated the butterflies would be, I started to search. The search lasted about five seconds before I found several Green Hairstreaks all posing to be photographed. These were probably the easiest butterflies to photograph throughout the whole project. Several families walked past, and they appeared to be very interested in seeing and learning about this special butterfly. I later also found the same species at Tegg's Nose in Macclesfield.

Fortunately, during a trip to Ashton Flash I met Rupert who was doing a butterfly transect. This allowed access to the site where there were several Dingy Skippers and Common Blues. On the public access part of the site I saw one Holly Blue which fortunately I managed to photograph. I had been having problems with this species as a few trips around Macclesfield had been unsuccessful. I only saw one other Holly Blue all year which happened to be in my back garden. Later that day a Small White was photographed at New Ferry Butterfly Park and Green-veined Whites were plentiful at RSPB Burton Mere Wetlands.

Another potentially difficult species was the Wall. Fortunately, the ranger, Martin James, who knew about my project, alerted me to



this species flying in a very specific area of Tegg's Nose. Two Walls were on the wing and occasionally settled long enough to be photographed.

Cheshire Wildlife Trust's Swettenham Meadows gave me several species, including another for the list, Small Copper. A few days later at Moore Nature Reserve seven species were photographed but no new ones for the list. By the end of May 12 species had been photographed, but worryingly these did not include Small Tortoiseshell. What a disaster it would be for me and the species if this common butterfly eluded me.

Ranger Martin alerted me to Small Heaths at Tegg's Nose. The weather was not good but during a short break in the clouds I rushed to



the venue and there were two Small Heaths hanging on to grass stems. Fortunately, the cold cloudy weather made it easy for photography.

It was now time to start the search for White-letter and Purple Hairstreaks. Several trips to Leftwich Woods and Marshalls Arm Local Nature Reserve in Northwich and Moore Nature Reserve proved to be unsuccessful but during these visits Painted Lady, Red Admiral, Meadow Brown, Gatekeeper, Large and Small Skippers, Ringlet and finally Small Tortoiseshell were added to the photographic list.

The 14<sup>th</sup> July turned out to be a red-letter day. On a morning walk at Marshalls Arm, after a few hours of waiting and searching a White-letter Hairstreak was found low down, possibly egg laying. My first photograph, and possibly my favourite





image of the project was one antenna showing from behind a leaf with the wings and body just visible as a shadow through the leaf, but did this fit my quality criteria? Fortunately, the butterfly eventually came lower down and allowed good views. A special moment for me as this was my first ever White-letter Hairstreak.

A few days earlier, at Moore, the ranger recommended the oaks either side of the access road on the bridge over the railway for Purple Hairstreaks. So the afternoon of the 14<sup>th</sup> resulted in another first - Purple Hairstreaks in the oak tree at eye level with the top of the bridge. They were a bit distant, but a long lens gave images that were just about good enough.

Large Whites along with several other common species were at the National Trust's Style Mill.

Red Rocks Nature Reserve on the Wirral was the location of the search for Grayling. The



first visit was unsuccessful, but the sun shone on the second visit when two very obliging Graylings were found.

This left one species still to be photographed, Essex Skipper. Fortunately, Rupert advised me that he had just confirmed this species at Whieldon Copse, Manley Road near Frodsham. What an



amazing place this is, there were butterflies everywhere. The skippers were very flighty and separating Essex Skippers from Small Skippers was very difficult, although the photographs did prove Essex Skippers at this site.

So, success, all 27 breeding species photographed plus Silver-washed Fritillaries by the side of the road adjacent to Trentabank Reservoir in Macclesfield Forest. My project proved to be a very enjoyable experience, but one thing became very obvious for a task like this – knowledge is the key. Thank you to everybody who gave advice to help me complete my task.

# Book Reviews



## Life Cycles of British & Irish Butterflies

by Pete Eeles

Pisces Publications

This book is exactly what the title states. It is a compendious account of the stages in the metamorphoses of all 59 species of butterflies that are considered to be resident in the UK and Ireland. There are two components to the account of each species: a description of the critical features - habitat, distribution, seasonal timing (via clear charts), life cycle and its stages and key behaviours, together with superb photos of all the stages including

differentiation of colour changes in ova and pupae. Most of the photos have been available for a long time via Pete's magnificent website ([www.ukbutterflies.co.uk](http://www.ukbutterflies.co.uk)), which shows what a generous man he is. I suggest, therefore, that he deserves to make some capital having turned all of these efforts into a book.

The intricacies are incredible. Pete provides the detail in the Introduction. We have 59 species; each has four stages to its life cycle (total - 236 subjects). But the larvae change skins and appearance (each is termed an instar) and most species have 5 instars (a few have 6). He calculates the total of subjects, therefore, at 468; by my reckoning that is a slight underestimate, but we will not split hairs. Suffice to say, that is a lot of photos and a lot of descriptions. He took most of the photos himself, but credits the other contributors - I'm sure that they all felt honoured to have their efforts included. It also seems that none of the pics were taken of captive breeding specimens, so eggs and tiny larvae had to be found before the camera came out. Granted, this is easy for some species but extremely difficult for others.

Given all the detail, you might expect a magnificent work of reference, but a rather dull read - definitely not the case. It is good writing, interesting, with some anecdotes and useful reference to the work of others. Indeed his modesty pervades the whole book. A similar task was accomplished by F.W Frohawk almost a hundred years ago in two volumes of *The Natural History of British Butterflies*. Obviously Frohawk's work could not include the photographs, making it less useful as a work of reference, but compensated by the awesome task of hand-painting all the life cycle stages. Pete dedicates his work to Frohawk. It would have been wonderful if Frohawk could have seen Pete's book.

I have had my copy for a couple of months now and have read most of it. For most species I have learned something of significance that I didn't know before. I am sure that I will never see most of the non-imago stages, nor will most of the readers of this newsletter, so you may feel that the detail is superfluous to your needs. But that's not really the point. In addition to a work of reference, the book is a source of inspiration. To witness dedication and skill at this level is really rather moving. It is published by

Pisces Publications, who have also published the new Moth Atlas and Michael Blencowe & Neil Hulme's magnificent book on the *Butterflies of Sussex*. They do a lovely job - nice binding (it will not fall apart in a hurry), good text and good paper, which does justice to the wonderful photos. It is a book that anyone with a serious interest in butterflies has to have.

*Review by the Editor*



## **Atlas of Britain & Ireland's Larger Moths**

**by Zoe Randle et al.**

Pisces Publications

Fifteen years in the making, this weighty tome is finally with us and it's absolutely been worth the wait. Based on records accrued between the time when Adam was a lad and 2016, the moveable feast that is moth recording is more than partly the reason for delays preventing earlier publication. Data originated from two sources, the National Moth recording Scheme (NMRS) and Mothsireland (MI), both of which have interesting first records within their databases. NMRS boasts

1741 as its first entry, a Kentish Glory in, would you believe, Kent; MI on the other hand has a record of Large Nutmeg from County Dublin from 1860. Thus, its abundantly clear that the history of our interest in larger moths is both long and interesting.

There are many large numbers associated with the Atlas; 25.5 million records, submitted by tens, if not hundreds of thousands of recorders before being validated through our network of hundreds of County Moth Recorders (CMRs) and other organisations before being plotted within 434 pages of distribution maps. Among the 18 pre-publication reviewers you can find Steve Hind, our VC58 CMR for micro-moths and Ant Marriott's name also stood out for me from the 80+ photographers recognised. Finally, there are no less than 11 authors, who must all be whole-heartedly applauded for their wonderful achievement. CMR's all received complimentary copies for their involvement.

Sir David Attenborough's Foreword ably sets the scene and following relatively brief yet comprehensive sections from an Introduction, Recording, Analysis and Layout, through Results and Causes and Conservation, it's as early as page 22 that we find the gold mine that are the Species accounts. Following this main body of the work, two Appendices follow, along with References and finally a complete Index of species.

I'm absolutely certain I didn't start at Orange Swift when beginning my initial browse, in truth I can't remember what species it was, nor would it have mattered since the first impression of the accounts was one of great (pleasant) surprise. The book isn't particularly big and it probably weighs much the same as a bag of sugar so to arrange two species per page yet not appear cluttered is some achievement. Each species has a photo, brief notes on distribution history, a flight period histogram and of course the main point of the whole effort, the most up-to-date geographical picture of known distribution. Circular dots have been employed to indicate presence, each placed centrally within a 10km square in three colours representing time periods. Pre-1970 and 1970-1990 are the same size, orange and blue respectively so yes, there's going to be possibly millions of instances where both should be shown – only they can't be. The treatment of such situations is to use the most recent record of the two, which

is also of course the most relevant. For records from 2000 onwards a smaller, black dot is used, so its straightforward enough to see that a species has been seen between, say, pre-1970 and subsequently in 2013. Likewise, species absent or unrecorded during 1970-1999 but then found again in 2013 are equally clear. A good example of how well this system works is the mapping of Clouded Border on page 165. Each species also has a sponsor, recognised alongside the map, with Chester and Wirral's branch of Butterfly Conservation being so named for Manchester Treble-bar – who's map is also an interesting one.

Having appreciated that, overall, this looked (and felt!) a stunning volume had been added to my library I set about exploring. I'd three categories in the main, species that have recently arrived into VC58, species that look likely prospects to arrive sooner rather than later and uber-common species. In the first instance I looked at Dingy Footman (page 250), something that began being regularly recorded locally as recently as 2009 but which now is more common than numerous other age-long residents also felt to be common. Sure enough, the northern half of the map shows practically 100% of that range as being reached post 1999 and that the number of records in this millennium alone is practically the same as everything combined beforehand. By now (2020), it will doubtless have gone further north and become even commoner hereabouts... as will have Buff Footman (also page 250). Can we predict new arrivals using this atlas? I think almost certainly yes. The map for Fletcher's or Pauper Pug (page 144) is mainly post-1990 dots and appears to be extending westerly from its East Anglian base – and its already arrived in VC58, three times, so not a true prediction – much the same as Sycamore (page 291) and Beautiful Hook-tip (page 263) which are also becoming commoner year on year here – note that the leading edge of both their ranges are predominantly black dots too... the map for Cypress Pug (page 141) also shows a candidate new species and it too made it here in 2019! Keep looking for more... I think that most moth-trappers in the northwest of England would rightly consider Large Yellow Underwing as being one of our most common species but the infamous 'blunderwing' actually doesn't enjoy a blanket distribution across UK at all. Odd missing 10km squares are rare in England apart from immediately west of the Wash, but in northern Scotland and much of central Ireland and Eire, its absent over large areas, which I found interesting. Had I but paid more attention to pages five and 12 of course I'd have understood that the south Lincolnshire bald spot wasn't restricted to Large Yellow Underwing, but is in fact an ever-present anomaly brought about by limited, or in some 10km squares, no coverage whatsoever.

Appendix 1 charts 26 species that have not been recorded post-1970 and some presumably for many, many years before then whilst Appendix 2 is perhaps even more interesting since it deals with species pairs or triples which we normally have to aggregate though insufficient evidence existing to determine to species level. I found these agglomerations to be excellent and bear silent witness as to why aggregates are necessary. Most of the separated species maps adjacent to the combined versions show that both (or all three) species occur broadly in the same areas, so the need for dissection or larval-based identifications is essential. Some however do give a good indication of what is more likely; looking at page 466 gives clear indication that, in VC58, its far more likely a recorder has seen Orange, rather than Light Orange Underwing and that an "ear" (pages 470-71) is more likely to be Ear Moth than Crinan but that neither Large nor Saltern can be ruled out; fascinating.

Published, printed and bound all in the UK by Pisces Publications and Gomer Press respectively, using paper from responsible sources, both parties are to be congratulated for such an excellent production. To have achieved what they have and yet managed to keep the cost to a very affordable £32-34 pounds depending on where you shop is also worthy of mention. I highly recommend anyone who hasn't already done so to put their hands in their pockets and doubt they will be disappointed.

***Review by Steve Holmes***

**Photo Competition  
unplaced, but highly commended**

**Broad-bordered Bee Hawkmoth  
by David Tolliday**



**Small Heath by Alex Neal**



**Green-veined White by Diane Hunt**



**Painted Lady by Barry Mills**



Small Pearl-bordered Fritillary by Roger Cope



Photo Competition - joint 3rd place

Hummingbird Hawkmoth by Sue Butters





Photo Competition - 2nd - Large Blue by Barry Mills

