

Hertfordshire & Middlesex Butterflies 2022



**Butterfly
Conservation**

Saving butterflies, moths and our environment

Andrew Wood

February 2023

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Front cover image: Common Blue by Chris Benton

Acknowledgements

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Introduction

Welcome to our 27th annual report on butterflies in our area. We are grateful to everyone who has submitted records for 2022 (and earlier years). If you still have records from previous years, we are very happy to add them to the county database as every bit of information helps to build up a picture of how butterflies are faring. Butterflies react very quickly to environmental changes so all this data is important in looking at the wider health of the climate and the environment.

Our branch website <http://www.hertsmiddx-butterflies.org.uk/> has a very active sightings page and we welcome all submissions to this too. Anything, once verified, sent there or submitted via the 'iRecord,' 'iRecord Butterflies,' 'iNaturalist,' BTO BirdTrack and Garden Butterfly Survey apps is added to the branch database and used in this report. We also have data from 81 butterfly transect routes. New ones in inner London, e.g. Wormwood Scrubs and Gladstone Park were set up as part of the Big City Butterflies initiative. You are also welcome to send records direct to me, preferably in a spreadsheet format.

These should have columns for grid reference, site name, date, species and number and stage(s) seen. Big Butterfly Count numbers are used to show the distribution of species but have not been used for the flight charts as this survey covers only three weeks in high summer and to have included them would unduly skew these charts.

Weather summary

Meteorological Office data shows that 2022 was the warmest year on record with eleven of the months being warmer than the long-term data.

January	Mild, dry and dull.	July	Extremely hot (record breaking, mid-month, dry and sunny.
February	Mild but very wet and rather dull.	August	Hot in the first half and generally very warm, dry and sunny.
March	Sunny and mild.	September	Mild, dull and wet but with a drier spell mid-month.
April	Dry, sunny, and mild.	October	Sunnier, drier and milder than average with no frosts.
May	Mild and dull with slightly less than average rainfall.	November	Slightly sunnier, and much milder than average No air frosts and slightly below average rainfall.
June	Generally mild, dry and sunnier than average.	December	Early and late mild but very cold with laying snow mid-month

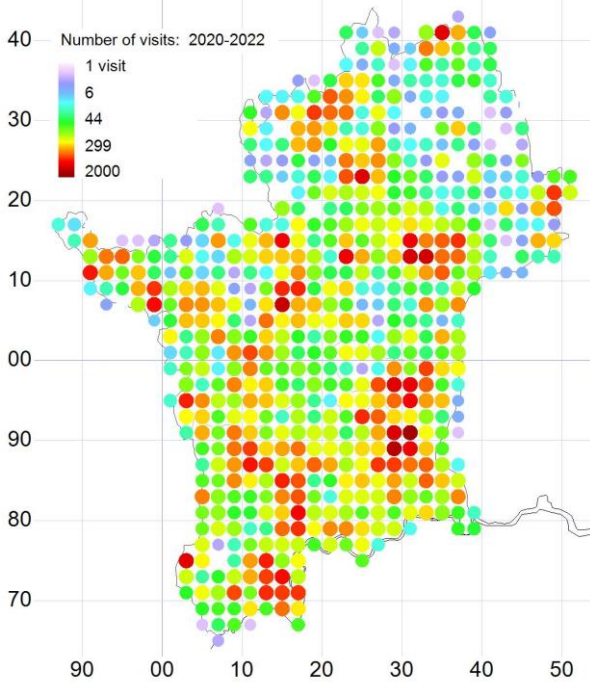
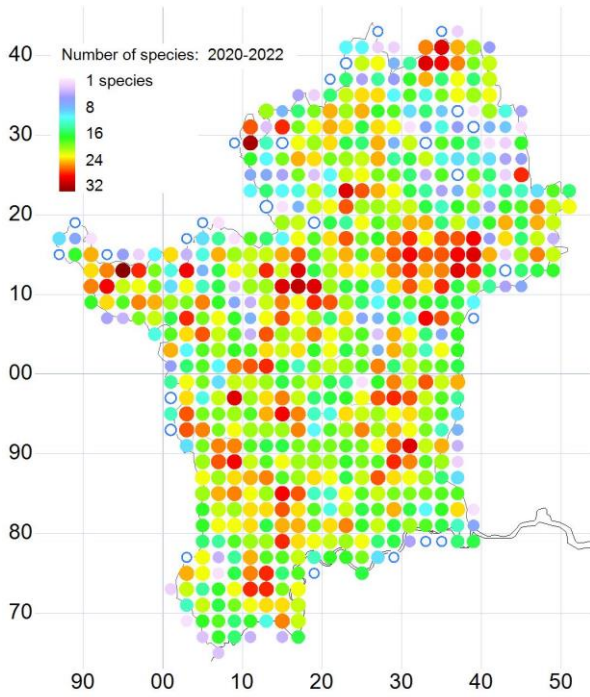
Overview

In 2022 butterfly activity was split into two parts, very much reflecting the weather conditions. The first half saw many records during mid-February in a warmer, brighter spell and several spring species had very early starts and finishes to their flight periods. In late spring and early summer flight times were again up to 2-3 weeks earlier and all looked good. However, the increasingly hot and dry summer desiccated many larval food plants and meant that nectar supplies went over very quickly. Especially after the record hot days in July numbers fell off and the autumn was one of the worst for butterfly sightings, despite the generally good conditions, however by then it was too late.

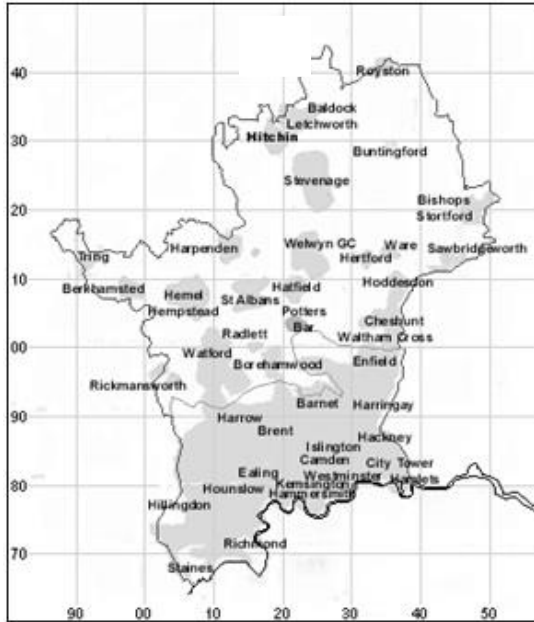
Recording Effort

This is the third year of the five-year 2020 -2024 survey. In 2022 we received records from 602 2 km squares in our area. Over the three years of the survey, we have records from 658 2km squares. In 2022, 2666 recorders submitted 81190 records compared to 3379 recorders and 51036 records in 2021.

The next two maps show the number of species recorded (top) and number of recorder visits (bottom) for each square in 2020- 2022. Our aim is to raise the white, purple and blue squares to the green, yellow and red categories to give our area maximum coverage.



Our Area



Species not included in the main section – regarded as most likely escapes, undocumented releases, accidental importations or possibly migrants.

<p>Camberwell Beauty <i>Nymphalis antiopa</i></p>	<p>Two records: Letchworth Garden City, Herts 7 Sept, Abbots Langley, Herts 16 Oct. <i>Photo: Jane Lay</i></p>	
<p>Large Tortoiseshell <i>Nymphalis polychloros</i></p>	<p>One record Stanwell Moor, Middlesex 10 May. <i>Photo Dave Miller</i></p>	
<p>Long-tailed Blue <i>Lampides boeticus</i></p>	<p>Four records, all Middlesex; Stamford Hill 6 April, Ealing 20-22 Jul, Gillespie Park Nature Reserve 20 Sept, Hyde Park 20 Oct. <i>Photo John Eborall</i></p>	
<p>Monarch <i>Danaus plexippus</i></p>	<p>One record; Shepperton, Middlesex 25 July. <i>Photo Andrew Wood</i></p>	
<p>Swallowtail <i>Papilio machaon</i></p>	<p>Two records from the same Cheshunt, Herts garden 10 and 12 July. <i>Photo James Somerville</i></p>	

A key to the main species accounts that follow can be found on the back cover

Dingy Skipper *Erynnis tages*

Restricted and rare

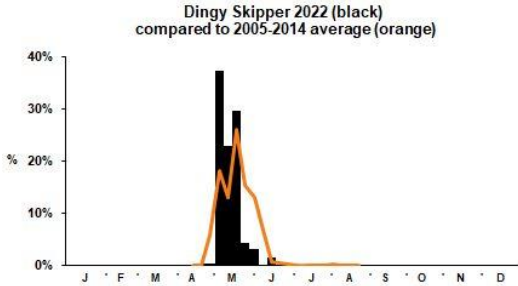
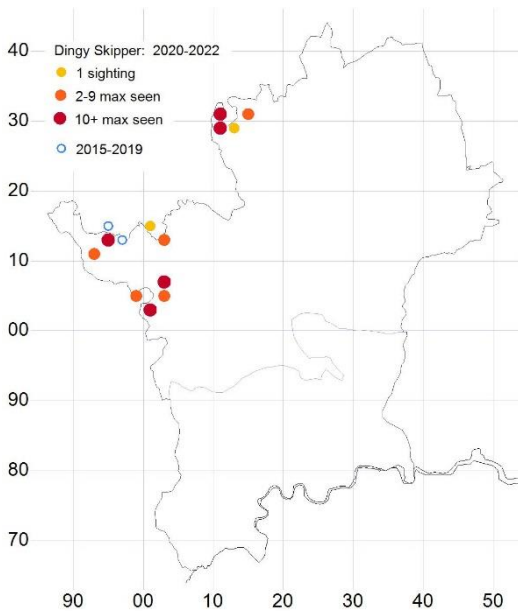


Photo Chris Benton

First: 21 Apr

Last: 11 Jun

Peak week: 30 Apr-6 May



Distribution % squares	
2022	1% (9)
2021	1% (6)
2015-19 mean	1%

Abundance (transects)	
2022	8
2021	5
2015-19 mean	9

Distribution change	
Unchanged compared with 2015-2019	

Abundance change	
Unchanged compared with 2015-2019	

This species remains confined to the north-west of Hertfordshire, with all but two of the double figure counts at the “hotspot” of Hexton Chalk Pit. The abundance figure has almost risen to its longer-term level due to increased numbers at Shrubhill Common in suburban Hemel Hempstead, this is a site where it was unrecorded in 2021 so this was a notable come back. The flight period didn’t start early but quickly peaked and declined compared to longer term patterns. No second brood examples were recorded, probably due to the very hot dry weather during the summer, damaging larval food plants.

Grizzled Skipper *Pyrgus malvae*

Restricted & rare

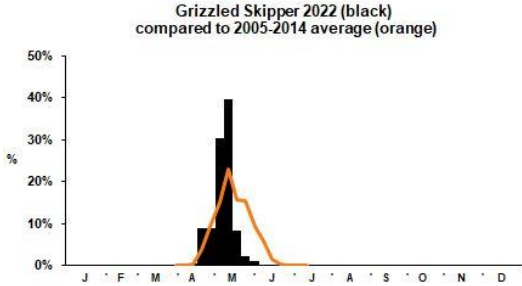
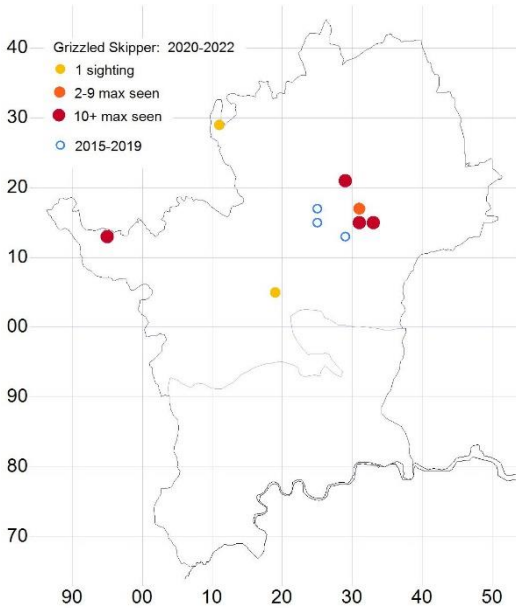


Photo Chris Benton

First: 15 Apr

Last: 2 Jun

Peak week: 7-13 May



Distribution % squares	
2022	1% (5)
2021	1% (7)
2015-19 mean	1%

Abundance (transects)	
2022	7
2021	7
2015-19 mean	8

Distribution change	
Unchanged compared with 2015-2019	

Abundance change	
Down 13% compared with 2015-2019	

The mild spring gave an early start to the flight period and most adults had stopped flying by 19th May, with only four records after that. All the records were from its two strongholds of Aldbury Nowers on the chalk and in east Hertfordshire in the area between Hertford and Watton at Stone near the railway line above the Beane Valley. All the double-figured counts came from this latter area. We are working with the landowners of the various sites in east Hertfordshire to try to ensure a long-term future for this rare butterfly.

Essex Skipper *Thymelicus lineola*

Widespread but recently declining

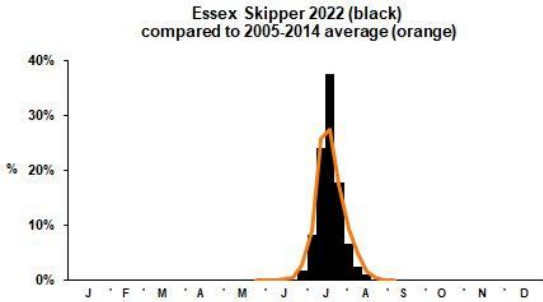
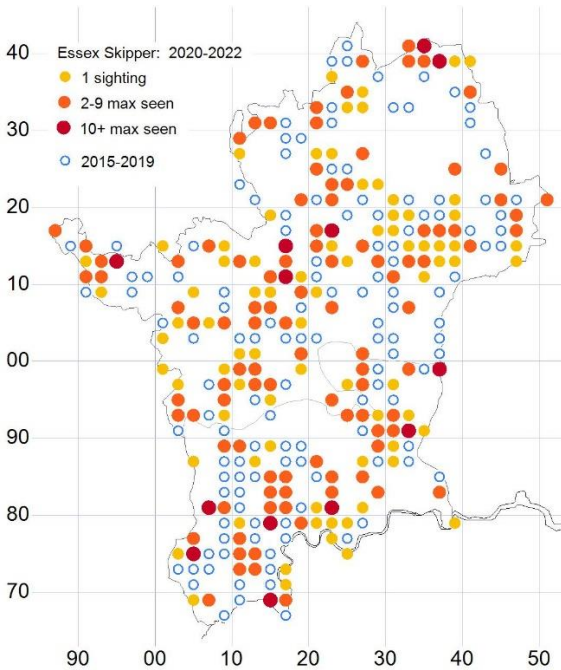


Photo Andrew Wood

First: 26 Jun
Last: 20 Aug
Peak week: 16-22 Jul



Distribution % squares	
2022	16% (96)
2021	16% (95)
2015-19 mean	17%

Abundance (transects)	
2022	6
2021	5
2015-19 mean	10

Distribution change
Down 5% compared with 2015-2019

Abundance change
Down 40% compared with 2015-2019

The Essex Skipper’s distribution and abundance changed little from 2021 so there are still concerns over its longer-term future. The effect of the hot dry summer may not be so severe for this species as others as it spends the autumn and winter as an egg rather than needing to find food during the very hot weather of the later summer. Its flight time was very close to the longer-term trend, but the sharp peak is probably caused by a quick drop in numbers during the extreme hot weather of the summer. Good numbers were recorded at the newly established Wormwood Scrubs and Kempton Nature Reserve transects in Middlesex.

Small Skipper *Thymelicus sylvestris*

Widespread but recently declining

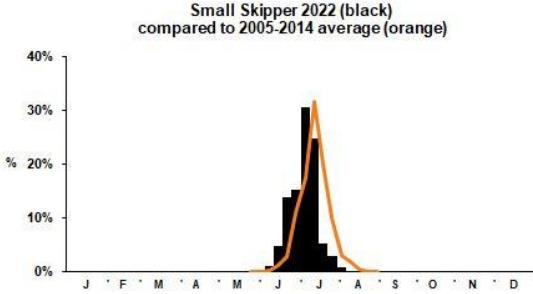
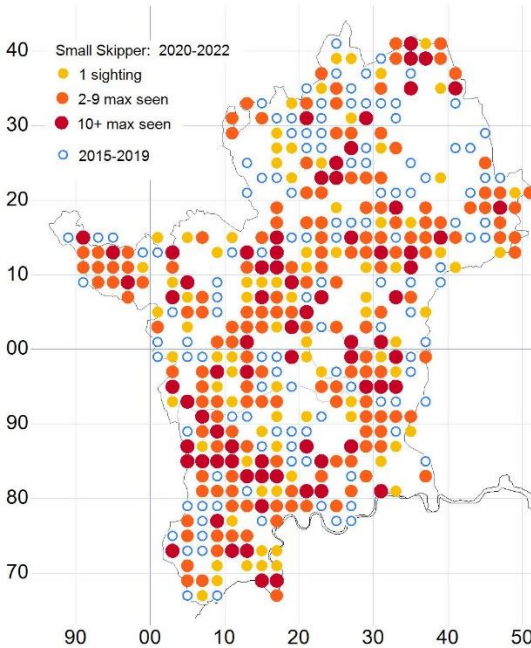


Photo Chris Benton



First: 2 Jun
Last: 8 Aug
Peak week: 16-22 Jul

Distribution % squares	
2022	31% (186)
2021	26% (158)
2015-19 mean	26%

Abundance (transects)	
2022	18
2021	16
2015-19 mean	20

Distribution change
Up 19% compared with 2015-2019

Abundance change
Down 10% compared with 2015-2019

Emerging a week and half earlier than 2021, doubtless due to the mild spring. Although the abundance figures moved slightly in the right direction, there was a rise in distribution. Comparing 2021 to 2022 the rise was across both counties, but not concentrated in any particular area. Clearly this is a species we need to monitor closely in 2023 so although distinguishing it from the Essex Skipper is not easy, please do try. Further information is available at:

https://www.hertsmiddx-butterflies.org.uk/identification_skippers-new.php#ss. The images of the two species in this report also show the main distinguishing feature of the black antenna underside in the Essex and the brown/orange of the Small.

Large Skipper *Ochlodes sylvanus*

Widespread but recently declining



Photo Chris Benton

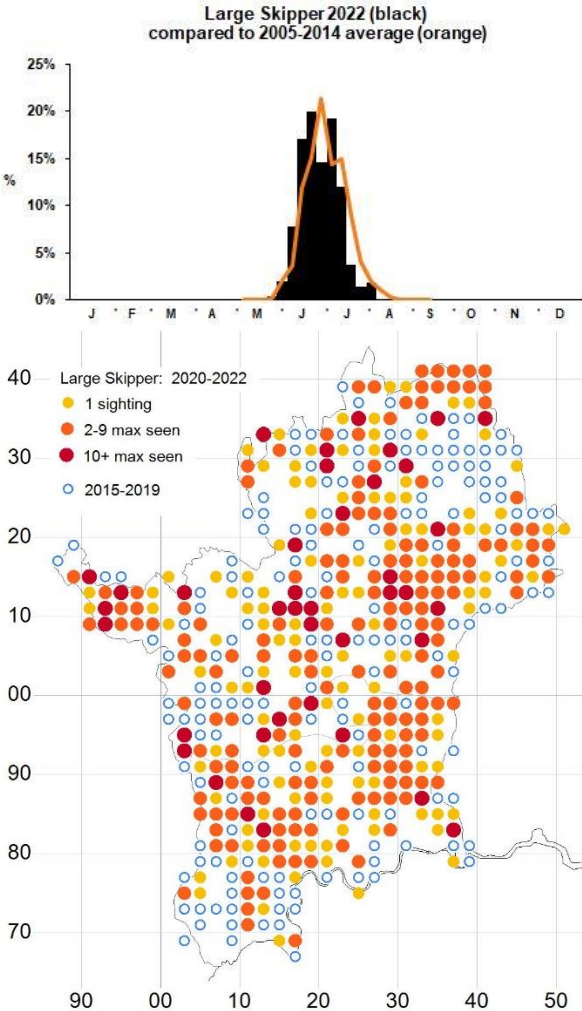
First: 21 May
Last: 11 Aug
Peak week: 16-22 Jul

Distribution % squares	
2022	38% (228)
2021	30% (181)
2015-19 mean	35%

Abundance (transects)	
2022	15
2021	16
2015-19 mean	19

Distribution change
Up 9% compared with 2015-2019

Abundance change
Down 21% compared with 2015-2019



Compared to the other two golden skippers the Large Skipper fared well in 2022 with records in many more squares and its abundance only slightly down. A flight period starting ten days earlier reflects the generally mild spring, so not surprisingly it declined a little earlier than the longer-term average. Its early flight period meant that was not disrupted by the very hot dry weather, but its subsequent larval development may well have been affected by this weather causing grasses to dry out and wither. However, its ability to thrive in shadier conditions than the Essex and Small Skipper may ameliorate this, we shall see in 2023.

Orange Tip *Anthocharis cardamines*

Widespread & Common

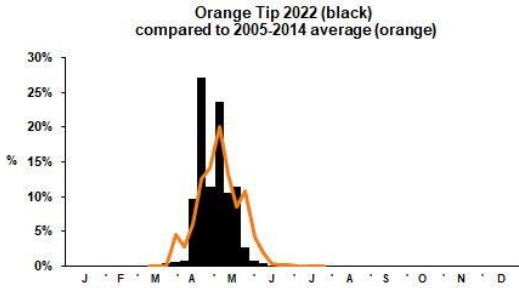
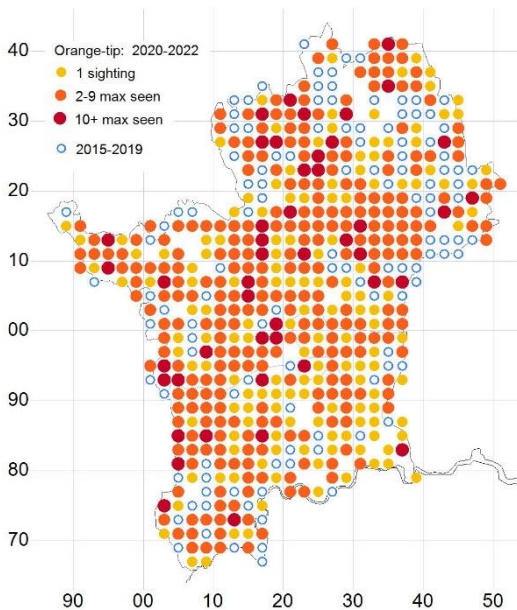


Photo Andrew Wood

First: 27 Feb

Last: 22 Jun

Peak week: 16-24 Apr



Distribution % squares	
2022	52% (313)
2021	50% (302)
2015-19 mean	42%

Abundance (transects)	
2022	13
2021	13
2015-19 mean	16

Distribution change
Up 24% compared with 2015-2019

Abundance change
Down 18% compared with 2015-2019

There was little change in the Orange Tip's distribution and abundance compared with 2021 and it is currently more widely distributed compared to longer-term trends. There was an unusually early record from 27 February, but the main flight began in late March, reflecting the mild spring and ended in mid-June with only three records after the 11th.

Large White *Pieris brassicae*

Widespread & common

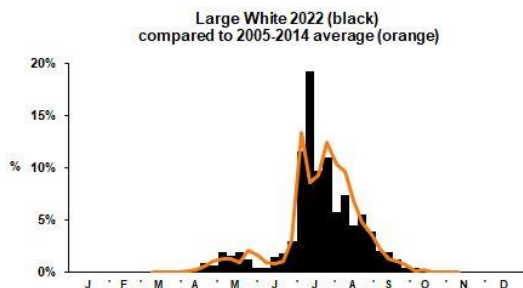
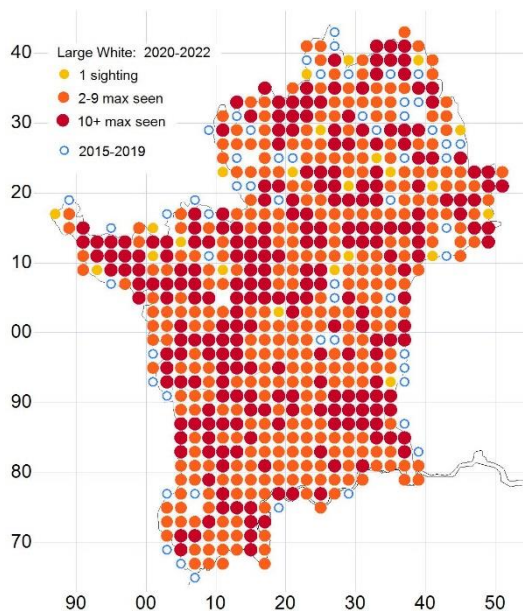


Photo Chris Benton

First: 10 Apr

Last: 27 Oct

Peak week: 9-15 Jul



Distribution % squares	
2022	80% (482)
2021	83% (498)
2015-19 mean	77%

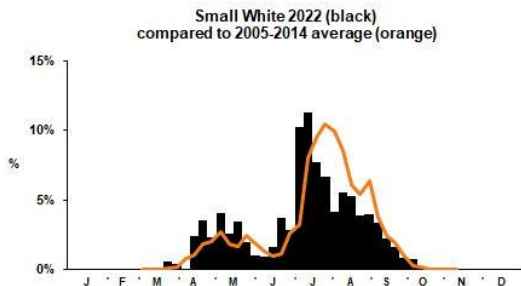
Abundance (transects)	
2022	34
2021	30
2015-19 mean	47

Distribution change
Up 4% compared with 2015-2019

Abundance change
Down 24% compared with 2015-2019

Another slight fall in distribution with a slight increase in abundance means that this species continues to do well. As usual there was a small spring generation followed by a larger one in the summer, possibly supplemented by migration from Europe. As with several other species the spike in early July reflects a quick drop in records following the very hot weather. That pushes the proportion of early records up compared to a “normal” summer.

Small White *Pieris rapae*



Widespread & common

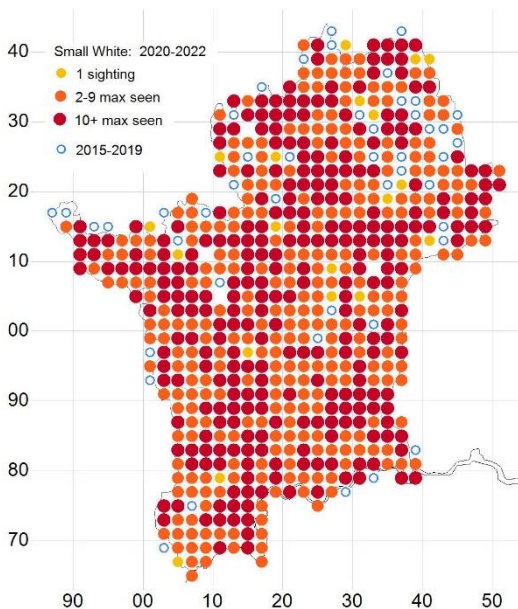


Photo Andrew Wood

First: 10 Mar

Last: 11 Nov

Peak week: 9-15 Jul



Distribution % squares	
2022	80% (482)
2021	87% (522)
2015-19 mean	80%

Abundance (transects)	
2022	54
2021	60
2015-19 mean	64

Distribution change	
Unchanged compared with 2015-2019	

Abundance change	
Down 11% compared with 2015-2019	

A very similar season to that of the Large White but the numbers dropped off much more steeply than usual after the early peak, reflecting the very hot dry summer. Although it is noticeable, that as the autumn began the numbers more closely matched the longer-term pattern. The mild autumn meant that a few adults survived into November

Green-veined White *Pieris napi*

Widespread & common

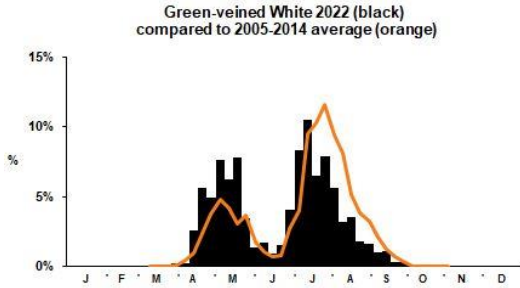
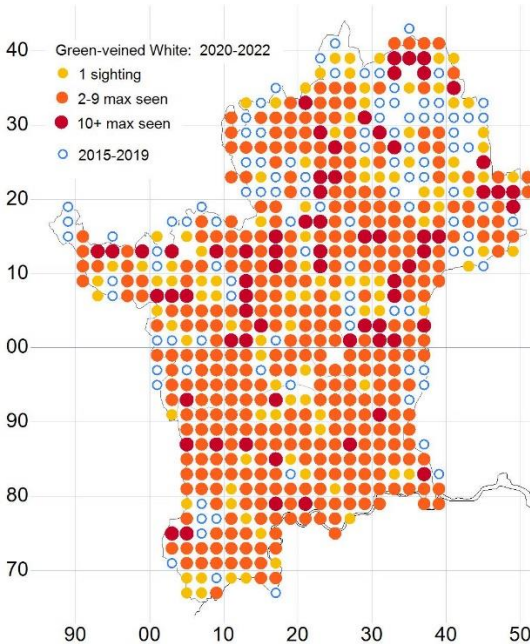


Photo Chris Benton



First: 23 Mar

Last: 8 Oct

Peak week: 9-15 Jul

Distribution % squares

2022	62% (376)
2021	64% (384)
2015-19 mean	58%

Abundance (transects)

2022	25
2021	30
2015-19 mean	38

Distribution change

Up 7% compared with 2015-2019

Abundance change

Down 30% compared with 2015-2019

As with the other whites there was minor change in distribution or abundance compared with 2021, although, like them, the abundance compared to longer term trends was again down. This species generally has a proportionally larger spring brood than the other whites, but in 2022 it made up a much higher proportion of the total number of Green-veined Whites flying. This was probably due to later summer counts being reduced by the hot dry conditions.

Clouded Yellow *Colias croceus*

Less common migrant

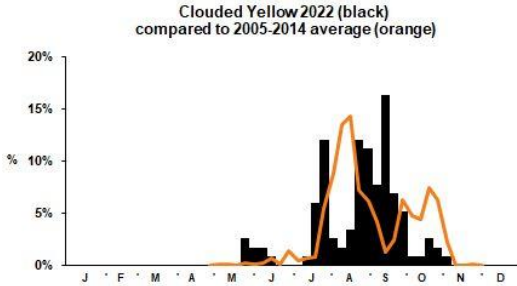
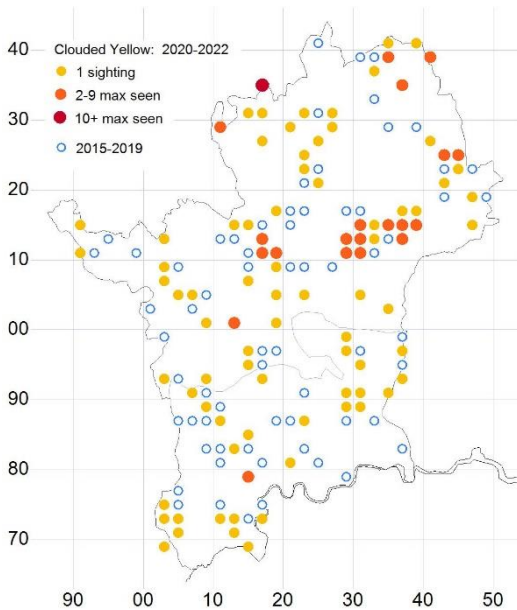


Photo Chris Benton

First: 6 May
Last: 29 Oct
Peak week: 10-16 Sep



Distribution % squares	
2022	9% (55)
2021	3% (16)
2015-19 mean	4%

Abundance (transects)	
2022	2
2021	1
2015-19 mean	1

Distribution change
Up 125% compared with 2015-2019

Abundance change
Up 100% compared with 2015-2019

Although not a Clouded Yellow year in the sense of a mass influx, this migrant was certainly more visible than in many other years, indeed the number of recorded squares was the highest since 2014. As a migrant it can turn up at any location, the higher numbers recorded at certain locations in the eastern part of Hertfordshire possibly reflects recorder effort rather than real hot spots. The peak site count of eleven was near Hitchin. It is always worth looking for this butterfly in fields of clover and lucerne which are increasingly being grown in some of our agricultural areas.

Brimstone *Gonepteryx rhamni*

Widespread

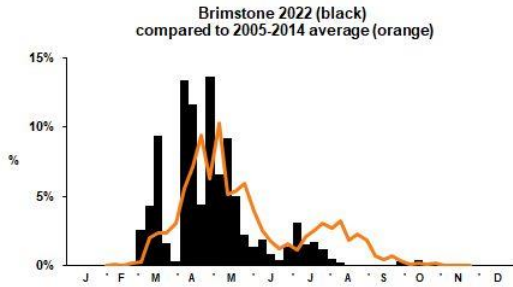
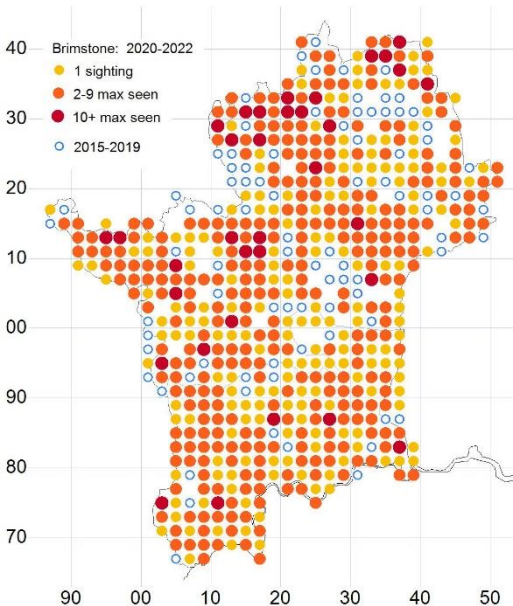


Photo Chris Benton



First: 1 Jan

Last: 16 Nov

Peak week: 30 Apr- 6 May

Distribution % squares	
2022	65% (389)
2021	65% (388)
2015-19 mean	53%

Abundance (transects)	
2022	19
2021	21
2015-19 mean	19

Distribution change
Up 23% compared with 2015-2019

Abundance change
Unchanged compared with 2015-2019

2021 was a particularly good year for the Brimstone and although the abundance for 2022 show a slight decline, it is still doing as well as the longer term average. The mild spring gave an early emergence and a much earlier summer brood. However, as shown by the large area of white under the orange line for July to September, this was short and sharp, caused by, we hope, their entering hibernation earlier. There was a brief upswing of numbers around the end of September and start of October, was this some adults coming out of hibernation or a partial second generation?

Speckled Wood *Pararge aegeria*

Widespread & common

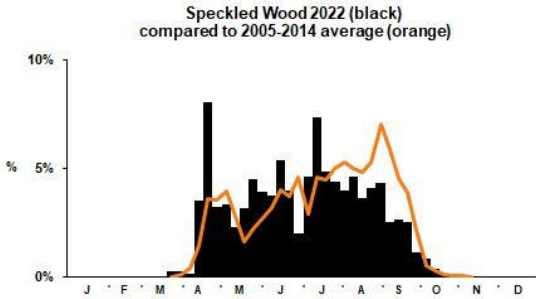
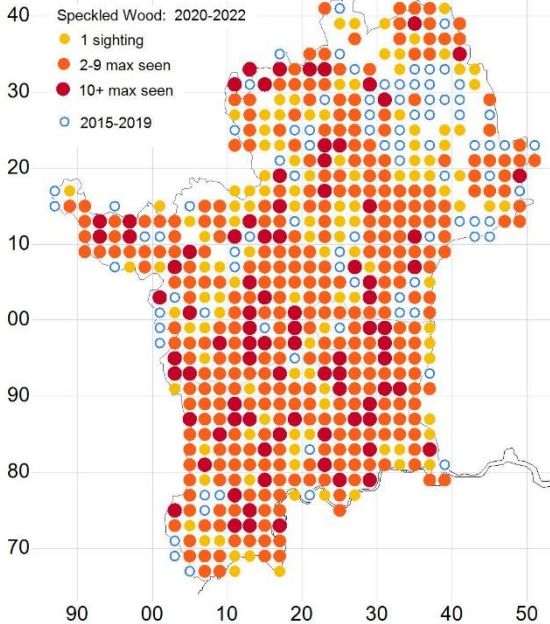


Photo Chris Benton



First: 21 Mar
Last: 12 Nov
Peak week: 16-22 Apr

Distribution % squares	
2022	71% (426)
2021	60% (357)
2015-19 mean	61%

Abundance (transects)	
2022	50
2021	37
2015-19 mean	48

Distribution change	
Up 16% compared with 2015-2019	

Abundance change	
Up 5% compared with 2015-2019	

The chart shows how unusual the flight pattern for this species was. Normally the overlapping generations build to a peak in late summer/early autumn but in 2022 the highest peak was in mid April and the second highest in early June. This is a graphic representation of the effect of the hot dry summer on butterflies, with the late flights being depressed. Interestingly the distribution and abundance numbers were both positive, quite unusual and reversing last year's declines .

Small Heath *Coenonympha pamphilus*

Widespread

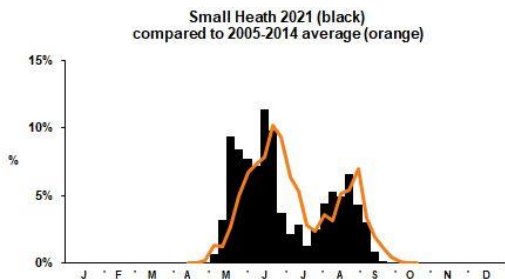
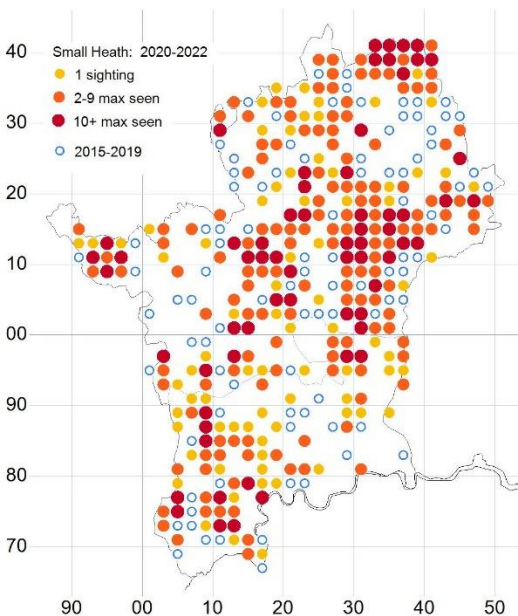


Photo Chris Benton

First: 25 Apr

Last: 25 Oct

Peak week: 11-17 Jun



Distribution % squares	
2022	28% (168)
2021	27% (160)
2015-19 mean	20%

Abundance (transects)	
2022	25
2021	32
2015-19 mean	42

Distribution change
Up 40% compared with 2015-2019

Abundance change
Down 40% compared with 2015-2019

2021's small summer brood, over which I expressed concern in last year's report, seems to have bred successfully as the spring brood this year was early and strong. This led to a slightly advanced summer brood which peaked early, no doubt due to the hot dry summer weather. However, the further drop in abundance is a worry as this is a species whose status is nationally regarded as of concern. There were good numbers on the new Wormwood Scrubs transect in inner west London.

Ringlet *Aphantopus hyperantus*

Widespread & Common

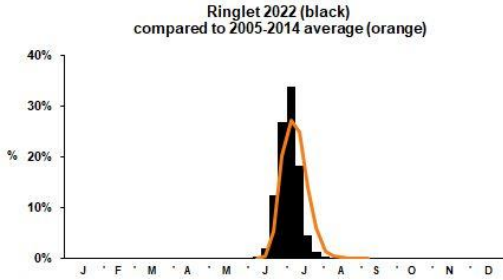
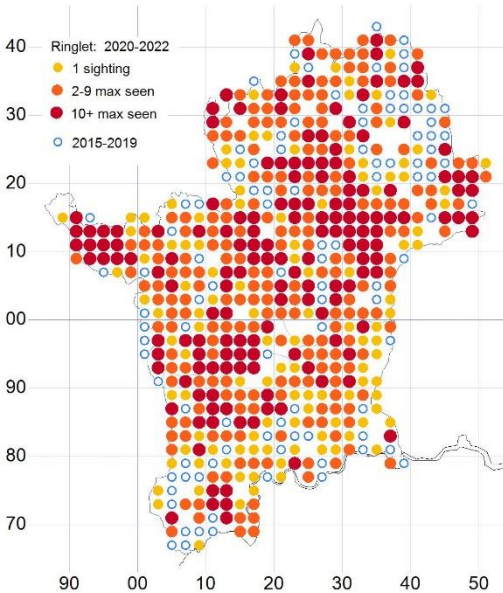


Photo Chris Benton

First: 3 Jun
Last: 13 Sep
Peak week: 2-8 Jul



Distribution % squares

2022	53% (319)
2021	60% (359)
2015-19 mean	45%

Abundance (transects)

2022	77
2021	53
2015-19 mean	108

Distribution change

Up 16% compared with 2015-2019

Abundance change

Down 30% compared with 2015-2019

The mild spring gave plenty of opportunity for the larvae to feed up and pupate which meant an early adult emergence, and this was followed by a rapid drop in numbers from mid-June. Distribution declined, though it is still ahead of the longer-term average, but reassuringly the abundance increased well after 2021's low. Looking, as in previous years at its best site, Balls Wood near Hertford, the maximum weekly count over the last four years is: 2019 - 514, 2020 - 202, 2021 - 127, 2022 - 266.

Meadow Brown *Maniola jurtina*

Widespread & Common

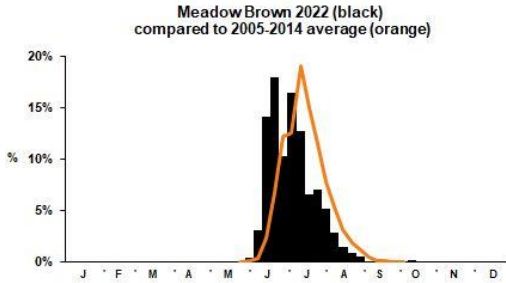
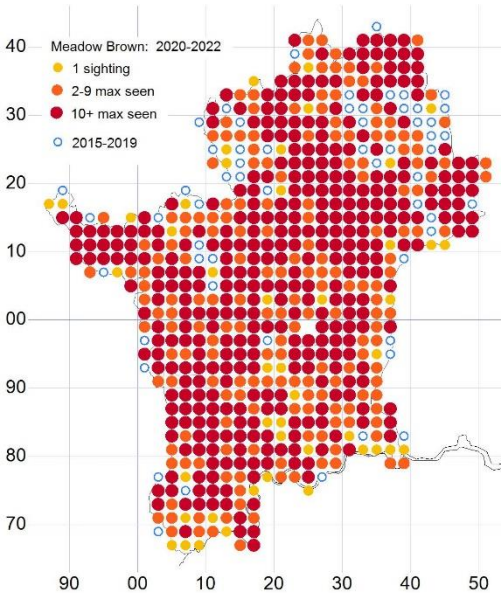


Photo Chris Benton

First: 14 May

Last: 18 Oct

Peak week: 18-24 Jun



Distribution % squares

2022	77% (461)
2021	81% (486)
2015-19 mean	68%

Abundance (transects)

2022	200
2021	228
2015-19 mean	307

Distribution change

Up 13% compared with 2015-2019

Abundance change

Down 31% compared with 2015-2019

There was a drop in both distribution and abundance compared to 2021, but this is still a very well distributed species. Like the Ringlet its emergence and peak were early as was the size of the flight after that peak. The mild spring led to a couple of very early records, but the main flight began in the last week of May. There were 17 May records in 2022 compared to 2 in 2021, but this was still well below 75 records in May 2020. However, it does show that this species that was previously always expected in early June is now regularly seen in late May.

Gatekeeper *Pyronia tithonus*

Widespread & common

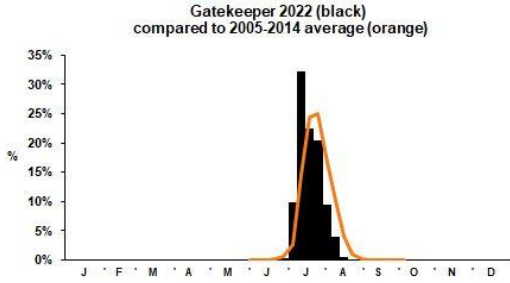
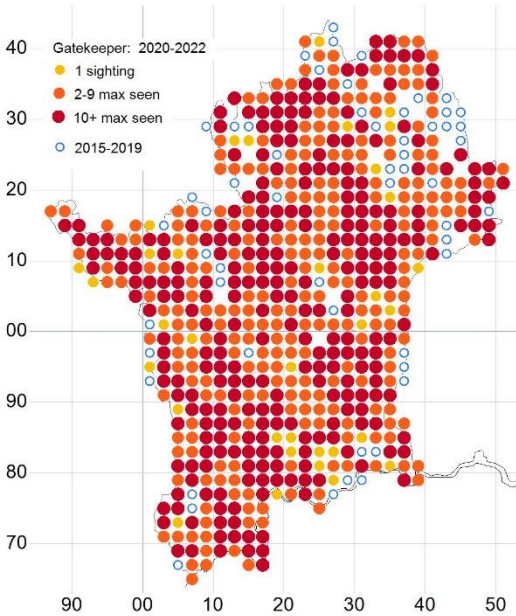


Photo Chris Benton



First: 10 Jun

Last: 23 Sep

Peak week: 9-15 Jul

Distribution % squares

2022	73% (442)
2021	76% (454)
2015-19 mean	70%

Abundance (transects)

2022	71
2021	62
2015-19 mean	85

Distribution change

Up 4% compared with 2015-2019

Abundance change

Down 16% compared with 2015-2019

This is another species flying and peaking early due to the spring weather. This allowing quick development of the larvae with the bulk of the flight season being over by mid-August. A few records straggled on into September, but many fewer than 2021. Like the Meadow Brown, distribution dropped, but unlike that species the abundance increased over 2021, even if not matching the longer-term numbers.

Marbled White *Melanargia galathea*

Widespread

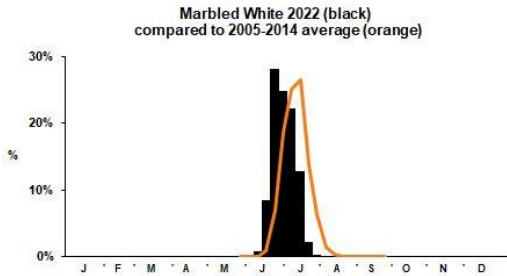
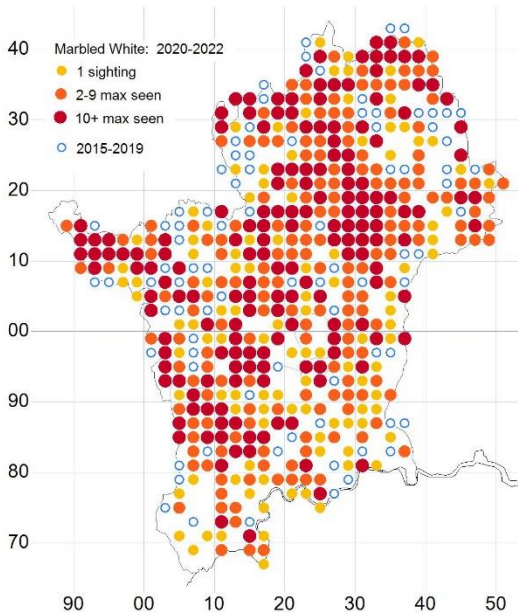


Photo Chris Benton

First: 2 Jun

Last: 18 Aug

Peak week: 18-24 Jun



Distribution % squares	
2022	49% (294)
2021	53% (319)
2015-19 mean	34%

Abundance (transects)	
2022	57
2021	74
2015-19 mean	90

Distribution change
Up 44% compared with 2015-2019

Abundance change
Down 36% compared with 2015-2019

As with the other single brooded brown species the flight period started early and quickly peaked, a month earlier than last year before dropping off quickly as the weather grew increasingly hot and dry. Distribution and abundance were well down compared with 2021 but this remains a very widespread species. Unlike last year the highest counts were from chalk sites at Aldbury Nowers and Therfield Heath

Dark Green Fritillary *Argynnis aglaja*

Restricted to chalky areas

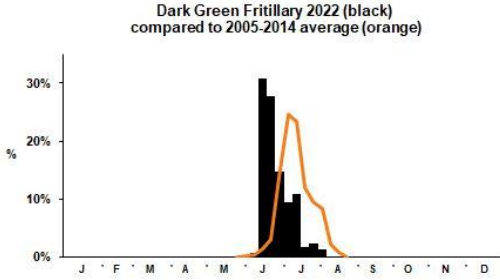
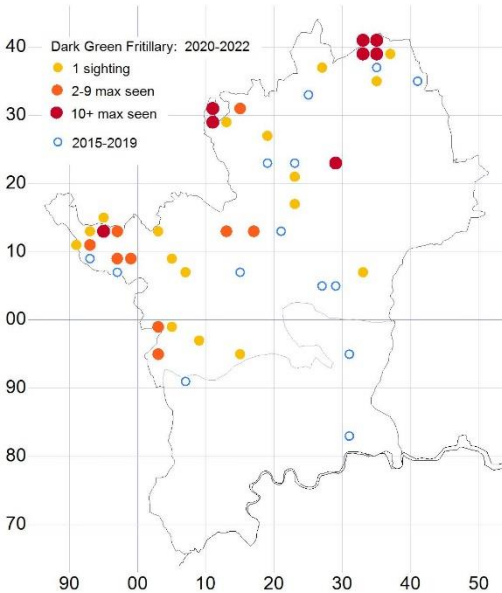


Photo Chris Benton

First: 2 Jun
Last: 10 Aug
Peak week: 11-17 Jun



Distribution % squares	
2022	3% (18)
2021	3% (19)
2015-19 mean	2%

Abundance (transects)	
2022	10
2021	8
2015-19 mean	14

Distribution change
Up 50% compared with 2015-2019

Abundance change
Down 14% compared with 2015-2019

Peaking three weeks earlier than 2021 the Dark Green Fritillary’s flight period finished much earlier than the longer-term trend, showing how flight times published just a few years ago can only be used as guidance rather than taken as gospel. A maximum count of 2 at its former stronghold Hexton Chalk Pit reflects a further decline, that was also noted last year. However good numbers were present at Aldbury Nowers and Therfield Heath. Most remarkable is the colony in eastern Hertfordshire by Walkern Road about a mile from Benington. Here small numbers have been recorded for a couple of years, but this year observers counted numbers in excess of 50 along a chalky field edge and its surroundings. What is this colony’s origin?

Silver-washed Fritillary *Argynnis paphia*

Locally common, spreading

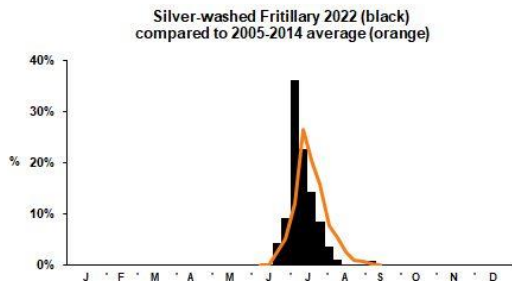
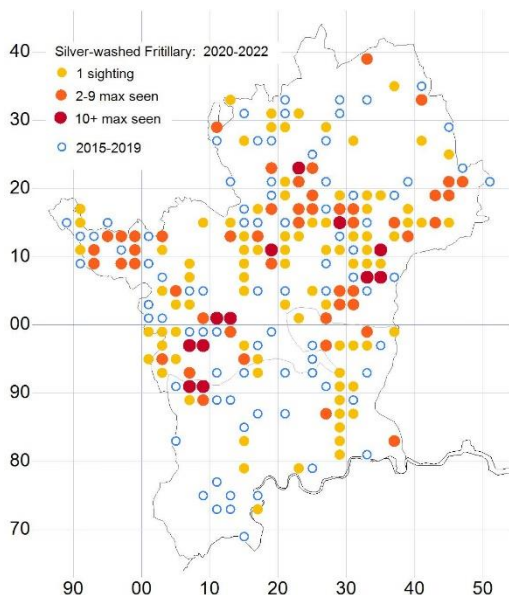


Photo Chris Benton

First: 15 Jun

Last: 19 Aug

Peak week: 2-8 July



Distribution % squares	
2022	14% (83)
2021	12% (63)
2015-19 mean	11%

Abundance (transects)	
2022	12
2021	8
2015-19 mean	14

Distribution change
Up 27% compared with 2015-2019

Abundance change
Down 14% compared with 2015-2019

The Silver-washed Fritillary continues its expansion, although it has yet to substantially penetrate western Middlesex and north east Hertfordshire. It did not start flying any earlier than usual, but both the peak and finish of the flight season were early. As with many other species this peak may be related to the drop off in butterflies due to the very hot and dry summer weather. As previously it continues to wander away from woodland and we have records from suburbia in Hertford and Ware in Hertfordshire and in Middlesex, London Zoo's car park, Spencer House near Green Park in central London and Enfield Lock. The photo shows the attractive creamier form of the female called *Valezina* photographed at Bramfield Park Wood.

White Admiral *Limenithis camilla*

Declining woodland species

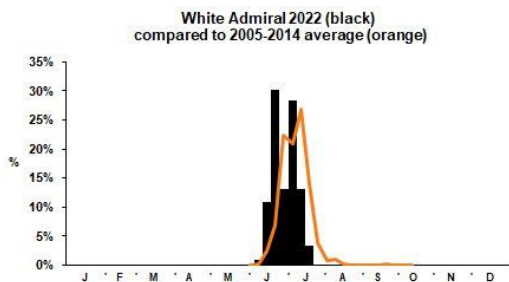
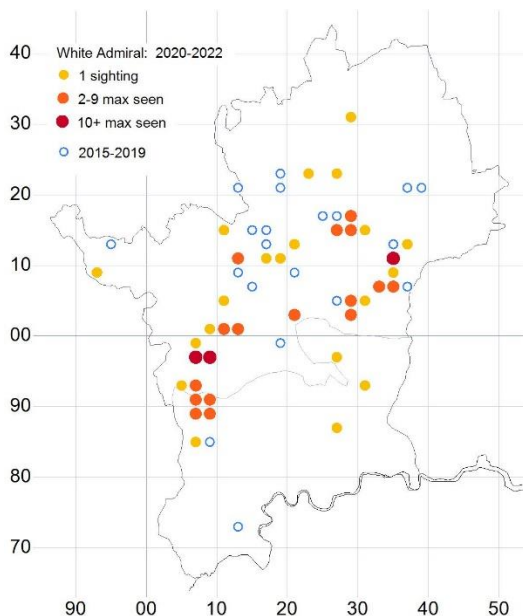


Photo Chris Benton

First: 5 Jun
Last: 20 Jul
Peak week: 18-24 Jun



Distribution % squares	
2022	4% (24)
2021	3% (19)
2015-19 mean	3%

Abundance (transects)	
2022	9
2021	4
2015-19 mean	5

Distribution change
Up 33% compared with 2015-2019

Abundance change
Up 80% compared with 2015-2019

A welcome increase in recorded squares for this nationally declining species. Its abundance at well monitored sites increased from 2021's totals of six at Bricket Wood Common and only five at Balls Wood to eight at Bricket Wood Common and twenty at Balls Wood. More casual observations showed good numbers at Whippendell Wood west of Watford and Bishops Wood right on the Herts/Middlesex border. There was a reappearance at Symondshyde Great Wood and a continuing presence at Northaw Great Wood, Knebworth Woods, Danemead and Broxbourne Woods, Bramfield Wood and Bramfield Park Wood in Herts and the Ruislip Woods complex in Middlesex. There were no second brood examples despite the early flight period

Purple Emperor *Apatura iris*

Local and increasing in woodland

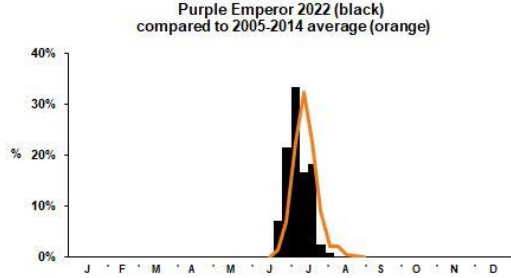
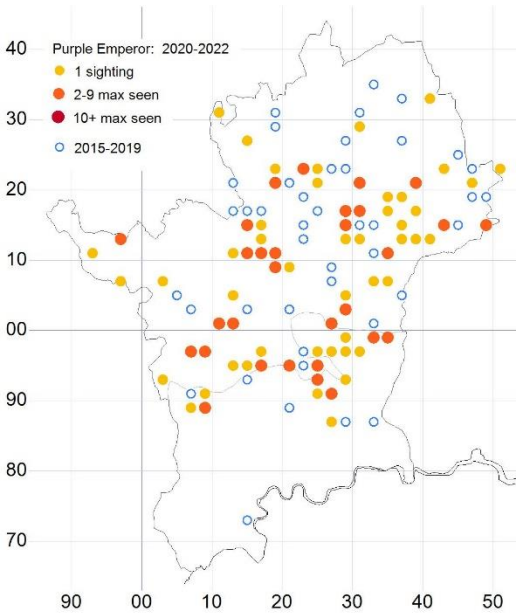


Photo Chris Benton

First 21 Jun

Last 30 Jul

Peak week: 2-8 Jul



Distribution % squares	
2022	7% (42)
2021	7% (40)
2015-19 mean	5%

Abundance (transects)	
2022	2
2021	2
2015-19 mean	1

Distribution change
Up 40% compared with 2015-2019

Abundance change
Up 50% compared with 2015-2019

Purple Emperor was little changed in distribution and abundance compared to 2021 and as in previous years their ability to range far and wide meant it turned up in less likely places such as a garden in Bishops Stortford. However most records were from woodland sites. It is noticeable that counts on any individual record are just as likely to be two or three rather than one as was the case in earlier years. As with last year the best counts were from Heartwood Forest between Sandridge and Wheathampstead.

Red Admiral *Vanessa atalanta*

Common migrant/Resident

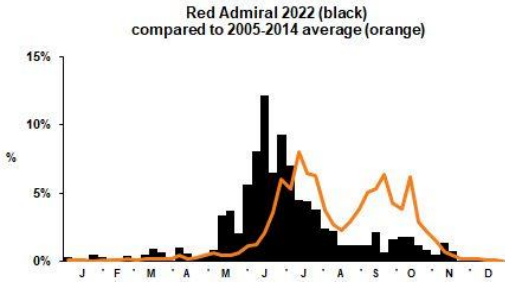
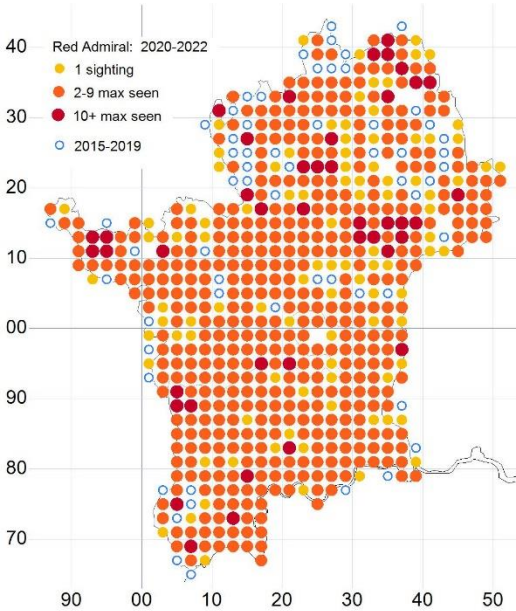


Photo Chris Benton



First: 1 Jan
Last: 29 Dec
Peak week: 18-24 Jun

Distribution % squares	
2022	73% (440)
2021	83% (494)
2015-19 mean	68%

Abundance (transects)	
2022	5
2021	15
2015-19 mean	9

Distribution change
Up 7% compared with 2015-2019

Abundance change
Down 44% compared with 2015-2019

2021's abundance increase was not continued in 2022 and neither was its distribution increase. This latter fall may be attributable to the cliff edge drop in numbers in early August during the really hot weather. This meant that the numbers normally seen nectaring on ivy during the autumn almost completely failed to materialise. Over winter survival was good with individuals seen throughout January to April, before they were supplemented by migrants in May and June. It may well be that there will be very little overwintering in 2022/23 due to the previously mentioned autumn slump.

Painted Lady *Vanessa cardui*

Variable migrant

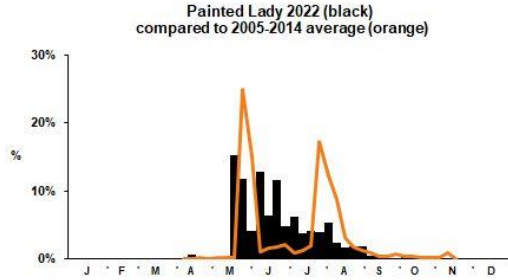
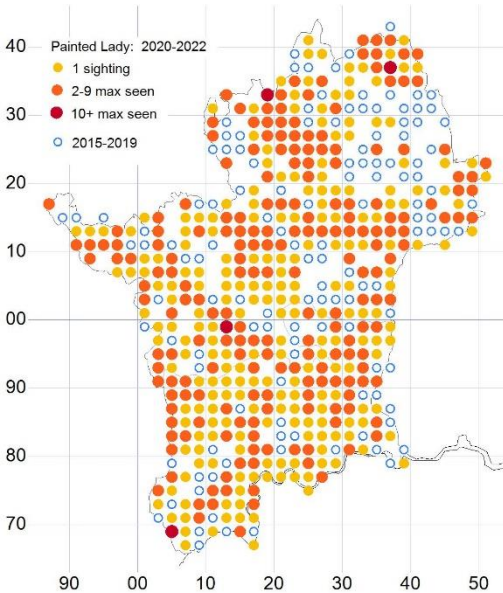


Photo Chris Benton

First: 11 Apr

Last: 17 Oct

Peak week: 16-22 Jul



Distribution % squares	
2022	45% (270)
2021	52% (312)
2015-19 mean	43%

Abundance (transects)	
2022	3
2021	3
2015-19 mean	4

Distribution change
Up 5% compared with 2015-2019

Abundance change
Down 25% compared with 2015-2019

Like the Red Admiral, Painted Lady numbers and distribution were not as high as 2021 but it was still a frequently encountered butterfly. Migrants began to arrive in numbers in mid-May, but there was no great sign of breeding leading to a home-grown brood in the summer. Instead, there was a series of mini peaks before they virtually disappeared after the end of August. Most counts were low, but eleven were recorded at Queen Mary Gravel Pit in Spelthorne in the south west of our area on 17 May. The sale of breeding kits means that some of our records may well be captive bred individuals rather than naturally occurring.

Peacock *Inachis io*

Common & Widespread

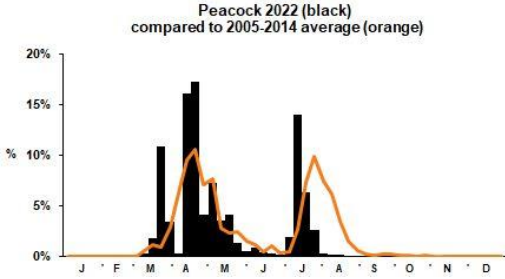
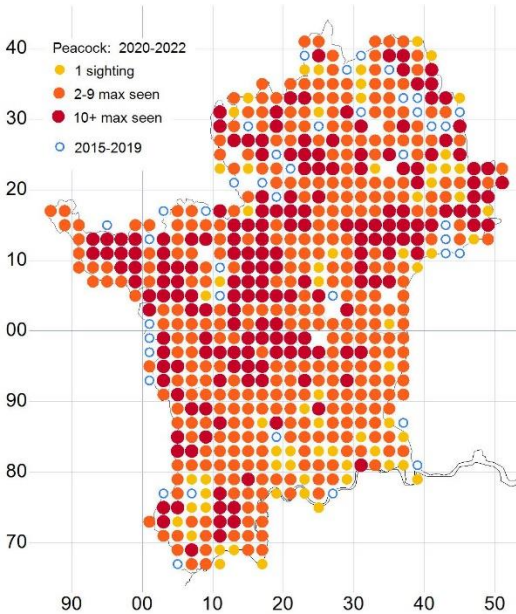


Photo Chris Benton



First: 1 Jan
Last: 24 Dec
Peak week: 16 -22 Apr

Distribution % squares	
2022	76% (455)
2021	80% (479)
2015-19 mean	63%

Abundance (transects)	
2022	24
2021	28
2015-19 mean	20

Distribution change
Up 20% compared with 2015-2019

Abundance change
Up 20% compared with 2015-2019

Most of the flight this year was in the spring when adults emerged from hibernation. They produced an early summer generation that had well nigh gone into hibernation by the end of July, a flight period of only about three weeks. There were 27 October and November records which may be a partial second brood or some hibernators waking for a final feed.

Small Tortoiseshell *Aglais urticae*

Common & Widespread

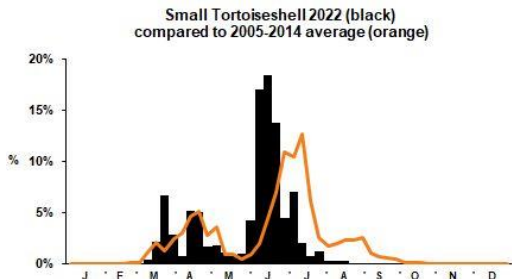
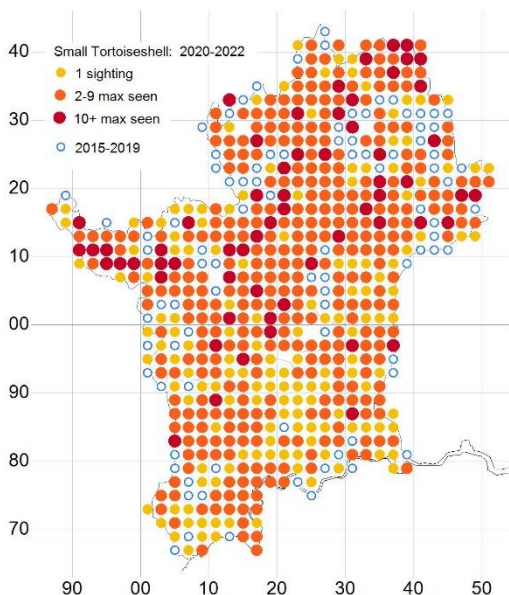


Photo Chris Benton

First: 1 Jan
Last: 25 Nov
Peak week: 11-17 Jun



Distribution % squares	
2022	69% (414)
2021	65% (387)
2015-19 mean	66%

Abundance (transects)	
2022	9
2021	10
2015-19 mean	19

Distribution change
Up 5% compared with 2015-2019

Abundance change
Down 55% compared with 2015-2019

The charts show a typical spring flight of over-wintering adults, followed by the early emergence of the main summer brood. These were on the wing from the end of May and had virtually gone by mid-July. There was no sign of the partial second brood in late summer or immigration, indeed there was little sign full stop of this species from late summer onwards (Just 29 records from August onwards). We must hope that this is a sign of early hibernation, as has been seen in some other recent years rather than a failure to breed. The spring emergence in 2023 will be interesting to observe.

Comma *Polygonia c-album*

Common & widespread

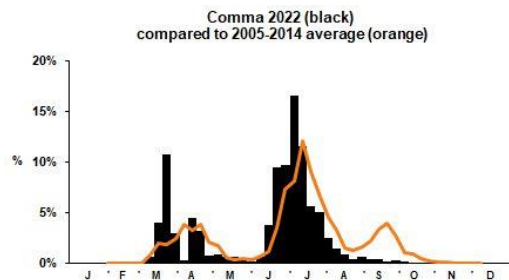
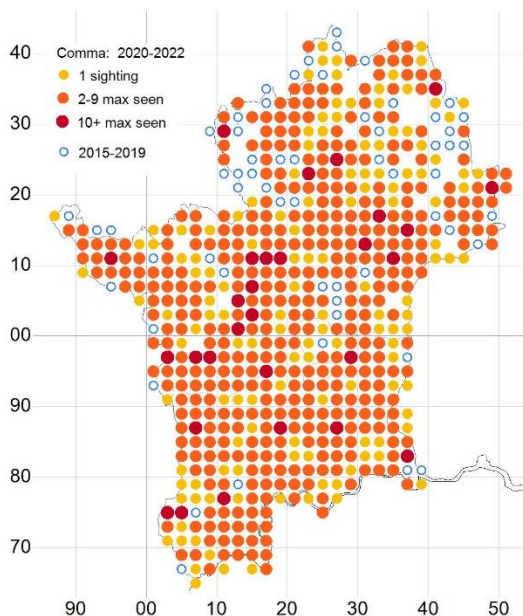


Photo Chris Benton



First: 1 Feb

Last: 16 Nov

Peak week: 2-8 Jul

Distribution % squares

2022	76% (457)
2021	67% (400)
2015-19 mean	64%

Abundance (transects)

2022	14
2021	10
2015-19 mean	15

Distribution change

Up 19% compared with 2015-2019

Abundance change

Down 7% compared with 2015-2019

The Comma was recorded more widely and in greater numbers than in 2021, but this is entirely due to the over wintering spring and mid-summer broods as there was no sign of any real autumn generation. Was this a failure to breed or early hibernation because of the hot dry conditions or some combination of the two? As with the Small Tortoiseshell next spring's flight will be interesting to observe. There were only 13 October and November records and a virtual absence, like the Red Admiral, from the abundant autumn ivy blossom.

Duke of Burgundy *Hamearis lucina*

Rare and restricted

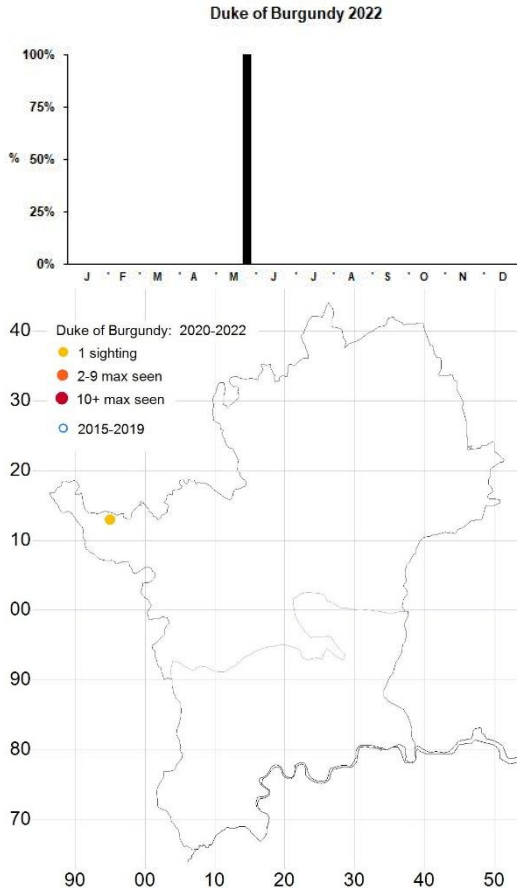


Photo Nick Murray

First: 27 May
 Last: 27 May
 Peak week: 21-27 May

Distribution % squares	
2022	1(>1%)
2021	1(>1%)
2015-19 mean	n/a

Abundance (transects)	
2022	0
2021	2
2015-19 mean	n/a

Distribution change	
Insufficient data	

Abundance change	
Insufficient data	

A great disappointment after 2021 was to receive only one report of this species, this was at the northern end of Aldbury Nowers at the base of the steep slope, almost on the Buckinghamshire border. We continue to work with Hertfordshire and Middlesex Wildlife Trust to try to understand the requirements for this species at Aldbury Nowers and whether these can be accommodated alongside the conditions for the other rare species here.

Small Copper *Lycaena phlaeas*

Widespread & common

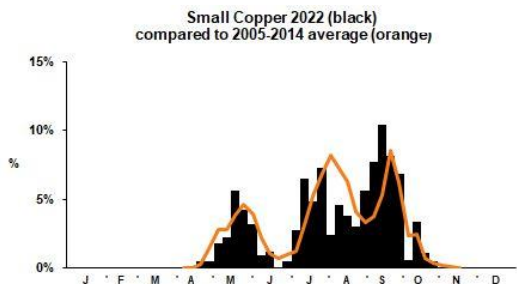
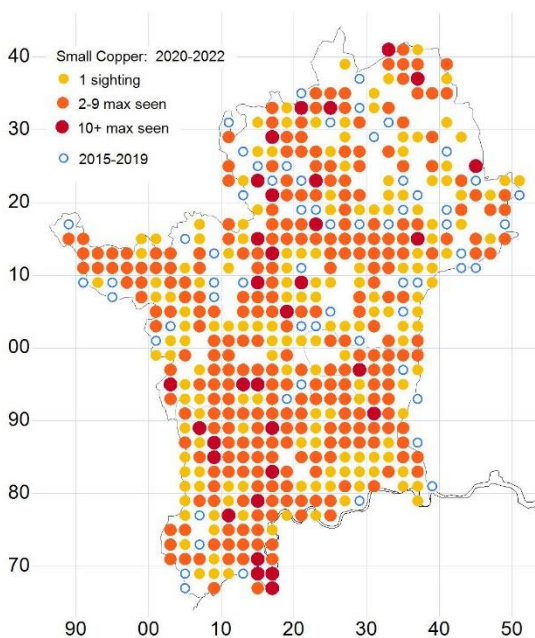


Photo Andrew Wood



First: 17 Apr

Last: 26 Oct

Peak week: 10–16 Sep

Distribution % squares	
2022	45% (269)
2021	55% (332)
2015-19 mean	32%

Abundance (transects)	
2022	6
2021	8
2015-19 mean	10

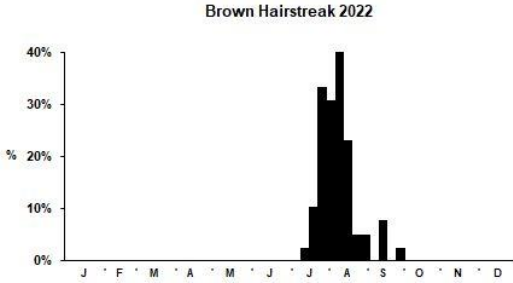
Distribution change	
Up 40% compared with 2015-2019	

Abundance change	
Down 40% compared with 2015-2019	

There was a large decline in distribution for this butterfly compared to 2021, though it is still above the longer-term trends. The same cannot be said for its abundance which continues to decline. Interestingly, the flight of this species seems to have been less affected by the hot dry weather than many. The second brood which coincided with the hottest, driest weather began a little earlier than the long-term pattern and rapidly declined but the third autumn brood was early and proportionally larger than the summer brood. At Nomansland Common, a top site, all the sheep's sorrel leaves died, and the third generation was very small. There were fresh leaves around by then and egg laying was observed. This may be because the site has dry sandy soil.

Brown Hairstreak *Thecla betulae*

Rare & restricted to Middlesex



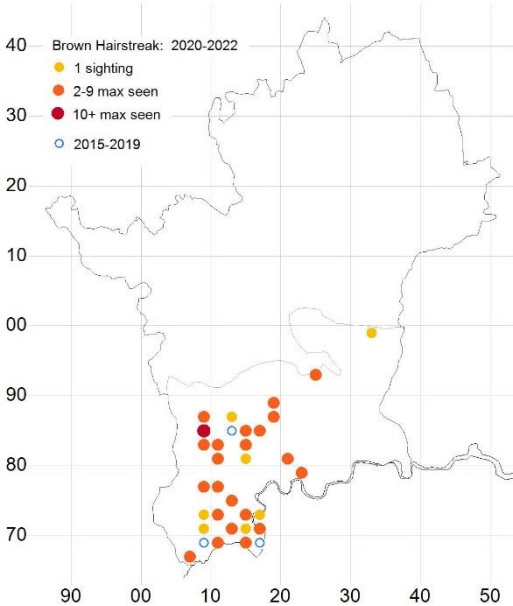
Andrew Wood

Photo

First: 14 Jul

Last: 30 Sep

Peak week: 6-12 Aug



Distribution % squares	
2022	3% (20)
2021	2% (13)
2015-19 mean	1%

Abundance (transects)	
2022	No data
2021	No data
2015-19 mean	No data

Distribution change	
Insufficient data	

Abundance change	
No data	

Not surprisingly the flight began 11 days earlier than 2021 and finished only 4 days earlier. The Ruislip Gardens/Ickenham area remains its stronghold, though this is likely to be as much due to recorder effort as it is now very well visited. There are records from several south-west Middlesex sites such as Hampton Hill, Teddington and Sunbury, including some suburban gardens. It was also recorded on the old Marshalling Yards site at Feltham. We also had the first record from Harrow at the Newton Ecology Park. So far it has failed to cross the border into Hertfordshire, though surely this will soon happen. It is worth checking blackthorn for the eggs before it starts flowering if you are in Middlesex or south Hertfordshire. For detailed information please see <https://tinyurl.com/wcucxjx5>.

Purple Hairstreak *Neozephyrus quercus*

Common around oaks

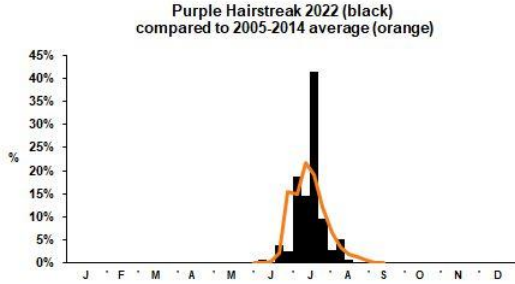
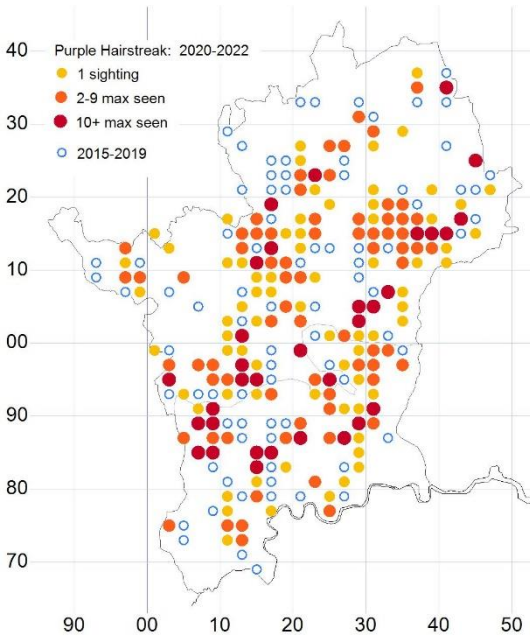


Photo Chris Benton

First: 4 Jun

Last: 21 Aug

Peak week: 16-22 Jul



Distribution % squares	
2022	16% (94)
2021	12% (73)
2015-19 mean	13%

Abundance (transects)	
2022	7
2021	7
2015-19 mean	7

Distribution change
Up 23% compared with 2015-2019

Abundance change
Unchanged compared with 2015-2019

There was a significant growth in sites for this species, this may well be attributable to its habit of descending to the ground level in very hot dry weather to drink nectar, water or salts, when the honeydew deposits on oak and ash leaves have dried up. The warmer spring was probably responsible for its flight period being 10 days earlier than 2021, though is not especially early compared to the longer-term average.

Green Hairstreak *Callophrys rubi*

Very rare & restricted

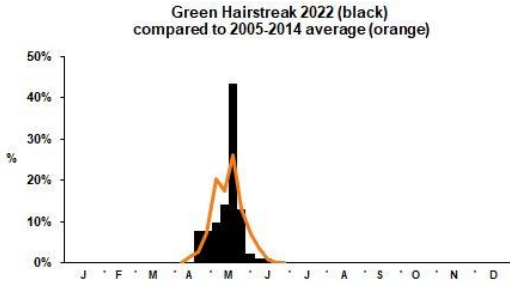
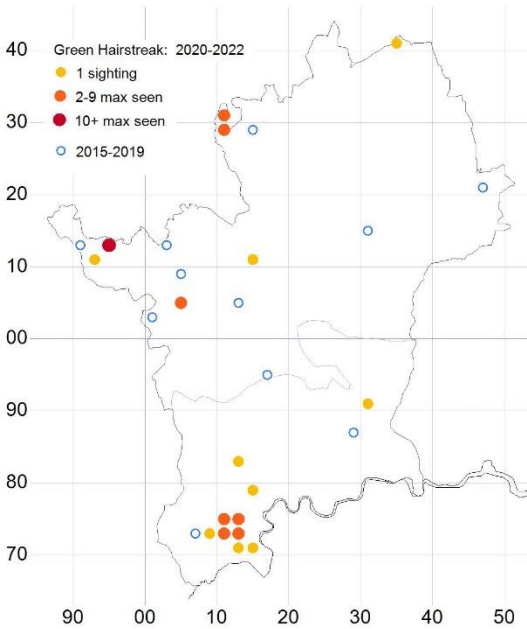


Photo Chris Benton



First: 16 Apr

Last: 15 Jun

Peak week: 14-20 May

Distribution % squares	
2022	2% (10)
2021	1% (7)
2015-19 mean	2%

Abundance (transects)	
2022	7
2021	2
2015-19 mean	4

Distribution change	
Unchanged compared with 2015-2019	

Abundance change	
Up 75% compared with 2015-2019	

Green Hairstreak started flying a week later than 2021, an unusual occurrence in 2022, but finished within a day of the earlier year. This year the largest counts were from Hexton Chalk Pit (9), Hounslow Heath (6), both well-established sites and, pleasingly, there was also a count of 6 at the newly established Kempton Nature Reserve Transect in south-west Middlesex. Unlike previous years there were no records well away from its established areas.

White-letter Hairstreak *Satyrrium w-album*

Common around elm

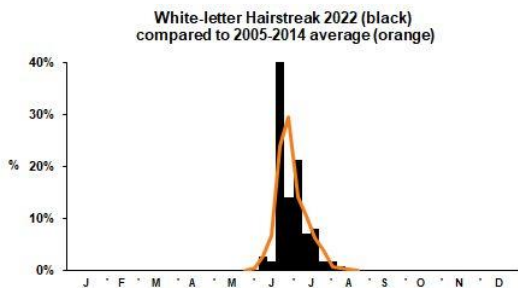
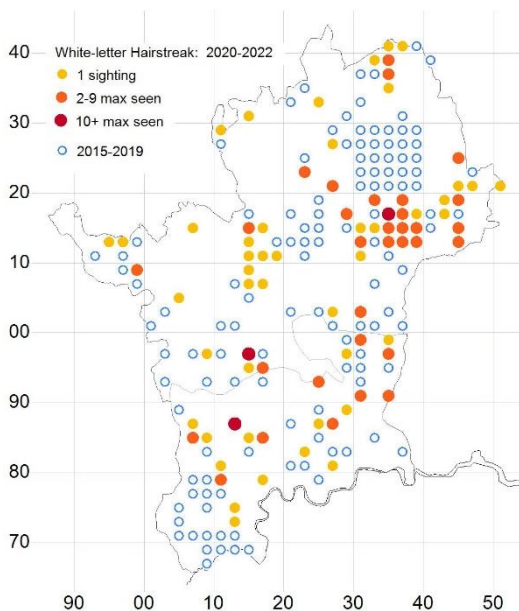


Photo Chris Benton

First: 10 Jun
Last: 10 Aug
Peak week: 18-24 Jun



Distribution % squares	
2022	6% (34)
2021	7% (41)
2015-19 mean	9%

Abundance (transects)	
2022	1
2021	2
2015-19 mean	2

Distribution change
Down 33% compared with 2015-2019

Abundance change
Down 50% compared with 2015-2019

The disappointing drop in abundance and distribution in 2022 is, hopefully, as likely to be due to recording effort as a real decline, as this species is not the easiest find. For instance, it was recorded on the Ware Park Transect in 2022, the first time since 2017, even though there has not been a lot of change to the amount of elm on the route and it is likely to have been present the whole time. It is good to see continuing records from urban green space in London such as Alexandra Park, Minet Country Park and Tottenham Marsh.

Small Blue *Cupido minimus*

Very rare & restricted

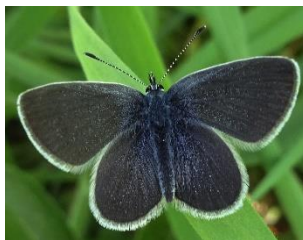
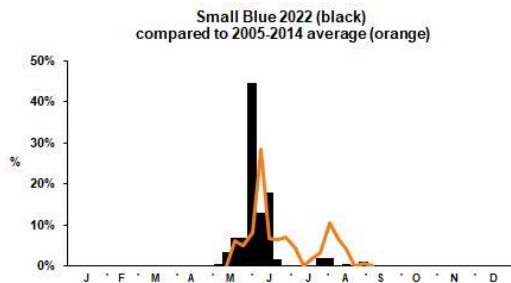
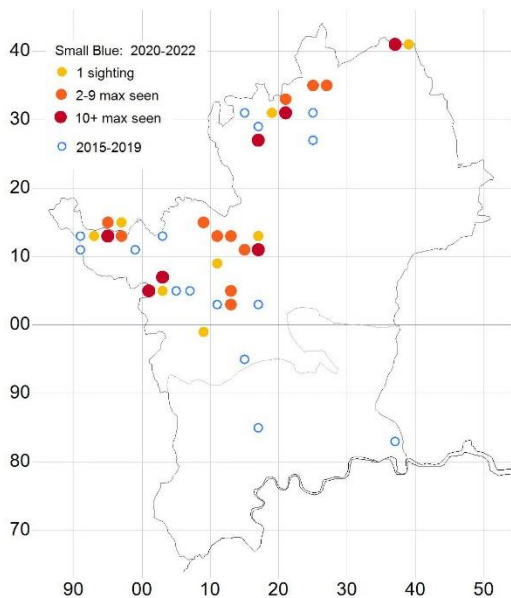


Photo Chris Benton



First: 6 May
Last: 27 Aug
Peak week: 28 May-3 Jun

Distribution % squares	
2022	3% (19)
2021	2% (11)
2015-19 mean	2%

Abundance (transects)	
2022	5
2021	2
2015-19 mean	89

Distribution change
Up 50% compared with 2015-2019

Abundance change
Too little data to calculate

A further increase in distribution is welcome news for this, our smallest butterfly. Searching with landowner permission in the Royston area revealed several new colonies. The best counts were at some of these sites, together with Heartwood Forest, the A41 junction at Bourne End and the field at Hillbrow, Letchworth Garden City. There was some evidence (12 of 63 records) of a small second brood this year, probably due to hot dry weather desiccating the larval food plants. We must hope that enough were able to feed up to produce a good emergence in spring 2023.

Holly Blue *Celastrina argiolus*

Widespread & common

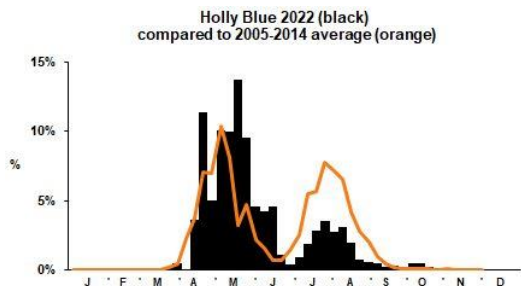
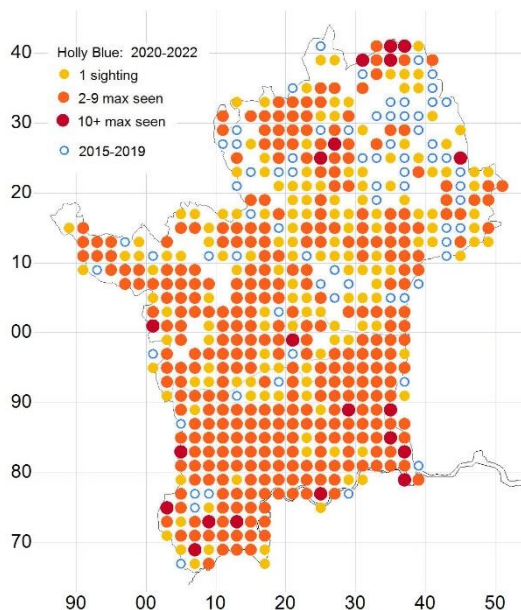


Photo Chris Benton

First 19 Mar

Last: 9 Nov

Peak week: 14-20 May



Distribution % squares	
2022	62% (376)
2021	57% (343)
2015-19 mean	55%

Abundance (transects)	
2022	11
2021	6
2015-19 mean	13

Distribution change
Up 13% compared with 2015-2019

Abundance change
Down 16% compared with 2015-2019

The Holly Blue’s abundance and distribution data bounced back after 2021’s decline and it remains a commonly seen species. What is noticeable is that the spring brood was much larger than the summer one, but interestingly not earlier than the long-term trend. The chart above also shows the partial third brood that is now a regular feature of this species’ flight. Indeed, this year there were 45 October and November records compared to 7 in 2021. Many of these were from one site at Stanwell Moor, but the other records were distributed over sixteen other locations, the bulk of which were in Middlesex.

Brown Argus *Aricia agesthis*

Widely distributed

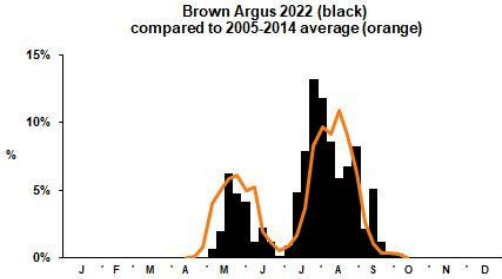
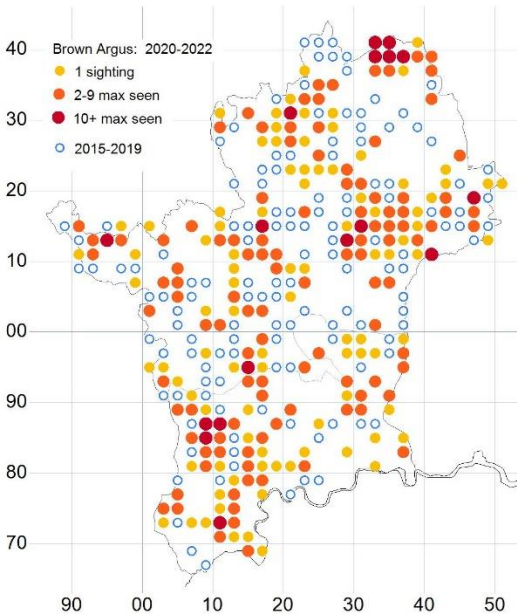


Photo Chris Benton



First: 23 Apr

Last: 25 Oct

Peak week: 23-29 Jul

Distribution % squares

2022	19% (116)
2021	18% (109)
2015-19 mean	20%

Abundance (transects)

2022	7
2021	7
2015-19 mean	15

Distribution change

Down 5% compared with 2015-2019

Abundance change

Down 55% compared with 2015-2019

Brown Argus was little changed from 2021, apart from beginning to fly three weeks earlier. As is usual the summer flight was larger than the spring one and there was little sign of it being affected by the year's hot dry weather. As last year the highest counts were from chalk land areas, particularly the Therfield Heath area. This is apart from the very highest count of 25 which was from a set aside field north of Panshanger, just west of Hertford.

Common Blue *Polyommatus icarus*

Widespread & common

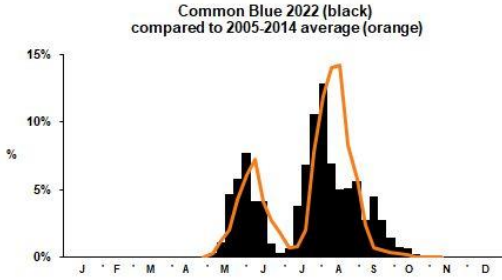
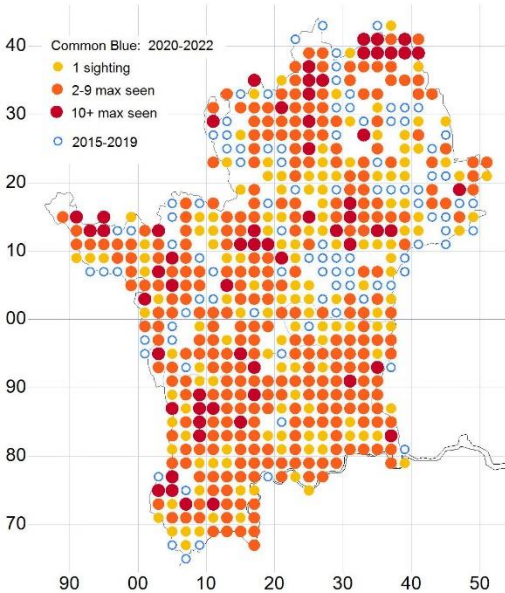


Photo Chris Benton

First: 14 Apr
Last: 13 Nov
Peak week: 13-19 Aug



Distribution % squares	
2022	61% (366)
2021	49% (279)
2015-19 mean	54%

Abundance (transects)	
2022	26
2021	15
2015-19 mean	38

Distribution change
Up 13% compared with 2015-2019

Abundance change
Down 32% compared with 2015-2019

After last year's big drop, it was pleasing to be able to record a climb in distribution and abundance, even if the latter is still well below the longer-term mean, hence its appearance as our cover photo. The two broods both started slightly earlier than the longer-term pattern and the balance between the two broods, with the second being large was the usual pattern. It is noticeable that numbers dropped quite steeply at the end of July as the hot weather took hold.

Adonis Blue *Polyommatus bellargus*

Very rare & restricted

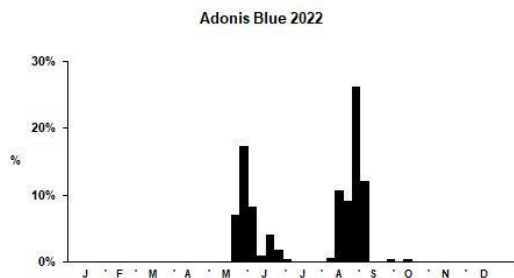
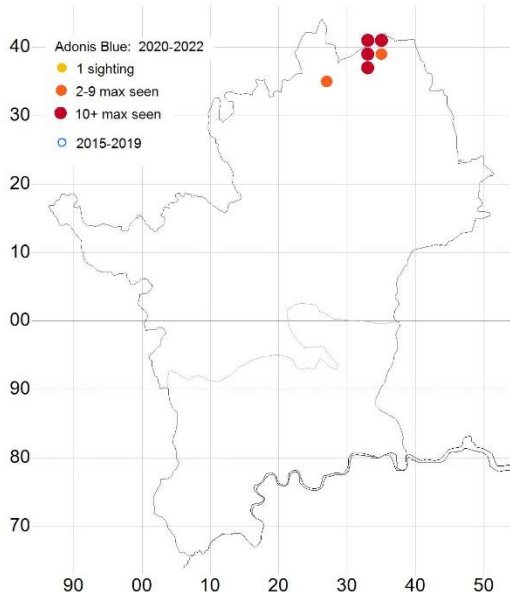


Photo Chris Benton



First: 8 May

Last: 3 Oct

Peak week: 20-26 Aug

Distribution % squares	
2022	1% (6)
2021	>1% (4)
2015-19 mean	>1%

Abundance (transects)	
2022	26
2021	28
2015-19 mean	2

Distribution change
Unchanged since 2015-2019

Abundance change
Up 1300% compared with 2015-2019

We have now seen seven broods of this species since its sudden appearance at Church Hill and it can now be found right across the Therfield Heath complex. It was also seen during the second half of August at the land east of Clothall Common close to the Baldock bypass. Are we seeing a spread along the A505 corridor as has likely happened with the Chalkhill and Small Blues in recent years? This year's flight began almost three weeks earlier than 2022 and finished 12 day later with the second brood being the larger.

Chalkhill Blue *Lysandra coridon*

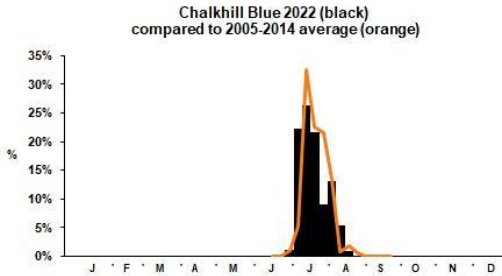
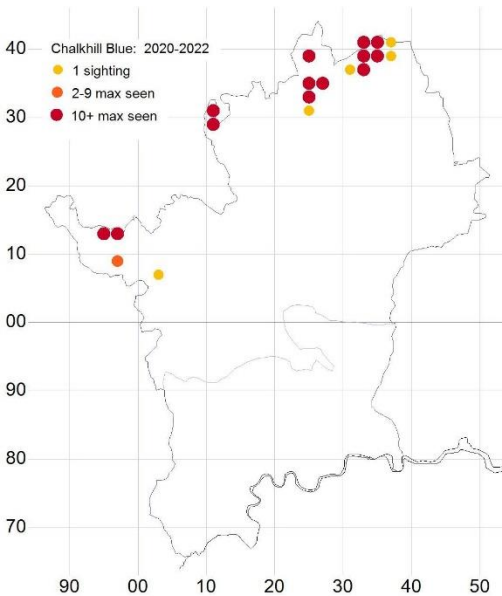


Photo Chris Benton



First: 22 Jun

Last: 1 Sep

Peak week: 16-22 Jul

Distribution % squares

2022	2% (13)
2021	3% (16)
2015-19 mean	2%

Abundance (transects)

2022	200
2021	187
2015-19 mean	188

Distribution change

Unchanged compared with 2015-2019

Abundance change

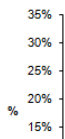
Up 6% compared with 2015-2019

A success for 2022 with the abundance data on transects again increasing and exceeding the longer-term mean. On my annual survey at Hexton Chalk Pit the total rose from 152 to 202 over a standardised route. The newer colonies at Ashwell Quarry and east of Clothall Common were still present. There were no records from outside the established area for this species.

Key to the Species pages

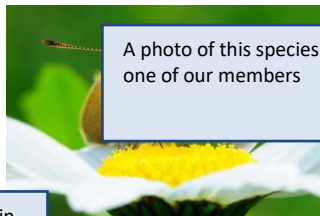
Common Name *Scientific name*

Small Skipper 2015 (black)
compared to 2000-2019 average (orange)



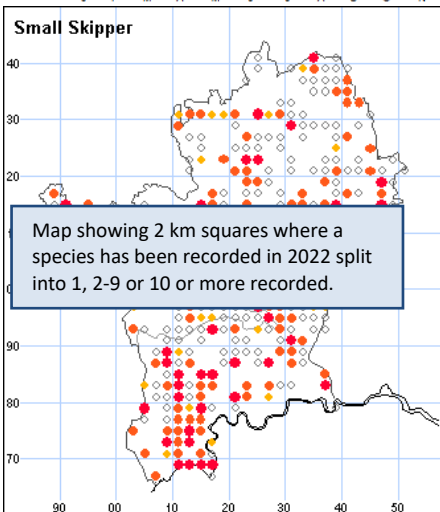
The flight period showing proportion of species flying in any week compared with the 2015-2019 average

Widespread but declining



A photo of this species taken by one of our members

Brian Knight



Map showing 2 km squares where a species has been recorded in 2022 split into 1, 2-9 or 10 or more recorded.

First: 16 Jun

Last: 16 Aug

Peak week: 25 Jun -1 Jul

Distribution % squares

2022 30% (155)

2022

2015-19

mean

Abundance

2022

2022

2015-19

mean

Distribution

Up 3% compared to

2015-2019

Abundance change

First sighting

Last sighting

Peak Week when most seen

Distribution % squares. The % and

number of 2km squares with records in

which this species was recorded

Abundance (transects) Average

number of a species seen on transects

(so comparable year on year)

Distribution and Abundance change

compared with the recent 5-year

period to smooth out year to year

comparisons

Some notes on the species during the year, together with interesting or unusual observations

Our branch website <http://www.hertsmiddx-butterflies.org.uk/> has a very active sightings page and we welcome all submissions. Anything, sent there or submitted via the 'iRecord' apps or the Big Butterfly Count, once verified, is added to the branch database and used in this report

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