Cheshire and Wirral ARGUS

The Newsletter of the Cheshire and Wirral Branch of Butterfly Conservation

Spring 2023 Issue 108

ANNOUNCEMENTS

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 when they begin again. You will get a warm and friendly reception.

Photographic Competition 2022

Congratulations to Roger Cope for his winning entry, shown on the front cover of this edition. Those judged as second and third are at the end of the newsletter, along with other entries that scored highly with the judges. Thanks to all those who entered. We have begun to receive images taken on phone cameras; so far none of these have gained scores that put them in contention, but as phone cameras improve, who knows? Please bear in mind that the best entries are reproduced in the newsletter, so the resolution must be adequate for printing, minimally 300 dpi.

Photographic Competition 2023

Open to all Members of Cheshire & Peak Branch of BC

Entries must be of butterflies or moths (any life-cycle stage) in colour or B & W; images that have not been submitted for any previous C&W competition. Entries must be submitted by e-mail to the newsletter editor as a JPG file at 300 dpi resolution, A5 size by **December 31st 2023**. Please 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 2024 newsletter; second and third entries will be on the back cover and inside back cover. Prizes are book tokens - First £25, second £15, third £10.

COVER IMAGE White Admiral (*Limenitis camilla*) Ryton Wood, Warks.

Nikon 3100, Sigma 105mm macro lens, ISO200, 1sec at f16, tripod, available light.

by Roger Cope - the winner of our 2022 Photo Competition. Runners up and specially commended entries are towards the end of the newsletter.

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If you have any questions about their roles, or feel you would like to help the branch, please contact any one of them.

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Editorial

Another year and another photo competition. Not so many entries, but a consistently high standard from those that did enter. It is tending to devolve down to a hard core and I wonder if the rest of you are being put off by what you percieve as unsurmountable opposition? The panel of judges is not composed of experienced photographers, so the process is not overwhelmed by technical criteria. Composition and lighting are critical, so even if you don't have the latest mirrorless camera and an expensive macro lens, you can still produce stunning images. Have a try this year.

As you will see much of the newsletter is taken up with reports from transect walkers. This seems reasonable to me, because now that we have almost 50 transects ranging right across the county (see map on page 10) the collection of reports gives the best possible understanding of how butterflies are faring in Cheshire & Wirral. The collection makes interesting reading and I won't cherry pick, but it is clear and pleasing that Holly Blues are on the up, even if not many other species are.

If the transect reports seem a bit depressing, have a look at this (tinyurl.com/msnbvact). This is the Butterfly Conservation report on the State of UK Butterflies 2022. Actually it isn't all misery because those specialist species occupying sites that can be preserved or improved are doing well, some of them miraculously so. In contrast, specialist species existing on unmanaged habitat are doing badly. This tells us that the problem is not just climate change or the odd bad summer, but rather something fundamentally wrong with habitats - destruction, loss or corruption (and I don't mean in the political sense). The report is superbly written, illustrated and produced and we should all download it, read it and inwardly digest the contents. BC is doing what it can to preserve our butterflies and moths and to try to establish the causes of their declines. We need this analysis. Now that we no longer have the EU to protect us from the excesses of those that manage the countryside for other purposes, we need to identify the threats as unambiguously as possible.

We have two articles about moths in this edition. The shorter piece describes efforts by moth trappers to generate useful data to protect the vulnerable Danes Moss site from damage that might follow from adjacent building development. The other article, by Clive Jones is a fascinating description of a one-man moth-blitz of a small Cheshire nature reserve. Whilst reading the article, please keep in mind the effort and skill involved in generating the data. Clive has written a much longer report, which he sent to me for interest and I asked for this shortened version for inclusion in the newsletter. He will send a PDF of the full report if you email him (cej.northgate@live.co.uk). His survey involved a prodigious amount of work, but the results are revealing, with unexpected moths turning up in his traps producing valuable insights into our species maps. It is also striking that the profile of 'his' moth species differs markedly from the profiles that we see in gardens - not surprising, but interesting. For example, in the 'real world' trappers aren't necessarily swamped by Large Yellow Underwings. overwhelming, but difficult outcome is that we need this survey next year and the year after...and we need similar surveys to be done elsewhere. I leave you with those thoughts.

Events in 2023

David and Jennifer Tolliday have recently taken on the job of organising our group outings and four trips have been arranged for 2023. For any enquires or to book on to any of the events please contact David and Jennifer. Their contact details are:

Email: davidtolliday1@outlook.com

Phone 01625 432105 Mobile 07722 124412

The leader for each event has excellent local knowledge of the site.

Car park locations include 'What3Words' which gives precise locations down to a three-meter square. It is a free app for Android and Apple mobile phones.

Butterfly Conservation's head office has agreed that a database of our members who would like to receive information about outings can be maintained. This information will be stored securely in line with GDPR rules and only used specifically for information about our outings. You can remove your details from this list at any time. If you would like to include your contact details for outings please provide your details to David and Jennifer.

Saturday 29 April, Tegg's Nose, Macclesfield for Green Hairstreaks.

Leader: Tim Ward

Meet at Tegg's Nose Country Park car park, Buxton Old Road, Macclesfield,

SK11 OAP, grid ref. SJ950732 at 11.00.

What3Words: renewals.circulate.blueberry

Tim has walked the transect at Tegg's Nose for the last 10 years so knows the site very well. The main focus of the trip is to look for Green Hairstreaks but Tim will also show us the two prime lekking sites for Wall Browns in case anybody wants to return later in the year to look for them (we may organise a short notice walk for them). We will also try and look at the different behaviours of female Orange Tips and Green-veined Whites which should help with identification when these two butterflies are in flight. Peacocks and Speckled Woods should also be flying.

There is a good quality café next to the car park.

Sunday 28 May, Bickerton Hill for Small Coppers

Leader: John Roberts

Meet at the National Trust car park at Bickerton Hill, Goldford Lane, Bickerton, Malpas,

SY14 8LN, grid ref.SJ503530 at 10.30.

What3Words: taxpayers.snuggled.seaside

The main focus of the trip is to look for Small Coppers, but they can be unpredictable with numbers varying each year. This can be due to overgrazing of the main food plant, Sheep's Sorrel, or dry weather. However, from recent transect reports the end of May should hopefully be a good time to see them along with a range of commoner species.

Sunday 2 July, Prees Heath, Shropshire - Silver-studded Blue, Purple Hairstreak, Essex Skipper

Leader: David Tomlinson (see p.4 for contact details)

Meet at 10.30. Prees Heath lies between the A49 and A41, two miles south of Whitchurch, North Shropshire. Meet in the car park at SJ557362 (nearest Post Code SY13 3LA, but note that post code would take you finally to the west of the A49; the car park is just east of the A49).

What3Words:learns.microchip.gracing

Prees Heath Common is a Butterfly Conservation reserve. Following major habitat recreation to expand the area available to the Silver-studded Blue colony, this event is an opportunity to observe the butterfly in large numbers and appreciate the scale of habitat creation on the common. The Silver-studded Blue has an intimate relationship with ants and this will be described as will the restoration actions conducted on the common. Our visit is timed for early Purple Hairstreaks and will be just after the peak for Silver-studded Blues, but the colony is so large that good numbers will be present and many will still be in good condition.

Prees Heath hosts a large population of Purple Hairstreaks in the many oak trees to the west side of the reserve. Some of the oaks are quite small and it is sometimes possible to find the hairstreaks at eye-level. This is facilitated by bringing a step-ladder and, if you have one that is light and reasonably portable, bring it with you (this is not a joke!).

To the east of the reserve is a colony of Essex Skippers and we will try to see these after dealing with the blues and hairstreaks. The site also hosts the other common heath/grassland butterflies, especially Ringlets.

Saturday 15 July – Wallasey Sandhills for Grayling and then on to Bidston Moss

Leader: Dave Costello (see p.4 for contact details)

Meet at 10.00am at Wallasey Sandhills Car Park, known as The Gunsite Car Park, Leasowe, CH46 2RH. Grid Ref SJ2739 9251

What3Words: fixed.went.jacket.

Free parking but there is a three hour limit at Bidston Moss.(Junction 1 Retail Park SJ288913, What3Words cards.dose.fetch)

The target species at Wallasey Sandhills is Grayling. Reduced to just two small sites on the North Wirral coast, this is our branches rarest resident breeding butterfly. Both sites offer a range of habitats and a good mix of butterfly species will be present on the day. The walk at Wallasey Sandhills will be based around the established transect on the site and take in a good variety of habitats. Bidston Moss is an increasingly promising and developing site.

There is a basic but good food vendor in the Bidston Moss car park - bacon butties, coffee, tea, etc. as an option for lunch if preferred or just bring your own.

AGM and Members' Day

Saturday 13th May Lion Saltworks

Ollershaw Lane, Marston, Northwich CW9 6ES

AGENDA

10.00	Coffee, Tea, and Conversation
10.30	Welcome and housekeeping
10.40	Presentation to be announced
11.30	Moth Traps that have been run overnight
	Lunch
13.00	Branch AGM
13.30	Moth recording and highlights from the Annual Moth Report
14.00	Conclusion of the meeting followed by a visit to Ashton's flash with this year's target species. Dingy Skipper (see below)

Saturday 13 May, Ashton's Flash, Northwich for Dingy Skipper

Leader: Rupert Adams (and Mike Perchard if available)

This field trip follows the Members Day and AGM that will be held at The Lion Salt Works Museum, Marston, Nr Northwich.

Rupert established the transect at Ashton's Flash over 7 years ago and it is walked weekly during the recording season by either Rupert or Mike Perchard; both know the site very well. The main focus of the trip is to look for Dingy Skipper, which will be at the start of its season. Rupert will also explain the progress of survey work that is being undertaken as part of an intended application to extend the existing SSSI. A number of other common species of butterfly should also be flying.

We will walk to the site from the museum (approximately 10 minutes) and access the survey area through gates that are normally locked. Stout shoes should be worn and it is essential that visitors keep to the areas that they are escorted to as the site is highly alkaline and there are unguarded areas of unstable ground.

Cheshire and Wirral Transect Reports for 2022

Reports from individual recorders collated by Tim Ward

1. Red Rocks Marsh Nature Reserve (SJ207876)

There has been an alarming decrease in Grayling numbers at this site despite investment in time and resources from the Dee Estuary Project. We urgently need more data to work out what is happening. If you fancy helping out by being part of a small group undertaking larval surveys from late March 2023 until mid- May 2023 please let me know by contacting me at mailfordjc@gmail.com. You will not be committing yourself, but it gives me the opportunity to let you have some detail of what's required. The best day at Red Rocks this year resulted in a meagre record of just 4 Grayling. We need members' help!!

All the other usual species were present although we weren't graced with any Dark Green Fritillary this time around. Common Blue numbers were good with a number of females showing no sign of any blue scales at all and causing some discussion regarding Brown Argus which is present a short hop away across the Dee Estuary in Flintshire.

No sign either of the often mis-reported Essex Skipper, nor of Wall Browns which have progressed up the River Dee from RSPB Burton Mere over the last few years. Fingers crossed for the future. (Dave Costello)

2. Red Rocks - South (SJ207874)

This is a new transect, established in 2022 by Charley Dutton who walked it a few times but has now moved into a new role and handed over the transect to Hannah Fox of Cheshire Wildlife Trust. The transect extends the area of the dunes between Hoylake and West Kirby being recorded for butterflies. A major focus of this transect is Grayling numbers and, unfortunately, only 3 of these were seen on 6 visits during July and August.

3. Cleaver Heath (SJ257827)

Our 2km transect was initiated in 2017 and consists mainly of well-used public and farmland footpaths. The 2022 species count was 15 which was about our usual. The total sightings count was 514 and was down overall. A handful of the 26 weeks were lost to poor weather and non-availability. Downward trends included most of the whites (including Orange Tip), Comma, Small Tortoiseshell, Peacock and Speckled Wood. Stronger showings were seen in Holly Blue, Large Skipper and Meadow Brown. As last year, we failed to meet up with a single Painted Lady. Again, we noticed a further increased use of early strimming/cutting along almost all the local footpaths, hedges and grass verges adjacent to crops and fence-lines. (Alan Irving)

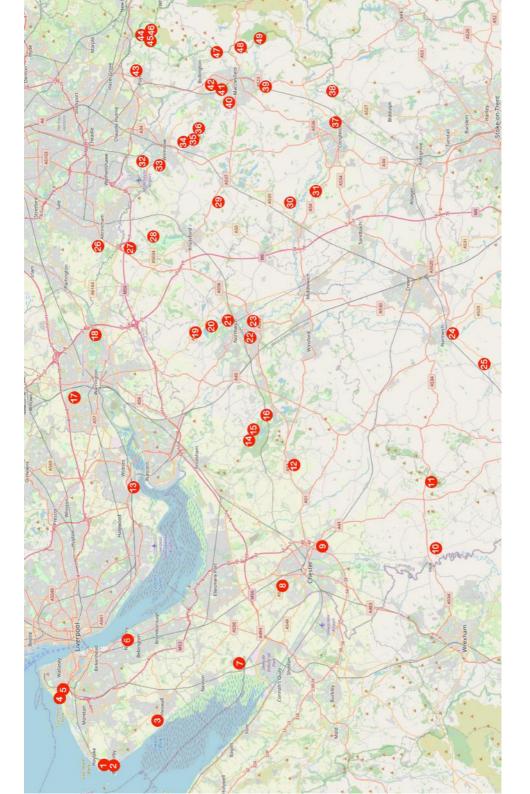
4. Wallasey Sandhills (SJ276925)

I have passed on the recording of this important transect as my time as Conservation Officer for Wirral is very limited given that I still work full time. Anyone interested in becoming part of a team of recorders on this transect should contact me at mailfordjc@gmail.com.

The site is one of two at which our branch's rarest resident breeding butterfly, the Grayling, can be found. Hopefully branch members will join me on the 15th July 2023 for a branch field trip to this site and the nearby Bidston Moss (details to follow). What I can report is that visits to the site on the 12th July resulted in 19 records and 21st July 26 records of adult Grayling. A startling contrast to Red Rocks (see my report). (Dave Costello)

5. Cross Lane (SJ289916)

This new transect in the Bidston area was set up in 2021 by Tom Giles. No recording was



carried out in May or after mid July, so it is hard to identify any trends.

6. New Ferry Butterfly Park (SJ333850)

This transect continues to be well managed and maintained by the volunteers and they are currently developing sector one by planting more sheep's sorrel to encourage the Small Copper population. This year the first recording of Dingy Skipper was made and it will be interesting to see if numbers increase next year. Volunteers have also reported seeing a White Letter Hairstreak but so far I have not observed this species. The Holly Blue numbers were up more than two-fold this year. All of the meadow butterflies (Common Blue, Meadow Brown, Small and Large Skippers) showed an increase, as did the Gatekeeper. Butterflies that did not fare well were Small Tortoiseshell, Comma and Peacock, all of which showed a steep decline despite a reasonable distribution of nettles. (Pat Thurston)

7. RSPB Burton Mere Wetlands (SJ314734)

After a slow start, butterfly numbers improved over the summer to give an above average year overall. Whilst Orange-tip had a record year, numbers of other 'Whites' were down, probably reflecting a change in management of two areas of set-aside which previously included brassicas in their seed mix. Meadow Brown and Gatekeeper also prospered in the very hot months of summer but Wall numbers were down—unfortunately previous favoured resting areas along the transect have become overgrown.

Red Admiral and Comma had a record year whereas Peacock and Small Tortoiseshell numbers were down. Both Small and Large Skipper had a very good year and Essex Skipper maintained its presence after its first recording in 2021. Holly Blue was seen much more frequently than usual and whilst Common Blue had a very poor first brood, second brood numbers were back to normal. (Dave King)

8. Countess of Chester Country Park (SJ397693)

This is the first year of Countess of Chester Country Park #2 (CoCCP#2) transect recording after the CoCCP#1 route became overgrown and impassable. CoCCP#2 is a circular route comprising about half of the old route and is less likely to become overgrown.

As ever I was optimistic for a good butterfly year which started on 19th March with 6 Small Tortoiseshells, however inclement Spring weather resulted in some low counts. The first Orange Tips appeared on 17th April but numbers didn't really get going this year. Dull weather persisted in May with a zero count on the 2nd. Small, Large and Green-veined Whites showed in low numbers during May. In mid June, the "Browns" turned up and count numbers began to surge; Meadow Browns, Ringlets and Gatekeepers showing in good quantities, peaking at a total of 135 on 10th July.

10th July was remarkable for another reason, a new butterfly species in the form of an Essex Skipper! I managed to record a close up image which confirmed the species. August wasn't a good month, often dull. I had a zero count on the 29th. September produced a late flurry of Commas, and with that the butterfly year fizzled out.

It was a bad year for Peacocks. I saw one in April but that was it for the rest of the season. I hope others fared better than me. For the second year in a row, Purple Hairstreaks were seen on the transect route but not by me. How annoying!

Each year I have seen just 1 Brimstone on transect and the same happened this year: not enough for this habitat. I've been in contact with the group that looks after CoCCP and they will be planting more of the Brimstone's food plant, Alder Buckthorn, so hopefully numbers will increase.

One development this year was that I have been able to carry out Moth Trapping on the

transect. I trapped during May, June, July and August. The rarest moth I recorded was a Birch Mocha, the first time it has been recorded in Cheshire since 2012 and the seventh ever record in VC58. Full records to be sent to the Cheshire Moth Recorder. (Peter Smith)

9. Caldy Nature Park(SJ423649)

Between the 3 of us we recorded every week from 18th March until 7th October (inclusive), 2022. Our first year of walking the transect, 2020, was disrupted by Covid so gave incomplete recordings but actually higher numbers. The totals of all species have fallen each year since 2020. Numbers of Speckled Wood and Large White are stable, Small and Green-veined Whites have declined and the *Nymphalinae* species are also stable, with Comma and Red Admiral having their best year so far. Holly Blue and Small Skipper were recorded for the first time this year.

We all felt the butterfly year was very disappointing with comments that it was a "washout" & "disastrous". Given the excellent, hot, sunny weather for many weeks the butterflies did not respond. Perhaps the good weather was just at the wrong time for them to benefit? One delightful event, I watched 2 brimstones mating. They were so busy I even managed to photograph them! (Jacky Creswick, Charles Neame & Ken Walker)

10. Stretton Nature Reserve, West Cheshire (SJ435522)

The total for the year (1035), was better than 2021 (772) but still not as good as 2020 (1619). Considering the wonderful weather, better results were expected. The drought and loss of nectar with the shrivelling of many flowers may be partly to blame. The biggest losers were Small Tortoiseshells, Peacocks, Red Admirals and Painted Ladies which come late in the season when the drought had its biggest effect.

Good numbers of Gatekeeper, Meadow Brown and Ringlet were recorded, but all three were less numerous than 2020. Orange Tip were plentiful, Small Skipper numbers were the same as for 2020 (84), but the Large Skipper numbers have fallen from 108 in 2020 to 56 in 2022. I have not been skilful enough to count Essex Skipper on my transect. Common Blue numbers were up (15) and Small Copper numbers down (4). A Purple Hairstreak was seen on the transect feeding on a bird dropping on a fallen branch of oak still with green leaves.

Birdsfoot trefoil continues to be the most important plant on the Nature Reserve and is visited by most species for nectar. Every attempt has been made to increase its abundance and distribution.

Should anyone wish to visit the Nature Reserve next season, then please contact me. There are 18 species of dragonfly that have been recorded over the last twelve years as well as the butterflies. (Julia Drage; juliadrage@gmail.com)

11. Bickerton Hills (SJ495529)

The transect at Bickerton Hills was started in 2018 and continued from 2019 with some slight modifications to the route walked. In 2022, there were 4-5 different walkers of the transect with each walker contributing about 1 walk per month (John Roberts, Sarah Bridson, John Wild, Heather Smith & Richard Sayle).

The number of butterflies recorded in 2022 was actually a record (just) for this transect and the number of species recorded was also a record - a total of 237 individuals, of 19 different species. Of course, numbers recorded can be a function of recorder effort which for 2022 was approximately the same as in most previous years at 13.9 individuals per recorder visit. Nevertheless, a good result for the year at this site given the summer drought and consequent scorching of vegetation on many south-facing slopes.

The top three species in descending order were Speckled Wood (46 and a steady increase

from 8 in 2018), Gatekeeper (37, a marked increase from all previous years) and Small Copper (20), though the latter showed a trend of decline from 80 in 2018. Small White also showed a marked decline (9 in 2022 compared with 70 in 2018) following the national trend. A record count for Purple Hairstreak (10) was achieved largely due to the inspiration of the new recording protocol from Tim Ward and extra care taken by recorders in monitoring likely oak trees. Common Blue was recorded for the first time on the transect. Green Hairstreak numbers were back to good levels following low results in 2020 (lockdown) and 2021 (cold spring). The remaining species registered consistent numbers. (John Roberts)

12. Kelsall 1 (SJ523681)

This is the fourth year of running this local transect. Overall, the butterfly numbers for the season were up by 6% on 2021. A total of 18 species were recorded, which was one up one last year.

The overall condition of the transect was generally good this season, with the hedgerows less severely cut back during the winter and also there was little in the way of the flooding (winter or summer) which has occurred in previous years.

The Whites had a disappointing season with the three totals being down by around 20% compared with 2021. Although Meadow Browns and Ringlets were slightly down on last year, Gatekeepers had a good year up by 42% and were also more widely found along the length of the transect. Red Admirals and Speckled Woods both improved upon 2021, while Commas almost doubled in the numbers seen. The star of the season must go to the Holly Blue, which isn't normally seen that often on the transect but this year had good first and second broods and overall enjoyed a seven fold increase compared with last year.

Having missed out last year, I was once again able to observe Purple Hairstreaks (first seen in 2020) on the transect. Hopefully this is now an ongoing colony and maybe next year they will be observed at eye level, having only ever been seen high up on a single oak tree. (Barry Mills)

13. St Michael's Eco Park (SJ495848)

This is only the second year of this transect on a historical brownfield site and former golf course, recently taken into management again after nearly 20 years of abandonment. The site includes a 1.5MW solar farm and extensive grounds, which the ranger team hope to utilise for wildlife, whilst providing community engagement and educational opportunities. In managing the site we have aimed to retain natural regrowth features with large swathes of thistle, willow-herb and scrub patches to provide resources for many common butterfly species and so far have recorded 19 species. Through implementing projects including wildflower meadow creation and tree planting we hope to diversify invertebrate habitat and increase nectar sources.

The results from 2022 were encouraging, with many common species showing increases in abundance. Overall, the total number of individuals increased by 65%. It is difficult to draw comparisons with only 2 years of data but we are optimistic that implementation of new management regimes is impacting the numbers. In particular, we observed particularly high numbers of browns, with Gatekeeper numbers more than doubling on 2021 data, Ringlet numbers 87% higher and Meadow Browns up by 21%. This may have coincided with particularly warm temperatures during their flight periods around July and August. Ringlet numbers are of particular interest as the species is scarce within the local area. Common Blue also had a fantastic year with an average of 8 individuals per transect compared to 2 per transect in 2021. Similarly, we observed higher numbers of whites; Large white (+77%), Small White (+24%), Green-veined (+50%). Another point of interest was observing the first Small

Copper at the site, with 2 in total. We are excited to see whether this trend continues in the next few years and will be updating the Site Details Form with the newly introduced habitat management and features. (Chris Haimes)

14. Hatchmere Beaver Enclosure (SJ547723)

This was the second time this transect had been done. Excellent numbers of Brimstones seen plus a few Orange Tips. No Green Hairstreaks were seen. However even the large patches of bilberry on the adjacent transect didn't produce anything. Good numbers of Meadow Browns here and a few Ringlets. Good numbers of Large and Green Veined whites seen too. A single Large Skipper seen plus low numbers of Small Tortoiseshells, Commas and Red Admirals. (Paul Kenyon)

15. Hatchmere (SJ551721)

I spent some time looking for Green Hairstreaks due to the amount of Bilberry. Sadly none were found, although there are good numbers over the road at Flaxmere Moss. Overall this transect was a disappointment again. Small numbers of Large Whites, Green Veined Whites, Speckled Woods, Peacocks, Small Tortoiseshells. The population of Brimstones was good as they occupied most of the area where the Bilberry was in proliferation and where the Alder Buckthorn grew. (Paul Kenyon)

16. Crown Farm (SJ572704)

Butterfly numbers recovered well this year after last year's disappointing season. The grassland species did particularly well leading to a significant increase in the total number of butterflies recorded over the season compared to 2021. Overall butterfly numbers were up by almost 40% on 2021. Meadow Brown (576 records - 75% increase), Gatekeeper (106 records, up 25%) and Ringlet (39 records, up 85%) all did well and between them, they accounted for half of this year's sightings. Small Heath did not do as well though, particularly the second brood and numbers were down at 98 compare to 126 last year. Small Skipper numbers were comparable to last year and I also managed to get a good enough photo of some of them to positively identify a couple of Essex Skippers. Large Skippers (17) also had their best year since I started recording at this site.

2021 was the first year we were able to monitor this site during the Dingy Skipper flight season and numbers were very disappointing at 17 with a maximum record of 5 on a single visit. Numbers this year were better at 33 with a maximum count of 13 on a single visit but no second brood specimens were seen this year.

Common Blue, which had a very good year last year, had an even better one this year with 433 sightings compared to 331 last year with strong showings on both first and second broods. Small Copper also did well this year, up to 32 from 19 the previous year. In addition to these, there is an area just off the transect that attracts the Small Copper when the heather is in bloom.

Green Veined and Small Whites were also more numerous this year but I didn't record a single Large White. A couple of Brimstone were also recorded this year, a first for this site. Hopefully these sightings will become more frequent as Cheshire Wildlife Trust, who manage this site, have planted some additional Alder Buckthorn. Just 4 Orange Tip were recorded this year which is similar to the 5 recorded last year.

The biggest disappointment this year has been the numbers of Vanessids. Only 10 Peacocks were seen, all prior to mid May, and only 2 Small Tortoiseshell, one in April and the other at the end of August. No Commas or Red Admirals were seen and only a single Painted Lady. In total 1491 butterflies of 18 species were recorded on my 21 visits. (Mike Perchard)

17. Sankey Valley Park (SJ592894)

This year the usual range of species was observed across this transect. Total count was up slightly against last year despite the clearing and cutback of large areas of vegetation, for the purposes of flood control. High numbers of overwintered Small Tortoiseshells were seen at the start of the season and there was a strong first brood. However, the second brood was much smaller. Numbers of Commas and Peacocks were approximately fifty percent down this year. A very small population of Common Blues continues to hang on in the meadow sector. A good year for Small White, Speckled Wood, Gatekeeper and Holly Blue which all increased compared with last year. Numbers of Meadow Browns have continued to slowly decline over the last four years. There is a large number of oak trees across the transect and it has been possible to observe the occasional Purple Hairstreak on the relatively small trees. A total of nineteen species was recorded, which remains the same as last year. (Pat Thurston)

18. Woolston Eyes (SJ652881)

A warm spell in late March enabled an early count on the 25th when a temperature of 19 degrees produced four butterflies including a Brimstone. Many species emerged early due to the exceptionally warm spring. Overall, however, numbers of most species were less than in 2021. Particularly disappointing were Peacocks with the second brood appearing late and in very small numbers. Two species, Brimstone and Painted Lady, which were not seen in 2021, were found this year, and Ringlet, an uncommon species at Woolston, was seen on two occasions including the earliest ever record on 20th June. Another species to be seen in excellent numbers was Holly Blue which was present on 5 dates with a maximum of four butterflies on 31st July.

Brambles which were encroaching on an area of Bird's Foot Trefoil had been cut back and a single female Common Blue was noted on three dates in August. No Small Skippers were found and there was just one sighting of Large Skipper on 20th June.

A maximum of 7 Purple Hairstreaks were present although not included in the official counts as they were only seen in early evening.

The highest count was of 73 butterflies, compared with 101 in 2021. The transect was monitored every week with the help of my fellow wardens and the total number of species seen was 18. (Dave Hackett)

20. Marbury & Northwich Flashes (SJ660758)

This is my second year recording this transect, and unfortunately it has fared worse than last year, though comparison of just two years does not allow conclusions to be drawn. The same number of species (18) were recorded in both years. Many species registered small numerical increases or decreases and the overall number of butterflies was reduced from 801 in 2021 to 737. The most common species - Small White, Speckled Wood and Meadow Brown maintained their numbers, showing small numerical increases. Orange Tip, Small Tortoiseshell and Peacock showed large reductions. (Sheelagh Halsey)

21. Ashton's Flash (SJ666749)

Compared to last season, when we had a very poor Spring, this year started off promisingly but ultimately, this was the most disappointing season since we started recording here. Total records were down 30% on last year, which was already a poor season. The site suffered badly this year once the hot, dry weather set in and much of the vegetation was parched. Butterfly numbers from the middle of the season onwards were well down but the bigger concern has to be the effect of the shrivelled vegetation on next year's generations.

Dingy Skipper showed better than last year with good numbers occurring from 22 April until 17 June. Small and Green-veined Whites also did better than last year during the early part of the year but numbers of both species were significantly lower later in the season and only 2 Large White were recorded during the whole year. The other Spring species normally seen at the site, Orange Tip and Brimstone, were marginally up on previous years.

Common Blue again did well during the first brood. The peak numbers didn't quite match last year but the flight season lasted about 3 weeks longer than last year. Second brood numbers were disappointing at not much more than half those seen last year. Similarly, Small Heath had a good first brood but very few second brood individuals were seen.

The two main species on this site were both well down with Meadow Brown numbers down to 140 from 221 the previous year and Gatekeeper massively down at 56 from 181 last year. Ringlets also were only 50% of those seen last year. Only a single Large Skipper was recorded this year.

Speckled Wood were seen virtually every week from the middle of April until mid-September. A total of 89 were recorded compared to 51 last year. Other species seen were Small Copper (4), Painted Lady (1), Small Tortoiseshell (5) and Peacock (9).

In total 601 butterflies of 17 species were recorded, compared to 836 and 20 species last year. Small Skipper, Red Admiral and Comma dropped off this year's list. (Mike Perchard)

22. Marshall's Arm (Revised Route 2021) (SJ649721)

A very poor and slow start to the year here. Brimstones and Orange Tips were in good numbers but the numbers of Peacocks, Small Tortoiseshells and Small Heaths were well down with the latter almost disappearing from the site. Common Blues similar in numbers to last year with good numbers of Ringlets, Meadow Browns and Gatekeepers especially and Small Coppers. Large Skippers were down but Small Skippers increased. After the arrival of Essex Skippers last year they maintained a small but stable population.

White Letter Hairstreaks were first seen in mid June and maintained a small but consistent population hopefully encouraged by the planting of many Elms. Purple Hairstreaks had a good season again. I took part in the amended single species evening count of this butterfly on selected trees and a count of 100 was achieved one evening in mid July. Also in July a couple of Painted Ladies were counted. Red Admirals were seen throughout September and October.

Wall Brown was seen on the transect though not on a designated count day. We recorded a total of 24 species this season. (Paul Kenyon)

23. Leftwich Woods (SJ666717)

Leftwich remains one of the best places to see White-letter Hairstreak but 2021 proved disappointing for the species and as 2022 progressed the loss of further trees to Dutch Elm Disease was worrying. WLH larval damage was restricted to a few trees and it was clear that the species was not going to have a good year. An early first sighting of a single adult on 10 June was followed by records of the species on each transect walk until 16 July with a maximum of 6 seen on 8 July. Young trees are now reaching the stage when the butterfly will use them to lay eggs and further planting of both Wych Elm and disease resistant elms is proposed, along with the removal and disposal of Dutch elm disease infected dead trees.

The lack of nectar plants as the long hot and dry summer continued seriously impacted other species. Small Skipper, Small Copper and Gatekeeper were recorded only once and there were no sightings of Large Skipper, Painted Lady, Red Admiral or Ringlet. Meadow Brown fared little better with only four individuals seen on 3 occasions. Purple Hairstreak remains

thinly distributed with just three individuals seen on three occasions.

Even more worrying was the paucity of records of adult Peacock (3) and Small Tortoiseshell (6). What is particularly concerning is that numerous larvae of both species seemed to be thriving after the spring generation. Presumably they couldn't cope with the summer weather conditions. Comma was recorded as singles on several occasions in spring, summer and autumn.

Large White was recorded on only 3 occasions (4 individuals), Small White on 14 occasions (33 individuals) and Green-veined White on 12 occasions (36 individuals with a maximum of 11 on 17 July). Early spring sightings of Orange Tip saw a maximum of 6 on 4 April. There were only 2 spring sightings of Brimstone although the larval food plant thrives nearby. Holly Blue gave a single record in spring followed by regular sightings (maximum 2) on numerous occasions throughout summer. Speckled Wood was seen on a total of 16 occasions (thirty six individuals with a maximum of 8 seen on 17 July.)

2021 was a poor year for butterflies at Leftwich Woods both in terms of species and overall numbers and 2022 has been even worse. Much of this can be attributed to poor weather at the start of the flight season in 2021 and the long hot and dry summer of 2022.

Ending on a more positive note, in 2021 Butterfly Conservation was consulted on a major tree planting scheme that is to take place nearby in the Dane Valley. It will extend and link Leftwich Woods with other trees within the valley's landscape. The scheme will include a large number of Elms, Oak and other local species and should provide an extensive corridor of suitable habitat for some of Northwich's more notable butterfly species. Although the scheme did not progress in 2021/2022 due to a lack of named cultivars it is hoped that it will take place in 2022/2023. (Rupert Adams)

24. Nantwich Lake and River Weaver (SJ648515)

Running mostly through Nantwich Riverside Park, the vegetation along the course of this 1.6 km-long transect consists mainly of deciduous woodland, scrub, tall herbs and areas of regularly-mown grass.

Butterfly numbers increased a little in relation to the previous year (a noticeable low point), though between the two years several changes in the numbers of the species are apparent. Firstly, this year Green-veined Whites were much more prevalent than Small Whites (Greenveined Whites have always been more numerous than Small Whites). Also, this year we have seen far fewer Small Tortoiseshells than we have done previously (8 in 2022 and thirty-three in 2021). The numbers of Peacocks, Red Admirals and Commas were also down, but not to the same degree. Peacocks were only seen in weeks three and four in 2022 (between weeks one and seven in 2021). Small Tortoiseshells were mostly evident in the first half of the recording periods in both years, while Commas were seen between weeks fourteen and nineteen in 2022, and between weeks fifteen and twenty-four in 2021. Red Admirals (in small numbers) were apparent throughout much of the recording periods in both years.

Orange-tips were numerous between mid-April and mid-May and there were sightings of Brimstones during the same period. Small numbers of Ringlets were seen early in July, when Meadow Browns and Gatekeepers were first recorded, together with a Small Heath. During the second half of July, numerous Small Skippers were spotted feeding on Knapweed and Ragwort. Other species seen throughout much of the recording season include Large Whites, Speckled Woods and Holly Blues. (Malcolm and Gill Reid)

25. Sound Common (SJ620480)

Spring butterfly numbers were very much down on the previous season. Still, it was good to

see them back again, tick off a few Brimstones, Peacocks, Orange Tips and Large Whites, whilst walking across the Common.

Warmer and sunnier weather in May and June brought a gradual increase in the butterfly population and number of species. Ringlets, Meadow Browns and Speckled Woods helped to bring the numbers up a little. Even the Green-Veined White, as well as the Large White, were much reduced in numbers.

On Sound Common we do not have the 'conventional', much admired flower meadows seen elsewhere (yet), but new species arrive now and again and progress is ongoing. This year too, there were many different kinds of flowering plants on offer for the butterflies and other insects. The Knapweed always attracts the Common Blue, but I only noticed a single one this year. Still, the odd Painted Lady, a few Tortoiseshells and some magnificent Red Admirals helped to keep the spirits up.

In July and August, the high temperatures caused many a food plant to wilt, but the brambles offered compensation. I have never seen them flowering so prolifically. Heather and gorse were in full bloom by now and seemed to attract Gatekeepers and a few Large Skippers; among them a second-brood Dingy Skipper.

I would single out the Speckled Wood for 'holding the fort'. When I had almost given up on seeing any butterflies, out of seemingly nowhere a Speckled Wood would appear to make my walk around the Common worthwhile. By September numbers had dwindled, and for this year the butterfly count came to an end.

Butterflies were a little down in numbers, but wild flowers very much up. I never had the feeling the Common was not providing adequate food. Perhaps the climate over the past couple of years has had some adverse effect. I am looking forward to next season. (Antje Molton)

26. Dunham Massey (Yew Tree Farm, White Oak Woods, Gardens) (SJ732880)

Our three Dunham Massey transects were surveyed this year more evenly compared to last year, however disappointingly, due to the drought and very hot or windy weather, we completed 50% less surveys compared to last year's efforts.

11 species were recorded on transects and include Large White, Small White, Green-veined White, Red Admiral, Small Tortoiseshell, Peacock, Comma, Speckled Wood, Meadow Brown, Gatekeeper and Ringlet.

Our species highlight that was admired off transect in the parkland and mature woodland around our NT car park was Purple Hairstreak seen on mature and semi mature oak trees and flying down to the ground to take advantage of moist deer droppings. The Purple Hairstreak records off transect have been submitted to iRecord.

Next year we are introducing a new deer park transect walk to capture more data. Fingers crossed for a stable season next year. (Natalie Pownall)

27. Rostherne Mere NNR (SJ743841)

A total of 20 species were recorded with marked increases in 13 of them. The new areas of wetland habitat and the recent rewilded margins surrounding the mere provided diverse flora and excellent nectar sites for various species. Meadow Brown remained the dominant butterfly on the Reserve with 1336 records and an amazing count of 397 on 21st June, setting a new site record.

There were good numbers of Orange-tip (53 records) seen during the spring and Small Skipper and Large Skipper counts were both up. It was also a very good year for all three white

butterfly species with 353 records of Green-veined White and 49 seen on 10th July. Purple Hairstreaks were recorded in many of the large Oaks and they often ventured towards the ground to seek moisture during high temperatures and drought conditions. The first sighting was on 10th July. It was an above average year for Small Copper with three seen on 6th September. It was a better year for Common Blue and Holly Blue but numbers still remain low. Painted Lady was only recorded on two occasions. Interestingly, Small Tortoiseshell, Peacock and Comma had poor years compared to the other species. Numbers of Gatekeeper were up with 60 recorded on 26th Jul. The Ringlet population continues to expand with 33 records and the species now seen on most transects. Finally, the large areas of woodland supported higher than average numbers of Speckled Wood with 267 records and 33 seen on 30th August.

(Bill Bellamy)

28. Tatton Park (SJ758819)

The first transect survey of the year was undertaken the 11th March and the last was completed on 7th October. Seventeen different species were seen this year, equalling the previous best total seen in 2019. Nine species showed increased numbers, whilst the remaining eight were lower, although differences were fairly marginal. Returning species this year were Painted Lady, Comma and Small Copper. 2022's most common species was the Gatekeeper with 289 individuals recorded; this was followed by Meadow Brown (258) and Ringlet (49). The best transect walk was on the 11th July where 278 butterflies were seen; interestingly 2021's best walk was on the same date when 225 individuals were seen, so we must make sure a walk is done on 11th July every year!! The transect will be monitored again in 2023 and it will be interesting to see how the dry summer affects numbers moving forward. (Mark Sills)

30. Swettenham Meadows (SJ804675)

This was my first year on this transect, taking over from Alan Chadwick, so this summary may vary a little from the high data content of previous years. My introductory transect was held on a bright late spring afternoon in late March. The grass was short and foot placement easy to find among the damp tussocks and yielding surface. Within a few weeks I was pushing my way through chest high grasses and horse tails finding footholds, or not, by feel. I made 22 visits between end of March and mid September, the weather after that was unsuitable.

Overall, the grand total was down on last year at 752 in 2022 vs 805 in 2021. Most common was the Meadow Brown, but the number was down at 159 vs 350. This was followed by the Small White (108 vs 112), Large White (80 vs27), Gatekeeper (59 vs 52) and Ringlet (59 vs 7, I'm sure I got these right and didn't mistake Ringlet for MB.) Green-veined White had an increase (57 vs39), Orange Tips were also up (51vs38). For other species, the Small Tortoiseshell and Speckled Wood were down but the other showed little ups and downs. The Small Copper and Common Blue are holding on in the mid 20s. I did see 19 species, the Large Skipper making an appearance on two/three occasions. (Luciano Pinto)

31. Brereton Heath Country Park (SJ797651)

Brereton Heath Local Nature Reserve has had high numbers of some of the early emerging species this year, particularly Brimstones and Orange Tips. 10 Brimstones were recorded on 15th April, and 17 on 14th June. The highest count of Orange Tips was 5 individuals on 14th April. Unfortunately numbers of most other species were considerably down, even including the whites. Fortunately Meadow Brown and Gatekeeper numbers were good with sightings a couple of weeks earlier than usually expected. The count for Meadow Brown peaked at 36 on 17th June, and at 28 for Gatekeepers on both 15th and 22nd July. Similarly, Specked Woods have been seen from very early in the year. Numbers of Ringlets, fairly new to the site,

continue to increase; one count in mid-June had 9 individuals. Habitat improvement work on the heathland area appears to benefit Small Coppers and the Dingy Skipper, which is a recent arrival to the site, first sighted in 2019. This year has also recorded our first sightings of the Burnet Companion moth, several of which were noted on the meadow in May. (Mark Arnold)

32. Quarry Bank (SJ834830)

The survey for 2022 began on the 23rd March 2022 and showed a mixed picture this year. Good numbers of Small Tortoiseshell, Peacock and Brimstone were recorded. From Mid-April Orange Tips appeared and large numbers were sighted until late May. Speckled Wood, Holly Blue and Large and Small Whites were seen in good numbers from May onwards.

The first Painted Lady appeared in early June and small numbers were seen throughout the season. Meadow Browns were recorded in early June and were seen in large numbers until mid-August. Gatekeepers were seen from mid-July and were present in large numbers until late August.

Holly Blue, Green-veined White, Ringlet and Small Copper all had good years and numbers were higher than in 2021. Peacock, Small Tortoiseshell, Brimstone and Red Admiral numbers were all down on the previous year and late summer numbers were low. Speckled Wood showed large numbers throughout the whole season. Common Blues were present in small numbers from July. Both Large and Small Skippers were present but in lower numbers than previous years. (Derek Hatton)

33. Lindow Common (SJ834811)

Lindow Common is a Local Nature Reserve and SSSI, comprising an important area of lowland heath as well as some woodland and rough grassland. No recording has been possible in 2022 but it is hoped to resume recording in 2023. (Michelle Anderson)

35. Alderley Edge Mottram Quarry (SJ862776)

This transect was set up by the National Trust Ranger in 2021 and comprises some farmland borders and woodland. The woodland is mostly closed canopy, with few butterflies except for occasional Speckled Woods, although a couple of glades within the woodland are more productive.

Compared with 2021, more than twice as many transects were walked. However, despite this, unlike 2021, no Ringlets or Large Skippers were seen and there were fewer Large Whites and Peacocks. On the brighter side, there was an increase in the number of Small Whites, Green-veined Whites, Orange Tips and Speckled Woods. New species seen were Brimstone, Holly Blue and Small Copper.

A change to the route is proposed for 2023 onwards, to replace some of the closed canopy woodland with a hedge-lined path. (Susan Hancock)

34. Alderley Edge Stormy Point (SJ861779)

This transect was set up by the National Trust Ranger in 2021 and comprises fields, scrub and some closed canopy woodland with few butterflies except for occasional Speckled Woods.

Compared with 2021, more than twice as many transects were walked. However, despite this, unlike 2021, no Small Coppers or Dark Green Fritillaries were seen and there were fewer Green-veined Whites, Gatekeepers, Orange Tips, Peacocks and Commas. However, there was there was a large increase in the numbers of Meadow Browns and Speckled Woods, with well over twice as many as in 2021. Species new to the transect were Small Skippers and Wall Brown.

A change to the route is proposed for 2023 onwards, to change the route through the closed canopy woodland to one that includes some glades. (Susan Hancock)

36. Hare Hill (SJ875763)

This new transect was set up in 2021 by the National Trust Ranger but was not walked during 2022. A volunteer is sought to take on this transect; full training can be provided as necessary.

37. Dane-in-Shaw Pasture (SJ878626)

Jack Swan has retired from his transect recording role at the end of the 2021 Season. We are grateful for his many years of dedicated recording. Cal Sherratt, the Countryside Ranger, is now undertaking the weekly transect walks. Overall numbers are up on the previous year and Speckled Woods and Orange Tips did considerably better.

38. Bosley Cloud (SJ903635)

This is the first year of a modified route and a new recorder. The transect incorporates the bilberry-covered summit of the hill as well as the woods which cover the lower slopes. Early in the season there were small numbers of whites. Green Hairstreak numbers were fairly modest, peaking in early June with maximum daily counts of 6. Red Admirals were seen on most visits, with a maximum of 8 in early June. The generally windy weather in this exposed environment may have adversely affected the counts. Recording finished at the end of August when Speckled Wood numbers were starting to explode (maximum count of 32). (Bob Nightingale)

39. Danes Moss to Sutton Reservoir (SJ910706)

Recording on the transect this year was interrupted by illness for a couple of weeks in August and again in Septembers othe records for the year are incomplete. It is possible to make some general observations in trends on the transect in comparison with previous years.

Green-Veined White is, as in previous years, the most common species but numbers have been declining for a few years. Orange-Tip have similarly declined from the numbers recorded 3 or 4 years ago.

Two factors have affected grassland species along the transect this year. Most of the damp meadow at Sutton Reservoir was cut in error by contractors in June and birch regeneration into the more open areas of Danes Moss Nature Reserve is probably leading to a decline in some of the grassland species in these areas. No Small Skipper were recorded this year and even accounting for the break in recording, numbers of Meadow Brown were also down this year.

It is interesting to note that Small Heath was present in good numbers this year on the former landfill and on the area to the north of the landfill but has not been seen on the transect since 2018. This may also reflect the loss of grassland habitats on the reserve.

Canal and Rivers Trust have agreed that in future years the damp meadow at Sutton reservoir will be cut in late summer on a two-year rotation and the arisings removed to lower fertility levels and maintain a diverse range of grasses and flowering species. Macc Wild Network are exploring the possibility of scything on this site; one of a number of sites where it is hoped to use this more sensitive form of management to conserve and restore the biodiversity of grassland habitats in and around Macclesfield. (Diana Moss)

40. Macclesfield Leisure Centre & Athletics Track (SJ891745)

This new transect was set up in March 2022 and is located in the "wildlife corridor" being promoted by the Macc Wild Network Trust. The site is being carefully managed to encourage wildlife with a sympathetic mowing regime, a wildflower meadow area and planting of

natural species to improve biodiversity. It is early days in the evolution of the site but, even so, some 17 different species were recorded on the transect as well as Purple Hairstreaks in the Oak Trees in the evening. Meadow Browns and Speckled Woods dominated the brown end of the spectrum, with smaller numbers of Ringlets and Gatekeepers. All the common whites were present, with Green-veined White predominant. Small Skippers were present in July and Small Coppers in late September. Peacocks and Small Tortoiseshells were present in moderate numbers in the Spring but very scarce later in the season. Comma, Red Admiral and Painted Lady were all recorded in very small numbers. Holly Blues were recorded throughout July and the first half of August. It will be interesting to watch and record the evolution of the site. (Tim Ward)

41. Riverside Park, Macclesfield (SJ913745)

Once again I seem to have had clashing commitments on ideal butterfly days but get the impression that numbers have been fairly low again this year There are more butterfly friendly blooms in Spring on first parts of the transect before Himalayan Balsam takes over. The latter sections of the transect are generally more rewarding for butterflies but numbers of species such as Small Copper, Common Blue, Small and Large Skipper were generally low again. Red Admiral, Painted Lady and Small Tortoiseshell were also present in only very small numbers, though Peacock and Comma had a decent year. All the Browns and the Whites were recorded in numbers similar to previous years. There has been some rewilding done on a different part of park so I might check this out next season to see if it's feasible to modify the transect to include this. (Frankie Badcock)

42. Tytherington (SJ918756)

The following species have been recorded on this transect during 2022 – Large White, Green-Veined White, Small White, Holly Blue, Red Admiral, Small Tortoiseshell, Speckled Wood and Meadow Brown. In contrast to previous years, Brimstone, Orange Tip, Gatekeeper, Comma and Peacock have not been recorded on the transect this year. The Alder Beetle colony seems to be in good health and is maybe expanding its range as more trees on the transect are showing signs of defoliation. Since I have been walking the transect, I have noticed a considerable decline in the number of nectar-providing plants and this might provide some explanation for the absence and /or reduced numbers of some species. I am regularly informed (by my neighbours) of the butterflies which visit their gardens that are adjacent to the transect route, so it is likely that the butterflies have just located more reliable sources of nectar. Indeed, in my own garden (next to the transect) I have recorded all the species observed on the transect plus Gatekeeper, Peacock, Painted Lady, Comma, Large Skipper and Purple Hairstreak. (Julia Harding)

43. Jacksons' Brickworks Local Nature Reserve (SJ945844)

The second full year of recording at this transect began on the 18th March with a single male Brimstone, alongside a Comma, 2 Small Tortoiseshell and 2 Peacocks. Orange tips were on the wing from the 8th April and peaking with good numbers towards the end of April. A single Painted Lady was recorded on May 6th. Following a lull in May, different species increased during June with 13 Common Blues appearing on June 10. Numbers of this species remained low throughout the remainder of the summer, with the last one recorded on August 26th.

A high of 26 Large Skippers and 33 Small Skippers were recorded on July 8th, with good numbers of Meadow Brown and Ringlet throughout July. Gatekeeper numbers were low during the summer months, except for 17 individuals on July 22nd. Large and Small White numbers were constant throughout July and August.

The reserve is valuable for a small population of White-letter Hairstreak, with the first 3 individuals appearing in the canopy of the coppiced elms on the 8th July, alongside 2 Purple Hairstreaks in an adjacent oak. The final recording of Purple Hairstreak was spotted in the canopy of a reliable oak on July 22nd, and the last WLH sighting was on the 5th August.

Small Coppers appeared throughout August around the usual woodland ride areas. Peacocks appeared heading towards late summer with low numbers of Comma, Red Admiral, and Small Tortoiseshell.

An October 7th visit recorded Peacock, Comma, Red Admiral, Small Copper and a late Painted Lady nectaring on the reserve's late-flowering Devil's-bit scabious. (Pete Dowse)

44. Elmerhurst (Lyme Park) (SJ962832)

The transect at Elmerhurst comprises a combination of open, deer-grazed, acidic grassland, interspersed with mature and veteran parkland trees followed by mature mixed woodland with oak, sycamore, beech, alder and conifers. The under-storey is well established and includes some coppiced Wych Elm.

Overall, the number of butterflies recorded (430) was higher than 2021 (314). We have, however, seen a decrease within species numbers and overall numbers are down by 213 compared to 2019.

In 2022, the predominant species was again Meadow Brown with a 25% increase on 2021, but it is noted that it is still 50% down on numbers from 2019. We have seen other increases in species including Small Skipper (174%), Small White (from 2 to 21), Speckled Wood (115%) Ringlet (50%) and Orange Tip (9%). Decreases were seen in Large Skipper (-50%) continuing a downward trend from 2019 of 6 to 2), Green Veined White (-100%), Small Tortoiseshell, Peacock, and Small Heath. Painted Lady was recorded for the first time since 2019 and in the same numbers. Gatekeeper remains steady at 28. Small/Essex Skipper have not been recorded since 2019 when they were counted at 62. (Claire Disley)

45. 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. This transect includes the only known breeding sites for Green Hairstreak in Lyme Park.

Compared to 2021, we see a 2% drop in overall number of butterflies recorded. This is small compared to the 38% drop if we compare 2022 records to 2019 records. We do however see a consistency in the number of individual species counted, with 19 species recorded in 2022 compared to 18 in 2021 (Small White being recorded in 2022, a species not recorded since 2018). Notable decreases are seen in Small Skipper (-73%) from 41 to 11, Green-Veined White (-30%) from 74 to 54 and Gatekeeper (-27%) 111 to 80 and Red Admiral (-60%). We had increases in Speckled Wood (172%) 18 to 49, Large Skipper (75 %) from 20 to 35, Meadow Brown (30%), Small Copper (33%) and Orange Tip (32%).

This will be the final year for this route in Cluse Hey. We will be changing the route for next year. The decision hasn't been taken lightly and has been based on the advice from UK Butterfly Conservation. Due to the changing environment of the terrain in Cluse Hey, areas of the transect have become difficult to manoeuvre which has led to an inevitable inconsistency in recording. Being aware of the site and future for it, we recognise that the terrain, and therefore access, will become even more challenging to navigate. Ensuring we have long term viable data with consistency in the recording is key. We will reroute the transect and start afresh next year. We acknowledge that the new route will bring us up from the stream and remove us from the current butterfly rich area. However, this is in population

only, rather than species, as many of these have been seen around the estate just not in such numbers. I also say 'current' as we are excited to see what we can do to improve these areas. (Claire Disley)

46. Garden (Lyme Park) (SJ965058)

This is the second year of the transect comprising of approximately 7ha of mostly formal gardens, accessed via the south front of Lyme Hall. It is the second highest garden in the National Trust, so spring bulbs often flower later than other properties. Overall, a 20% increase of total number of butterflies counted from 134 to 161 but a drop of 31% of individual species from 16 to 11. Of 6 species recorded in 2021, 11 saw a decrease in 2022, most notably Peacock (81%), Small Tortoiseshell (64 %) and Gatekeeper (60%). 5 species recorded in 2021 were not recorded at all in 2022, namely Small Skipper, Large Skipper, Brimstone, Small Copper, and Ringlet; it is however noted that these were seen in 2021 in very low numbers of 1 to 2. It's not all heading downwards with increases, albeit in small numbers, seen in Meadow Brown (336%) from 11 to 48, Orange Tip (267%) from 3 to 11, Speckled Wood (141%) from 12 to 29, and Small White (46%) 13 to 19. (Claire Disley)

47. Kerridge Hill (SJ944759)

This transect is now 3 years old and in 2022 recorded 2 new species: Dark Green Fritillary (a single individual on 3 separate occasions) and Common Blue (2 individuals on a single occasion). This was also an exceptional year for the Wall Brown population; numbers were more than double the previous years, with 27 recorded in the 7-week first brood and another 31 recorded in the 7-week second brood. Other species having a good year were Small Skipper (24 records) and, especially at the end of the season, Speckled Wood (202 records). Small Heath (52) and Small Copper (15) both had a decent year, as did Meadow Brown (166) and Ringlet (126). The common Whites were all present and, as usual, were dominated by Green-veined White. Peacocks were flying in the Spring but were mostly absent later in the year. Red Admiral, Comma and Small Tortoiseshell all had a decent year, as did the migrant Painted Lady (which loves to duel with the Wall Browns at the top of the hill). (Tim Ward)

48. Tegg's Nose (SJ947723)

Wall Brown had a second consecutive very good year, with 20 records in the 6-week first brood and 24 records in the 6-week second brood. Other species having a good year were Small Skipper (95 records), Speckled Wood (140 records), Meadow Brown (319), Ringlet (327) and Gatekeeper (135). Green Hairstreak numbers (43 records) were disappointing but were more widely spread over the hill than usual. Peacock numbers were down, especially in the latter part of the season, but Small Tortoiseshell and Red Admiral held steady. Most disappointing was the Common Blue, with only a single record. Green-veined Whites dominated the Pieridae as usual but it was good to see that Orange Tip numbers (32) recovered from the poor 2021 (7). A handful of Dark Green Fritillaries were recorded in July but these were probably vagrants rather than a breeding colony (though we keep hoping!) Small Copper appeared in late July, having been absent in the earlier part of the season; this seems to be the pattern at Tegg's Nose and I wonder if they may have adopted a single brood approach, given the exposed nature of the terrain. (Tim Ward)

49. Macclesfield Forest (SJ959710)

This was the second year this transect has been walked. The transect is 3km long and divided into 12 sections. The transect was walked 22 times between mid- March and October.

15 different species were seen, the same number as last year. There was a single sighting of Wall Brown last year (the transect is close to the stronghold of Tegg's Nose) but not this year.

3 Painted Ladies were seen instead, again not surprising considering the proximity to the hotspot of Tegg's Nose.

Most common species were Ringlet (152 sightings), Meadow Brown (89), Speckled Wood (83), Green-veined White (slightly reduced from last year to 69 sightings) and Orange Tip (31). Apart from Small Tortoiseshells, the season started with a strong showing of Orange Tips, week beginning 15th April. Ringlets had a single brood peaking mid-July. Speckled Woods had 2 broods: a smaller brood peaking in June and the main brood in August/ September. There was no recording for 2 weeks in early September; if records had been made here Speckled Wood numbers would doubtless have been higher.

Other species seen were: Gatekeeper (24), increased numbers of Small Skipper (14), slightly reduced numbers of Small Tortoiseshell (10), Peacock (8) and Small White (6), and roughly stable numbers of Red Admiral (8), Brimstone (4), Large White (7), Comma (2).

Green Hairstreaks are reported in the upper parts of the forest, but none were seen on the transect. Although there have been occasional reports of rarer Silver-washed and Dark Green Fritillary butterflies in Macclesfield Forest, none have been seen yet on the transect. (Steve Charles)

Wider Countryside Squares

The format of the WCBS survey has been developed by Butterfly Conservation in conjunction with the British Trust for Ornithology and the Centre for Ecology and Hydrology. WCBS is both scientifically sound (random sampling of the countryside) and efficient (2-4 visits per year). Its method is broadly based on the BTO's Breeding Bird Survey (BBS), surveying two parallel 1 Km long transects subdivided into 10 sections, located within randomly selected 1 Km squares. Surveys are undertaken between May and August.

In 2022 and in accordance with the protocols for WCBS 16 Recorders surveyed 16 squares in Cheshire and The Wirral.

21 species were seen with Small White being the most numerous (78 records) followed by Meadow Brown (63 records), Speckled Wood (58 records), Gatekeeper (50 records), Greenveined White (49 records) and Large White (43 records).

At the other end of the scale, and perhaps not surprising, due to the very specific nature of their habitat requirements, Cheshire species not recorded were White-letter Hairstreak, Green Hairstreak, Grayling and Wall. Large Skipper, Small Copper, and for the first time within a WCBS square Essex Skipper, were recorded on a single occasion each. Purple Hairstreak was seen on 3 occasions, more frequent than previously for WCBS squares in Cheshire.

Of the migrants there were no records of Clouded Yellow, and only 3 Painted Lady and 7 Red Admiral were noted.

Of the other "resident" Cheshire species all were recorded between 2 and 17 times. However, in line with records from other surveys for 2022, Peacock was only recorded on 3 occasions and Small Tortoiseshell on 11 occasions.

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.

Moths

Fancy attracting these moths to your garden?







We can lend you all the kit you need to try recording moths!







KIT CONTAINS:

Compact Moth Trap with bulb and cable

Field Guides

Glass containers

Carry bag and other accessories



Choose a spot in your garden to put the trap, where you can run the mains cable from your house.

We will deliver the kit to you and take it back after an agreed period.

We just ask you to record the moths you see. Take photos if you can!

IF YOU WOULD LIKE TO BOOK THE KIT:

Write to Dave Maddy, Cheshire County Moth Recorder, at d.j.maddy@btinternet.com for further details

Moths on a small Cheshire nature reserve Clive Jones

Occasionally for wildlife watchers, small wonders reward persistence and attention. These pictures illustrate a personal highlight of the moth-trapping campaign which I ran during 2022 at Cheshire Wildlife Trust's Hockenhull Platts reserve, near Chester. The species



is Nemophora degeerella, (sometimes called the Yellow-barred Long-horn) The males have outlandishly long antennae (Fig 1) and can be seen 'dancing' in sunlit aerial 'leks', something I'd seen a



couple of times before. This time I noticed a female sitting on a grass stem, (2) while at least 8 males danced above my head. She crept to the top of the stem, then as I glanced away to look at the dancers, she disappeared, but a few seconds later appeared on a nettle, in 'nuptial embrace' with a male (3). They remained conjoined for a while, then the



male flew off, leaving the female sitting on the nettle leaf. I'm sure others will have seen and probably filmed this behaviour, but I haven't been able to find a detailed account; I'm not even sure that I've correctly interpreted what I saw, and I was left with more questions than answers. Do males form 'dancing' groups in response to the presence of females? If so, is the stimulus visual or pheromone-based? Alternatively, do females gravitate to dancing groups? Are the males competing to be chosen by the female, and if so how? Quality of dance? Quality of pheromones? Length of antennae - surely such extravagance must be an advertisement of fitness,

since they seem to go beyond any functional need? Does a female select a particular male among the dancers, or does she fly up and get grabbed by the fittest one?

My Hockenhull survey involved upwards of 60 sessions, setting two small light traps each evening and checking them as soon as possible after dawn next morning, so early starts were needed during the summer. I tried to avoid bad weather, but there were a few mornings when it poured with rain, head-high reeds were saturated with dew, or fingers were numbed by frost. Even the grimmest morning, however, could be brightened - a new moth, lines of Pinkfooted Geese overhead, or a decent view of a Cetti's Warbler; occasionally a Sparrowhawk would slip away at my approach, I heard a cuckoo once (depressingly, my only one of 2022) and once a Red Kite wheeled overhead. The reserve (only about 5 hectares in extent) already had a substantial moth list, totalling over 250 species; during my survey I recorded nearly 200 species, of which over 60 were new to the Reserve list, taking the new tally to just over 320 These totals are approximations as a handful of species may be recorded by different observers either to species level or as members of aggregates groups of species indistinguishable except by dissection of genitalia. I appreciate importance of exact identifications, but in common with lots of 'moth-ers' I prefer to release my moths unharmed, accepting a little imprecision, rather than 'opening them up to tie them down'.

As well as the *Nemophora degeerella* lek, there were other stand-out moths

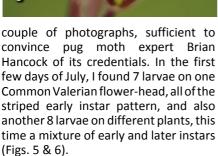
too, including several which are very scarce in Cheshire, and 18 species which were completely new to me. Arguably the most significant result was confirmation of a breeding population of the Valerian Pug, a dingy-looking little



moth of which there were only 26 previous Cheshire records, with none since 2017 (Fig 4). There had been two records on the Reserve in the 1980s, both involving adults. I had a tantalising 'flyaway' from my trap in early June, but though I was reasonably sure of the ID there was nothing to confirm it. Fortunately, I trapped another adult later, which stayed long enough for a







Commenting on my images, Brian Hancock mentioned that he had only found Valerian Puglarvae on seedheads, but on later visits I couldn't find any larvae once the flowers had gone over. I searched only one group of plants to avoid trampling large areas, but even among these it appeared that only a minority of plants held larvae. It may not be feasible to monitor the population of Valerian Pug year on year, but it should certainly be possible to assess the effect on the foodplant of any management on the Reserve. The species may well be under-recorded, so it would be well worth searching the flower-heads of Common Valerian if you know somewhere it grows.

Nationally, Double Dart (Fig 7) has a Red Data Book rating of Near Threatened and the Atlas of Britain and Ireland's



Larger Moths gives declines of 79% in distribution and 95% in abundance between 1970 and 2016. There have been 911 Cheshire records, but only 4 in 2021, and from 2017 to 2021 just one site accounted for 22 of a total of 37 records. Hockenhull had one in 1980, but my total of 11 across 5 visits from mid-June to early July suggests that the Reserve may be a significant site for this species in Cheshire. Its principal foodplants are sallows, birches. blackthorn and hawthorn, and also herbaceous plants including Broadleaved Dock. This indicates that any management of 'scrub' should be carefully considered, and also how 'ordinary' species such as Broad-leaved Dock can be important.

The Fen Wainscot (Fig 8) is uncommon in Cheshire, with 20 previous records in all, and only 6 in the 5 years to 2021 – three of those from the same site. There have been no previous records from Hockenhull Platts, but 2 records each of 2 adults in late July may suggest a resident population.

The impressive Lunar Hornet Moth (Fig 9), one of the clearwings, is widespread in the UK; its larvae feed in the lower





trunks and upper roots of sallows and willows, so Hockenhull is not an unexpected place to find it; I used a pheromone lure to confirm its presence the Reserve. on was quite disconcerting to have 5 of the insects in the trap, though by no means as unsettling as the morning when I had to release 3 three genuine, and very active Hornets. The lure has only recently come on stream, which is probably why Cheshire had only 77 records to 2021, but with 12 of those in that year.

Space permits mention of just one more personal favourite, *Lacanobia suasa*, the Dog's Tooth (Fig. 10). Suasa from



'suasum' – a colour 'which is produced by a smoky spray on a white garment' – this according to The Scientific Names of the British Lepidoptera, by A. Maitland Emmet. I almost missed this one, a first for me, finding it clinging to the bottom of the trap as I walked out of the reserve one not-quite midsummer morning, and it was the 'fuzziness' or perhaps 'smokiness' of this its colouration which made me sit up and take notice; my first thought was a worn Pale-shouldered Brocade and I had to post it to the Cheshire Moths Facebook group to get a firm ID.)

The Atlas of Britain and Ireland's Larger Moths provides details of the conservation status and changes in abundance and distribution for the larger (macro) moths. Of 768 species with a reported conservation status, 25 are Endangered. (A further 31 are Critically Endangered or Regionally Extinct.) In my Hockenhull survey I found only one Endangered Species, the Figure of Eight (Fig 11), which I trapped twice, with a total of 5 insects. Nationwide the Figure of Eight suffered declines of 70% (distribution) and 96% (abundance) between 1970 and 2016. On the other



hand, few current Cheshire mothtrappers would regard it as desperately uncommon, with a total of 2385 Cheshire records, and 124 in 2021 alone. Perhaps Cheshire really is a stronghold, but equally our perception of its relative abundance may be a result of 'shifting baseline syndrome'; in the past, equivalent trapping effort might have turned up many more of the species; certainly in 1948 S. Gordon Smith described it as 'Generally distributed and often common'. Surveying one site across a whole year gave a real sense of purpose to my mothing and I aim to continue at least some trapping at Hockenhull Platts. It would be good to confirm whether some species which turned up only once (eg Blackneck, and Gold Swift) are genuine Reserve residents and whether some which were recorded in the past (eg Puss Moth and two Kittens - Alder and Poplar) are still present, though I missed them this time. I also wish I had time to work on other groups too – perhaps there's someone out there who fancies 'the caddisflies of Hockenhull Platts' as a project.

Photographs

An album with a selection of photographs from Hockenhull Platts can be found here (https://www.flickr.com/photos/149980226@N06/). Files can be downloaded at a range of resolutions and I am happy to allow not-for-profit use of any images, provided they are acknowledged '©Clive Jones', with a link to the source where appropriate.

References and Acknowledgements

Thanks to David Maddy (current county Moth Recorder) and Steve Holmes (former county Moth Recorder for macro moths) for data on previous Hockenhull Platts records

Thanks to CWT Living Landscape Officer (West) Jack Helsby for permission to trap.

Number of Cheshire records to end of 2021: https://www.cheshire-moth-charts.co.uk/ (a readily searchable resource giving details of all Cheshire moth records, with dates, locations and phenology)

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Saving Danes Moss Diana Moss and Tim Ward

There we were, deep in the western end of the Danes Moss site, staggering along overgrown paths and negotiating steep banks in the dark, carrying heavy generators and moth traps. Spending much of the night on our knees in a blizzard of moths around the central lamp, recording what we saw. Inspecting the subsidiary traps and identifying the contents (one portable trap was taken home for examination the following morning but moths escaped into the car while being driven home, making driving a little difficult, so that experiment wasn't repeated!).

Most members will be aware of the proposed major development at Danes Moss where there is outline planning permission for a link road, 950 houses, a school and retail the southern edge of Macclesfield.

In December 2021 Cheshire East Council, in partnership with private developers, submitted reserved matters applications for the 55 Ha site. The proposed development site is deep peat and forms the northern half of a lowland raised bog complex; Danes Moss Nature reserve and SSSI form the southern part of this complex with the former landfill site in between. The site is a natural carbon store, a rich and varied wildlife habitat and a much-valued green space where the people of south Macclesfield have walked for decades. Cheshire Wildlife Trust were among many objectors pointing out that 'the likely destruction of natural capital (biodiversity and stored carbon) at this scale is unprecedented in recent decades within the Cheshire region'. The considerable local concern about the proposal led to the establishment of a campaign to Save Danes Moss.

On looking through the planning documents, including reports by the ecological consultants, it became clear that actually very little was known about the biodiversity of the site; entomological records in particular were virtually non-existent. The ecology report mentioned two insects as being recorded on site; Small Heath and Cinnabar moth. An invertebrate scoping survey undertaken on a damp November day identified the potential for the site to support not only rare species, but also an abundance of more widespread species, and recommended that a full invertebrate survey was carried out. This was never commissioned.

It was obvious, however, just from walking through the site that the composition and structure of the vegetation was likely to support a rich and varied invertebrate population. Sallow grows across the site and forms a dense stand of wet woodland along the southern boundary. Tall remnant hedges separating the moss rooms along with developing willow scrub provide an extraordinary abundance of edge habitats for insects and foraging birds. There are thickets of brambles, and stands of tall forbs including Meadowsweet (*Filipendula ulmaria*), Common Valerian (*Valeriana officonalis*), Marsh Thistle (<u>Cirsium palustre</u>), Willowherb (*Chamaenerion* spp.), Hogweed (Heracleum sphondylium) and Caucasian Comfrey (*Sympytum caucasicum*) along with extensive areas of rough grassland.

Throughout 2022 the Save Danes Moss campaign have been working to record the

biodiversity of the site and recording moths as important indicators of biodiversity was a high priority.

Four overnight trapping sessions, led by Steve Hind, were held in June, July, August and September and, coupled with some daytime visits looking for day-flyers and larvae/leaf-mines, recorded some 314 moth species of which 40 are designated "Local" (meaning that they have been recorded in only 101-300 10km squares in Britain since 1 January 1960). A further 4 species are designated "Nationally Scarce B" (meaning that they have been recorded in only 31-100 10km squares in Britain over the same period), including the Devon Carpet (Lampropterix otregiata), the Marsh Oblique-barred (Hypenodes humidalis), the micro case-bearer Coleophora orbitella and the micro-moth Caryocolum viscariella.

Our moth records are only one part of the evidence being assembled by the Save Danes Moss Community Group to demonstrate the importance of the site for wildlife. Recording of other groups has been carried out by keen amateur naturalists with Andrew Emmerson, from the Save Danes Moss group, taking the lead. The findings, from just one summer of recording, are stark evidence of just how valuable and biodiverse the site is and what would be lost if the development went ahead. An important part of the recording has been identifying which species have some form of protection under law, and ensuring that all the records for these species are uploaded to the planning portal. This ensures that they can be taken into account at any future planning appeal or legal hearing.

24 of the 27 species of butterfly known to breed in Cheshire have been recorded over the whole of Danes Moss with 21 recorded on the development area. These include the only known colony of the rapidly declining Dingy Skipper in Cheshire East and good numbers of Small heath. Dark Green Fritillary a rarity in the east of the county was also recorded. Other notable invertebrate sightings include the Broad-banded Hopper Wasp (*Gorytes laticinctus*), a UK Redlist rare species with only 2 Cheshire records, and the Banded General Soldier Fly (*Stratiomys potamida*) which has been recorded only a handful of times in Cheshire in the last 50 years. Such findings hint at the possibility that there are likely to be other scarce species yet to be recorded, and confirm that this is indeed one of the most biodiverse sites in Cheshire East.

The site has recently been designated as a Local Wildlife Site and the records collected over the summer were an important part of the evidence submitted to the Council. Although this does not guarantee the protection of the site it does have to be taken into account in the consideration of any planning application. The moth records were a crucial part of the evidence and have also proved invaluable in the campaign. The numbers of both widespread and rarer moth species recorded over just four sessions, has shown unequivocally the value of the site for biodiversity in a way that is easily communicable to both the general public and professionals.

The trapping sessions were run by moth experts; members of the Save Danes Moss group also came along and for those with no previous experience of moth trapping those summer nights around the light were a wonderful and unforgettable insight into the beauty and diversity of these often unnoticed creatures.

PHOTO COMPETITION 2022 Highly commended and Second and Third placed entries









Green-veined Whites (Pieris napi) by Suzanne Butters. Photo competition third prize Oakhanger, Cheshire. Nikon D7500, 105mm macro lens, ISO 125, 1/60 at f13, with flash and wet knees



Heath Fritillaries (*Melitaea athalia*) by Barry Mills. Photo competition second prize Haddon Hill, Somerset (3/6/2022), Nikon Z7ii , 105mm macro lens , f13 , 1/800 , ISO 640, hand-held, no flash.