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Front cover image Red Admirals by Andrew Wood

Acknowledgements

Thanks are due to Bob Clift, Chris Benton, David Hunt, Malcolm Hull and Peter Ewer for supplying the images in the report. I am grateful to Ian Small, Jane Wood, Liz Goodyear, Malcolm Hull and Paul Busby for their helpful comments and criticisms of my text.

Introduction

Welcome to our 28th annual report on butterflies in our area. We are grateful to everyone who has submitted records for 2023 (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.

Please submit your records using the iRecord, iRecord Butterflies, Butterflies for the New Millennium, iNaturalist, BTO BirdTrack and Garden Butterfly Survey apps. These are verified, then added to the branch database and used in this report. We also have data from 81 butterfly transect routes. 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 information below shows that 2023 was less extreme than 2022 with generally dull and cool conditions interspersed with some warmer and sunnier conditions, more typical "English weather"

conditions, more typical "English weather".

January	Generally mild and wet with frosts mid-month	July	Cool, dull and windy
February	Mild dry and sunny	August	Cool, dull and windy but slightly less so than July
March	Very wet and dull	September	Very warm but wet at times but with above average sunshine
April	Unsettled wet and dull	October	Warm, especially early on but overall wet and dull.
May	Mild but generally wet and dull	November	Sunnier than normal but with storms and frost
June	Warm. Dry and sunny (sunniest since 1957)	December	Cold early on otherwise mild and very wet

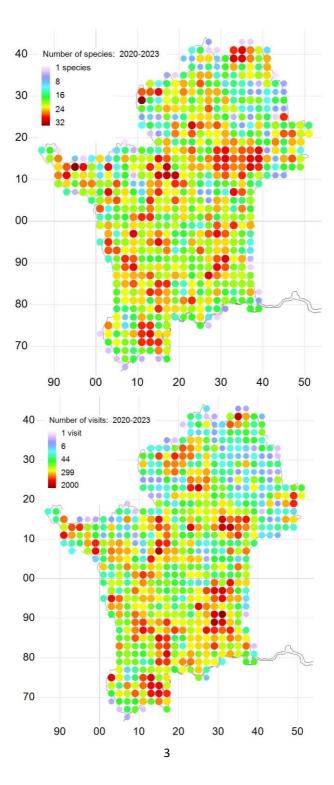
Overview

In 2023 butterfly activity started early with records during mid-February of emerging hibernating adults. After that, the spring was rather dull and cool, and many species started emerging later than both 2022 and in many other years. Given the drought of 2022 most species seemed to have ridden out that period reasonably well as good numbers were recorded during the rather dull summer of 2023. There were several exceptions to this, and these are discussed under the species accounts.

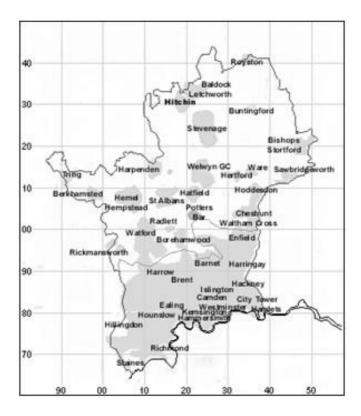
Recording Effort

This is the fourth year of the five-year 2020 -2024 survey. In 2023 we received records from 3555 recorders who submitted 72690 records from 621 2 km squares. There has been an effort to visit squares with few or no records during 2023 and this means that we now have no unrecorded squares for this survey period. As 3% more squares were visited in 2023 an increase in distribution should be expected for widespread species so a slight increase may not be a real distribution increase. Over the four years of the survey, we now have records from 677 2km squares.

The next two maps show the number of species recorded (top) and number of recorder visits (bottom) for each square in 2020-2023. Our aim is to continue to raise the purple and blue squares to the green, yellow and red categories to give our area maximum coverage.



Our Area



The inner London boroughs are included in the Big City Butterflies project, one of whose aims is to increase recording in these most built up of areas.

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

Camberwell Beauty Nymphalis antiopa	Nomansland Common, Herts 7 May 2023
Long-tailed Blue Lampides boeticus	Hackney, Middx 30 Sept 2023 Ickenham, Middx 7 Oct 2023 Both indoor records so likely to be imported with produce
Monarch Danaus plexippus	Bricket Wood Herts, 7 Aug 2023

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

Dingy Skipper Erynnis tages

Restricted and rare

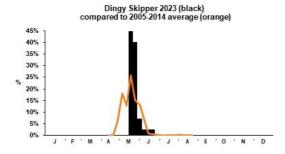




Photo Chris Benton

First: 7 May Last: 19 Jun

Peak week: 14-20 May

40	Dingy Skipper: 2020-2023 1 sighting
30-	2-9 max seen 10+ max seen 2015-2019
20	man E
10	
00	
90	
30	2 months
70	
	90 00 10 20 30 40 50

Distribution	n % squares
2023	1% (10)
2022	1% (9)
2015-19	1%
mean	

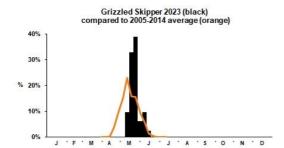
Abundance (tran	nsects)
2023	5
2022	8
2015-19 mean	9

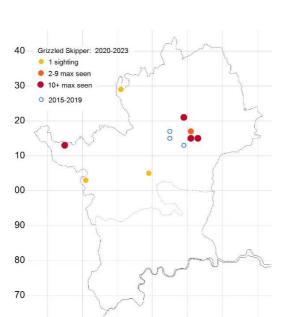
Distribution change
Unchanged compared with
2015-2019

Abundance change
Down 44% compared with
2015-2019

The most exciting news of 2023 was the discovery of a new colony in central Hertfordshire. This is at a private brown field site with poor soils and substantial amounts of bird's foot trefoil, its larval foodplant. Numbers were not high, but it was widely distributed there. This discovery was accidental and shows the need to check out any similar sites across our area. Elsewhere it was present at its other sites along the western border. However, the drop in abundance at the four transects where it is recorded is concerning. All but one of the double figure counts were at Hexton Chalk Pit which is not a transect site.

Grizzled Skipper Pyrgus malvae





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Restricted & rare



First: 3 May

Last: 12 Jun

Peak week: 21-27 May

Distribut	ion % squares
2023	1% (6)
2022	1% (5)
2015-19	1%
mean	

Abundance (ti	ransects)
2023	3
2022	7
2015-19	8
mean	

Distribution change
Unchanged compared with
2015-2019

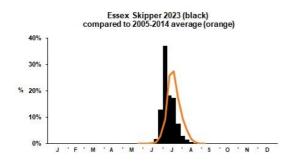
Abundance change
Down 63% compared with
2015-2019

The poor spring meant that emergence was over 2 weeks later than 2022 and numbers were low at all sites. The low numbers reflect poor breeding success in 2022 which may have been affected by the desiccation of its largely dry sites. We are continuing to work with quarry owners, farmers, landowners and Network Rail to try to optimise conditions for the survival of this species in its Beane valley heartland.

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Essex Skipper Thymelicus lineola

Widespread





First: 21 Jun Last: 21 Aug

Peak week: 2-8 Jul

40	Essex Skipper: 202 1 sighting	0-2023				
30	2-9 max seen10+ max seen2015-2019	15	0 0 0	00	0	
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90		000	00	0 0		
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70	000	0-				
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Distribution % squares			
2023	20% (123)		
2022	16% (96)		
2015-19	17%		
mean			

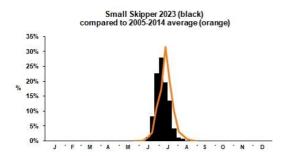
Abundance (transects)		
2023	15	
2022	6	
2015-19 mean	10	

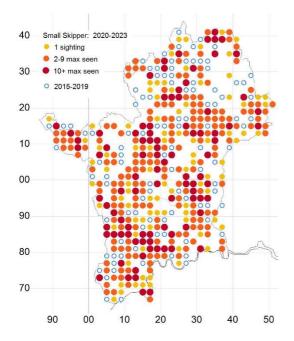
Distribution change
Up 17% compared with 2015-
2019

Abundance change	
Up 50% compared with 2015-	
2019	

For several years, this report has been expressing concern over this species so 2023 brings a welcome respite with increases in both distribution and abundance. The former may be due to greater surveying but the abundance change could well be significant. We must wait until next year to see if it is the start of a welcome trend. The flight period was very similar to last year despite the changed weather. It appears that larval activity in early 2023 was not adversely affected by the poor spring weather.

Small Skipper Thymelicus sylvestris





Widespread but recently declining



First: 11 Jun

Last: 23 Aug

Peak week: 2-8 Jul

Distribution % squares			
2023	31% (183)		
2022	31% (186)		
2015-19	26%		
mean			

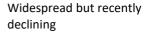
Abundance (transects)		
2023	27	
2022	18	
2015-19 mean	20	

Distribution change
Unchanged compared with
2015-2019

Abundance change
Up 35% compared with
2015-2019

As with the Essex Skipper there was a significant increase in this species' abundance, although the distribution has not significantly changed. The flight period was about a week and a half later than 2022 but the overall flight period was still slightly earlier than the longer term pattern.

Large Skipper Ochlodes sylvanus



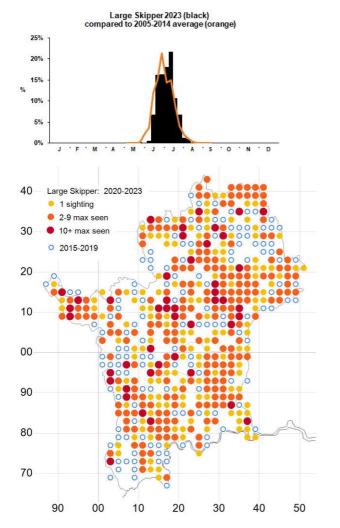




Photo Chris Benton

First: 25 May Last: 22 Aug Peak week: 2-8 Jul

Distribution % squares			
2023	32% (196)		
2022	38% (228))		
2015-19	35%		
mean			

Abundance (transects)		
2023	18	
2022	15	
2015-19 mean	19	

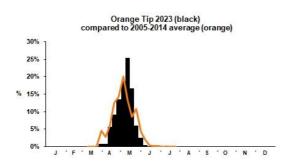
Distribution change
Down 8% compared with
2015-2019

Abundance change
Down 5% compared with
2015-2019

The Large Skipper had a mixed year. Worryingly, in a year with more squares covered there was a noticeable drop in distribution compared to both 2022 and the longer-term trend. The abundance increased, although it was slightly below the longer-term figure. The actual flight period was not greatly different from the longer-term pattern. It emerged only four days later than 2022 and finished eleven days earlier. Its liking for shadier conditions than the other "golden" skippers is shown by the fact that seventeen of the twenty highest counts were in woodland areas.

Orange Tip Anthocharis cardamines

Widespread & common





First: 17 Mar Last: 20 Jul

Peak week: 14-20 May

40-		p: 2020-20	023	O	0.0		
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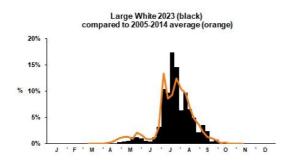
Distribution	n % squares
2023	45% (276)
2022	52% (313)
2015-19	42%
mean	

Abundance (transects)		
2023	11	
2022	13	
2015-19 mean	16	

Distribution change	
Up 7% compared with	
2015-2019	

Abur	11	ge
Down	,0,0 001	ared with
2015-2	019	

The state of the spring weather is shown by the first record and peak week both being almost four weeks later than in 2022. Indeed, the whole flight pattern was slightly later than the longer-term average. The drop in distribution and abundance is probably due to the poorer spring weather that constrained both butterfly and recorder activity. There are a couple of records from later July which are three weeks later than the next latest record. Are these possibly the very partial second brood that was noted in some of our reports from the 1990s, or just an example of a few surviving poorer weather to emerge on a bright day?





First: 4 Apr Last: 5 Nov

Peak week: 16-22 Jul

40	Large Wh	nite: 2020-	2023		(0 0 0 0 0		
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	90	00	10	20	30	40	50

Distribution	on % squares
2023	85% (527)
2022	80% (482)
2015-19	77%
mean	

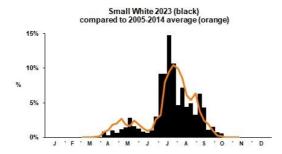
Abundance (tra	nsects)
2023	33
2022	34
2015-19 mean	47

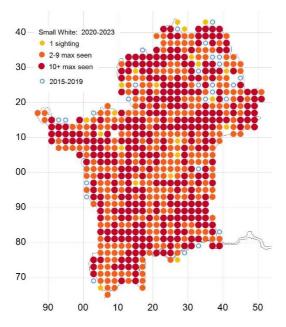
Distribution change
Up 23% compared with
2015-2019

Abundance change
Down 30% compared
with 2015-2019

The Large White was very widely seen in 2023, its increase in recorded squares exceeding the number of extra squares recorded in during 2023. However, the abundance was slightly down compared with 2023 and well down on the longer-term number. It is possible that some of this distribution change was due to migration from Europe. It was seen both earlier and later than usual, but the actual flight pattern was a pretty good match for the longer-term trends.

Small White Pieris rapae





Widespread & common



Photo Andrew Wood

First: 14 Jan Last: 28 Oct

Peak week: 16-22 Jul

Distribution % squares	
2023	87% (542)
2022	80% (482)
2015-19	80%
mean	

Abundance (transects)	
2023	57
2022	54
2015-19 mean	64

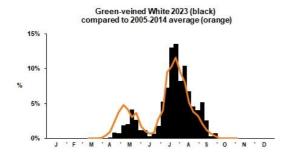
Distribution change
Up 9% compared with
2015-2019

Abundance change Down 11% compared with 2015-2019

A very similar season to that of the Large White with a pretty good match to the longer-term pattern. Notable was an estimate of 2000 flying over an arable field near Wallington in the north east Hertfordshire "arable dessert". The 14 January record, from Hemel Hempstead, was very much an outlier being found indoors, so was presumably a larva that had crawled inside, pupated and developed much more quickly in the warmth. It survived a few days after emergence.

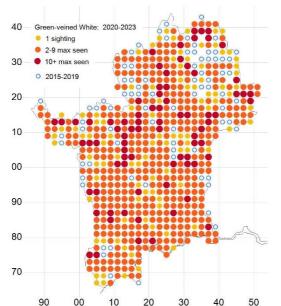
Green-veined White Pieris napi

Widespread & common





THOSE CHITS BETTE



First: 17 Mar Last: 15 Oct

Peak week: 23-29 Jul

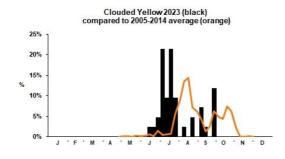
Distribution	on % squares
2023	62% (381)
2022	62% (376)
2015-19	58%
mean	

Abundance (tra	nsects)
2023	34
2022	25
2015-19 mean	38

Distribution change	
Up 7% compared with	
2015-2019	

Abundance change
Down 10% compared
with 2015-2019

As usual the Green-veined White was not as widely recorded as the other two whites. Its distribution was unchanged, but the abundance climbed towards its longer-term figure. In the spring its main flight was delayed, presumably due to the weather, compared with the longer-term trends while the summer brood matched those trends very well. So development of the larvae and pupae into adults was perhaps a little faster than normal.





First: 16 May Last: 26 Sep

Peak week: 2-8 Jul

40	Clouded	Yellow: 20	20-2023 -	1	1	·	
	1 sight	nting		· /	200	. 5	
30-	1 0+ m	nax seen	-		0	0 0	
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70					-0		
	90	00	10	20	30	40	50

Distribution % squares		
2023	2% (9)	
2022	9% (55)	
2015-19	4%	
mean		

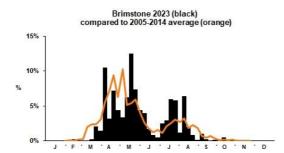
Abundance (tra	nsects)
2023	2
2022	2
2015-19 mean	1

Distribution change
Down 50% compared with
2015-2019

Abundance change
Unchanged compared with
2015-2019

The Clouded Yellow was not common in 2023 with only 30 records. 20 of those were from the same site; Feltham Marshalling Yards where between one and three were recorded from May to September, but mainly in July. Many of those records were probably the same individuals being seen. The four records in September followed none in August, so may be an indication of local breeding.

Brimstone Gonepteryx rhamni



Widespread



First: 1 Jan Last: 11 Dec

Peak week: 14-20 May

	one: 2020-20 ighting	123	6			
	max seen	A 2		0		
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Distribution % squares				
2023	65% (401)			
2022	65% (389)			
2015-19	53%			
mean				

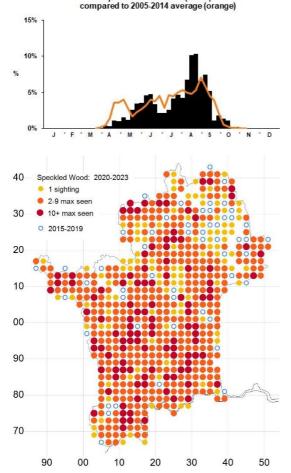
Abundance (transects)			
2023	28		
2022	19		
2015-19 mean	19		

Distribution change			
Up 23% compared with			
2015-2019			

Abundance change				
Up 47% compared with				
2015-2019				

I wrote that 2022 was a particularly good year for this species, in which case 2023 was an exceptionally good year. This is especially so as the abundance data, taken from transects, was well up on last year and the longer term trend. For the second year it was seen on New Year's day and there were records through January and February. Poor weather stopped further appearances (with just one exception) between 20 February and 16 March. As last year there was a rise in sightings in the autumn, but later than 2022, I pose the same question about partial second generation or a small emergence from hibernation?

Speckled Wood 2023 (black)





First: 2 Feb Last: 21 Nov

Peak week: 20-26 Aug

Distribution % squares				
2023	72% (447)			
2022	71% (426)			
2015-19	61%			
mean				

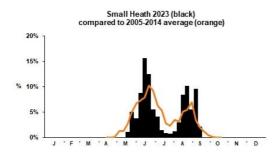
Abundance (transects)				
2023	56			
2022	50			
2015-19 mean	48			

Distribution change
Up 18% compared with
2015-2019

Abundance change
Up 16% compared with
2015-2019

After 2022's unusually flat flight pattern, the weather produced a more normal flight pattern with a steady rise in numbers from spring to a peak in late August. There was a drop after mid September but the butterfly was recorded in numbers through October and into late November The distribution increase was probably due to recording effort but the rise in abundance is good news for this species. A few years ago the highest numbers were from the woodland site at Balls Wood in Hertfordshire, but this year most of the highest counts were from more urban areas in Middlesex such as Tower Hamlets Cemetery Park.

Small Heath Coenonympha pamphilus







First: 4 Apr Last: 26 Sep

Peak week: 11-17 Jun

40	Small Heath: 2020	-2023	E-10 C 2			
30	2-9 max seen10+ max seen2015-2019	000	0	000	0 0 0	
20		.vv.	0	0		
10	0	0	0	0 0 0	0	
00-		0	0	0000	3	
90		0	00	0		
80		0				
70						
	90 00	10	20	30	40	50

Distribution % squares				
2023	31% (181)			
2022	28% (168)			
2015-19	20%			
mean				

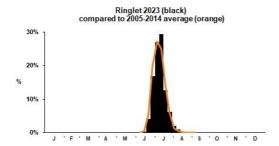
Abundance (transects)				
2023	48			
2022	25			
2015-19 mean	42			

Distribution change
Up 55% compared with
2015-2019

Abundance change
Up 14% compared with
2015-2019

2023 seems to have suited the Small Heath with rises in both distribution and abundance. The main gaps seem to be in western Hertfordshire and southeast Middlesex, two areas that would seem to pose dissimilar problems to its establishment. As last year the spring brood was the strongest, so the 2022 drought does not seem to have an adverse effect on this species in our area. It emerged three weeks earlier and finished four weeks later than last year, producing a very long flight period.

Ringlet Aphantopus hyperantus



Widespread & common



First: 10 Jun

Last: 14 Sep

Peak week: 9-15 Jul

40 Ringle	et: 2020-2023				
	sighting	Ot			
	9 max seen			0000	
	+ max seen		0000	0000	000
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Distribution % squares				
2023	49% (304)			
2022	53% (319)			
2015-19	45%			
mean				

Abundance (tran	nsects)
2023	43
2022	77
2015-19 mean	108

Distribution change	
Up 9% compared with 2015-	
2019	

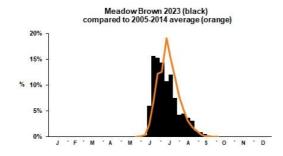
Abundance change
Down 60% compared with
2015-2019

The flight period fitted the longer-term pattern almost exactly Distribution has now fallen back from 60% of squares in 2021 to 49%, though still above the longer-term average. Its abundance fell back after 2022's increase, being even lower than 2021's 53. Looking, as in previous years at one of its best sites, Balls Wood near Hertford, the maximum weekly count over the last five years is: 2019 - 514, 2020 - 202, 2021 - 127, 2022 - 266 and 2023 - 212. It is to be hoped that these changes are the result of the 2022 drought which seems to have affected this species. It favours damp grassland of which there was plenty in 2023 leading to hopes of increased numbers in 2024.

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#### Meadow Brown Maniola jurtina

#### Widespread & common





First: 28 May Last: 3 Oct

Peak week: 18-24 Jun

40	Meadow E	Brown: 202	20-2023			200	
	<ul><li>1 sight</li><li>2-9 ma</li></ul>	ting ax seen					)
30-	<ul><li>10+ m</li><li>2015-2</li></ul>	ax seen – 2019	0		ø	0 0	
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90		Q					
80		0					T.
70		0					
	90	00	10	20	30	40	50

Distributio	n % squares
2023	82% (508)
2022	77% (461)
2015-19	68%
mean	

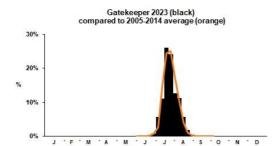
Abundance (tran	nsects)
2023	333
2022	200
2015-19 mean	307

Distribution change
Up 36% compared with
2015-2019

Abundance change
Up 5% compared with 2015-
2019

Even the poorer weather could not prevent emergence in early May (even if only two records) and this year's data shows increases in distribution and abundance over 2022. Given the drought in 2022 its ability to breed after what might have been considered a possibly difficult year is reassuring. This is especially so in terms of abundance with a huge increase after last year. Nine of the ten highest counts were from transects in west and northwest Middlesex at Fryent Country Park, Horsenden Hill West and Osterley Park showing the value of these ancient fields now surrounded by suburbia.

### **Gatekeeper** Pyronia tithonus



#### Widespread & common



Photo Chris Benton

First: 8 Jun Last: 29 Sep

Peak week: 16-22 Jul

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	0+ max seen	000		1444	0 0	
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Distribution % squares		
2023	81% (503)	
2022	73% (442)	
2015-19	70%	
mean		

Abundance (transects)		
2023	130	
2022	71	
2015-19 mean	85	

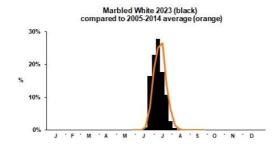
Distribution change
Up 16% compared with
2015-2019

Abundance change		
Up 65% compared with		
2015-2019		

The Gatekeeper's fortunes closely mirrored those of the Meadow Brown, except that its flight period was an almost exact match for the long-term trends rather than being slightly earlier. It would seem to be another grassland species that was not affected badly by 2023's hot and dry weather. In contrast to the Meadow Brown nine of the ten highest counts for this species, were in Hertfordshire.

## Marbled White Melanargia galathea

#### Widespread





First: 29 May Last: 28 Aug Peak week: 2-8 Jul

10-	Marbled Whi	9	0-2023	0	0		
30-	<ul><li>2-9 max</li><li>10+ max</li></ul>		-30		00	0 0	0
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0		5	0				

Distribution % squares		
2023	48% (296)	
2022	49% (294)	
2015-19	34%	
mean		

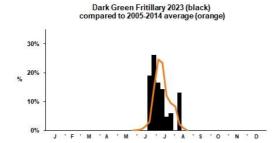
Abundance (transects)		
2023	78	
2022	57	
2015-19 mean	90	

Distribution change
Up 40% compared with
2015-2019

Abundance change		
Down 13% compared with		
2015-2019		

Despite some anecdotal concern expressed about this species there was only a minor change in its distribution and an increase in abundance in 2023. Unlike 2022 when the highest counts were from chalkland areas this year's records were well spread across both counties and several habitats including chalk, clay and brownfields. A particularly strong site is Horsenden Hill in Middlesex.

### Dark Green Fritillary Argynnis aglaja



#### Restricted to chalky areas



First: 14 Jun Last: 10 Aug

Peak week: 25 Jun-1Jul

40	Dark Green Fritillary: 2020-2023  1 sighting
30	2-9 max seen 10+ max seen 2015-2019
20	0 0
10	
00-	00
90	
80	mina
70	
	90 00 10 30 30 40 50

Distribution % squares		
2023	1% (8)	
2022	3% (18)	
2015-19	2%	
mean		

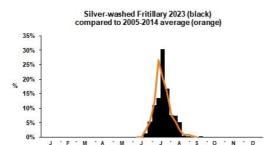
Abundance (transects)		
2023	5	
2022	10	
2015-19 mean	14	

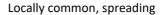
Distribution change
Down 50% compared with
2015-2019

Abundance change
Down 64% compared with
2015-2019

2023 saw this species fall back to its traditional chalk areas around Royston, Aldbury Nowers and Hexton Chalk Pit. At the last of those there was a maximum count of eight, a considerable iimprovement on 2022. The central Hertfordshire colony near Aston and Benington remains although there were fewer reports this year. The only double figured counts were not on transects reflecting the decline in abundance which is measured by such counts. All in all not a good year for this butterfly.

#### Silver-washed Fritillary Argynnis paphia







First: 23 Jun

Last: 17 Sep

Peak week: 16-22 July

	1 sighting     2-9 max seen	/18	-71-6	000	• •	
30	10+ max seen     2015-2019	0	00	0		
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90	1	00	0 0			
80						
70		4				
	90 00	10	20	30	40	50

Distribution % squares		
2023	13% (79)	
2022	14% (83)	
2015-19	11%	
mean		

Abundance (transects)	
2023	9
2022	12
2015-19 mean	14

Distribution change
Up 18% compared with
2015-2019

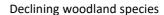
Abundance change		
Down 35% compared with		
2015-2019		

There was an insignificant change in distribution but a noticeable drop in abundance. This could be down to damage to dog violet in woodland caused by the dry hot conditions of 2022. However, there were differences between sites. The woods at Bricket Wood Common and Symondshyde recorded numbers in the 20s and 30s, whereas a previously strong site at Balls Wood had low single figure counts. Some new sites were added such as at Great Hormead Park where there were several on the edge of an otherwise very dense and dark wood and in southwest Middlesex at Kempton Park.

#### White Admiral Limenithis camilla

10%

## White Admiral 2023 (black) compared to 2005-2014 average (orange) 30% 25% 20% % 15% -





First: 19 Jun

Last: 29 Jul

Peak week: 25 Jun-1 Jul

30	1 sighting 2-9 max seen 10+ max seen
30	0 2015-2019
20	
10	
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90	
80	Jane Jane
70	0.3

Distribution % squares		
2023	2% (13)	
2022	4% (24)	
2015-19	3%	
mean		

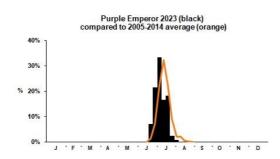
Abundance (transects)	
2023	4
2022	9
2015-19 mean	5

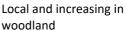
Distribution change		
Down 50% compared with		
2015-2019		

Abundance change				
Down20% compared with				
2015-2019				

Last year's increases after a period of decline were, unfortunately, reversed in 2023 and the highest count on any transect anywhere was two, although less formal recording gave a top figure of eight. A previous stronghold of Balls Wood in eastern Hertfordshire now must be regarded a toehold with just two transect records, both single examples. On the positive side Potters Crouch Plantation between Chiswell Green and Hemel Hempstead produced records of this butterfly for the first time in ten years. This site is threatened by golf course development and the Branch is working to prevent this site being lost.

### **Purple Emperor** Apatura iris







First 24 Jun

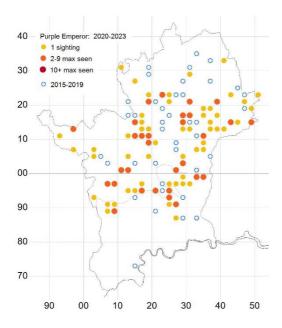
Last 10 Aug Peak week: 2-8 Jul

Distribution % squares				
2023	5% (29)			
2022	7% (42)			
2015-19	5%			
mean				

Abundance (transects)				
2023	4			
2022	2			
2015-19 mean	1			

Distribution change				
Unchanged compared with				
2015-2019				

Abundance change				
Up 300% compared with				
2015-2019				



Purple Emperor was seen at fewer places than 2022 and these were at the main known sites rather than the less expected sightings in more unlikely places. The abundance figure needs to be taken with some caution as it is based on just one transect. This year the highest counts, overall were from Whipendell Woods west of Watford, though most sightings were from Heartwood Forest near Sandridge.

#### **Red Admiral** Vanessa atalanta

# Red Admiral 2023 (black) compared to 2005-2014 average (orange) 25% 20% 15% 10% 5% 0%





Photo Andrew Wood

First: 9 Jan Last: 20 Dec

Peak week: 16-22 Jul

40	Red Admiral: 2020	-2023		ó		
	1 sighting		7	00000		
30	<ul><li>2-9 max seen</li><li>10+ max seen</li></ul>	638	0000			
30		0	0000			
	0 2015-2019	00		0.0	0000	000
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Distribution % squares				
2023	91% (563)			
2022	73% (440)			
2015-19	68%			
mean				

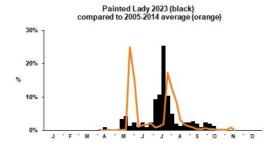
Abundance (transects)					
2023	36				
2022	5				
2015-19 mean	9				

Distribution change				
Up 31% compared with				
2015-2019				

Abundance change				
Up 400% compared with				
2015-2019				

2023 will go down as a Red Admiral year with very large numbers recorded in the first half of July. Numbers were so high that I was asked to speak about it on BBC Three Counties Radio during the Big Butterfly Count. It was the most widely distributed butterfly in 2023 and its abundance figure saw a huge increase. However hopes of a big home produced brood in the autumn were not wholly realised, though it was more evident, for instance, on ivy blossom than for the last few years. Its ability to survive winters is shown by records through January to March, although it looks likely that the huge number of records in the summer were caused by migration.

### Painted Lady Vanessa cardui







First: 7 Apr Last: 15 Oct

Peak week: 16-22 Jul

	1 sightir	ng	2023	0	0 0		
30-	<ul><li>2-9 max</li><li>10+ max</li><li>2015-20</li></ul>	seen seen	000	_/_	0 0		0
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Distribution % squares				
2023	43% (267)			
2022	45% (270)			
2015-19	43%			
mean				

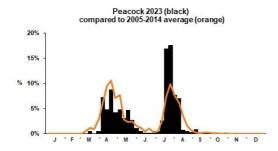
Abundance (transects)				
2023	2			
2022	3			
2015-19 mean	4			

Distribution change
Unchanged compared with
2015-2019

Abundance change
Down 50% compared with
2015-2019

This was an average year for Painted Lady, placing it neatly between Clouded Yellow and Red Admiral in the migrant stakes. I have mentioned breeding kits before, but it was interesting leading walks on Open Farm Sunday to hear from virtually every nursery or key stage one child that their school had bred and released Painted Lady butterflies earlier in the year. September and October records were much more in evidence after a cooler summer.

#### Widespread & common





First: 2 Jan Last: 30 Dec

Peak week: 23-29 Jul

40 Pea	cock: 2020-2	023				
	1 sighting			ő		
	2-9 max seen	48			000	
	10+ max seen				000	
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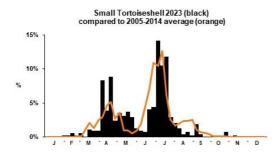
Distributio	n % squares
2023	82% (511)
2022	76% (455)
2015-19	63%
mean	

Abundance (transects)			
2023	29		
2022	24		
2015-19 mean	20		

Distribution change	
Up 46% compared with	
2015-2019	

Abundance change
Up 45% compared with
2015-2019

The proportions of spring and summer flights was reversed compared to last year with more recorded in the latter than the former. Both fitted into the longer-term flight pattern but there were pleasing increases in both distribution and abundance. There were 30 September and October records but as there are constant records throughout August and September it is perhaps harder to argue for a partial second generation rather than just more adults that emerged in July not going into hibernation as early as it appears they did in the hot weather of 2022.





First: 2 Feb

Last: 10 Nov

Peak week: 9-15 Jul

40	Small Tortoi	seshell:	2020-2023		0.0	••••	
	<ul><li>1 sightin</li></ul>				##		
	2-9 max						
30	10+ max	seen	0				
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Distributio	n % squares
2023	54% (337)
2022	69% (414)
2015-19	66%
mean	

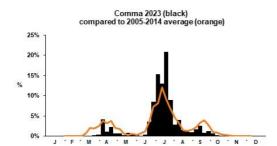
Abundance (transects)				
2023	4			
2022	9			
2015-19 mean	19			

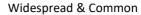
Distribution change
Down 18% compared with
2015-2019

Abundance change				
Down 76% compared with				
2015-2019				

This was not a good year for the Small Tortoiseshell. Given the increase in squares covered in 2023, the drop of 77 squares with records is alarming, as is the abundance figure down to 4 which is a huge drop compared to last year and even more so against the longer-term mean. This is the lowest figure in the last decade. The map shows that there are generally lower numbers in Middlesex with many squares only recording them singly, compared with greater numbers in Hertfordshire. There was a slightly greater late summer/early autumn presence than last year, but numbers were still low It looks as if the early Peacock-like hibernation may be becoming the norm.

#### Comma Polygonia c-album







First: 7 Jan

Last: 3 Nov

Peak week: 16-22 Jul

40	Comma: 20 1 sightir 2-9 max	ng		0	/o O		
30	10+ max     2015-20		000	0 0	o	000	
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70		0					
	90	00	10	20	30	40	50

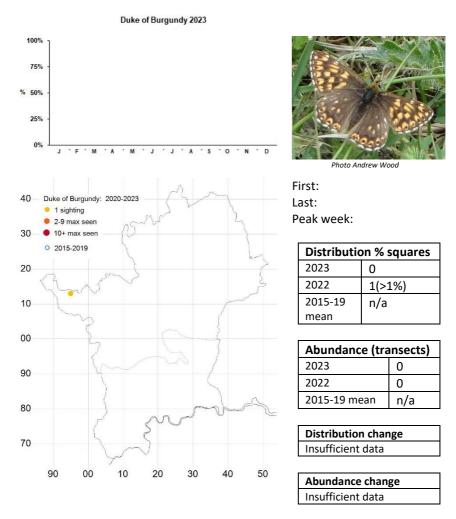
Distribution % squares				
2023	78% (482)			
2022	76% (457)			
2015-19	64%			
mean				

Abundance (transects)					
2023	15				
2022	14				
2015-19 mean	15				

Distribution change
Up 22% compared with
2015-2019

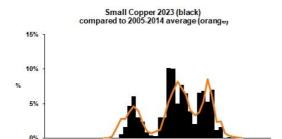
Abundance change
Unchanged compared with
2015-2019

The Comma had a reasonable year with only minor changes in its abundance and a slight increase in distribution which may be due to greater observer coverage. The number over-wintering from 2022 looks to have been small but the summer emergence was up to strength and unlike 2022 there was clear evidence of a smaller autumn emergence. They were not observed on autumn nectar in the numbers that would have been expected a few years ago. This suggests that their flight pattern may be changing in a similar way to the Small Tortoiseshell



The third year of inclusion in this report, but only to note that there were no records of this rare species in our area. 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 other rare species there.

#### **Small Copper** *Lycaena phlaeas*



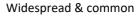




Photo Chris Benton

First: 8 Apr Last: 22 Oct

Peak week: 16-22 Jul

40	Small Co	pper: 2020	)-2023 —		1		
30		nax seen nax seen -2019	65		0 0	0	
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70							
	90	00	10	20	30	40	50

Distribution % squares					
2023	55% (339)				
2022	45% (269)				
2015-19	32%				
mean					

Abundance (transects)					
2023	14				
2022	6				
2015-19 mean	10				

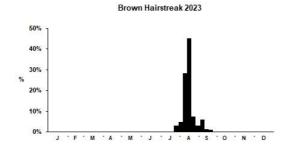
Distribution change
Up 72% compared with
2015-2019

Abundance change
Up 40% compared with
2015-2019

A good bounce back for this attractive butterfly after last year's fall. The flight chart shows something close to the longer-term but with a later start in the spring, no doubt due to the poor spring weather. Unlike last year the peak was not in the third brood but in the mid-summer one. As is usual, the best counts came from some of the rare areas of heathland in Hertfordshire at Nomansland Common, Patmore Heath and Chorleywood Common, these sites widely spaced across Hertfordshire. In Middlesex there is a strong population at Osterley Park.

#### Brown Hairstreak Thecla betulae

Rare & restricted to Middlesex





First: 24 Jul

Last: 23 Sep

Peak week: 13-19 Aug

40	Brown Ha	airstreak: 2	2020-2023	5	1	~	
30-		nax seen nax seen -2019	(5	-2 \J		4	
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	90	00	10	20	30	40	50

Distribution % squares	
2023	3% (21)
2022	3% (20)
2015-19	1%
mean	

Abundance (transects)		
2023	2	
2022	No data	
2015-19	No data	
mean		

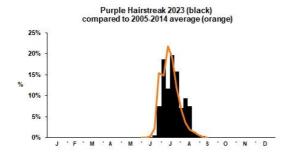
Distribution change
Insufficient data

Abundance change
Insufficient data

A shorter flight period than last year but more Middlesex squares have records so there is probably a mix of both expansion and increased observation. New areas include Ponders End in the Lea Valley and Wormwood Scrubs. It is now recorded on transects at Perivale Wood, Wormwood Scrubs, Horsenden Hill west and east so it is possible to produce an abundance figure. So far it has failed to cross the border into the modern area of 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





. . .

First: 13 Jun Last: 8 Sep

Peak week: 16-22 Jul

40-	Purple Hairstreak:  1 sighting	2020-2023	7			
30	<ul><li>2-9 max seen</li><li>10+ max seen</li></ul>	_05	- 400	0		}
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	<u></u>	0	3	3		
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Distribution % squares		
2023	13% (83)	
2022	16% (94)	
2015-19	13%	
mean		

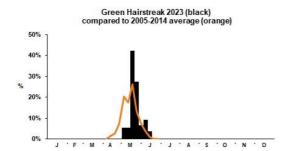
Abundance (transects)	
2023	12
2022	7
2015-19 mean	7

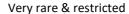
Distribution change
Unchanged compared
with 2015-2019

Abundance change		
Up 70% compared with		
2015-2019		

A drop in distribution but an increase in abundance. This latter increase may be a result of the butterflies appearing lower down on nectar and searching the ground for salts, after heavy rain washed honeydew off the higher leaves of trees. The flight period was slightly later than the longer-term average probably due to the cool spring and this resulted in a final flight date about three weeks later than 2022.

### **Green Hairstreak** Callophrys rubi







First: 28 Apr Last: 17 Jun

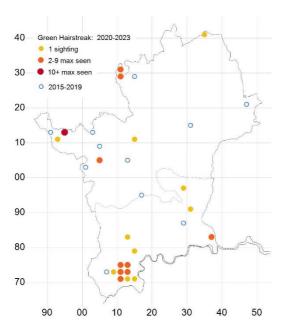
Peak week: 14-20 May

Distribution % squares		
2023	2% (11)	
2022	2% (10)	
2015-19	2%	
mean		

Abundance (transects)	
2023	3
2022	7
2015-19 mean	4

Distribution change
Unchanged compared
with 2015-2019

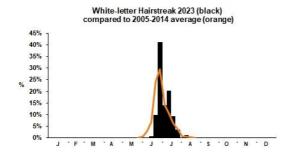
Abundance change	
Down 25% compared	
with 2015-2019	



The distribution measured by squares didn't change significantly but in fact it did appear at two new sites for this survey period with records from Trent Park in Enfield and Tower Hamlets Cemetery Park, both on the eastern side of Middlesex. Abundance dropped but when a butterfly is only recorded on a few transects in small numbers there tend to be fluctuations that may not be significant.

#### White-letter Hairstreak Satyrium w-album

#### Common around elm





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First: 17 Jun Last: 10 Aug

Peak week: 25 Jun-1 Jul

	letter Hairstre ighting	Sak. 2020-2	.023	000	0	
	max seen	05	-77-6°	0	- 4	
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90	00	10	20	30	40	50

Distribution % squares		
2023	6% (37)	
2022	6% (34)	
2015-19	9%	
mean		

Abundance (tra	insects)
2023	4
2022	1
2015-19 mean	2

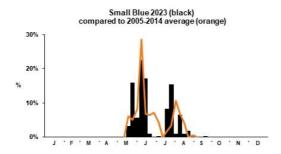
Distribution change
Down 33% compared
with 2015-2019

Abundance change		
Up 100% compared with		
2015-2019		

Not a great deal of change compared to 2022, the comments about abundance for Green Hairstreak also apply to this species. It is likely that many of the open circles from the prior five-year survey would gain colour if someone wanted to concentrate on this species as a project for 2024. For instance, recording at a private site in north east Hertfordshire readily produced records during 2023 around the abundant elm. Look out for distinctive elm flowers in the spring before leaves appear and revisit from mid-June to mid-August and look up in sunny weather for small dark butterflies flitting around the leaves.

#### Small Blue Cupido minimus

#### Rare & restricted





First: 14 May

Last: 23 Aug

Peak week: 4-10 Jun

40	Small Blue: 2020-2023			
30	2-9 max seen 10+ max seen 2015-2019	50		
20	A Law		•	
10				
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90		0		
80		· ·		
70	(	3	**	

Distribution % squares	
2023	4% (27)
2022	3% (19)
2015-19 mean	2%

Abundance (transects)		
2023	6	
2022	5	
2015-19 mean	89	

Distribution change
Up 150% compared with
2015-2019

Abundance change	
Too little data to calculate	

There was a further increase in distribution for this species, that was twenty years ago absent from the county and is now well distributed along the Chiltern edge of Hertfordshire. Much of this increase is down to intensive surveying, in cooperation with farmers and landowners, in the Royston and Barley areas. The Small Blue seems to have a great ability to detect sites with its larval food plant, kidney vetch. For instance it was found at a new site on an island of rough ground with the plant growing at Aldwickbury Golf Course between Harpenden and Wheathampstead.

#### Holly Blue Celastrina argiolus

#### Widespread & common

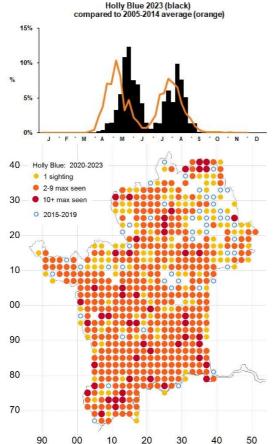




Photo Chris Benton

First 17 Mar Last: 15 Nov

Peak week: 21-27 May

Distribution % squares		
2023	76% (472)	
2022	62% (376)	
2015-19	55%	
mean		

	Abundance (transects)					
	2023	29				
ĺ	2022	11				
ĺ	2015-19 mean	13				

Distribution change
Up 38% compared with
2015-2019

Abundance change			
Up 123% compared with			
2015-2019			

The Holly Blue experienced a very successful year, being seen in almost a hundred more squares than 2022 and vastly increasing its abundance too. Many recorders commented on its numbers and presence in 2023. The balance between the two broods was very close this year despite its flight period starting well beyond the longer-term pattern in both broods. There were 28 October and November records in 2023, suggesting a continuing small and partial third brood. Unlike 2022 these were spread over as many sites as there were records.

### **Brown Argus** Aricia agestis

#### Widely distributed

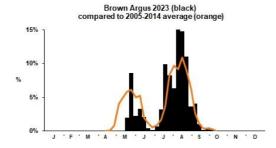




Photo Chris Benton

Brown Argus: 2020-2023 1 sighting 2-9 max seen 30 10+ max seen 0 2015-2019 20 10 00 90 80

70

90

00

10

20

30

First: 14 May Last: 14 Oct

Peak week: 6-12 Aug

Distribution % squares				
2023	31% (191)			
2022	19% (116)			
2015-19	20%			
mean				

Abundance (transects)			
2023	32		
2022	7		
2015-19 mean	15		

Distribution change		
Up 55% compared with		
2015-2019		

Abundance change			
Down 55% compared with			
2015-2019			

Like the Holly Blue this species numbers and wide distribution were much remarked upon in 2023. There was a fairly small spring brood but a very large summer brood Was this helped by the cool, damp spring that resulted in abundant larval foodplant growth? Unlike last year the highest counts were split between chalk and brownfield sites. It is these brownfield sites where it would have benefited from the growth rather than dessication of the cranesbill and storks-bill larval food plants.

40

50

#### **Common Blue** *Polyommatus icarus*

## Common Blue 2023 (black) compared to 2005-2014 average (orange)

#### Widespread & common



First: 17 Apr

**Last:** 17 Apr

Peak week: 13-19 Aug

40	Common Blu	e: 2020	-2023		0		200	20	
	<ul><li>1 sighting</li></ul>					000			
	2-9 max s	een	o •	0			•		
30	10+ max s	seen					000	0	
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		2	2000	200	000				0
30		1				000	200	0	1
		0		0	1				(5)
70		1		22					
		Ö	-0						

Distribution % squares				
2023	66% (410)			
2022	61% (366)			
2015-19	54%			
mean				

Abundance (transects)			
2023	21		
2022	26		
2015-19 mean	26		

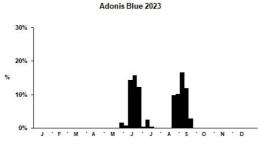
Distribution change			
Up 13% compared with			
2015-2019			

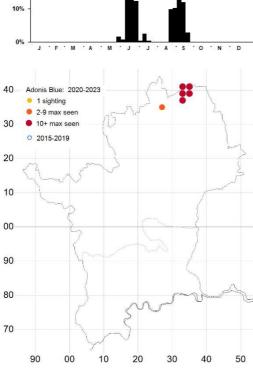
Abundance change			
Down 18% compared with			
2015-2019			

I did not feel that 2023 had been a good year but with all the records in it appears to be doing well in terms of distribution, although its abundance seems to have dropped. The flight pattern in terms of balance between the broods and their timing was close to the longer term. One note of caution is that some observers are still recording early Holly Blues as Common Blue, and it is possible that this confusion persisted when they were both flying which may have led to some of the increases in distribution above. Please check any blues near ivy and holly, especially in urban areas as they are most likely to be Holly Blue, as is any blue seen above head height.

#### **Adonis Blue** Polyommatus bellargus

#### Very rare & restricted







First: 21 May Last: 10 Sep

Peak week: 27 Aug-2 Sep

Distribution % squares	
2023	1% (5)
2022	1% (6)
2015-19	>1%
mean	

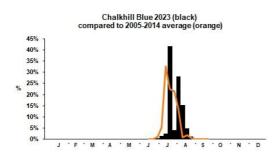
Abundance (transects)	
2023	25
2022	26
2015-19 mean	2

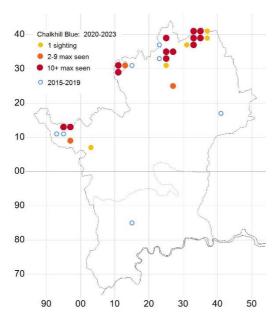
Distribution change	
Unchanged since 2015-	
2019	

Abundance change
Up 1250% compared with
2015-2019

The known colonies of this likely introduced species persist at Therfield Heath and it is present, in very small numbers, east of Clothall Common near Baldock. 2023's flight period started two weeks later than 2023 and ended three works earlier with the two broods being very similar in size.

#### Chalkhill Blue Lysandra coridon





Restricted to chalk, often common where present



Photo Andrew Wood

First: 6 Jul Last: 13 Sep

Peak week: 23-29 Jul

Distribution % squares	
2023	2% (13)
2022	2% (13)
2015-19	2%
mean	

Abundance (transects)	
2023	103
2022	200
2015-19 mean	188

Distribution change	
Unchanged compared with	
2015-2019	

Abundance change	
Down45% compared with	
2015-2019	

Chalkhill Blue was present at all its known colonies. However, the abundance crashed compared to 2022, dropping back almost to 2020 levels. It is interesting to note that the abundance totals in previous years have been as high as 780 in 2015 and 657 in 2004. The annual standardised count at Hexton Chalk Pit was also down with a value of 96 in 2023 compared with202 in 2022, a similar drop compared with the transect based abundance figure. Could this be because the cool damp spring was detrimental to larval development?

#### Key to the Species pages Widespread but declining **Common Name** Scientific name Small Skipper 2015 (black) compared to 2000-2009 average (orange) A photo of this species taken by 35% one of our members 30% 25% 20% 15% The flight period showing proportion of species flying in Brian Kniaht any week compared with the 2015-2019 average. First: 16 Jun Small Skipper Last: 16 Aug Peak week: 25 Jun -1 Jul **Distribution % squares** 2023 First sighting 2023 Last sighting 2015-19 Map showing 2 km squares where a Peak Week when most seen mean species has been recorded in 2023 split Distribution % squares. The % and into 1, 2-9 or 10 or more recorded. Abundai number of 2km squares with records in which this species was recorded. 2023 Abundance (transects) Average 2023 number of a species seen on transects 2015-19 (so comparable year on year) mean Distribution and Abundance change compared with the recent 5-year Distributi period to smooth out year to year Up 3% co comparisons. 2015-202 Abundance change Some notes on the species during the year, together with interesting or unusual observations

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