

Hertfordshire & Middlesex Butterflies 2018



**Butterfly
Conservation**

Saving butterflies, moths and our environment

Andrew Wood

February 2019

Contents

Section	Page
Introduction	1
Key to species accounts	Back cover
Brimstone	13
Brown Argus	36
Brown Hairstreak	30
Chalkhill Blue	38
Clouded Yellow	12
Comma	28
Common Blue	37
Dark Green Fritillary	20
Dingy Skipper	3
Essex Skipper	5
Gatekeeper	18
Green Hairstreak	32
Green-veined White	11
Grizzled Skipper	4
Holly Blue	35
Large Skipper	7
Large White	9

Section	Page
Marbled White	19
Meadow Brown	17
Monarch	2
Orange Tip	8
Painted Lady	25
Peacock	26
Purple Emperor	23
Purple Hairstreak	31
Red Admiral	24
Ringlet	16
Silver-washed Fritillary	21
Small Blue	34
Small Copper	30
Small Heath	15
Small Skipper	6
Small Tortoiseshell	27
Small White	10
Speckled Wood	14
White Admiral	22
White-letter Hairstreak	33

Cover Photo: Brown Hairstreak in Ickenham, photo by Sharon Newson

Introduction

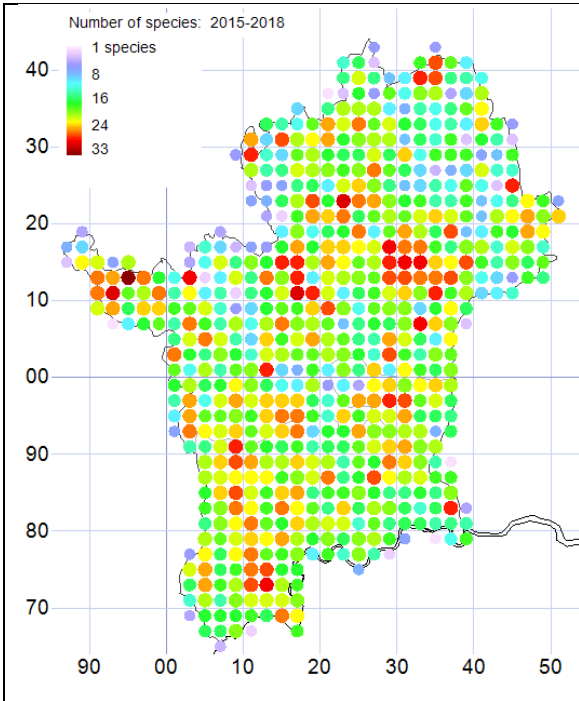
2018 started off with a generally mild January followed by cold February, March and early April leading to delayed emergences and low spring numbers. However, from the third week of April through to August the weather was very warm and dry meaning that emergence times rapidly caught up and large numbers of records were received. From late August onwards, the weather became more unsettled and many species had a rather sudden end to their flight period with numbers seen rather lower than usual.

We received 43717 records compared to 40635 records in 2017. Many of the 2964 recorders and records were again from the three weeks in the summer when the Big Butterfly Count was underway. As with any citizen science project there are some records that cannot be accepted but many of them help us to fill in gaps in the distribution of many species, particularly in urban areas, of which we have many.

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 three weeks in high summer and to have included them would unduly skew these charts.

Please read and use this booklet and, if you are not already a contributor, send in your sightings on paper or by email to the branch record collator by November 9 2019. Our branch website <http://www.hertsmiddx-butterflies.org.uk/> has a very active sightings page and we welcome all submissions to this too. Anything sent there or submitted via the 'iRecord Butterflies' app is added to the records received for inclusion in the branch database and this report.

Branch Contacts	
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Recording Effort

In 2018 we received records from 622 squares in our area. This means we have records from 679 squares for our current 2015-2019 survey period.

This map shows the number of species recorded for each square. For 2019, which is the last of the current 5-year period. We particularly need records from the under recorded purple and blue squares.

Our challenge is to turn this whole map green/yellow/red!

Species not included in the main section **Heath Fritillary *Melitaea athalia***

Between 27 June and 3 July several recorders reported between 1 and 3 Heath Fritillary from Broxbourne Wood. As the nearest colonies are about 40 miles away in Essex and it is not historically known from this site, it seems likely that these were a release.

Dingy Skipper *Erynnis tages*

Restricted and rare

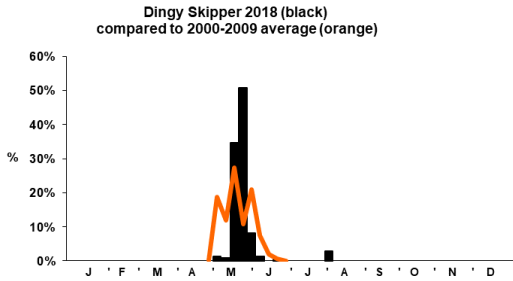
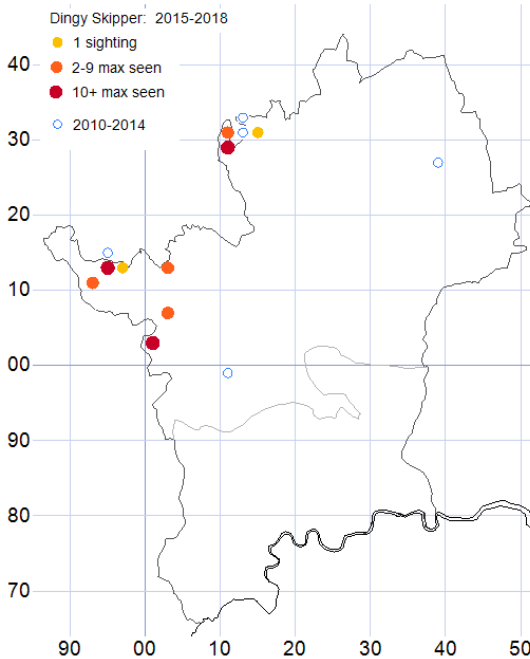


Photo Chris Benton



First: 16 May
Last: 5 Aug
Peak week: 21-27 May

Distribution % squares	
2018	1% (5)
2017	1% (6)
2010-14 mean	1%

Abundance (transects)	
2018	9
2017	6
2010-14 mean	13

Distribution change
Unchanged compared with 2010-2014

Abundance change
Down 30% compared with 2010-2014

A slight recovery in abundance was the high point for this butterfly but it is still below its historic numbers. It is not surprising, given the cool spring that the flight period started late but also finished early. All the high counts came from visits to Hexton Chalk Pit rather than on the few transects on which it is recorded. However the subsequent warm summer did lead to a record of a partial second generation as is clear from the flight period chart. Malcolm Hull reported, "at least 7 Dingy Skippers on land at Northfields Rd Tring this afternoon. The males were all super active. A couple were seen in courtship flight and a female crawling on the ground around low growing Birds foot Trefoil, apparently searching for egg laying sites."

Grizzled Skipper *Pyrgus malvae*

Restricted & rare

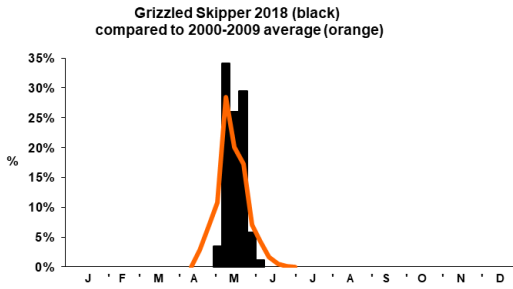
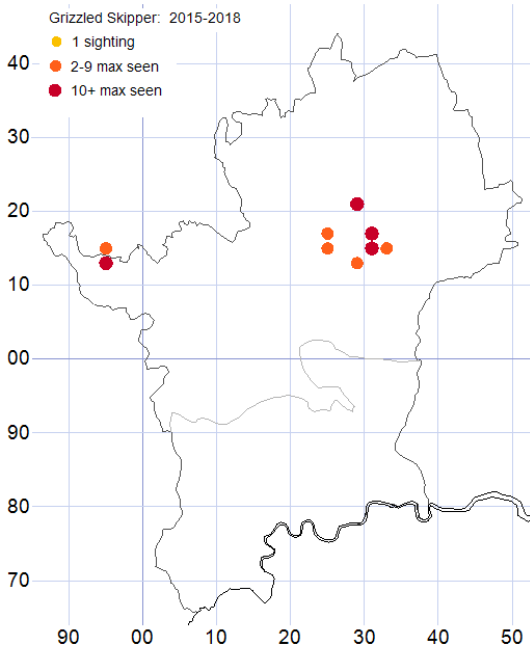


Photo Chris Benton



First: 1 May

Last: 8 Jun

Peak week: 7-13 May

Distribution % squares	
2018	1% (6)
2017	1% (5)
2010-14 mean	1%

Abundance (transects)	
2018	11
2017	6
2010-14 mean	21

Distribution change
Unchanged compared with 2010-2014

Abundance change
Down 48% compared with 2010-2014

A first flight date of 1 May reflects the poor spring and like the Dingy Skipper this did not lead to a later end of the flight, with almost all records restricted to a three-week period in mid-May. Again, like the Dingy Skipper the distribution was unchanged but there was a recovery in abundance compared to 2017, but still well down compared to the longer term. A concentrated day's search around Waterford Heath in May showed how easy it is to miss the butterfly without close observation. It also showed that eggs are often laid on the underside of agrimony leaves, though it is much easier to examine these leaves than the small low growing leaves of wild strawberry.

Essex Skipper *Thymelicus lineola*

Widespread but declining

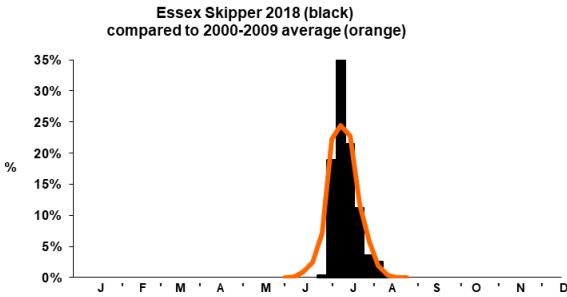


Photo Andrew Wood

First: 11 Jun

Last: 4 Aug

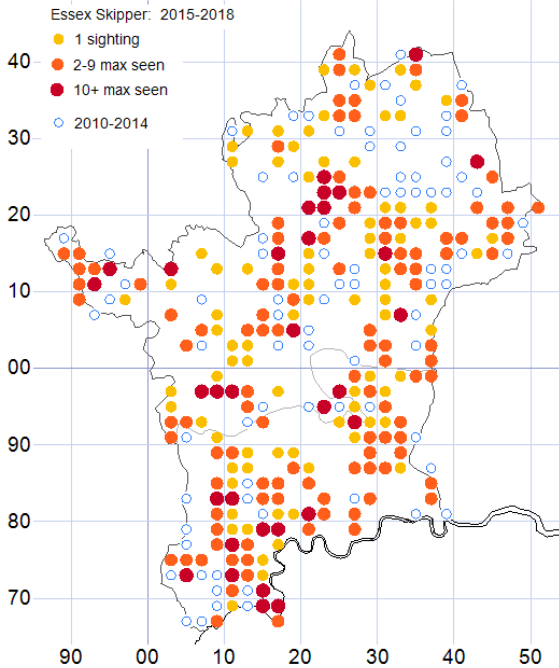
Peak week: 2-8 Jul

Distribution % squares	
2018	14% (69)
2017	18% (109)
2010-14 mean	14%

Abundance (transects)	
2018	8
2017	12
2010-14 mean	13

Distribution change	
No change compared with 2010-2014	

Abundance change	
Down 38% compared with 2010-2014	



Last year I wrote, “A welcome bounce back for this species after some poor years”. This shows the problem of comparing one year with another as both distribution and abundance dropped back in 2018. A late start rose to a sharp flight peak and a finish very close to the historic pattern. This reflects the effect of the cold winter and early spring which must have impeded larval development. This remains a species of some concern with many gaps in its distribution.

Small Skipper *Thymelicus sylvestris*

Widespread but declining

Small Skipper 2018 (black)
compared to 2000-2009 average (orange)

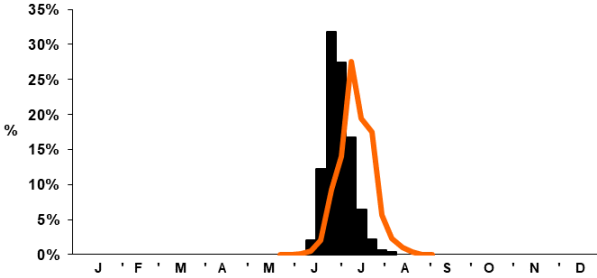


Photo Andrew Wood

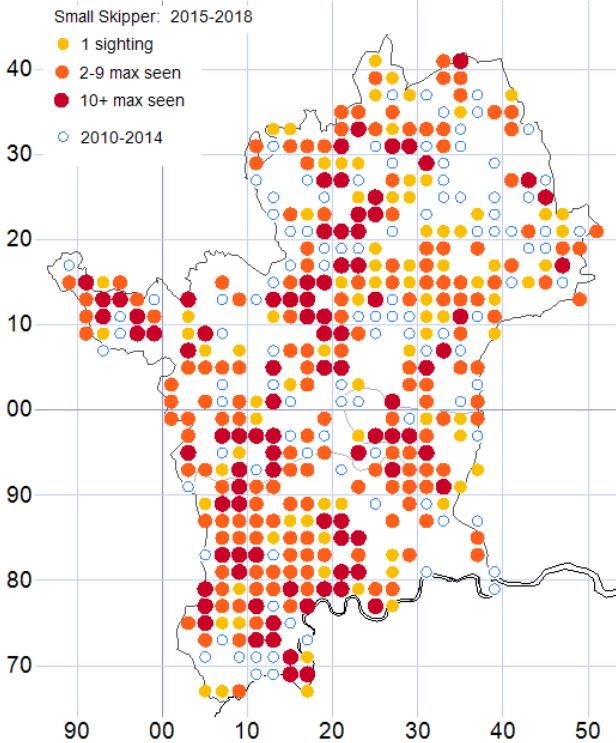
First: 6 Jun
Last: 11 Aug
Peak week: 25 Jun -1 Jul

Distribution % squares	
2018	23% (144)
2017	28% (169)
2010-14 mean	25%

Abundance (transects)	
2018	15
2017	21
2010-14 mean	25

Distribution change
Down 8% compared with 2010-2014

Abundance change
Down 40% compared with 2010-2014



The decline in distribution and abundance of the Small Skipper reflects that of the Essex Skipper and the status of both species continues to give cause for concern. I am still concerned about early June records of Small Skipper, especially in late years, as querying several has produced photographs of Large Skippers which are the expected golden skipper species at that time of the year. Please exercise caution when identifying this group of Skippers, all of them are small but the more patterned wings and less active behaviour are clues that you are looking at a Large Skipper.

Large Skipper *Ochlodes faunus*

Widespread & common



Photo Andrew Wood

First: 27 May

Last: 5 Aug

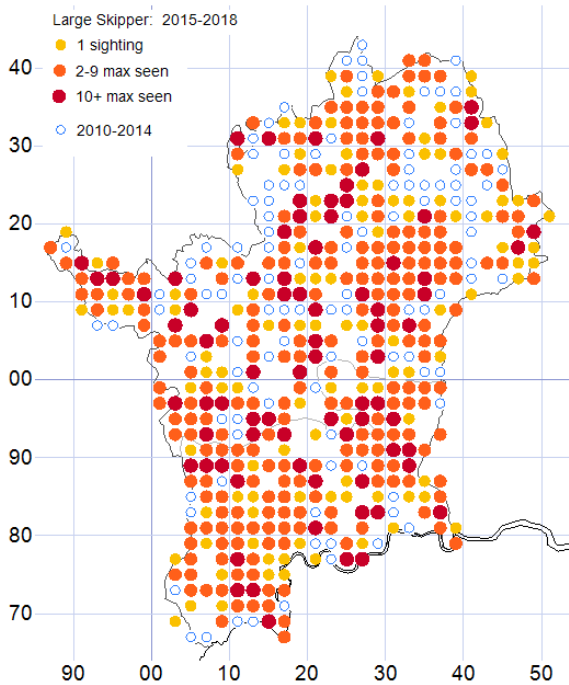
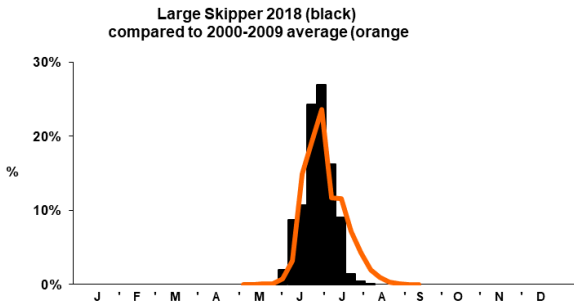
Peak week: 25 Jun – 1 Jul

Distribution % squares	
2018	29% (177)
2017	39% (235)
2010-14 mean	40%

Abundance (transects)	
2018	20
2017	18
2010-14 mean	29

Distribution change
Down 27% compared with 2010-2014

Abundance change
Down 31% compared with 2010-2014



The distribution showed a further decline, although abundance at recorded sites held up. However, the general trend for this, the commonest Skipper, continued its downward trend. The late spring seemed to have no effect on the start of its flight period, but it may be that the hot summer curtailed the length of the flight time with it peaking and falling off very quickly. The bias towards Middlesex noted last year continued in 2018. The large empty area in north east Hertfordshire suggests that this species is being adversely affected by intensive agriculture.

Orange Tip *Anthocharis cardamines*

Widespread & Common

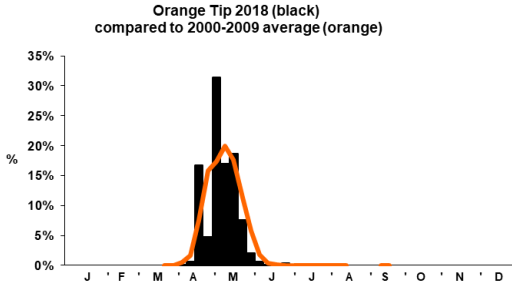
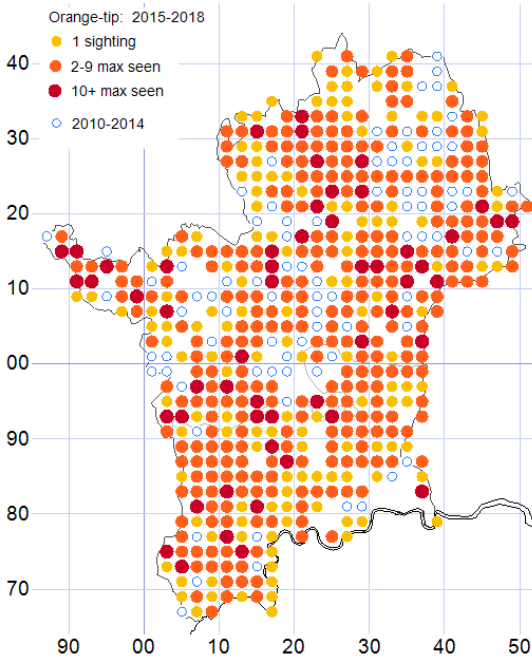


Photo Andrew Wood



First: 13 Apr
Last: 7 Jul
Peak week: 30 Apr – 6 May

Distribution % squares	
2018	42% (263)
2017	46% (279)
2010-14 mean	42%

Abundance (transects)	
2018	18
2017	16
2010-14 mean	21

Distribution change	
No change compared with 2010-2014	

Abundance change	
Down 14% compared with 2010-2014	

A slight change from last year but generally this common species is not showing huge changes on recent years. There was a late start to the flight period coinciding with poor spring weather but from May numbers picked up as the weather improved. We did get a few mid-July records suggesting that there may have been a very partial second brood. This was unexpected as the delayed start to the adult flight period would have balanced the advantages of fast development of larva in the warm spring. If the reports were of females, I would be sceptical, but some were confirmed as males which can't really be mistaken for anything else.

Large White *Pieris brassicae*

Widespread & common

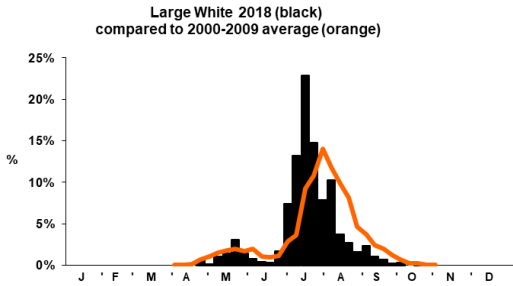
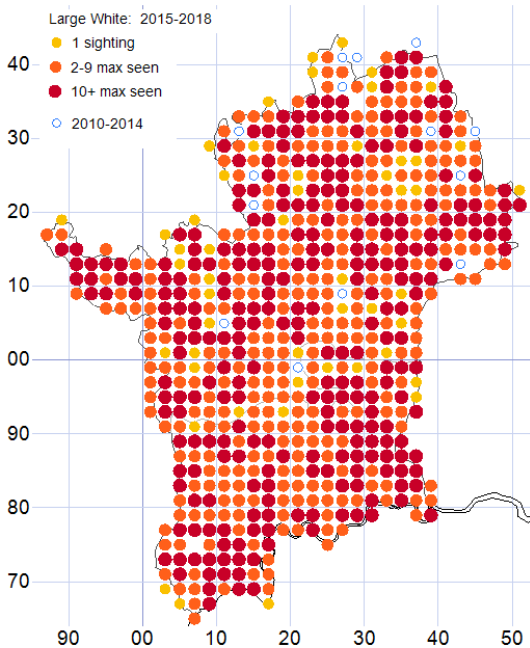


Photo Andrew Wood



First: 17 Apr

Last: 13 Oct

Peak week: 9-15 Jul

Distribution % squares	
2018	82% (511)
2017	72% (436)
2010-14 mean	67%

Abundance (transects)	
2018	78
2017	28
2010-14 mean	38

Distribution change	
Up 22% compared with 2010-2014	

Abundance change	
Up 105% compared with 2010-2014	

A bumper year for the Large White with big increases in both numbers and distribution. Some of the distribution increase is due to increased recording in north east Hertfordshire where they were probably always present but over our survey period there is hardly a square where this species has not been found. The usual small spring emergence produced offspring that developed very quickly to produce an early peak in the warm first half of July.

Small White *Pieris rapae*

Widespread & common

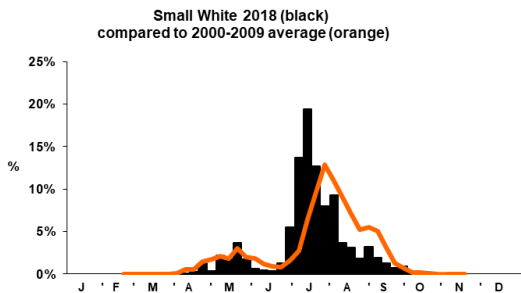
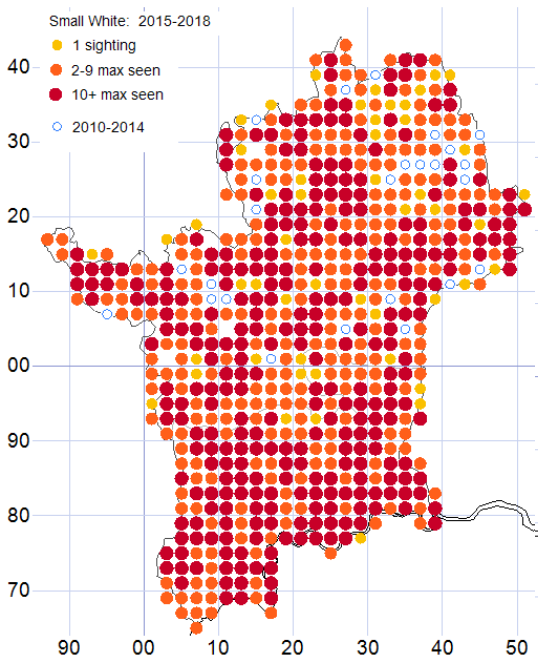


Photo Andrew Wood



First: 26 Mar

Last: 29 Oct

Peak week: 9-15 Jul

Distribution % squares	
2018	84% (523)
2017	75% (453)
2010-14 mean	73%

Abundance (transects)	
2018	106
2017	45
2010-14 mean	65

Distribution change	
Up 12% compared with 2010-2014	

Abundance change	
Up 63% compared with 2010-2014	

With a distribution similar to the Large White and a huge increase in abundance this species was as successful as its large relative. Interestingly there are over our whole survey period more empty squares in north east Hertfordshire than for the Large White. It would be interesting to visit that area of blue squares in north east Hertfordshire to see if it is really absent. It is a very rural area around Westmill, Dassells, Wood End, the Hormeads and Albury.

Green-veined White *Pieris napi*

Widespread & common

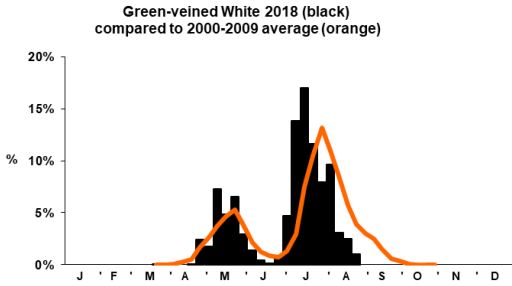
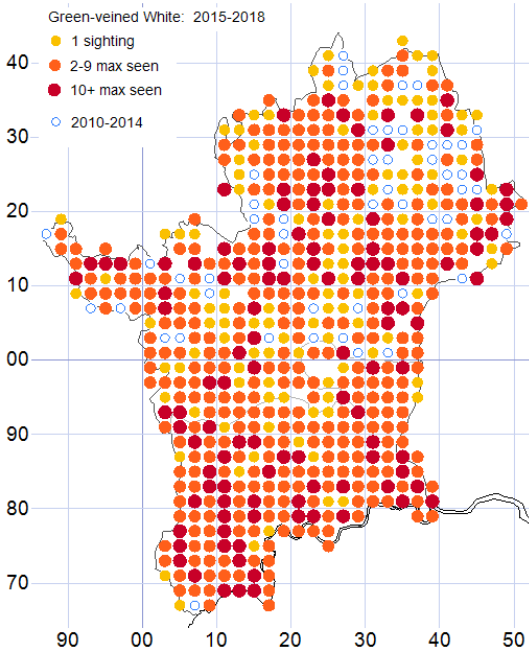


Photo Chris Benton

First: 17 Mar

Last: 5 Nov

Peak week: 10-16 Jul



Distribution % squares	
2018	68% (421)
2017	50% (304)
2010-14 mean	52%

Abundance (transects)	
2018	62
2017	26
2010-14 mean	51

Distribution change
Up 31 % compared with 2010-2014

Abundance change
Up 20% compared with 2010-2014

Still the least common of the three whites, but like its close relatives a very good year. As it uses wild cruciferous plants as larval foods its absence from the arable areas of north east Hertfordshire is likely to be more an accurate reflection of distribution rather than under recording. The flight period was very long with records from mid-March to early November, that is a month later than in 2017 which is perhaps surprising given that the summer brood emerged and peaked noticeably earlier than the longer-term average.

Clouded Yellow *Colias croceus*

Less common migrant

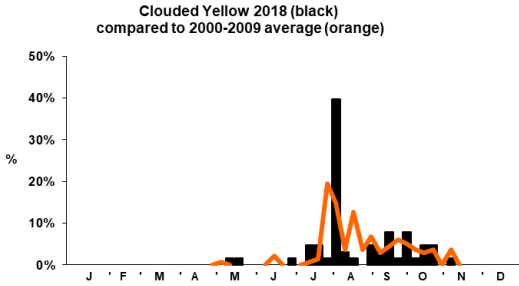
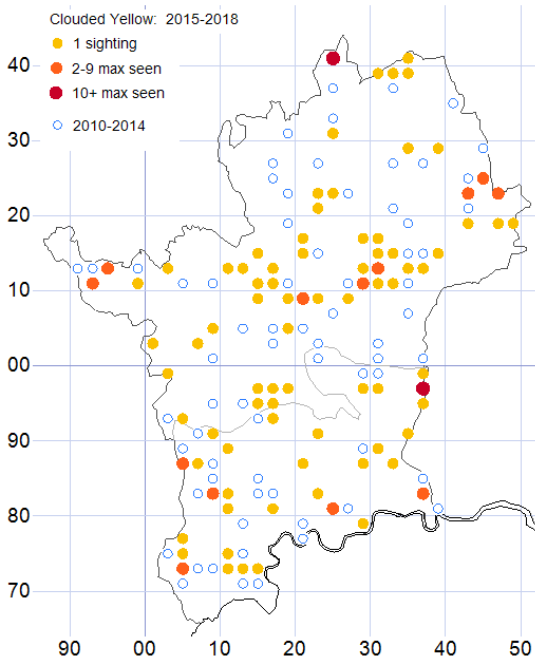


Photo Andrew Wood



First: 18 Apr

Last: 2Nov

Peak week: 30 Jul – 5 Aug

Distribution % squares

2018	6% (37)
2017	5% (28)
2010-14 mean	5%

Abundance (transects)

2018	2
2017	1
2010-14 mean	2

Distribution change

Up 20% compared with 2010-2014

Abundance change

Unchanged compared with 2010-2014

Another quiet year for this migrant species with most records being of single examples. It was recorded in slightly more squares than in 2017 but there is little significance in that, although it is interesting to note that most Middlesex records were near the Rivers Thames, Colne or Lee suggesting the use of these valleys as migration routes. The high peak in early August comes from observations by Laurence Drummond who noted, "There are a lot of Lucerne crops west of Bishops Stortford with Clouded Yellows seen; at Wickham Hall 2, at Hadham Park 3, at Albury End 1" The pale *helice* form was seen on 20 Oct at King George Reservoir in the Lea Valley, the same site as the early April record.

Brimstone *Gonepteryx rhamni*

Widespread

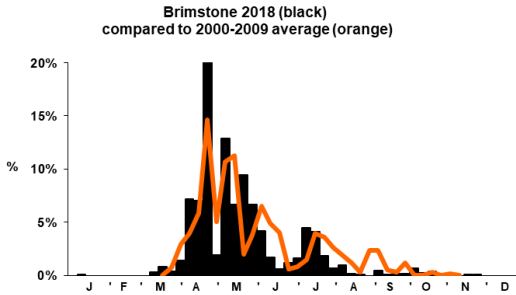
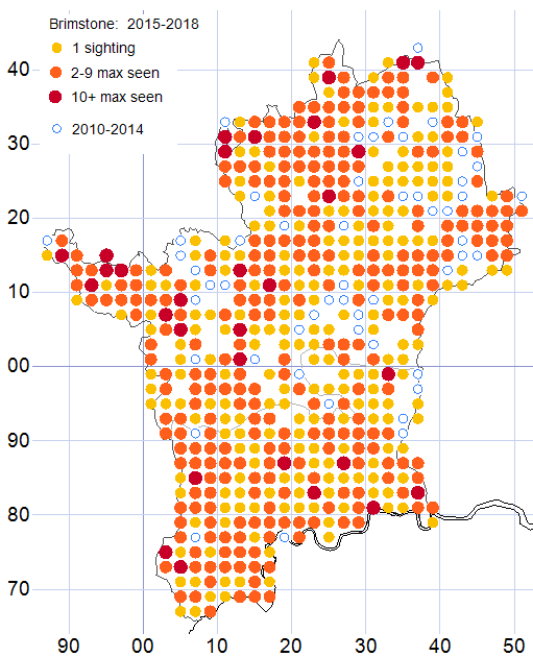


Photo Chris Benton



First: 10 Jan
Last: 14 Nov
Peak week: 16-22 Apr

Distribution % squares	
2018	52% (326)
2017	52% (315)
2010-14 mean	39%

Abundance (transects)	
2018	20
2017	17
2010-14 mean	21

Distribution change
Up 33% compared with 2010-2014

Abundance change
Down 5% compared with 2010-2014

The Brimstone is probably the most consistent of the commoner butterflies in our area, 2018 was yet another year of small variation from the previous year. The consistently wider range than the recent mean suggests a genuine increase. Near Alexandra Palace in north London, Diane Andrews reported, “a female on 19th laid a few eggs on our alder buckthorn which at the time only had a couple of very young tender leaves. More eggs were laid there on May 7th, 8th and 28th, but the caterpillars all disappeared presumably predated by birds”. Diane also found eggs on some seedlings and with protection was able to breed through 12 adults between June 22 and 29.

Speckled Wood *Pararge aegeria*

Widespread & common

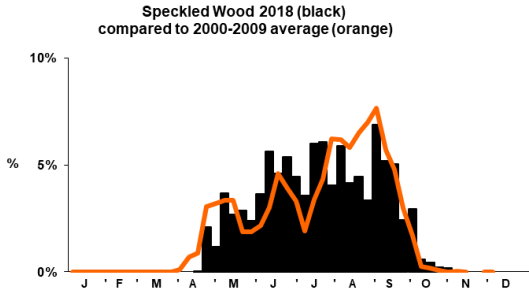
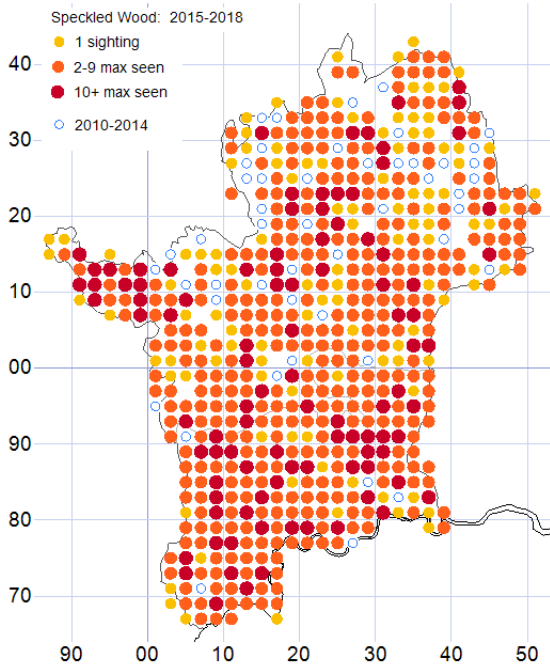


Photo Chris Benton



First: 25 Jan

Last: 31 Oct

Peak week: 27 Aug-2 Sep

Distribution % squares	
2018	70% (423)
2017	61% (370)
2010-14 mean	60%

Abundance (transects)	
2018	67
2017	50
2010-14 mean	58

Distribution change
Up 17% compared with 2010-2014

Abundance change
Up 16% compared with 2010-2014

A good year for this species that favours light woodland and other shadier places. John Archer reported a very early January record, "I've just seen a Speckled Wood on the wing at Bow Creek in east London. It looked a bit tatty, suggesting that it was one hanging on from last year, and there were certainly one or two about in the area very late into autumn". The poor early spring weather meant a generally late and small emergence, but numbers increased steadily to give a strong summer brood and the usual end of August to start of September peak.

Small Heath *Coenonympha pamphilus*

Widespread

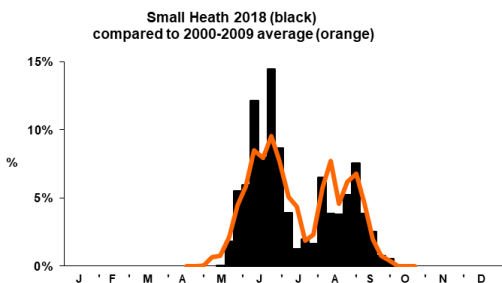
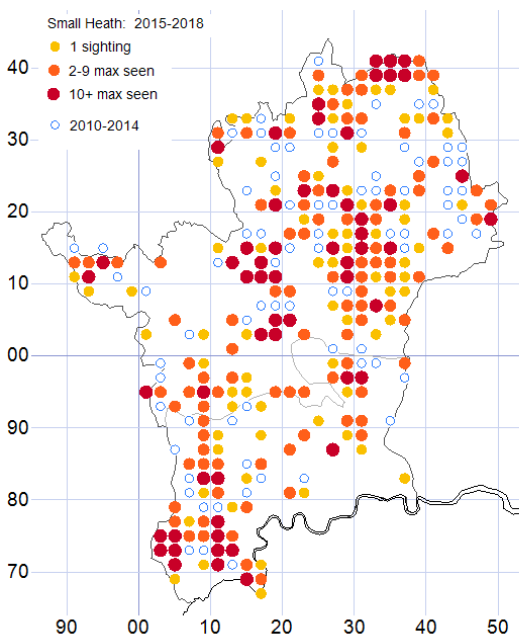


Photo Andrew Wood



First: 9 May

Last: 13 Oct

Peak week: 18-24 Jun

Distribution % squares	
2018	23% (145)
2017	19% (116)
2010-14 mean	17%

Abundance (transects)	
2018	63
2017	45
2010-14 mean	38

Distribution change
Up 35% compared with 2010-2014

Abundance change
Up 66% compared with 2010-2014

A good year for this attractive species, with sightings in areas of eastern Middlesex and south Herts where it had not been noted in the 2010-2014 period. An example is this report from Paul Busby, "Surprised to see a Small Heath on a relatively new wild flower bed, end of Jim O'Neil Walk by Victoria Road, South Ruislip. The two broods coincided very neatly with the long-term trend, although the peak was around mid-summer rather than late summer as it was in 2017, no doubt a reflection of the favourable May and June conditions, especially considering that the poor spring retarded the first date by 2 and a half weeks compared to 2017.

Ringlet *Aphantopus hyperantus*

Widespread & Common

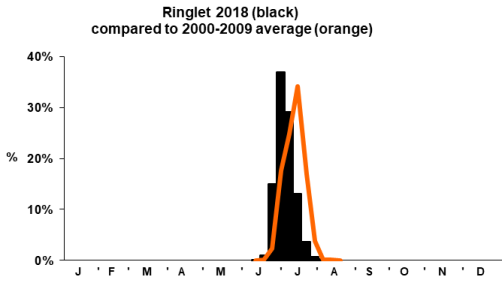
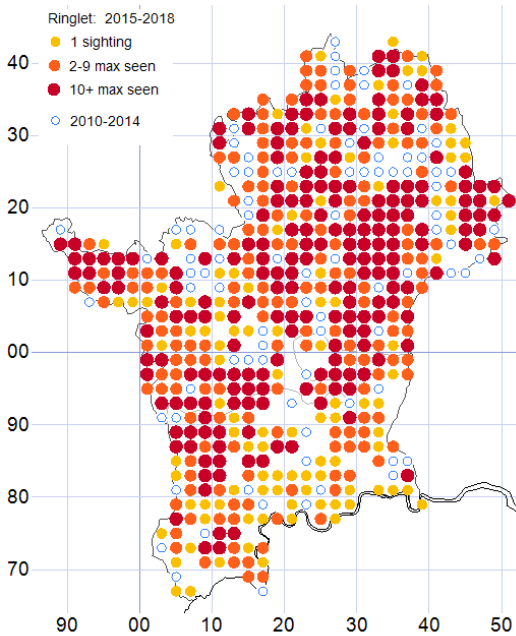


Photo Andrew Wood



First: 6 Jun

Last: 11 Aug

Peak week: 25 Jun – 1 Jul

Distribution % squares

2018	49% (302)
2017	44% (268)
2010-14 mean	44%

Abundance (transects)

2018	100
2017	121
2010-14 mean	122

Distribution change

Up 11% compared with 2010-2014

Abundance change

Down 18% compared with 2010-2014

Some slight change but nothing especially significant compared both with last year and with the longer term. The warm dry summer was probably responsible for the flight period starting and finishing earlier than the longer-term pattern. Although this butterfly is well distributed in both Middlesex and Hertfordshire it is noticeable that it generally occurs in lower numbers in the more built up areas and higher numbers in the more wooded areas of Hertfordshire and north-west Middlesex.

Meadow Brown *Maniola jurtina*

Widespread & Common

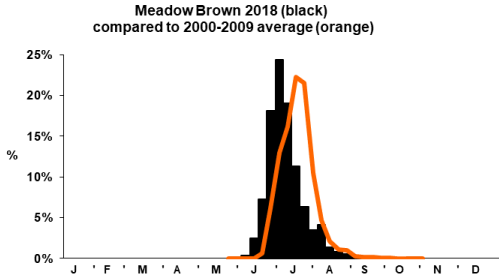
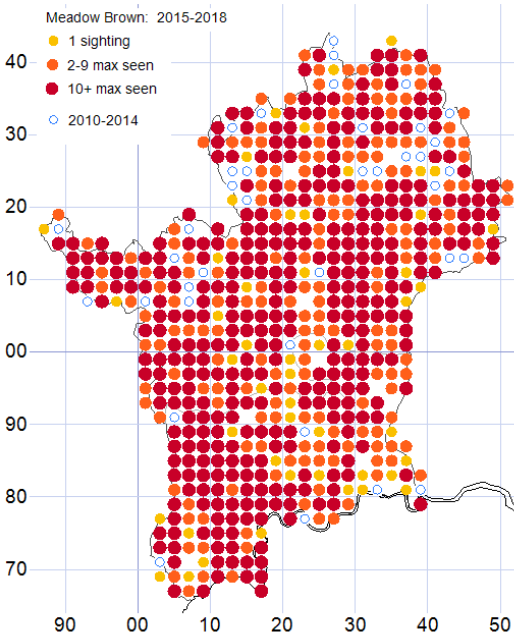


Photo Andrew Wood

First: 27 May

Last: 29 Sep

Peak week: 25 Jun - 1 Jul



Distribution % squares

2018	69% (426)
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2017	69% (419)
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2010-14 mean	63%
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Abundance (transects)

2018	334
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2017	358
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2010-14 mean	287
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Distribution change

Up 10% compared with 2010-2014

Abundance change

Up 16% compared with 2010-2014

Last year's good performance was continued in 2018, doubtless benefiting from the warm dry summer, as with the Ringlet the flight period was pushed forward but lasted longer than the long-term pattern. The main distribution gaps are in north east Hertfordshire (very like the Small White). It's good to note that several gaps in inner London around Tower Hamlets were filled in during 2018.

Gatekeeper *Pyronia tithonus*

Widespread & common

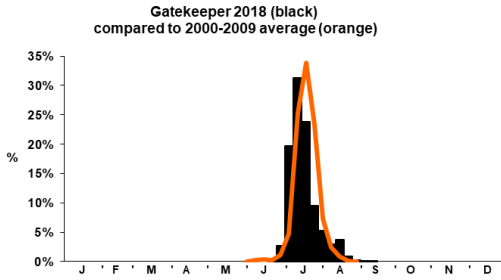
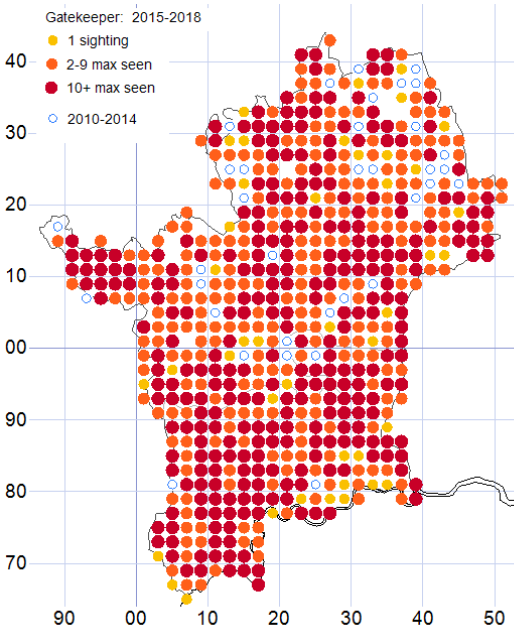


Photo Chris Benton



First: 21 Jun

Last: 14 Sep

Peak week: 9-15 Jul

Distribution % squares

2018	68% (420)
2017	71% (433)
2010-14 mean	65%

Abundance (transects)

2018	76
2017	108
2010-14 mean	91

Distribution change

Up 5% compared with 2010-2014

Abundance change

Down 27% compared with 2010-2014

A little down on 2017, particularly in terms of abundance, why this should be is not clear. Like all the other single brooded browns the flight period was ahead of the longer-term pattern. Peter Clarke noted an unusual form at Norton Green Common on a branch field trip, "One of the highlights was finding a Gatekeeper *ab. excessa* (extra black spots on the forewings) feeding on thistle"

Marbled White *Melanargia galathea*

Widespread in Herts

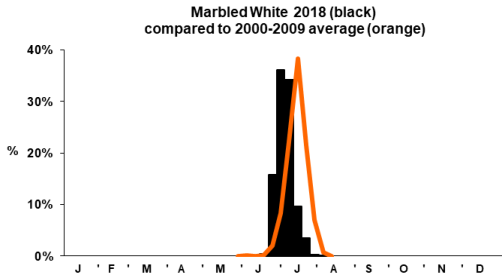
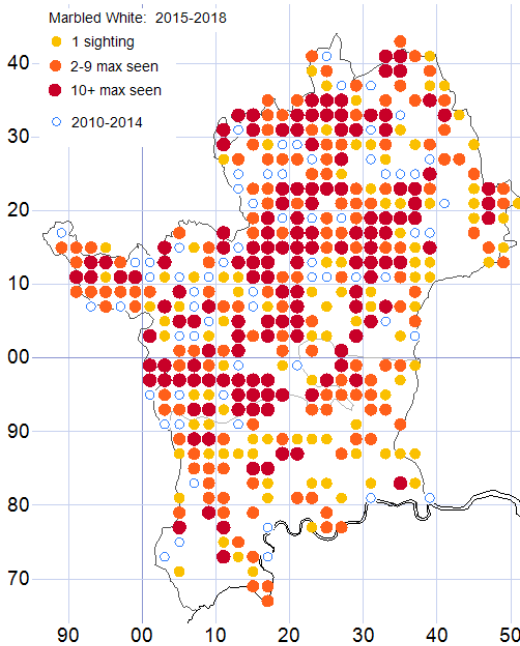


Photo Chris Benton



First: 1 Jun

Last: 4 Aug

Peak week: 25 Jun-1 Jul

Distribution % squares

2018	34% (214)
2017	34% (209)
2010-14 mean	26%

Abundance (transects)

2018	87
2017	71
2010-14 mean	91

Distribution change

Up 17% compared with 2010-2014

Abundance change

Down 4% compared with 2010-2014

Distribution was little changed numerically but comparison with 2017 shows several new squares in central and eastern Middlesex, suggesting that its eastward movement across our area continues. This is remarkable for a butterfly that thirty years ago was confined to the chalky area of north and west Hertfordshire. One area still to be colonised is the arable area west of the Stort valley in eastern Hertfordshire.

Dark Green Fritillary *Argynnis aglaja*

Rare but increasing

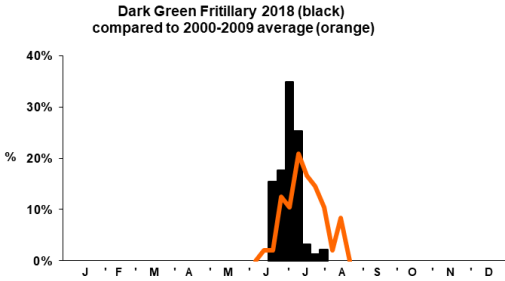
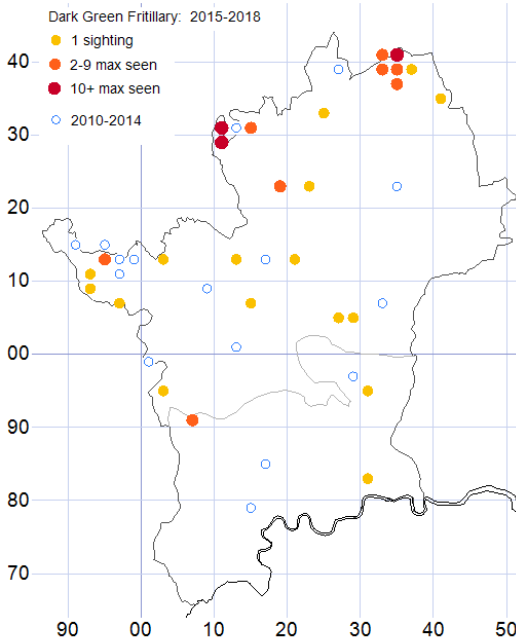


Photo Andrew Wood



First: 16 Jun

Last: 1 Aug

Peak week: 2-8 Jul

Distribution % squares	
2018	2% (11)
2017	2% (13)
2010-14 mean	2%

Abundance (transects)	
2018	7
2017	4
2010-14 mean	20

Distribution change	
Unchanged compared with 2010-2014	

Abundance change	
Down 65% compared with 2010-2014	

As in 2017 a noticeably early flight period, though with a later peak (although with the small numbers seen this may not be statistically significant). As with the Dingy Skipper the best site for this butterfly is Hexton Chalk Pit. It's a shame that we don't have a transect there. All of the double figured counts, bar two, came from this site.

Silver-washed Fritillary *Argynnis paphia*

Locally common in woodland

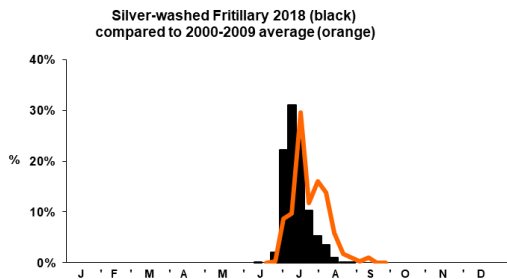
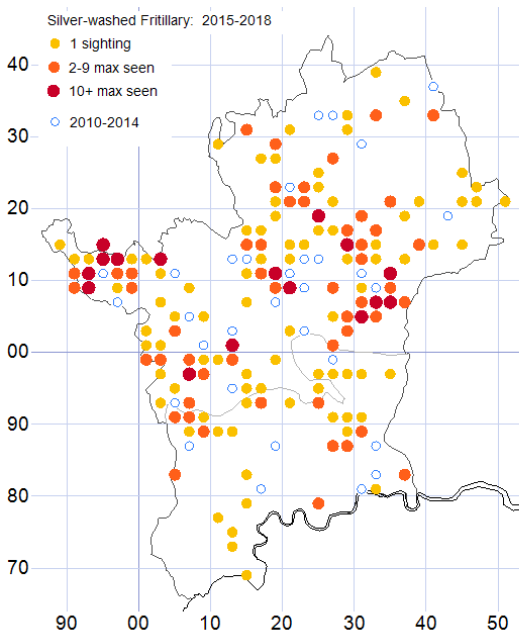


Photo Chris Benton



First: 10 Jun

Last: 22 Aug

Peak week: 2-8 July

Distribution % squares	
2018	15% (91)
2017	11% (69)
2010-14 mean	6%

Abundance (transects)	
2018	14
2017	17
2010-14 mean	13

Distribution change
Up 150% compared with 2010-2014

Abundance change
Up 7% compared with 2010-2014

Another big increase in sites during 2018, with definite evidence of expansion into more areas of Middlesex. For instance Miles Attenborough, “I have never seen one at Coppetts Wood or any of the green or wooded spaces near me so this was very exciting”. It is interesting to note that it was recorded in more squares in 2018 than the Essex Skipper. There were new sites in central Herts too as John Murray observed, “Two Silver-washed Fritillaries flew into the house this afternoon these are the first ever sightings at this site”. Numbers on the transects were slightly down but still above the longer term trend. The warm summer meant a peak ahead of the longer term average but equally an earlier finish to the flight

White Admiral *Limenithis camilla*

Local in woodland

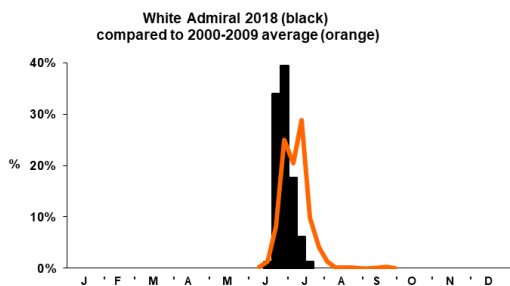
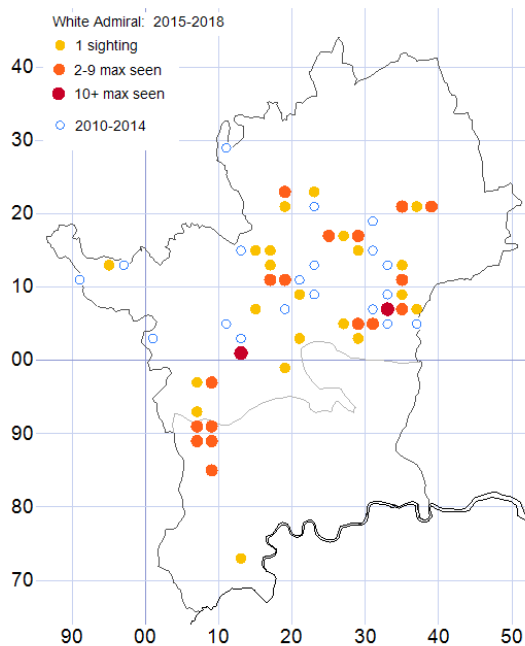


Photo Chris Benton



First: 13 Jun

Last: 21 Jul

Peak week: 25 Jun – 1 Jul

Distribution % squares	
2018	3% (21)
2017	3% (20)
2010-14 mean	3%

Abundance (transects)	
2018	5
2017	5
2010-14 mean	15

Distribution change	
Unchanged compared with 2010-2014	

Abundance change	
Down 67% compared with 2010-2014	

Last year's slight increase was maintained in 2018 but this species is still not doing well either locally or nationally. Encouragingly there were new sites. One was Heartwood Forest north of St Albans where Andrew Steele reported, "Of interest was a White Admiral (think 1st for the site) flew through on main footpath just outside Langley Wood" Another came from Mike Clark who noted, " we have been at Tewin orchard since 1969 and never recorded one before this June". An observation of an unusual form came from Peter Clarke, "A late afternoon visit to Norton Green Common, I found an unusual form of the White Admiral *ab. nigrina* where the white bands are virtually absent- it was only two feet away at one point so I had a good view of it.

Purple Emperor *Apatura iris*

Local in woodland

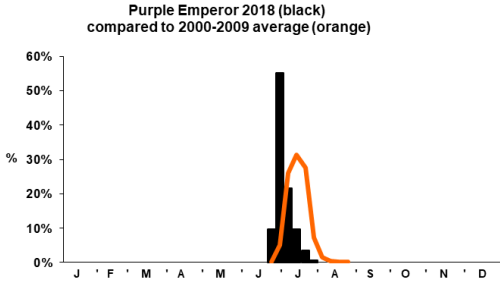
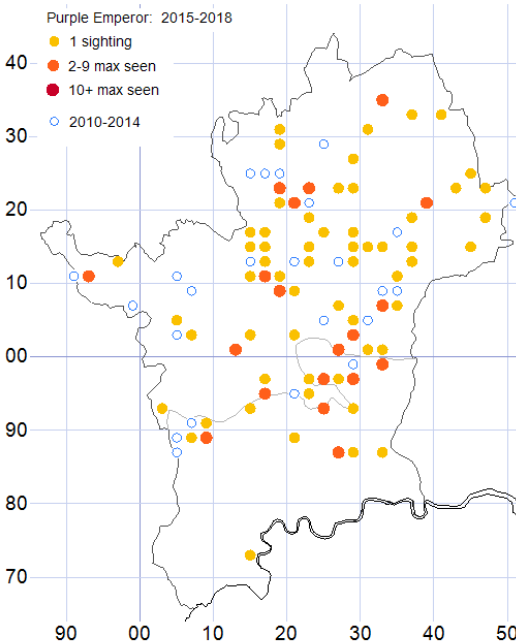


Photo Martin Humphrey



First 19 Jun

Last 28 Jul

Peak week: 25 Jun - 1 Jul

Distribution % squares

2018	8% (48)
2017	4% (27)
2010-14 mean	4%

Abundance (transects)

2018	2
2017	1
2010-14 mean	2

Distribution change

Up by 100% since 2010-2014

Abundance change

Too little data to calculate

A big increase in sites, especially in central Herts and northern Middlesex. It was present in over twice as many sites as the White Admiral, though it is naturally a much wider ranging species. It achieved a longer flight period than in 2017, while peaking a week earlier. What is noticeable is that any particular site there is a greater likelihood of recording 3 or 4 individuals than the ones and two that were previously the norm, suggesting a real increase in numbers which the transect data cannot really reflect for this high flying species.

Red Admiral *Vanessa atalanta*

Common migrant/Resident

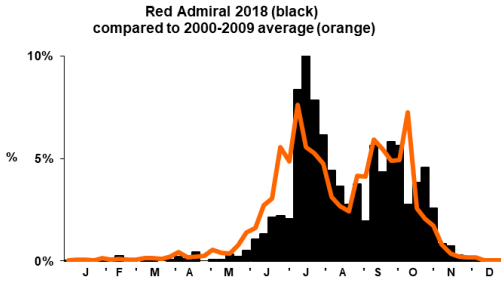
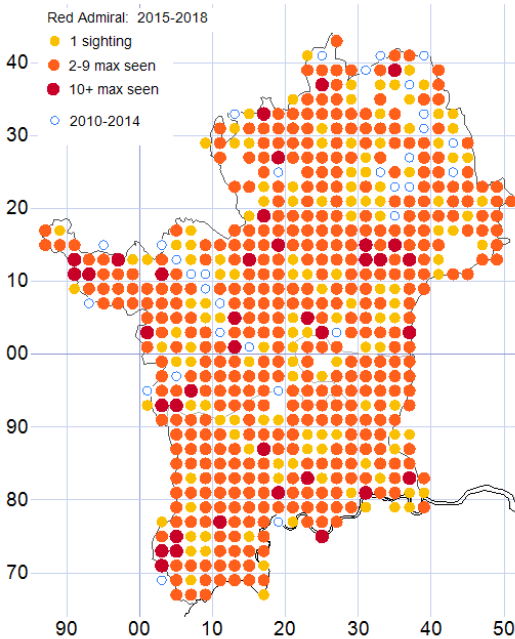


Photo Chris Benton



First: 2 Jan

Last: 3 Dec

Peak week: 16-22 Jul

Distribution % squares

2018	58% (360)
2017	80% (489)
2010-14 mean	59%

Abundance (transects)

2018	5
2017	15
2010-14 mean	11

Distribution change

Down 2% compared with 2010-2014

Abundance change

Down 66% compared with 2010-2014

Not a good year for our most often encountered migrant species with last year's big increase in sites and numbers dropping right off. The cold February did not help survival of over-wintering adults and there was little evidence of the usual early June influx. Indeed a noticeable chunk of the summer flight was actually later than the longer term pattern. Although there were sightings right through to December it was only seen in small numbers through the autumn when it can build up large numbers around ivy blossom.

Painted Lady *Vanessa cardui*

Variable migrant

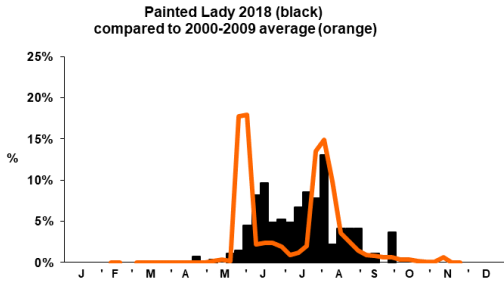
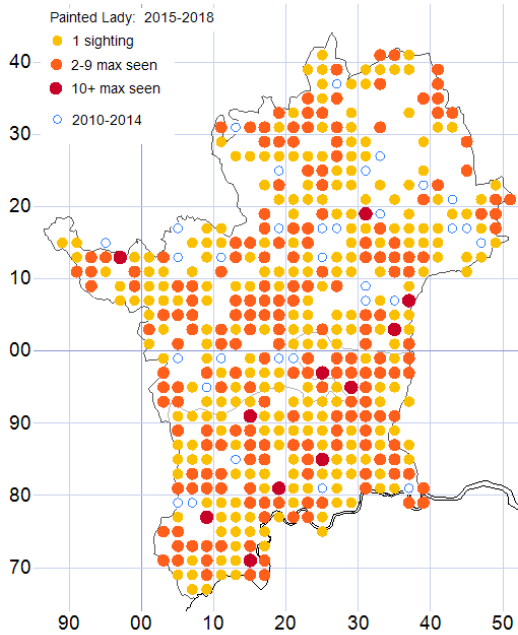


Photo Andrew Wood



First: 3 Apr
Last: 22 Sep
Peak week: 28 May-3 Jun

Distribution % squares	
2018	40% (240)
2017	37% (226)
2010-14 mean	17%

Abundance (transects)	
2018	2
2017	2
2010-14 mean	4

Distribution change
Up 135% compared with 2010-2014

Abundance change
Too little data to calculate

As with the other migrant species this was not a notable year although sightings of small numbers were well distributed. As with the Red Admiral there was little evidence of the late May/early June arrival. Unfortunately, this species continues to be widely sold for breeding which leads to releases that can distort figures. There were several reports of multiple numbers in the Big Butterfly Count data where the recorders admitted they were releases of bred adults (those records are not included in the analysis or sent to the national recording schemes). All the accepted records are of only one or two individuals.

Peacock *Inachis io*

Common & Widespread

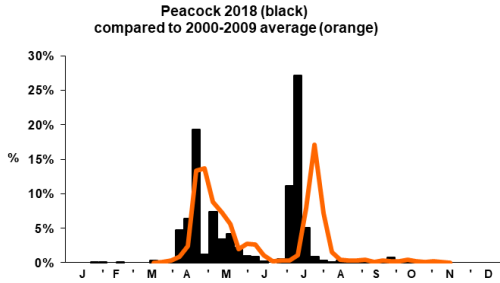
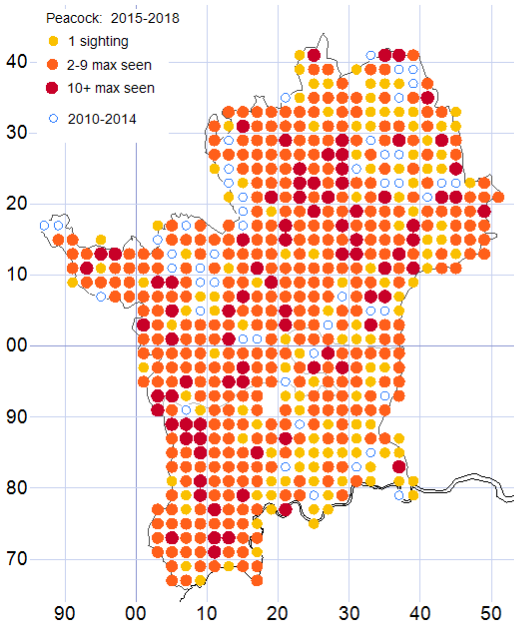


Photo Chris bEnton



First: 27 Jan

Last: 4 Nov

Peak week: 9-15 Jul

Distribution % squares

2018	52% (324)
2017	60% (362)
2010-14 mean	62%

Abundance (transects)

2018	11
2017	15
2010-14 mean	27

Distribution change

Down 16% compared with 2010-2014

Abundance change

Down 59% compared with 2010-2014

Not a good year for the Peacock. 2017's poor summer emergence meant that Spring 2018 numbers were low, doubtless exacerbated by the poor early spring. This in turn led to an early but very short summer emergence. As in some warmer previous years there was a small increase in adults seen in the third week of September suggestive of a partial second brood. This is supported by reports of full grown larvae at some sites in late August.

Small Tortoiseshell *Aglais urticae*

Common & Widespread

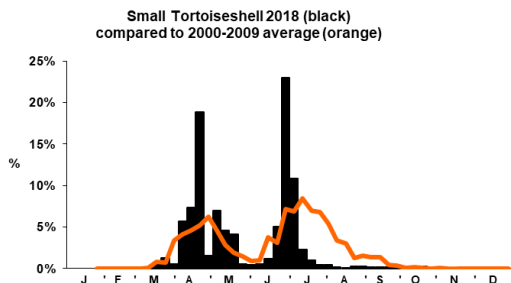
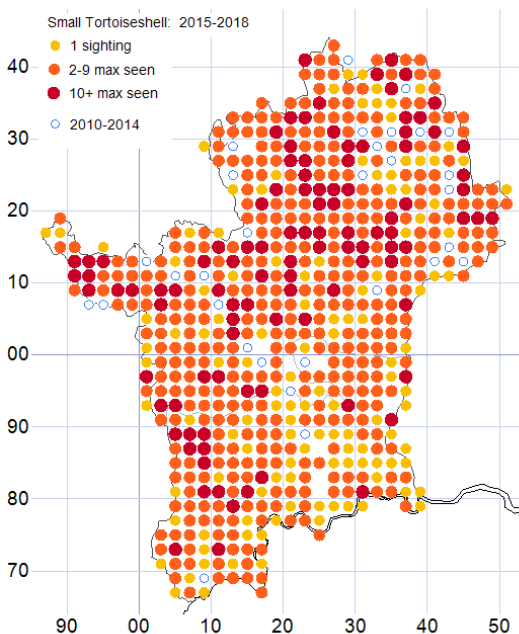


Photo Andrew Wood



First: 12 Jan

Last: 13 Nov

Peak week: 25 June – 1 Jul

Distribution % squares	
2018	58% (361)
2017	68% (414)
2010-14 mean	53%

Abundance (transects)	
2018	12
2017	19
2010-14 mean	24

Distribution change
Up 9% compared with 2010-2014

Abundance change
Down 50% compared with 2010-2014

The distribution and especially the abundance of this species are, again, giving some cause for concern. Particularly striking is the virtual absence of records after the end of July which is very unusual. Both the over wintered adults and the summer emergence showed very sharp peaks in noticeably short flight periods. Malcolm Hull noted early hibernation behaviour on 11 July, “two Small Tortoiseshells have gone into hibernation in my shed. Both are in characteristic over-wintering positions, i.e. the darkest positions free of cobwebs, one under a shelf and one on the underside of the roof behind a joist. This seems early but is about the same time that hibernation started for last 3 years.”

Comma *Polygona c-album*

Common & widespread

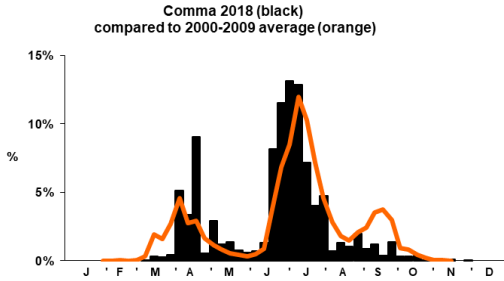
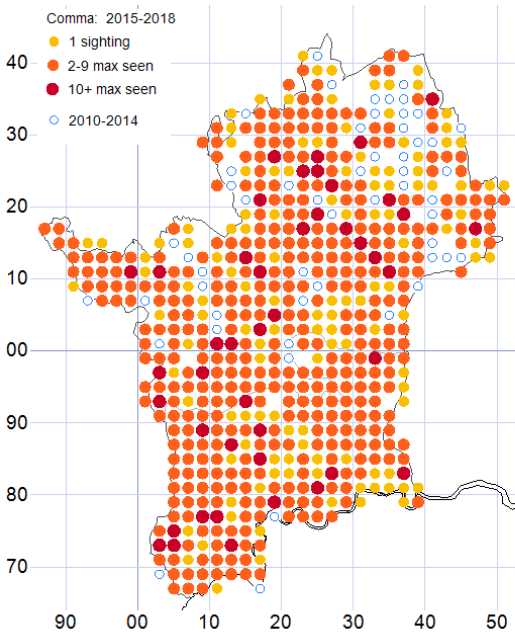


Photo Chris Benton



First: 11 Mar
Last: 2 Dec
Peak week: 2-8 Jul

Distribution % squares	
2018	68% (422)
2017	69% (421)
2010-14 mean	61%

Abundance (transects)	
2018	13
2017	21
2010-14 mean	15

Distribution change
Up 12% compared with 2010-2014

Abundance change
Down 14% compared with 2010-2014

Like closely related species the numbers of the Comma were well down compared to both 2017 and the longer-term data. The autumnal flight was also very low compared to previous years, this was probably one of the quietest autumns for nymphalid butterflies in many years.

Small Copper *Lycaena phlaeas*

Widespread & common

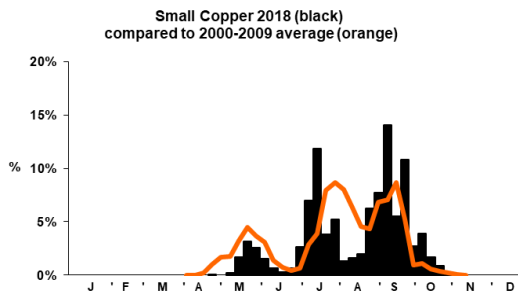
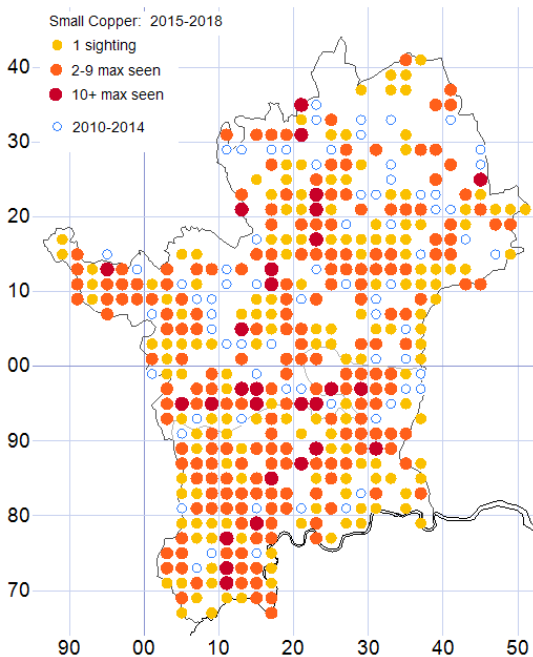


Photo Stan Waterman



First: 26 Apr

Last: 17 Nov

Peak week: 10-16 Sep

Distribution % squares	
2018	38% (236)
2017	36% (219)
2010-14 mean	28%

Abundance (transects)	
2018	15
2017	11
2010-14 mean	8

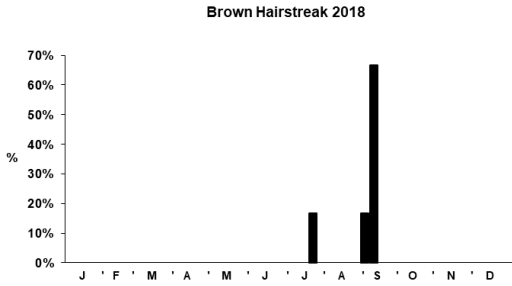
Distribution change	
Up 36% compared with 2010-2014	

Abundance change	
Up 88% compared with 2010-2014	

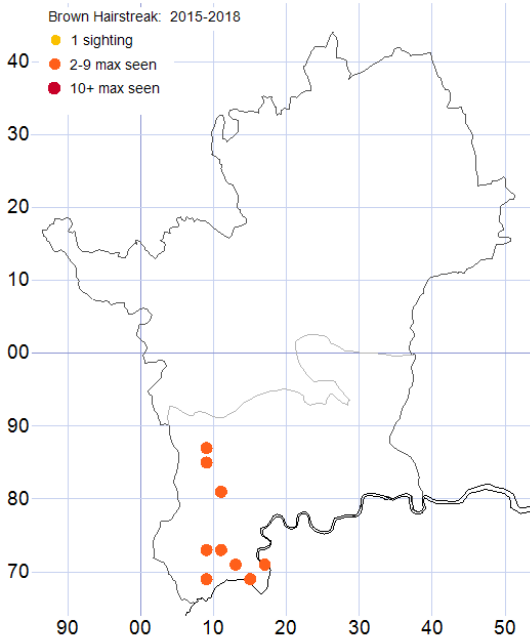
Last year's big increase was maintained, so in two years this species has bounced back from a deep low to a notable high. As usual there were three increasingly large broods, with again several November records, those on 14 and 17 November were a couple of weeks after a continuous run in October and early November. Nomansland Common is a prime site and Malcolm Hull made some interesting observations, "behaviour was impacted by stiff wind. A few were flying, but most were sheltering either within the Heather, or flat on bare ground. Just one adopted the curious "sideways" position with wings parallel to the ground. A few weeks earlier the majority of Small Coppers perching at this site had been sideways, with wings parallel to the ground."

Brown Hairstreak *Thecla betulae*

Very rare & restricted



Photos Sharon Newson



First: 19 Jul
Last: 6 Sep
Peak week: no data

Distribution % squares	
2018	1% (5)
2017	<1% (3)
2010-14 mean	None

Abundance (transects)	
2018	No data
2017	No data
2010-14 mean	No data

Distribution change	
To little data	

Abundance change	
No data	

Further intensive egg searching in south west Middlesex has revealed several new sites as shown on the map. A visit to one of those sites on 19 July resulted in a sighting of an adult female. This is an early date but given the warm summer it is perhaps not surprising. Then on 2 September we received a report from Sharon Newson in the Ickenham, Middlesex area of an adult in a garden, this was supported by a photo (see front cover and above). A visit to a nearby open space where there are extensive stands of blackthorn by Andrew Middleton and Liz Goodyear found several adults. A winter egg hunt revealed 14 eggs across this large site. After Christmas a further egg sighting in the north Hayes area by Paul Busby, extends the area even further.

Purple Hairstreak *Neozephyrus quercus*

Common around oaks

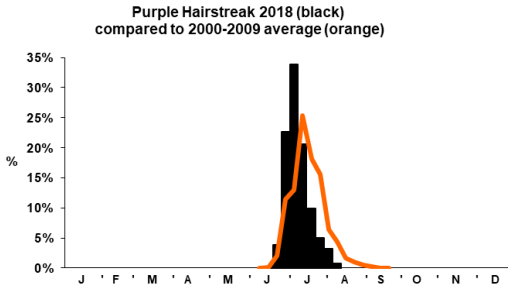
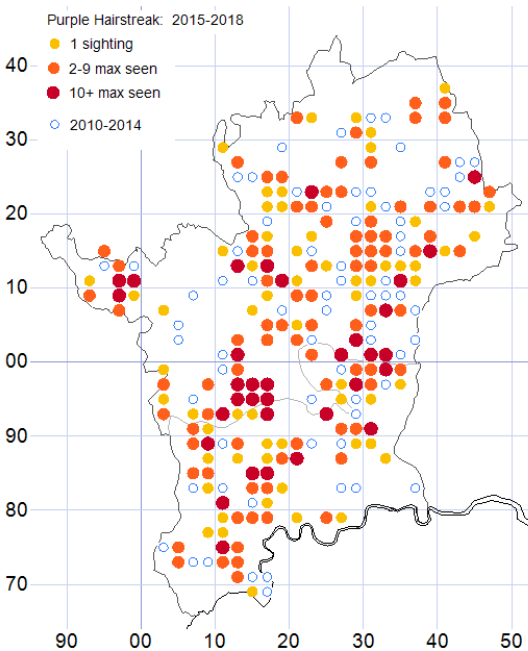


Photo Chris Benton



First: 11 Jun

Last: 11 Aug

Peak week: 2-8 July

Distribution % squares

2018	23% (140)
2017	11% (66)
2010-14 mean	13%

Abundance (transects)

2018	10
2017	8
2010-14 mean	10

Distribution change

Up 77% compared with 2010-2014

Abundance change

Unchanged compared with 2010-2014

A bumper year for Purple Hairstreak with many records of them low down. It seems likely that the dry weather lead to a lack of aphid honeydew high up causing the adults to descend to more shady areas and to dew wetted ground. Many recorders remarked that these were their first good sightings of this attractive butterfly for example Jenny Sherwen noted, "We saw 10+ Purple Hairstreaks mud puddling in and around the brick ponds at Hertford Heath". The numbers flying low down on Bricket Wood Common during the branch New Members' Day was a memorable sight for all those there.

Green Hairstreak *Callophrys rubi*

Very rare & restricted

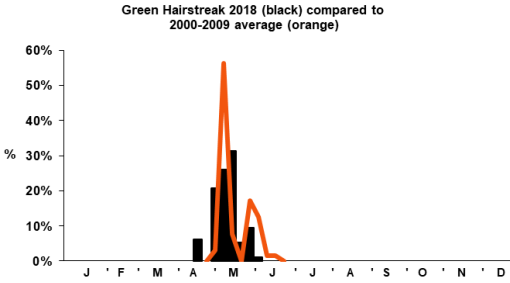
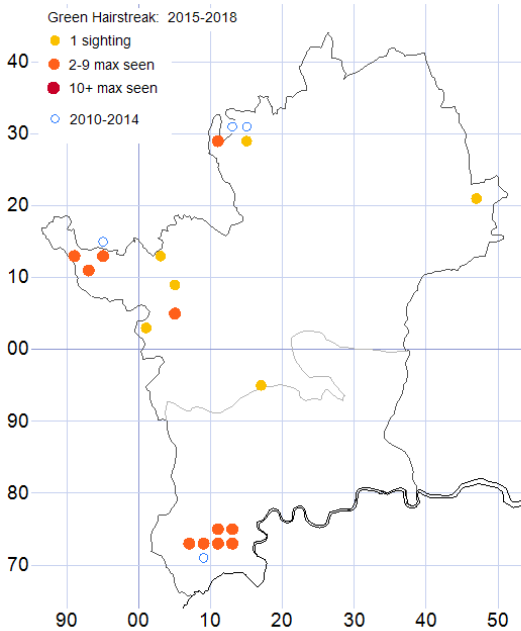


Photo Chris Benton



First: 20 Apr

Last: 6 Jun

Peak week: 14-20 May

Distribution % squares	
2018	2% (10)
2017	1% (6)
2010-14 mean	1%

Abundance (transects)	
2018	3
2017	2
2010-14 mean	11

Distribution change	
Up 67% compared with 2010-2014	

Abundance change	
Too little data to calculate	

After noting its confinement to a few set areas last year, two new sites were noted this year at widely separated points. First of all at the private Hilfield Park reservoir on 10 May and then on the 18 May Andrew Palmer reported, “Bishop’s Stortford. I have just seen a pristine Green Hairstreak alight on a Cotoneaster hedge next to my car for a few seconds, before flying off to the north. Gone before I could get my phone out to take a picture” The flight period was affected by the poor Spring weather as can be seen by a number of peaks rather than a smooth curve.

White-letter Hairstreak *Satyrrium w-album*

Common around elm

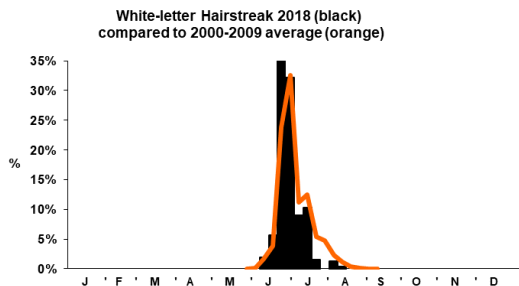
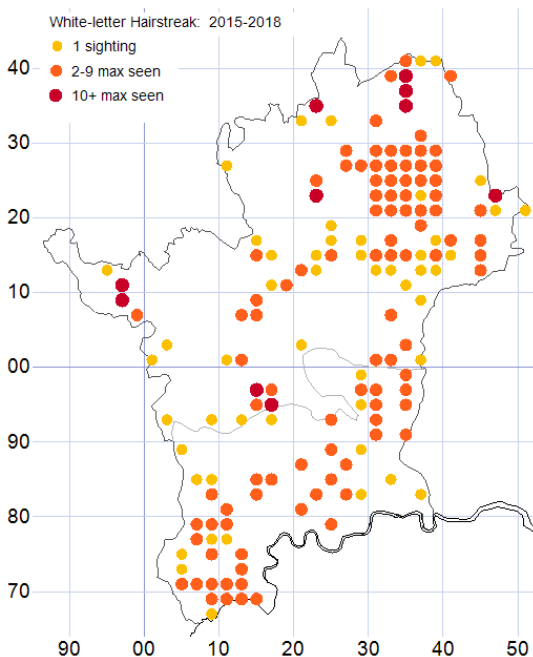


Photo Chris Benton



First: 5 Jun
Last: 7 Aug
Peak week: 18-24 Jun

Distribution % squares	
2018	19% (118)
2017	7% (41)
2010-14 mean	7%

Abundance (transects)	
2018	3
2017	2
2010-14 mean	2

Distribution change	
Up 171% compared with 2010-2014	

Abundance change	
Up 50% compared with 2010-2014	

In 2017 I wrote, “Surely it cannot have disappeared from every tetrad in the 10km square TL20 where it was recorded during 2010-2014 but only one square was added in 2018. However, Liz Goodyear and Andrew Middleton have now recorded adults or eggs in all the 25 2km squares in TL32, showing how under recorded this species is. In Royston Martin Johnson reported, “Over the last two weeks I've located a further four sites for White-letter Hairstreak in the town itself” Extra records in central and south-west Middlesex show that it is probably equally as well distributed in urban areas. A specific example came from Paul Atkin at London Zoo, “The most exciting discovery.... was a single egg on Elm suckers”.

Small Blue *Cupido minimus*

Very rare & restricted

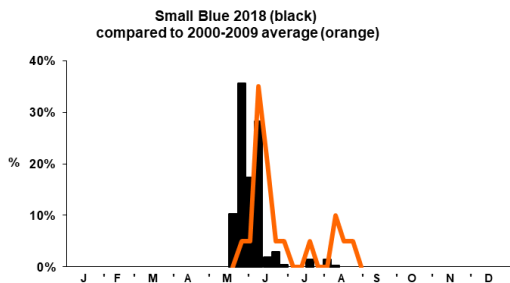
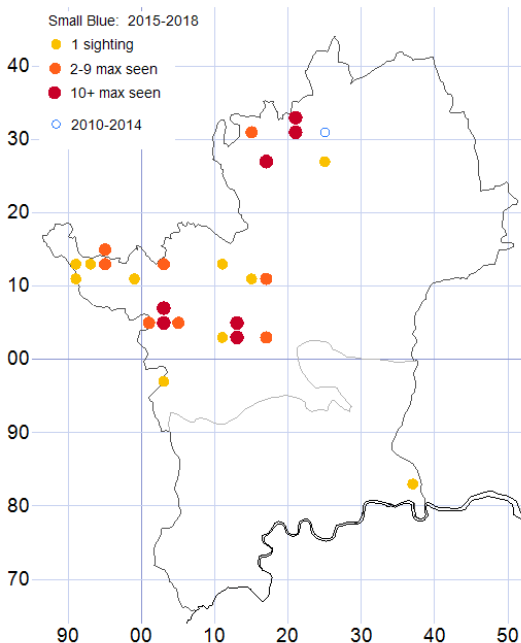


Photo Jean Crystal



First: 15 May
Last: 7 Aug
Peak week: 21-27 May

Distribution % squares	
2018	3% (17)
2017	2% (12)
2010-14 mean	1%

Abundance (transects)	
2018	5
2017	5
2010-14 mean	26

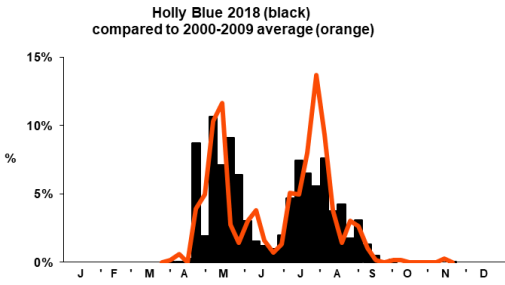
Distribution change	
Up 200% compared with 2010-2014	

Abundance change	
Too little data to calculate	

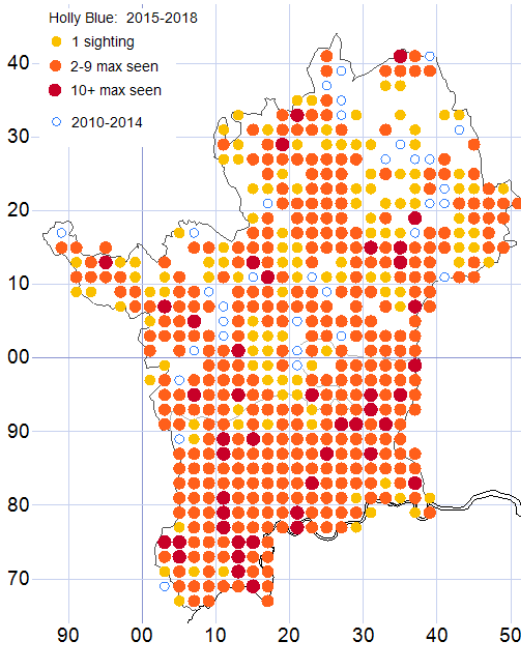
The Small Blue had a similar year to 2017 with no new sites recorded, although it was recorded at a few where it was absent in 2017. The flight period peaked early as the weather improved through May, but there was little evidence of the partial second brood in summer. A changed cutting regime at Hillbrow on the edge of Letchworth led to an expansion of kidney vetch in the lower field and a commensurate spread of Small Blues across the site. Good numbers were recorded here and around the edge of the former Butterfly World site at Chiswell Green and the A41 junction at Bourne End.

Holly Blue *Celastrina argiolus*

Widespread & common



Chris Benton Photo



First 17 Mar
Last: 23 Dec
Peak week: 30 Apr – 6 May

Distribution % squares	
2018	65% (406)
2017	47% (285)
2010-14 mean	42%

Abundance (transects)	
2018	19
2017	8
2010-14 mean	10

Distribution change
Up 55% compared with 2010-2014

Abundance change
Up 90% compared with 2010-2014

Having suggested in 2017 that a drop was a result of the parasite getting an upper hand, 2018 brought a big increase in numbers and distribution. Many recorders noted its increase during the year. What is good to see is the increase in records in the “arable desert” of north east Herts. It continues to be ubiquitous in urban Middlesex. Although the peak week was again in the spring the balance between the two broods was more equal. A number of late October/early November records is again suggestive of a partial third brood. There were two December records of adults on 6 and 23 December, the first time this has ever happened.

Brown Argus *Aricia agesthis*

Widely distributed

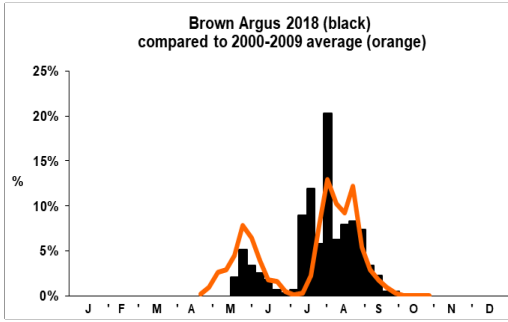
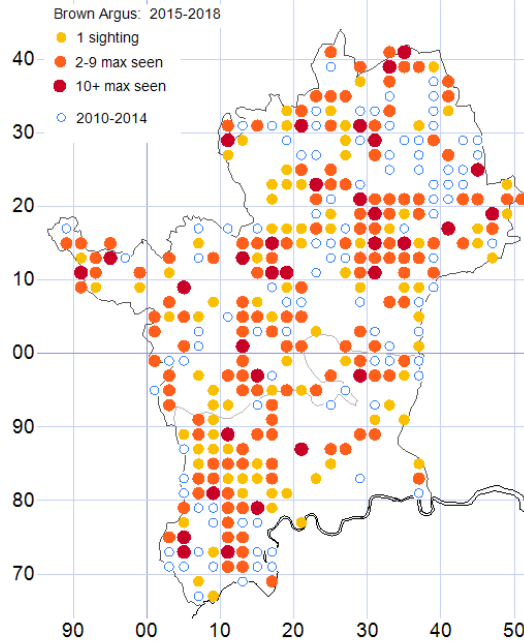


Photo Andrew Wood



First: 14 May
Last: 25 Oct
Peak week: 30 Jul – 5 Aug

Distribution % squares	
2018	27% (165)
2017	20% (119)
2010-14 mean	16%

Abundance (transects)	
2018	28
2017	12
2010-14 mean	14

Distribution change
Up 55% compared with 2010-2014

Abundance change
Up 100% compared with 2010-2014

2017's improvement continued in 2018. This species is doing very well currently, particularly extending further eastwards across Middlesex. This is a very similar pattern to the Marbled White, as both species move out of their chalkland home bases. John Eborall noted, "most notable feature of the year has been the increased number of sightings of Brown Argus and Small Copper compared with previous years, including in and around Ealing. Although still not common in the area, these species seem to have been more widespread and to have persisted well". The spring brood was very small but the summer flight was substantial with an early start and extending into the autumn. Again there were late October records. Interestingly all records after mid September were in Middlesex.

Common Blue *Polyommatus icarus*

Widespread & common

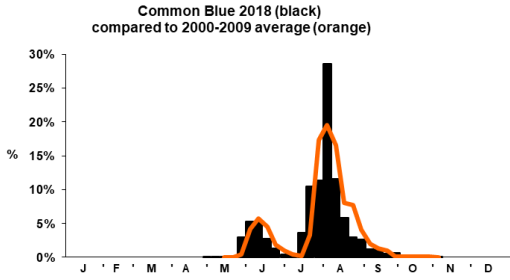
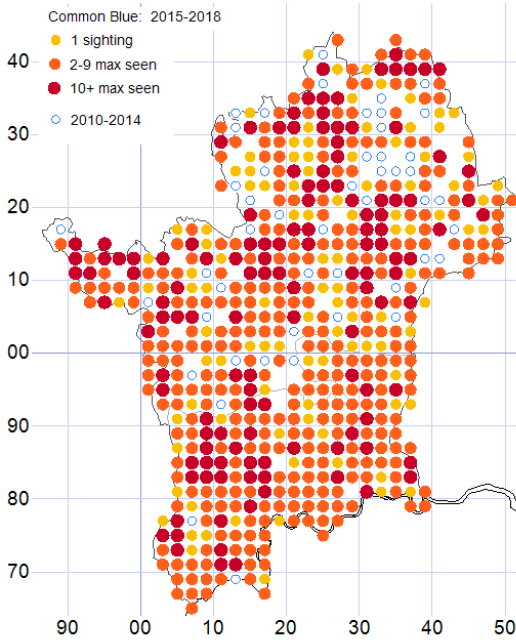


Photo Chris Benton



First: 23 Apr

Last: 29 Oct

Peak week: 30 Jul – 5 Aug

Distribution % squares	
2018	67% (415)
2017	51% (313)
2010-14 mean	41%

Abundance (transects)	
2018	83
2017	33
2010-14 mean	38

Distribution change
Up 63% compared with 2010-2014

Abundance change
Up 118% compared with 2010-2014

Like most of the blue and hairstreak species it was a good year for the Common Blue, its recovery over the past two years paralleling that of the Small Copper. The usual small spring brood was followed by a quickly peaking summer brood and a tail of records into the autumn. It is good to see that several recently empty squares in east Hertfordshire and central Middlesex were filled during 2018.

Chalkhill Blue *Lysandra coridon*

Common at known chalk sites

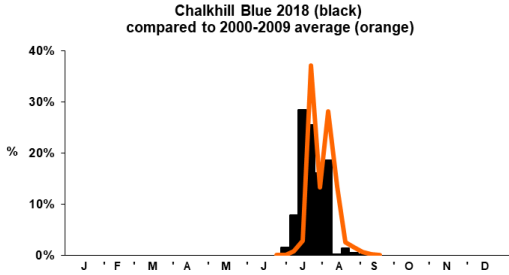
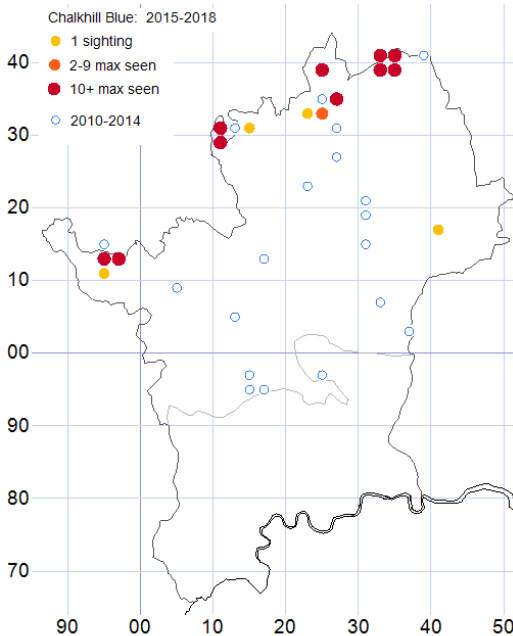


Photo Andrew Wood



First: 28 Jun

Last: 1 Sep

Peak week: 9-15 Jul

Distribution % squares	
2018	2% (10)
2017	2% (11)
2010-14 mean	2%

Abundance (transects)	
2018	91
2017	167
2010-14 mean	96

Distribution change	
Unchanged compared with 2010-2014	

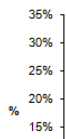
Abundance change	
Down 6% compared with 2010-2014	

Unlike the other blues it was not an especially good year for the Chalkhill Blue. With transect numbers well down, although not far off the longer term mean. I noted, "At Hexton I recorded my lowest ever end to end count of Chalkhill Blue with only 26 in a 5 metre box from one end to another (repeated twice with the same result), in good years this number has been an almost uncountable 300". The recently established colonies at Ashwell and north of Baldock were also still present. Not surprisingly there was no dispersion outside the existing sites into the wider countryside.

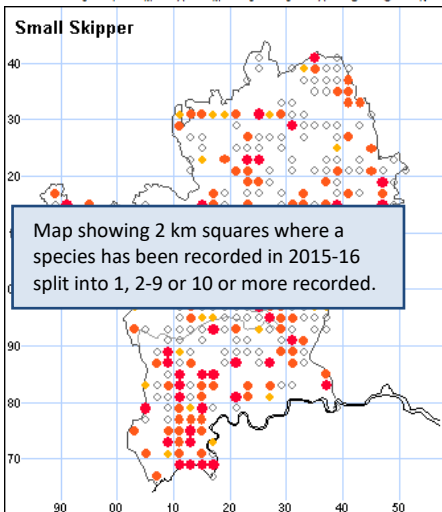
Key to the Species pages

Common Name *Scientific name*

Small Skipper 2015 (black)
compared to 2000-2009 average (orange)

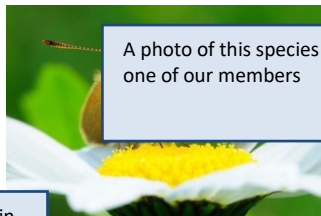


The flight period showing proportion of species flying in any week compared with the 2000-2009 average



Map showing 2 km squares where a species has been recorded in 2015-16 split into 1, 2-9 or 10 or more recorded.

Widespread but declining



A photo of this species taken by one of our members

Brian Knight

First: 16 June

Last: 16 Aug

Peak week: 25 Jun -1 Jul

Distribution % squares

2016 28% (155)

2015

2010-14
mean

Abundance

2016

2015

2010-14
mean

Distribution

Up 3% compared to
2010-2014

Abundance change

First sighting

Last sighting

Peak Week when most seen

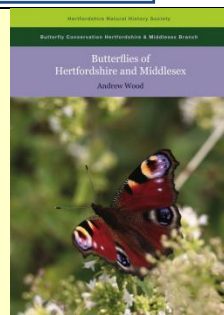
Distribution % squares. The % and number of 2km squares with records in which this species was recorded

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

The Butterflies of Hertfordshire and Middlesex" is still available. It is a fully illustrated 272 page hardback that updates the previous books covering our region published in 1987. There are hundreds of colour photos and detailed analysis of the changes between then and now, together with practical advice on how to find and observe our butterflies. Published by the Hertfordshire Natural History Society and ourselves at the price of £28 (including post and packing). It can be ordered at: <http://www.hnhs.org/publications>



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