



**Butterfly
Conservation**

Saving butterflies, moths and their habitats

Hertfordshire & Middlesex Butterflies



Andrew Wood

**February 2017
(covering 2016 records)**

Contents

Section	Page
Introduction	1
Key to species accounts	5
Recorder List	41
Brimstone	16
Brown Argus	38
Brown Hairstreak	3
Chalkhill Blue	40
Clouded Yellow	15
Comma	31
Common Blue	39
Dark Green Fritillary	23
Dingy Skipper	6
Essex Skipper	8
Gatekeeper	21
Green Hairstreak	34
Green-veined White	14
Grizzled Skipper	7
Holly Blue	37
Large Skipper	10
Large White	12
Long-tailed Blue	4

Section	Page
Marbled White	22
Meadow Brown	20
Monarch	3
Orange Tip	11
Painted Lady	28
Peacock	29
Purple Emperor	26
Purple Hairstreak	33
Red Admiral	27
Ringlet	19
Silver-washed Fritillary	24
Silver Spotted Skipper	3
Small Blue	36
Small Copper	32
Small Heath	18
Small Skipper	9
Small Tortoiseshell	30
Small White	13
Speckled Wood	17
White Admiral	25
White-letter Hairstreak	35

Cover Photo: White Admiral at Brickground Wood, Andrew Wood

Introduction

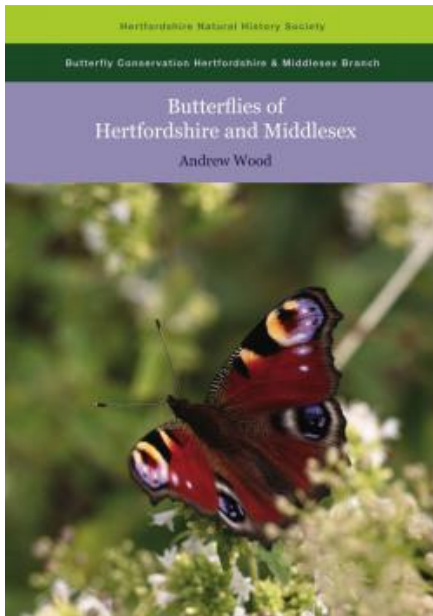
2016 started off on a generally mild but dull note, although late February was sunny. A wet, mild March was followed by a cool April and then a mild, dry May. June was dull, wet and cool but the summer weather was much drier and warmer through July and August than recent years. September was particularly warm and October was very dry.

We received 28802 records compared to 32065 records in 2015. Many of the 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 are perfectly reasonable and 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 9th 2017. 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 is added to the records received for inclusion in the branch database and this report.

2016 was also marked by the publication of Andrew Wood's new book "The Butterflies of Hertfordshire and Middlesex". This book 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. It is published by the Hertfordshire Natural History Society and Butterfly Conservation and is available at the price of £19.99 (including post and packing) until March 2017. It can be ordered at: <http://hnhs.org/publication/pre-publication-offer-butterflies-hertfordshire-and-middlesex>



Orange-tip *Anthocharis cardamines*

Conservation

There are few conservation concerns for this species. It has responded positively to recent sprays and uses a variety of common hosts.

Highlights, both in the wild and in gardens. These make it to be found in most environments, apart from deep woodland and very dry grassland.

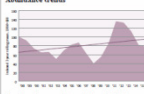
Distribution trends



There has been a downward trend since the late 1990s, but in the Orange-tip it still sees over two thirds of squares there seems to be little concern for causes. The fact that there has been a slight increase in occupied squares in the last five years holds the tip.

1987-1994	1995-2002	2003-2010	2011-2016
1766	1766	1766	1766
100	100	100	100
100	100	100	100

Abundance trends

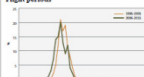


Numbers have moved up and down, but the general trend is upwards. However, there has been a slight decline in more recent years.

1987-1994	1995-2002	2003-2010	2011-2016
100	100	100	100
100	100	100	100
100	100	100	100

Single Square	Mean	Total	1987-1994	1995-2002	2003-2010	2011-2016
1997	12	100	17	17		
1997	20	200	17	17		
1999	15	150	17	17		
1999	16	160	17	17		
2000	13	130	17	17		
2000	18	180	17	17		
2000	17	170	17	17		
2002	17	170	17	17		
2002	18	180	17	17		
2005	14	140	17	17		

Flight periods



There has been a trend towards earlier adult emergence in several years. It is now still unusual to see Orange-tips in late March, compared to the

early April emergence that has been the 'book norm'. In 2016 there was a first record of a pupa, being a 2000 record of a April (21st or 22nd). In most years there would not even emerge! The end of the adult flight season was not to have changed greatly, numbers being low early but a few are generally on the wing until the middle of that month. Over the years there have been a few reports of individuals in July and August. Some of these may be misidentifications of Green-veined White, but there are a few reliable records of males. This phenomenon was recorded for the first time in one year ago, there is now none.

Tips for seeing the Orange-tip

This distribution species is not difficult to see as it is very mobile and the males are unmistakable. They are attracted to nectar sources including their hostplants and other early flowering plants such as Forget-me-nots and Bluebells. They are more likely to appear when hostplants are in flower. Males are more likely to be seen spent more time low down looking for egg laying sites and are less distinctive in appearance. Being open are often found near the top of plants in the open. This also holds in the open. On cooler, drier days they can be found on flowers or weed heads with the forewing pale blue washed with reddish-brown, which helps to break up their shape.

Male Orange-tip at Millbury Moor showing the distinctive hind wing. Photo: Simon Mansour.



Top left: Male Orange-tip on Forget-me-not at Millbury Moor, Hertfordshire. Photo: Simon Mansour.

Middle left: Male Orange-tip on Bluebell at Millbury Moor, Hertfordshire. Photo: Simon Mansour.

Bottom left: Orange-tip resting on the middle of a stem in a field.

Top right: Female Orange-tip on Bluebell. Photo: Simon Mansour.

Bottom right: Orange-tip on a flower. Photo: Simon Mansour.



Species not included in the main section



Photo Nick Bowles

Silver-spotted Skipper *Hesperia comma*

On 26 August Nick Bowles photographed this rare skipper in his Tring garden. The nearest colonies are some way off across Buckinghamshire. It has not been definitely recorded in Hertfordshire since 1959. How it got there is unknown and it seems unlikely that this species, with its very particular needs for short warm turf is about to colonise our area. Care needs to be taken not to confuse this species with the Large Skipper.

Monarch *Danaus plexippus*

Barbara Hall reported, "This afternoon (Sunday 17th July 2016) I spotted this lovely butterfly in the City of London on the Podium of the Middlesex Street Estate, E1 on our Yellow 'Sunrise' buddleia". Two days later a faded example was found on the Isle of Dogs not far away, it seems likely that it may be the same one. A further report came of one seen resting on a boat on the Regent's Canal west of Regent's Park on 12 September. It seems likely that these were escapes or releases.

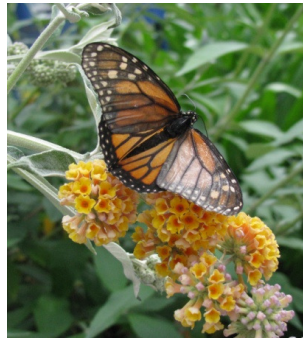


Photo Barbara Hall

Brown Hairstreak *Thecla betulae*

After last year's comments about this species, it is very exciting to be able to list a definite record for our area, the first for almost 20 years. On December 5th Stephen Reisbach, a Surrey Branch member who has been following the movement of this species northwards through that county found some eggs in the Hampton area of the London Borough of Richmond. We will be checking the site during the late Summer for adults. In the meantime late winter/early spring is a good time to check for the bright white eggs on Blackthorn in the south west of our branch in Spelthorne, and Richmond and Hounslow boroughs.



Photo Andrew Wood

Long Tailed Blue *Lampides boeticus*

This pretty butterfly has bred in our area in the 1990s but since then it has only been rarely reported. In 2016 we received three reports:

24 Jul - indoors in Camden, investigation strongly suggests that it had emerged from larvae in a packet of peas.

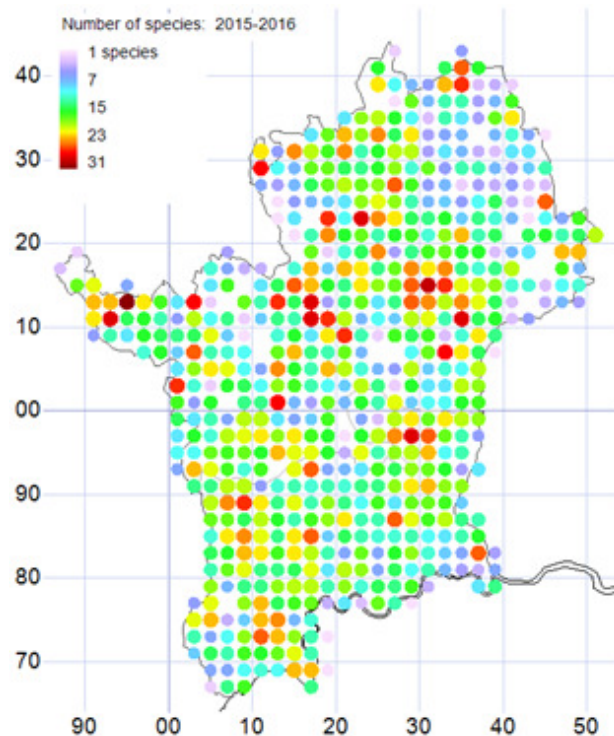
10 Aug - outdoors at Lockhart Field in Tower Hamlets Cemetery Park.

23 Oct - a larva which later emerged as an adult found in a packet of peas in St Albans.

Check packs of sugar snap peas or fine beans imported from East Africa for larvae or pupae as this seems to be the main way that this widespread species enters the UK.



Photo Alice Smith



Recording Effort

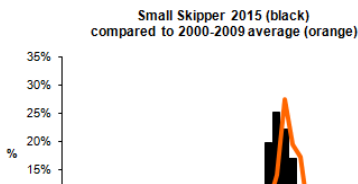
In 2016 we received records from 562 squares in our area. When added to 2015 we have now got records from 625 squares in our current 2015-2019 survey period.

This map shows the number of species recorded for each square. We particularly need records from the few blank squares and the under recorded purple and blue squares.

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

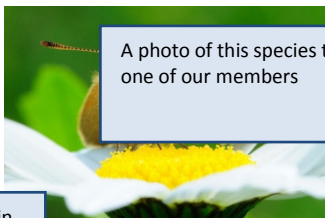
Key to the Species pages

Common Name *Scientific name*



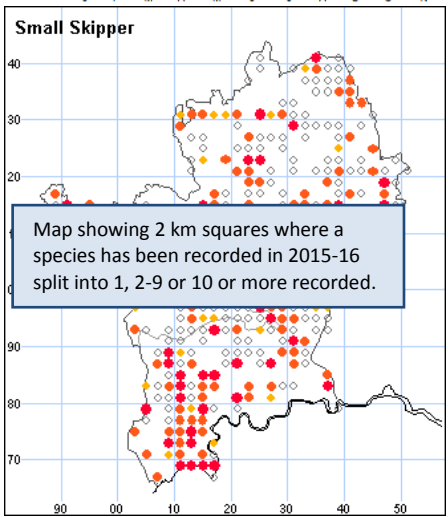
The flight period showing proportion of species flying in any week compared with the 2000-2009 average

Widespread but declining



A photo of this species taken by one of our members

Brian Knight



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

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 and Abundance change	
Up 3% compared with 2010-2014	
Abundance change	
Down 36% compared with 2010-2014	

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

Dingy Skipper *Erynnis tages*

Restricted and rare

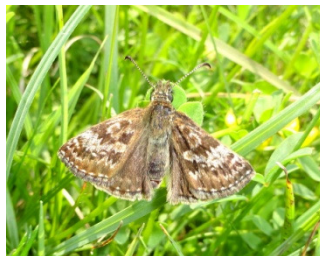
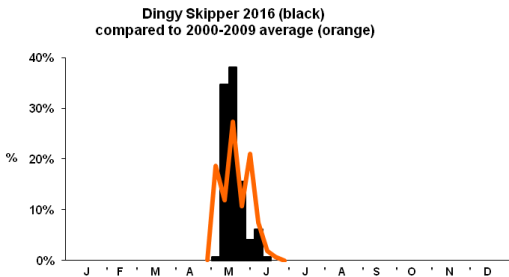
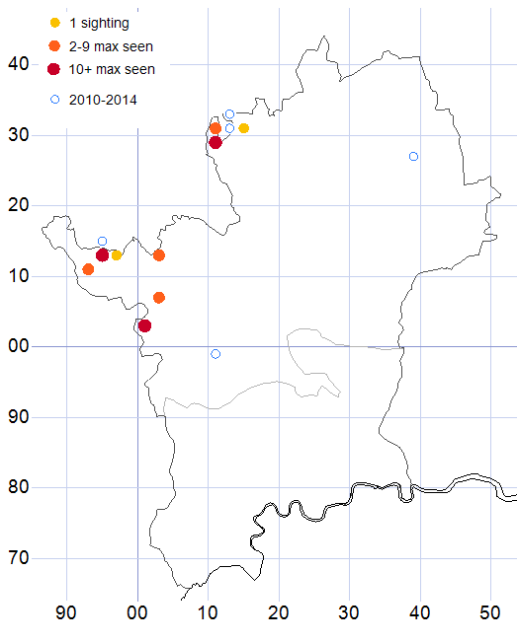


Photo Chris Benton

First: 5 May
Last: 15 Jun
Peak week: 14-20 May



Distribution % squares	
2016	1% (7)
2015	1% (6)
2010-14 mean	1%

Abundance (transects)	
2016	8
2015	11
2010-14 mean	13

Distribution change
No change

Abundance change
Down 38% compared with 2010-2014

The Dingy Skipper was recorded at its usual haunts, and the new transect in Hedgeswood Common/Hoo Wood confirmed a small colony to still be present. Its abundance dropped from last year despite more comprehensive transect coverage. This is worrying as it is below its levels earlier this century as well as last year. Having said that the colonies that are not monitored by transect showed good numbers with a count of over 30 at Hexton Chalk Pit. We have worked with HMWT, who manage the site, to ensure that their revised management plan is beneficial to this species.

Grizzled Skipper *Pyrgus malvae*

Restricted & rare

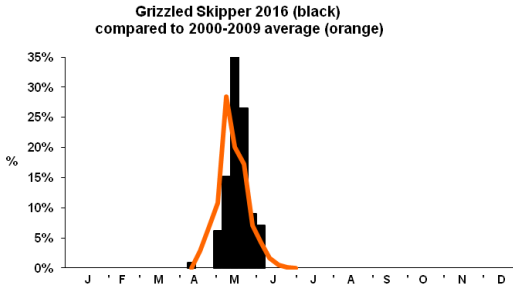
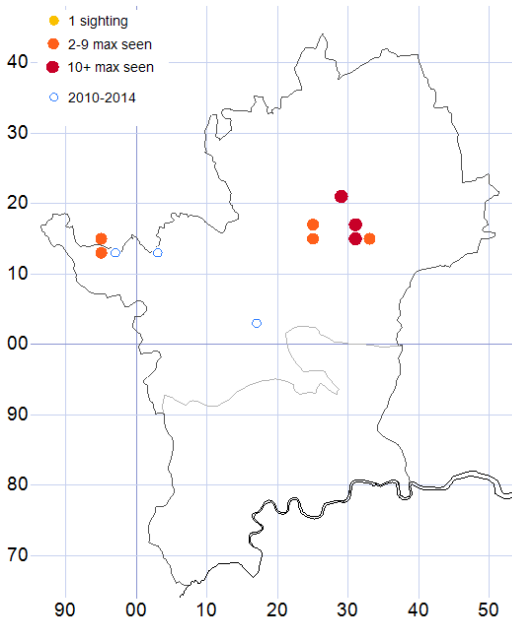


Photo Chris Benton

First: 12 Apr

Last: 7 Jun

Peak week: 14-20 May



Distribution % squares	
2016	1% (8)
2015	1% (4)
2010-14 mean	1%

Abundance (transects)	
2016	7
2015	11
2010-14 mean	21

Distribution change
No change

Abundance change
Down 66% compared with 2010-2014

The Grizzled Skipper’s flight season was slightly later than the longer term pattern, emergence being delayed by the cool April. The highest counts were not at the transect monitored sites. Good numbers were found at private sites surveyed with permission, north of the Waterford Heath colonies, including confirmation of its continued existence at sites last visited 15 years previously. Apart from the Aldbury Nowers colonies all the sites in central and east Hertfordshire are near railway routes. The big abundance drop is based on transect counts where the maximum seen on any walk was four compared to double figure counts at other sites.

Essex Skipper *Thymelicus lineola*

Widespread but declining

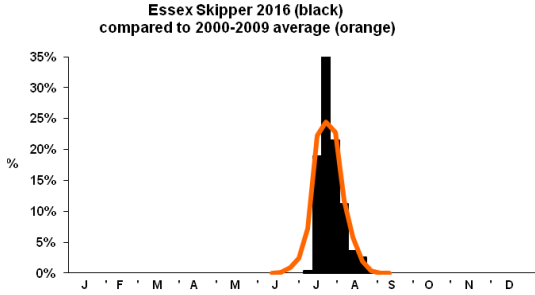
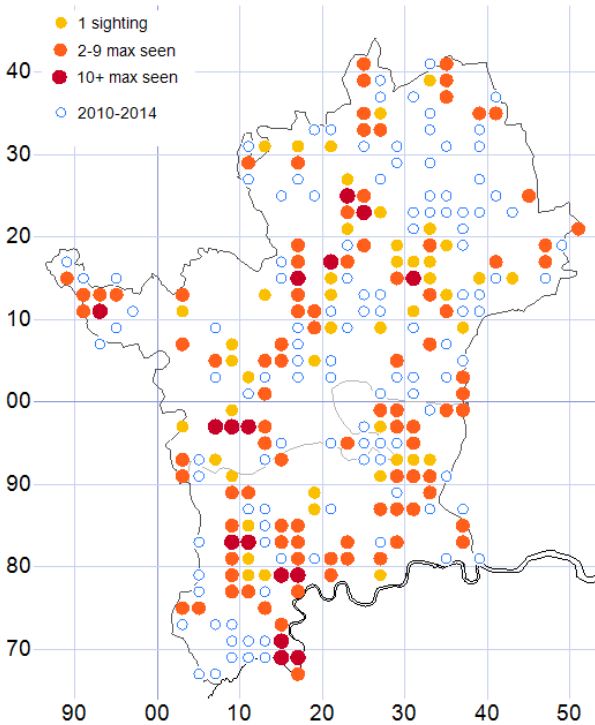


Photo Andrew Wood



First: 19 Jun

Last: 13 Aug

Peak week: 16-22 July

Distribution % squares	
2016	17% (95)
2015	17% (97)
2010-14 mean	14%

Abundance (transects)	
2016	7
2015	15
2010-14 mean	13

Distribution change
Up 21% compared with 2010-2014

Abundance change
Down 62% compared with 2010-2014

The decline in this species, noted last year, shows no real sign of change. The distribution in the current period is pretty well unchanged while the abundance has dropped compared to both last year and in the longer term. There are areas where it has not been recorded since prior to 2010 but more worryingly there are many areas where it seems to have disappeared since that relatively recent date. The noticeably later emergence is probably due to its not emerging as a larva until the spring and development being slowed by the cool April.

Small Skipper *Thymelicus sylvestris*

Widespread but declining

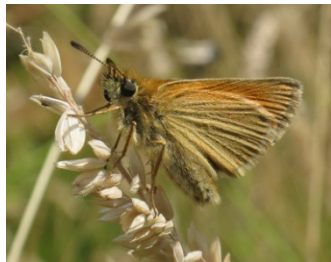
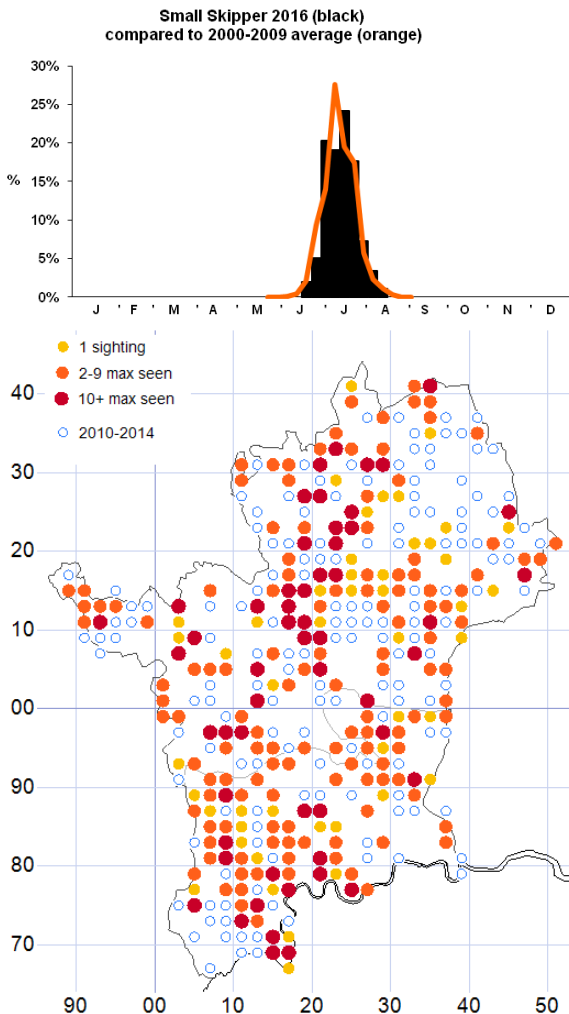


Photo Tom Speller

First: 19 June

Last: 17 Aug

Peak week: 16-22 July

Distribution % squares	
2016	27% (154)
2015	27% (151)
2010-14 mean	25%

Abundance (transects)	
2016	14
2015	23
2010-14 mean	25

Distribution change
Up 8% compared with 2010-2014

Abundance change
Down 36% compared with 2010-2014

The Small Skipper's decline is similar to the Essex Skipper but it is still more widely distributed and abundant at sites where observers have been able to determine the exact species. The distribution is virtually unchanged but numbers show a big drop. The flight period was very similar to the longer term trends. It seemed not to be affected by the cool April, probably due to its emergence as a larva during the previous year meaning that short term cooler periods had less effect on its development.

Large Skipper *Ochlodes faunus*

Widespread & common

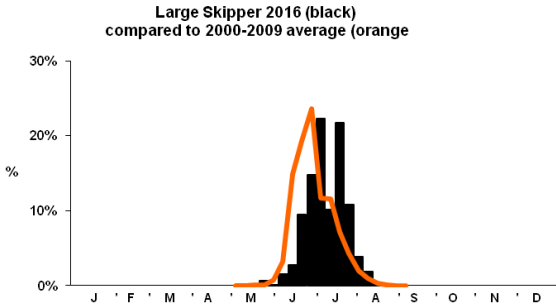
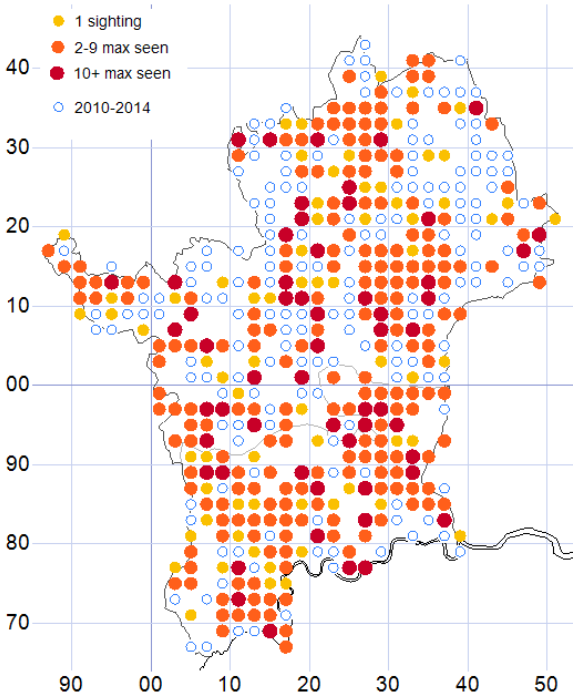


Photo Chris Benton



First: 25 May

Last: 13 Aug

Peak week: 2-8 Jul

Distribution % squares	
2016	38% (212)
2015	41% (234)
2010-14 mean	40%

Abundance (transects)	
2016	19
2015	25
2010-14 mean	29

Distribution change
Down 5% compared with 2010-2014

Abundance change
Down 35% compared with 2010-2014

Large Skipper suffered a setback in 2016 and it is to be hoped that the decline in abundance and distribution to well below longer term trends is a short term effect. It seems to have retreated from the most intensively farmed arable areas of Hertfordshire while there are many fewer squares in Middlesex where it has not been recorded in recent years. The flight period was noticeably skewed to the later summer compared to last year and longer term trends.

Orange Tip *Anthocharis cardamines*

Widespread & Common

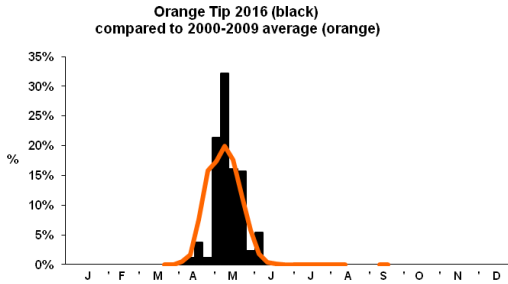
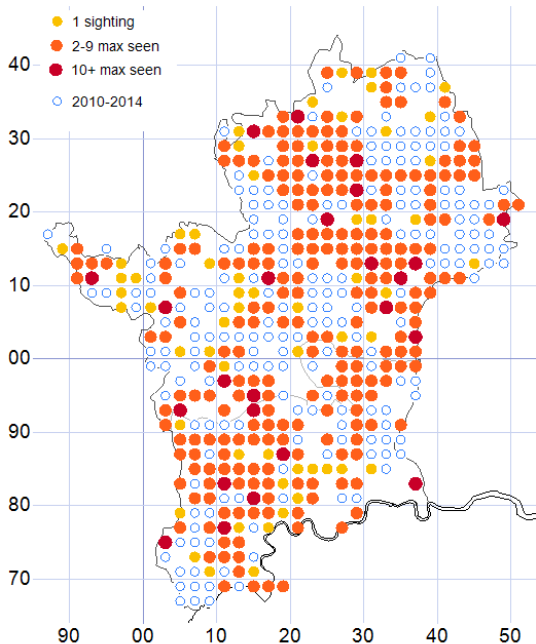


Photo Chris Benton



First: 5 Apr
Last: 22 Jun
Peak week: 7-13 May

Distribution % squares	
2016	43% (243)
2015	35% (200)
2010-14 mean	42%

Abundance (transects)	
2016	14
2015	15
2010-14 mean	21

Distribution change
Up 2% compared with 2010-2014

Abundance change
Down 29% compared with 2010-2014

Last year's distribution drop has been reversed. But there are still many areas where it is unrecorded and which must contain suitable habitat given that this butterfly is easily identifiable and often seen in parks and gardens. Unfortunately abundance dropped again and there were no very late or potential second brood examples seen. The poor early spring shows in the flight graph above, with a sharp peak in early May and very low numbers seen in April.

Large White *Pieris brassicae*

Widespread & common

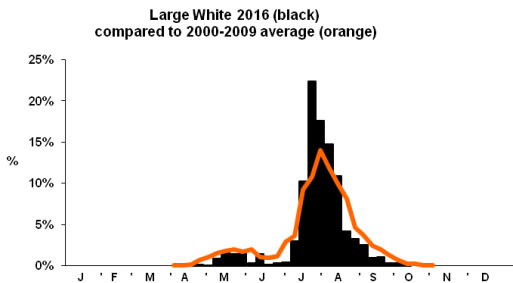
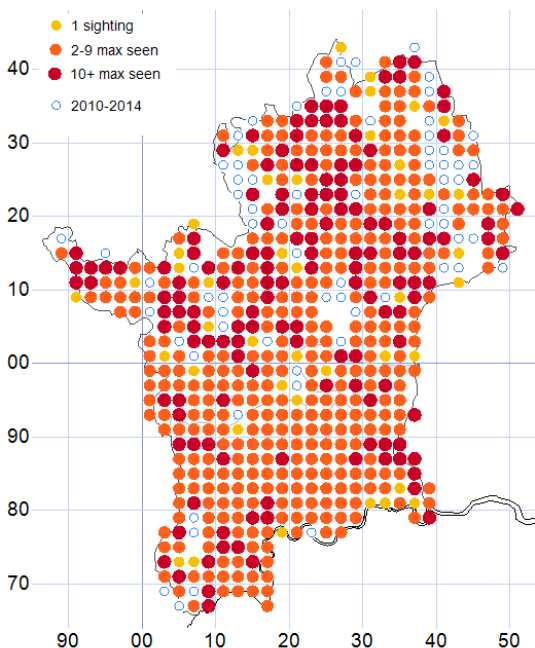


Photo Andrew Wood



First: 4 Apr
Last: 6 Oct
Peak week: 16-22 Jul

Distribution % squares	
2016	75% (423)
2015	83% (473)
2010-14 mean	67%

Abundance (transects)	
2016	31
2015	59
2010-14 mean	38

Distribution change
Up 11% compared with 2010-2014

Abundance change
Down 18% compared with 2010-2014

Not as widespread as 2015 but still very well distributed. The flight period is much the same as in recent years though the peak, as last year, is much sharper than the longer term trends. Observations around this time suggest the population was increased by migration. On 14 Jul Clive Burrows observed, "200/300 on Ovaltine Fields. Looked very much like they were migrating individuals". On 9 Jul Andrew Wood observed 100+ over a field in Sacombe Park and on 18 Jul Tom Gladwin noted, "All day small numbers ... passing WSW at a just visible height. Binoculars located a few at even greater height also flying WSW".

Small White *Pieris rapae*

Widespread & common

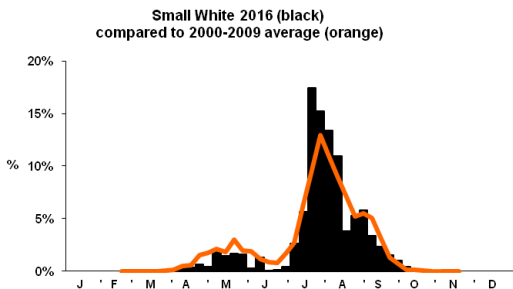
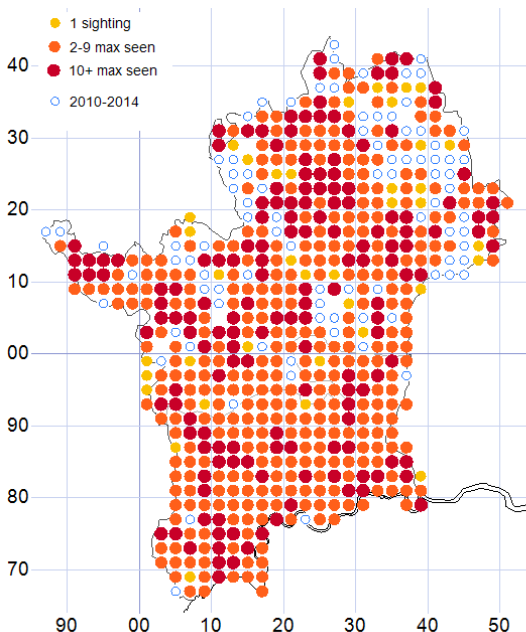


Photo Andrew Wood

First: 22 Mar

Last: 28 Oct

Peak week: 16-22 Jul



Distribution % squares	
2016	77% (437)
2015	81% (459)
2010-14 mean	73%

Abundance (transects)	
2016	46
2015	66
2010-14 mean	65

Distribution change
Up 6% compared with 2010-2014

Abundance change
Down 29% compared with 2010-2014

A similar pattern, as in previous years, to the Large White. The drop in abundance is quite sharp but this species has fluctuated over the last few years and it seems unlikely that it is in any danger. The unrecorded squares in the north east and parts of western Hertfordshire are probably due to a low number of recording visits rather than a real absence. Although such areas are not likely to turn up rarities it is still important that they are visited so that we can determine if intensive farming is having an effect, even on really common species.

Green-veined White *Pieris napi*

Widespread & common

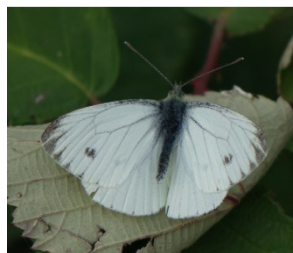
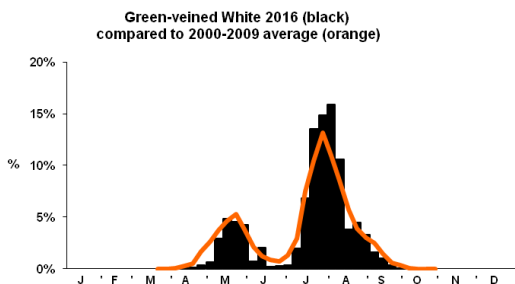
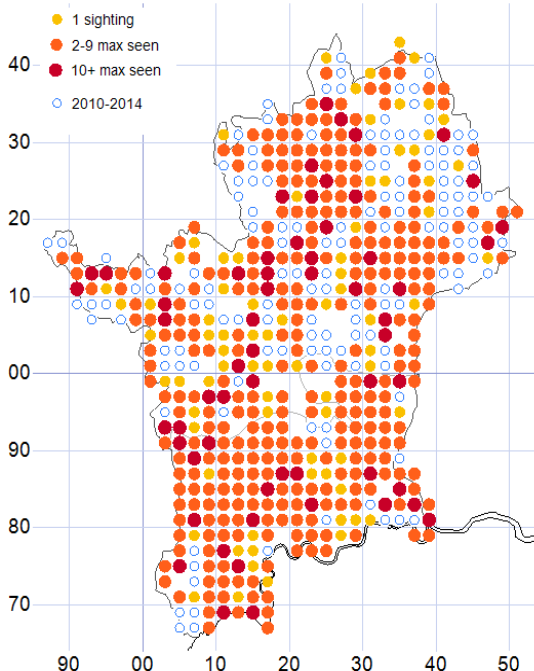


Photo Andrew Wood



First: 2 Apr
 Last: 2 Oct
 Peak week: 31 Jul – 6 Aug

Distribution % squares	
2016	60% (343)
2015	54% (308)
2010-14 mean	52%

Abundance (transects)	
2016	41
2015	36
2010-14 mean	51

Distribution change
Up 14% compared with 2010-2014

Abundance change
Down 20% compared with 2010-2014

The Green-veined White had the best year of the three *Pieris* species in 2016. The peak flight period was two weeks later than 2015, probably reflecting the cool April conditions which pushed its first brood flight period later too. Like the Holly Blue it occupies the vast majority of Middlesex squares but there are some big gaps in Hertfordshire where it must be present given the widespread distribution of its larval food plants.

Clouded Yellow *Colias croceus*

Less common migrant

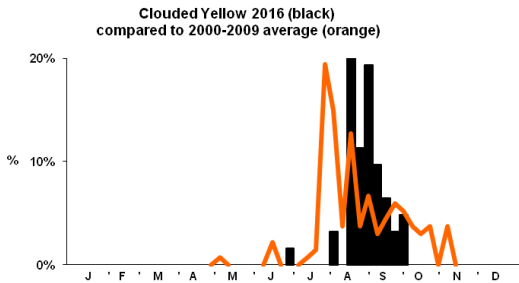
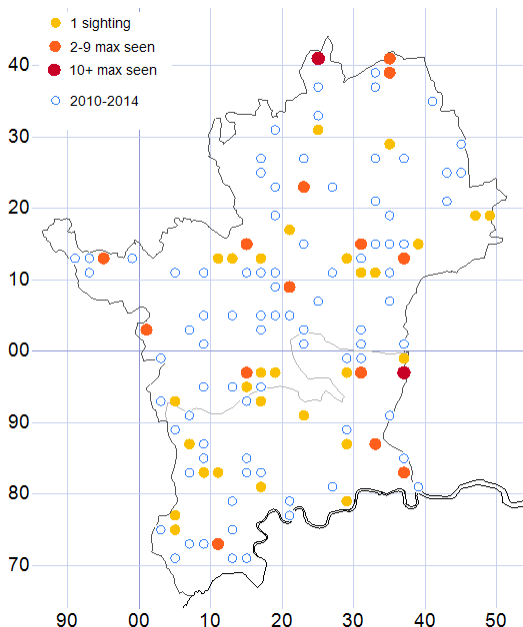


Photo Andrew Wood

First: 26 Jun
Last: 4 Oct
Peak week: 13-19 Aug



Distribution % squares	
2016	6% (36)
2015	2% (11)
2010-14 mean	5%

Abundance (transects)	
2016	1
2015	2
2010-14 mean	2

Distribution change
Up 20% compared with 2010-2014

Abundance change
Down 50% compared with 2010-2014

There were more Clouded Yellows reported in 2016 than 2015 with a strong late summer peak. However there were only three reports of more than single specimens so it was definitely not a Clouded Yellow year. The double figure report came from the Lea Valley where 10 were seen at the King George Reservoir on the Herts/Essex border. The abundance data is not significant as this species is not heavily recorded on transects and its inability to survive the winter in most of Britain means it has to be annually replenished by migration. In 2016 there was little movement until mid August and no evidence of the establishment of breeding colonies that would have produced an autumn flight.

Brimstone *Gonepteryx rhamni*

Widespread

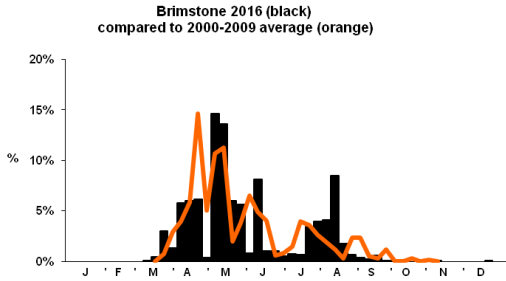
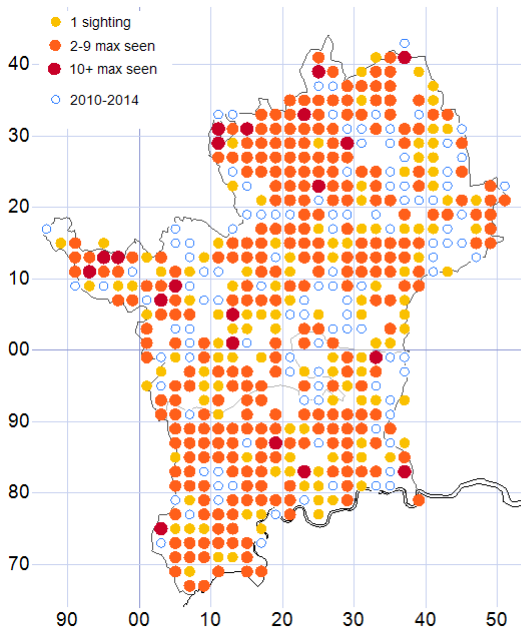


Photo Tom Spelleer

First: 4 Feb
Last: 14 Dec
Peak week: 30 Apr-6 May



Distribution % squares	
2016	51% (290)
2015	51% (290)
2010-14 mean	39%

Abundance (transects)	
2016	19
2015	20
2010-14 mean	21

Distribution change
Up 30% compared with 2010-2014

Abundance change
Down 10% compared with 2010-2014

The most remarkable thing about the Brimstone is how unremarkable its fluctuations are. It is probably the species in our area whose abundance and distribution vary the least over time. The proportion of records from the summer compared to spring was greater than normal, a reflection of the cooler early spring and a better August than the last two. The benefits of garden planting of alder buckthorn were shown by reports of egg laying by Diane Andrews in north London on May 4 and 26 and in Letchworth by Roger Millard.

Speckled Wood *Pararge aegeria*

Widespread & common

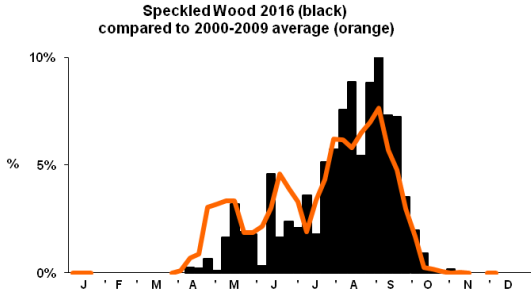
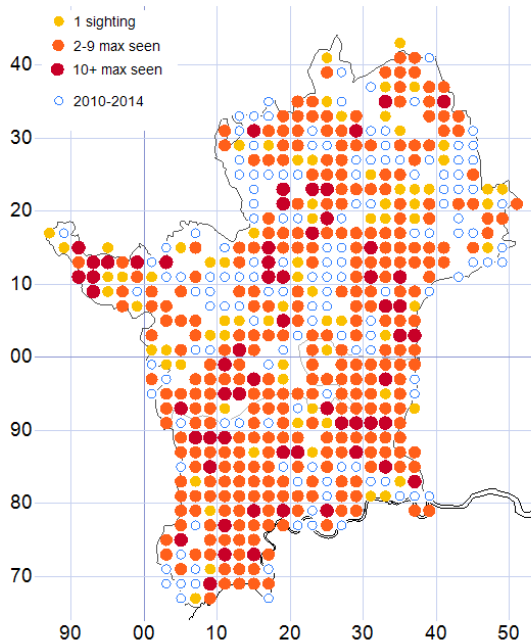


Photo Andrew Wood

First: 4 Jan

Last: 31 Oct

Peak week: 27 Aug-2 Sep



Distribution % squares

2016	59% (330)
2015	56% (320)
2010-14 mean	60%

Abundance (transects)

2016	39
2015	44
2010-14 mean	58

Distribution change

Down 2% compared with 2010-2014

Abundance change

Down 33% compared with 2010-2014

A further slight decrease in distribution and abundance since 2015 but this is still a common butterfly in shadier areas. Unlike 2015 when there was an unusual mid summer peak the numbers built up to the normal late summer peak. The spring flight was both small and late due to the poor April weather. The 4th January record is not the first early record but is interesting as there was also a record from 29 December 2015, different year but only a week apart. This individual was found by Ian Gamble near Berkhamsted who reported, "checking round the lights at work I found a resting Speckled Wood. On taking it indoors it perked up and became lively".

Small Heath *Coenonympha pamphilus*

Widespread

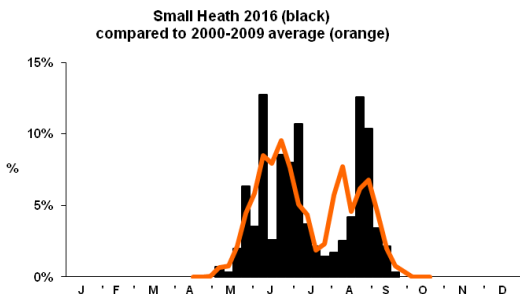
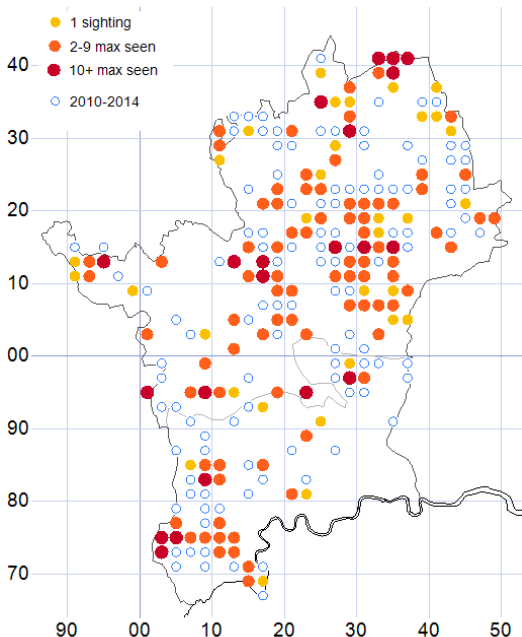


Photo Tom Speller



First: 6 May
Last: 23 Sep
Peak week: 4-10 Jun

Distribution % squares	
2016	14% (78)
2015	16% (93)
2010-14 mean	17%

Abundance (transects)	
2016	24
2015	28
2010-14 mean	38

Distribution change
Down 18% compared with 2010-2014

Abundance change
Down 37% compared with 2010-2014

Small Heath suffered in 2016 with a further drop in numbers and distribution. As in 2015 the highest counts came from Heartwood Forest together with the chalk grassland sites at Aldbury Nowers and Therfield Heath. Unlike many species the peak flight time was three weeks earlier in 2016 than 2015, though it should also be noted that there was a late summer peak that was much higher than usual.

Ringlet *Aphantopus hyperantus*

Widespread & Common

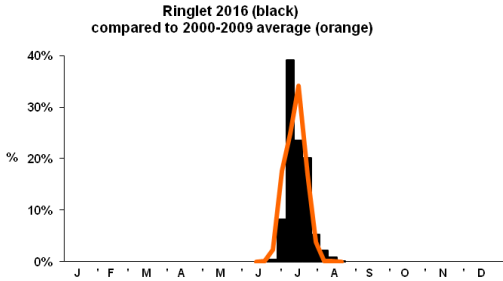
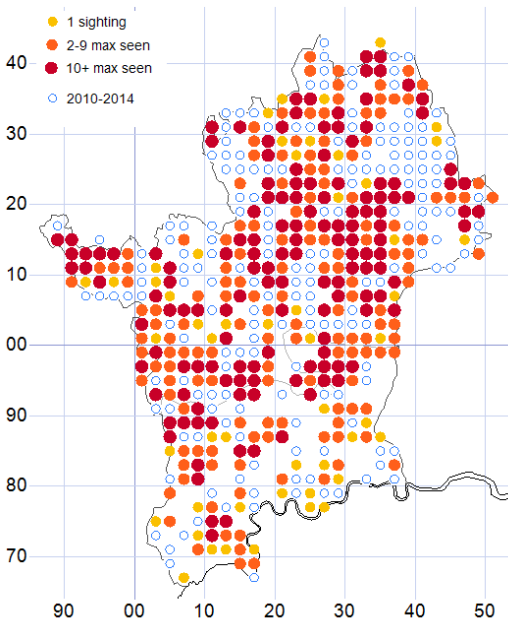


Photo Andrew Wood

First: 16 June

Last: 18 Aug

Peak week: 2 Jul - 8 Jul



Distribution % squares	
2016	45% (251)
2015	42% (237)
2010-14 mean	44%

Abundance (transects)	
2016	71
2015	146
2010-14 mean	122

Distribution change
Up 2% compared with 2010-2014

Abundance change
Down 42% compared with 2010-2014

The notable feature of the Ringlet's 2016 was the halving of abundance numbers compared to last year and a large drop compared to the longer term figures. Distribution continued to grow with Diane Andrews reporting it for the first time at Gillespie Park near Arsenal's ground and Downhills Park in Tottenham. Leslie Williams also reported, "Ringlet butterflies have established a population at Fryent Country Park. Their presence during 2016 was confirmed on both the Fryent Country Park and on the Beane Hill transect along woodland paths " As last year its highest counts were on the transect walk at Balls Wood, though in the 200-250 band rather than 250+. As is often the case with single brooded browns its flight times and peak were little different to the longer term trends.

Meadow Brown *Maniola jurtina*

Widespread & Common

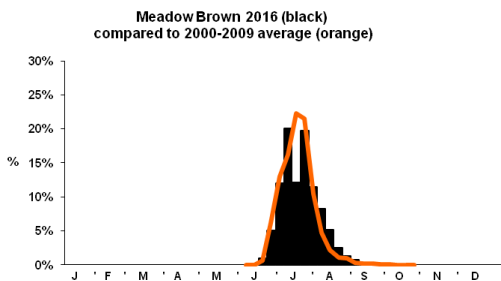
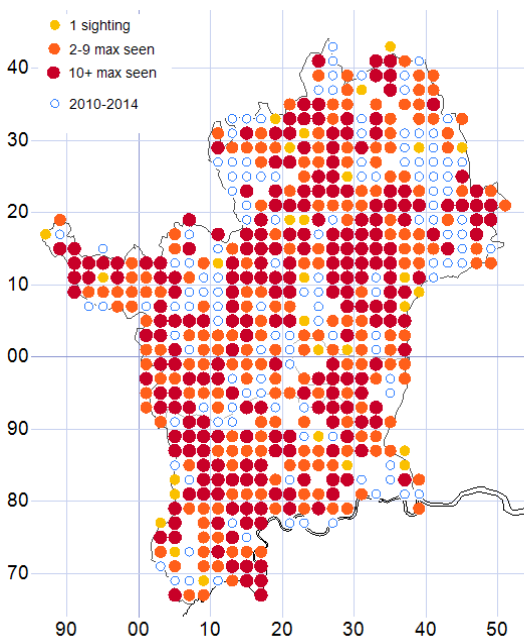


Photo Andrew Wood

First: 5 Jun
Last: 21 Sep
Peak week: 2-8 Jul



Distribution % squares	
2016	61% (342)
2015	65% (371)
2010-14 mean	63%

Abundance (transects)	
2016	185
2015	217
2010-14 mean	287

Distribution change
Down 4% compared with 2010-2014

Abundance change
Down 36% compared with 2010-2014

A slight decline compared to last year and the drop in abundance measured on the transect walks is worrying. It is still our numerically commonest butterfly despite the abundance figure being well below the 2010-2014 average. We need to keep an eye on common species like this as it is too easy to ignore changes in them until it is too late. Its flight period was slightly later than recently probably due to the cool April.

Gatekeeper *Pyronia tithonus*

Widespread & common

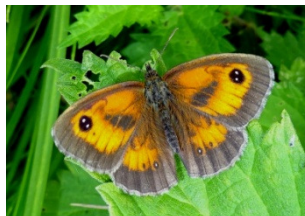
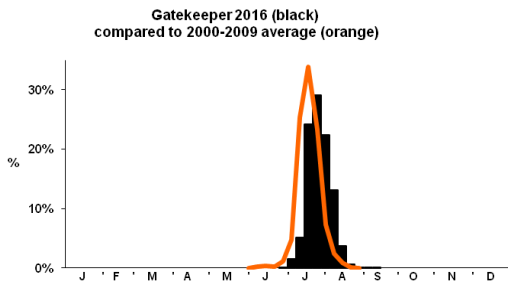
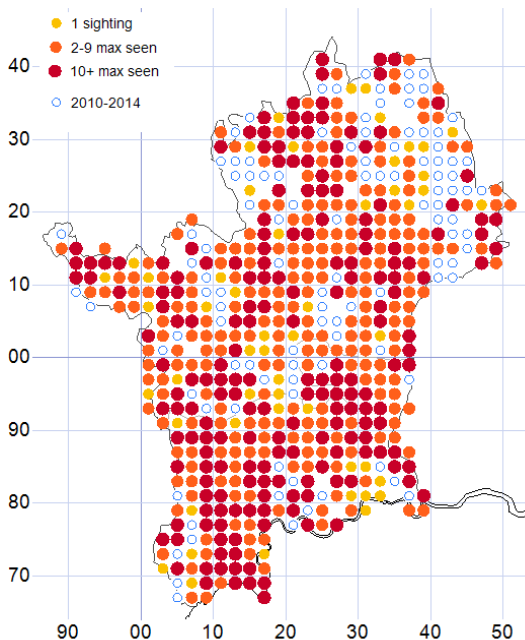


Photo Chris Benton



First: 1 Jul
Last: 15 Sep
Peak week: 16-22 Jul

Distribution % squares	
2016	63% (352)
2015	72% (411)
2010-14 mean	65%

Abundance (transects)	
2016	49
2015	86
2010-14 mean	91

Distribution change
Down 3% compared with 2010-2014

Abundance change
Down 46% compared with 2010-2014

Like the Meadow Brown there has been a slight decline in distribution but a continuing drop in abundance which is a cause for concern. We still need recorder effort in north east Hertfordshire to fill in some of the missing squares for Gatekeeper. There was a noticeably later flight period for the species with it not getting going until mid July and the whole flight period being back about a week over the longer term trends.

Marbled White *Melanargia galathea*

Widespread in Herts

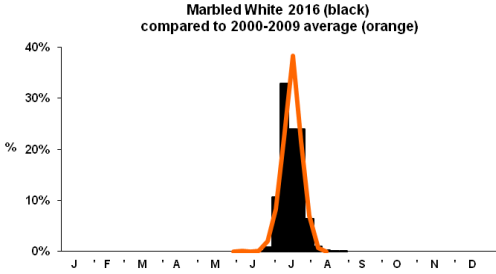
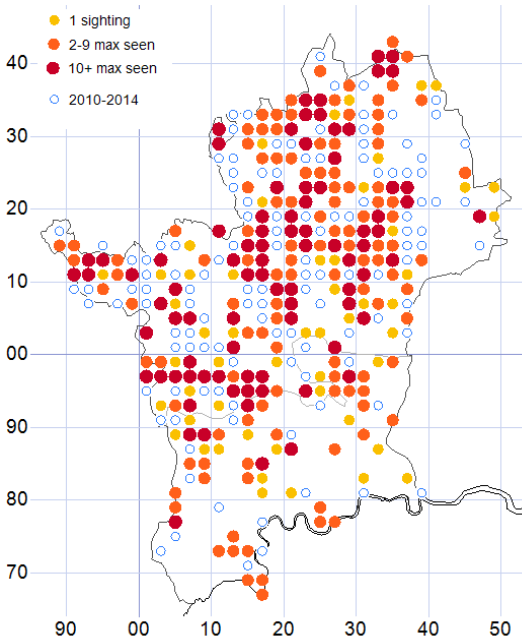


Photo Chris Benton



First: 5 Jun
Last: 17 Aug
Peak week: 2-8 Jul

Distribution % squares	
2016	33% (183)
2015	29% (162)
2010-14 mean	26%

Abundance (transects)	
2016	74
2015	79
2010-14 mean	91

Distribution change
Up 26% compared with 2010-2014

Abundance change
Down 19% compared with 2010-2014

Unlike the other brown species Marbled White had a good year with increased distribution and only a small drop in abundance. The increased distribution is mainly in southern Middlesex, showing a continued move towards central London. Its flight period fitted the longer term trend, although the peak was slightly earlier. Highest numbers continue to be recorded at Therfield Heath but good numbers were seen on the transects at Shrubhill Common in Hemel Hempstead and Heartwood Forest near St Albans.

Dark Green Fritillary *Argynnis aglaja*

Rare but increasing

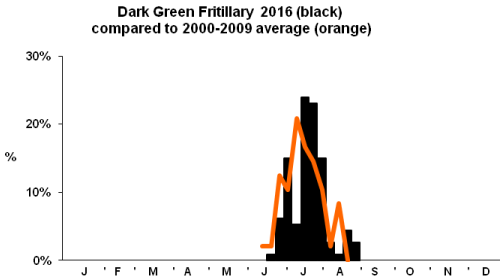
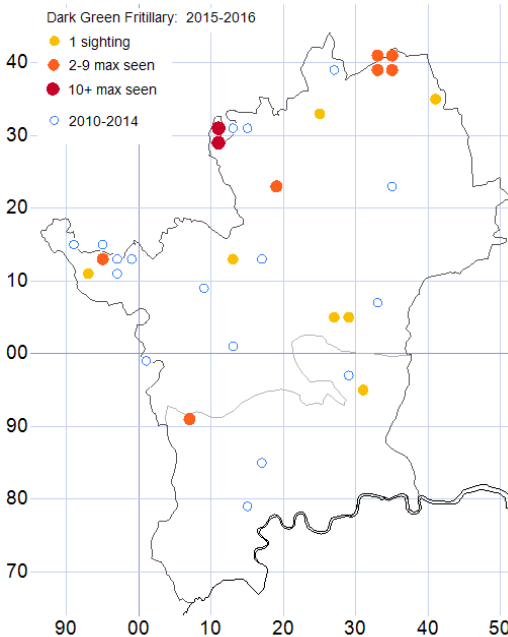


Photo Chris Benton



First: 19 Jun

Last: 29 Aug

Peak week: 16-22 Jul

Distribution % squares	
2016	2% (10)
2015	2% (11)
2010-14 mean	2%

Abundance (transects)	
2016	4
2015	2
2010-14 mean	20

Distribution change	
Unchanged	

Abundance change	
Down 80% compared with 2010-2014	

The main breeding colonies for this species remain at the chalk grassland sites at Therfield Heath, Hexton Chalk Pit and Aldbury Nowers. However there is now a wider scattering of records away from these core areas, could we be seeing a Silver-washed Fritillary like dispersion?. Those new sites are at Nuthampstead (a 2015 record received too late for last year’s report) and Northaw Great Wood in Hertfordshire and Oakwood Park and Bishops Wood in Middlesex. All of these are in a band south and east of previous records. We must be cautious, though as the map also shows odd dots from 2010-2014 where it has not recurred.

Silver-washed Fritillary *Argynnis paphia*

Locally common in woodland

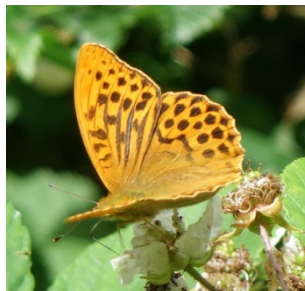
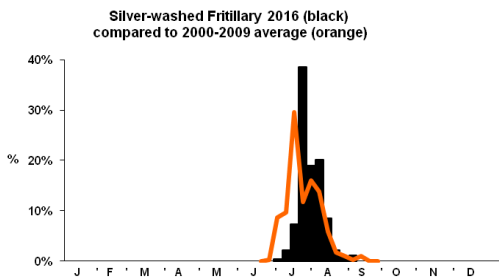
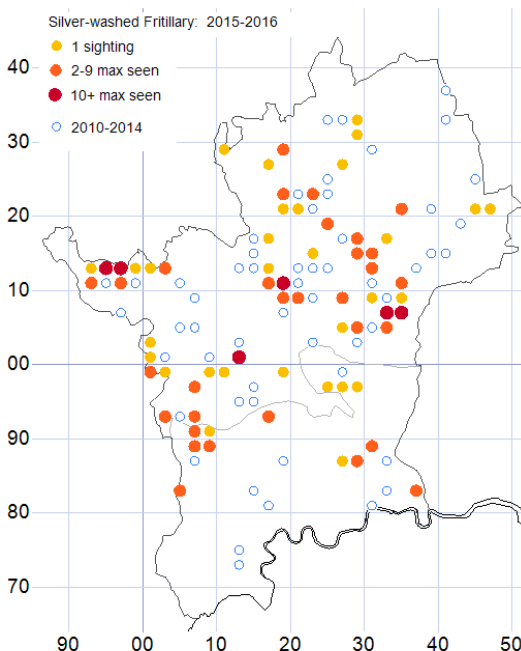


Photo Andrew Wood



First: 1 Jul
Last: 30 Aug
Peak week: 16-22 July

Distribution % squares	
2016	7% (41)
2015	7% (42)
2010-14 mean	6%

Abundance (transects)	
2016	8
2015	17
2010-14 mean	13

Distribution change
No change

Abundance change
Down 38% compared with 2010-2014

As with many species in 2016, the distribution has not altered very much but numbers have dropped a lot. The cool April appears to have an effect on larval development as the flight period and its peak was pushed on two weeks from both 2015 and the longer term. It is now a common species in most woodland in Hertfordshire and north Middlesex. At sites such as Broxbourne Wood west ride and Symondshyde Wood it is possible to count up to 20 individuals in a short visit. However at two other woodland sites where transects are walked, Balls Wood and Bricket Wood Common, numbers dropped noticeably in 2016.

White Admiral *Limenitis camilla*

Local in woodland

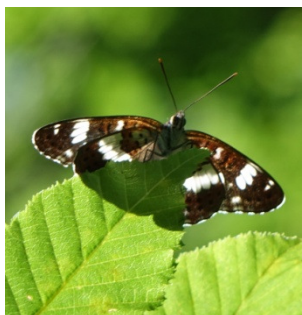
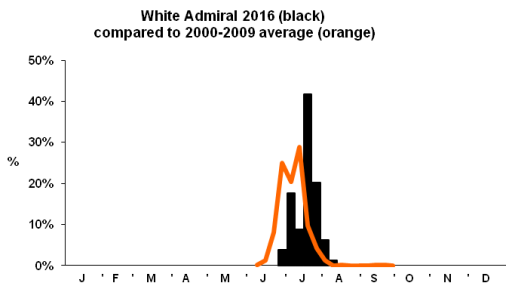
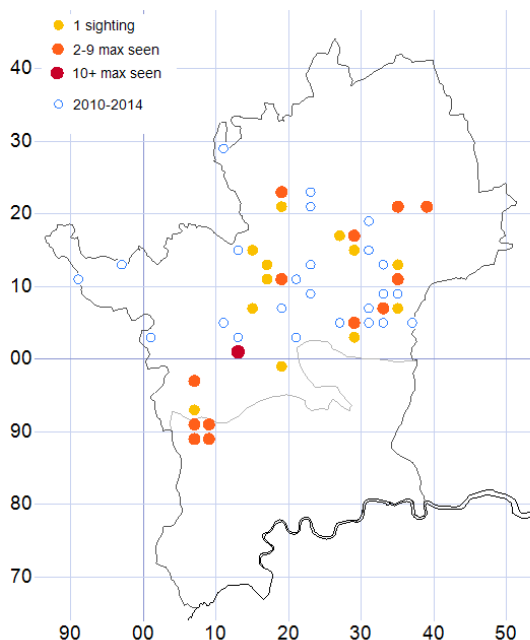


Photo Andrew Wood



First: 29 Jun

Last: 6 Aug

Peak week: 16-22 Jul

Distribution % squares	
2016	2% (14)
2015	4% (20)
2010-14 mean	3%

Abundance (transects)	
2016	6
2015	8
2010-14 mean	15

Distribution change
Down 33% compared with 2010-2014

Abundance change
Down 60% compared with 2010-2014

The White Admiral continues its decline with drops in both distribution and abundance. Its stronghold remains Bricket Wood Common but the highest transect count was only four, at Balls Wood it was two. Malcolm Hull writing about the Bricket Wood Common transect noted, "White Admiral and SWF numbers lowest for 9 years ". The only bright spot is the confirmation of its presence in low numbers at Whippendell Wood, west of Watford.

Purple Emperor *Apatura iris*

Local in woodland

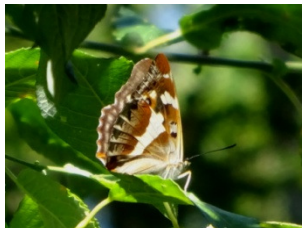
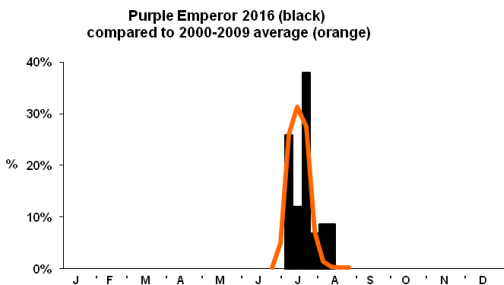
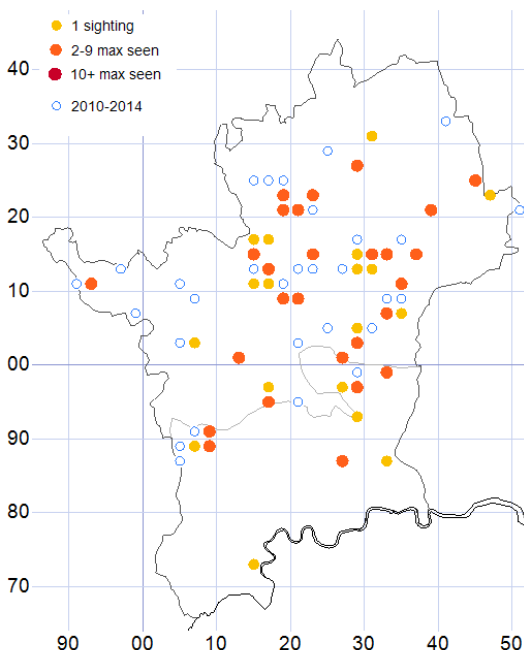


Photo Chris Benton



First: 4 Jul
Last: 12 Aug
Peak week: 16-22 Jul

Distribution % squares	
2016	5% (30)
2015	4% (23)
2010-14 mean	4%

Abundance (transects)	
2016	1
2015	1
2010-14 mean	2

Distribution change
Up 25% compared with 2010-2014

Abundance change
Too little data to calculate

Unlike the White Admiral the Purple Emperor continues to increase its distribution with new sites such as Ware (Liz Goodyear’s garden!), Batford, and Ellenbrook Fields. Despite the well known methods that can be used to see this butterfly, it often turns up unexpectedly on an observer’s local patch, so always keep your eyes open in July for a large dark butterfly. For instance Kate Aylett wrote, “I released a large butterfly from the fruit cage in my garden... I later identified it as a female Purple Emperor and Robert Browning reported, “Sighted a male on the ground while playing golf at Hadley Wood Golf Club on 5 July”.

Red Admiral *Vanessa atalanta*

Common migrant/Resident

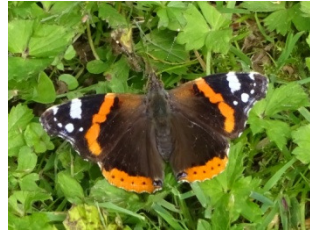
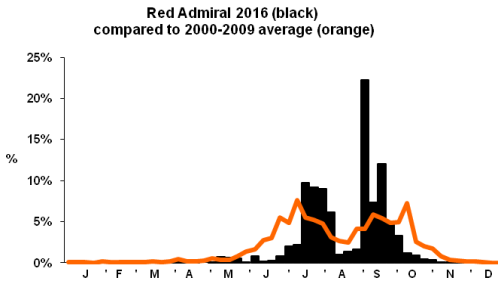
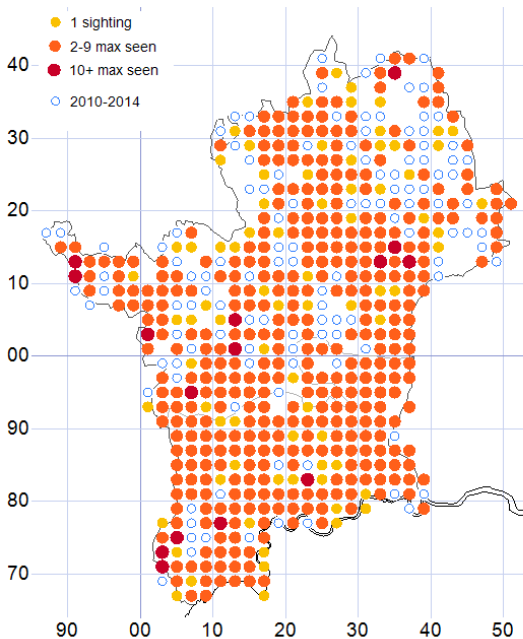


Photo Chris Benton



First: 7 Feb
Last: 22 Dec
Peak week: 3-9 Sep

Distribution % squares	
2016	67% (376)
2015	58% (332)
2010-14 mean	59%

Abundance (transects)	
2016	10
2015	6
2010-14 mean	11

Distribution change
Up 14% compared with 2010-2014

Abundance change
Down 9% compared with 2010-2014

A good year for this migrant/increasingly resident species. Unlike 2015 when there were no double figure counts, there were 37 double figure counts in 2016. There were two treble figure accounts in September both from Staines Moor in south west Middlesex where the butterflies were feeding on rotting blackberries. This accounts for the huge peak week shown on the flight chart. The sudden increase after a couple of low weeks suggest a possible immigration event. It is also notable that numbers tailed off quickly in the later autumn. However that still left 17 November records and 10 in December.

Painted Lady *Vanessa cardui*

Variable migrant

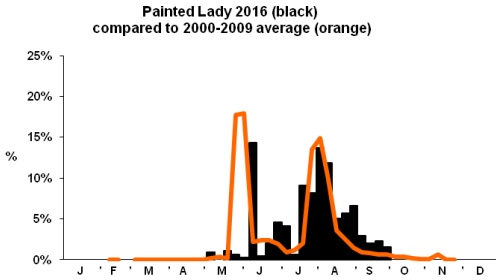
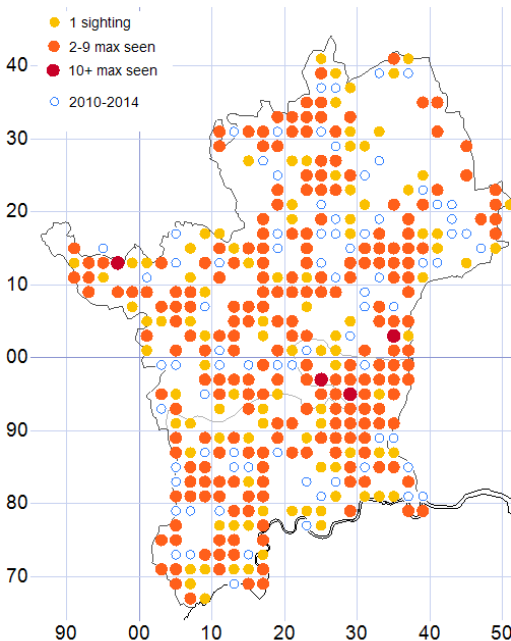


Photo Chris Benton



First: 20 Apr

Last: 14 Oct

Peak week: 4-10 Jun

Distribution % squares	
2016	30% (171)
2015	40% (227)
2010-14 mean	17%

Abundance (transects)	
2016	3
2015	2
2010-14 mean	4

Distribution change
Up 76% compared with 2010-2014

Abundance change
Too little data to calculate

The Painted Lady had a quieter year than 2015 but it was still a better than average year. There was little immigration in the spring with the first influx being in early June, relatively few were seen until mid July after which they were present in larger than usual numbers through to the end of September. An unusual form was noted at Church Fields, Harrow on the Hill by Allan Lunn, "I saw what I thought was a Marbled White. On closer inspection it proved to be a very pale, almost white Painted Lady. The black markings were as expected but the normal pink/orange background was completely absent. A most unusual sight".

Peacock *Inachis io*

Common & Widespread

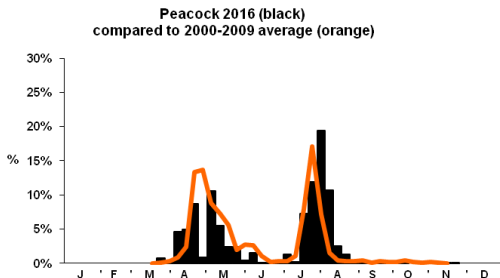
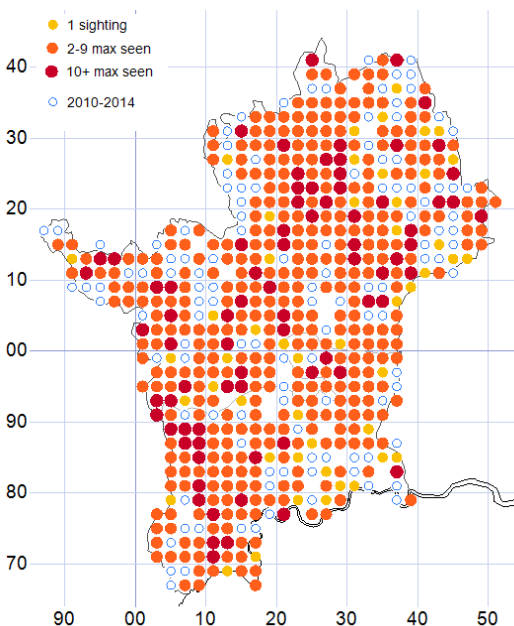


Photo Chris Benton



First: 21 Mar
Last: 12 Nov
Peak week: 30 Jul-5 Aug

Distribution % squares	
2016	58% (324)
2015	71% (406)
2010-14 mean	62%

Abundance (transects)	
2016	14
2015	37
2010-14 mean	27

Distribution change
Down 6% compared with 2010-2014

Abundance change
Down 48% compared with 2010-2014

A big drop from 2015 taking it below the recent averages which gives some cause for concern. The summer 2015 emergence was small and combined with the poor April is reflected in the small size of the post hibernation flight. The summer flight was a little later than usual. It is difficult to predict 2017 as the highest counts for 2016 were very evenly split between the early and late flights. Mile Attenborough photographed one with faded patches in the centre of the wings at Coppetts Wood on 30 April. Michael Hamerson noted the lack of larvae in 2016 in north London, "I did not spot the usual nests of Peacock larvae on the nettles along the road from the Kenwood Kitchen Garden entrance, or at the Archway Road entrance to Highgate Woods".

Small Tortoiseshell *Aglais urticae*

Common & Widespread

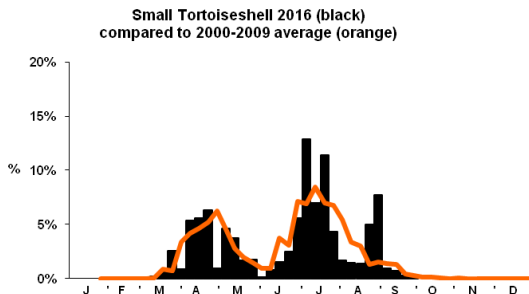
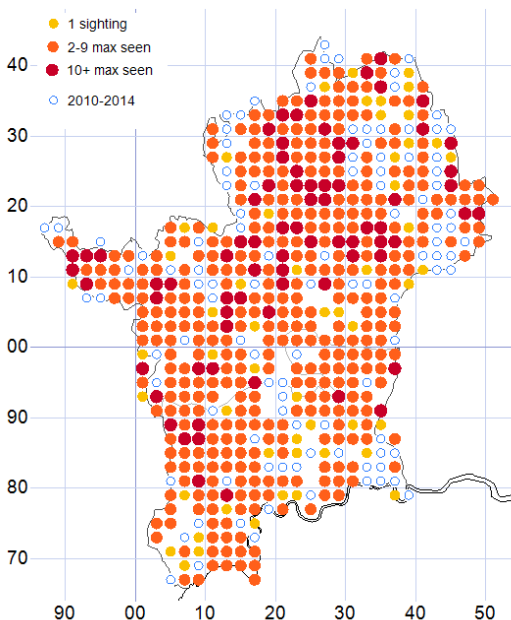


Photo Tom Speller



First: 30 Jan
Last: 30 Sep
Peak week: 2-8 Jul

Distribution % squares	
2016	63% (356)
2015	71% (404)
2010-14 mean	53%

Abundance (transects)	
2016	18
2015	36
2010-14 mean	24

Distribution change
Up 19% compared with 2010-2014

Abundance change
Down 25% compared with 2010-2014

As with Peacock there has been a drop this year, although distribution, particularly is still well up over longer term trends. Unlike 2015 there were three distinct flight periods, a small one in the spring reflecting low hibernating numbers and a poor April. The summer brood was much stronger and very distinctly separated from the late August flight. Was that flight a separate brood or did it represent an immigration event? From around the 20 August there was a sudden leap from single records to multiple counts into the forties which does suggest a sudden influx. Such events have generally led to an upturn in succeeding years with a high number of potential hibernators.

Comma *Polygona c-album*

Common & widespread

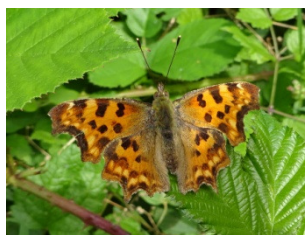
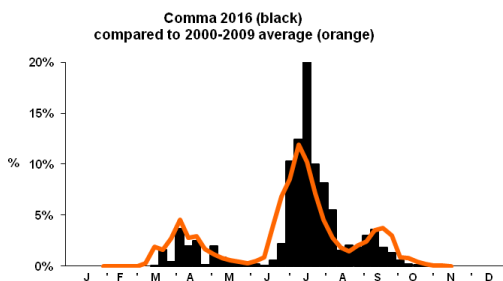
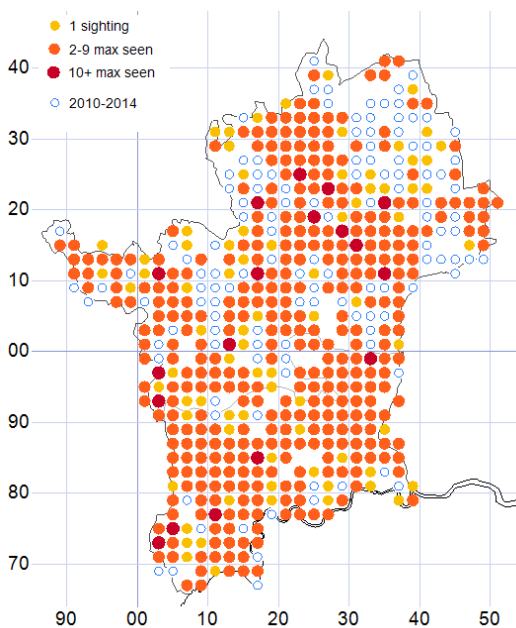


Photo Chris Benton



First: 2 Jan
Last: 29 Nov
Peak week: 16-22 July

Distribution % squares	
2016	56% (310)
2015	65% (371)
2010-14 mean	61%

Abundance (transects)	
2016	16
2015	16
2010-14 mean	15

Distribution change
Down 8% compared with 2010-2014

Abundance change
Up 7% compared with 2010-2014

Nowhere near the drop in abundance of the Peacock and Small Tortoiseshell in 2016, but a noticeable drop in distribution. The flight pattern was similar to longer term trends. There are rather large areas of Hertfordshire where it has not been recorded in 2015 or 2016, whereas Middlesex has rather fewer gaps. This is a trend for several species and may raise questions about land use and management in more rural areas.

Small Copper *Lycaena phlaeas*

Widespread & common

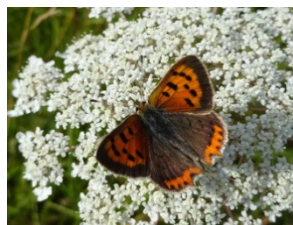
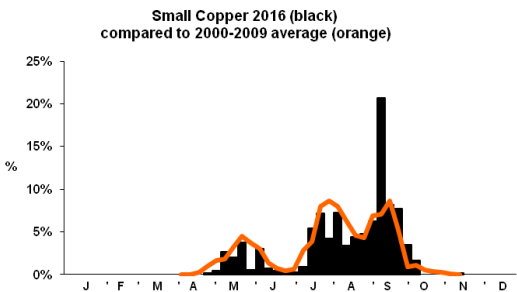
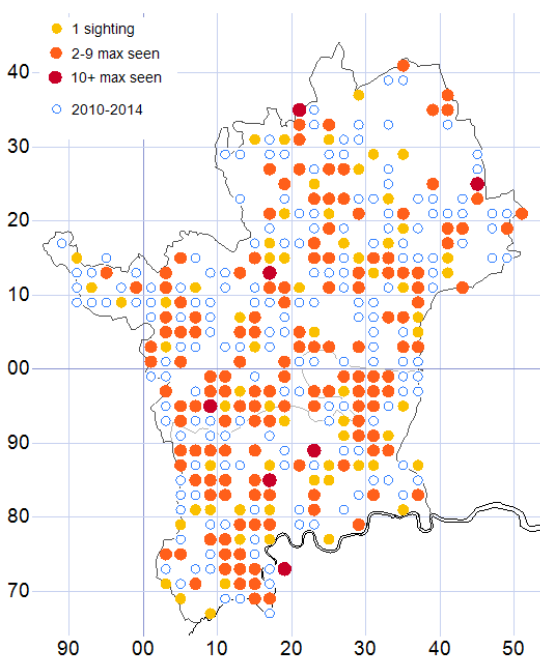


Photo Chris Benton



First: 29 Apr
Last: 18 Oct
Peak week: 10-16 Sep

Distribution % squares	
2016	21% (120)
2015	27% (153)
2010-14 mean	28%

Abundance (transects)	
2016	5
2015	6
2010-14 mean	8

Distribution change	
Down 25% compared with 2010-2014	

Abundance change	
Down 38% compared with 2010-2014	

The lack of Small Copper was mentioned in messages more often than any other species in 2016. The very distinct break between the 2nd and 3rd broods seen last year was not repeated and there was then a very sharp peak in early September with peak counts from several widely separated sites. This peak was two weeks earlier than 2015. The reasons for this are not clear. It will be interesting to see what 2017 brings for this species and I hope that as this is a distinctive butterfly recorders will be able to keep a close look out for it so that we can closely monitor its progress.

Purple Hairstreak *Neozephyrus quercus*

Common around oaks

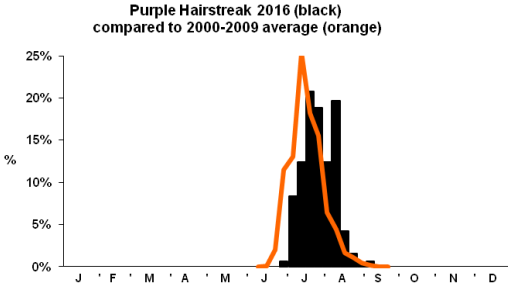
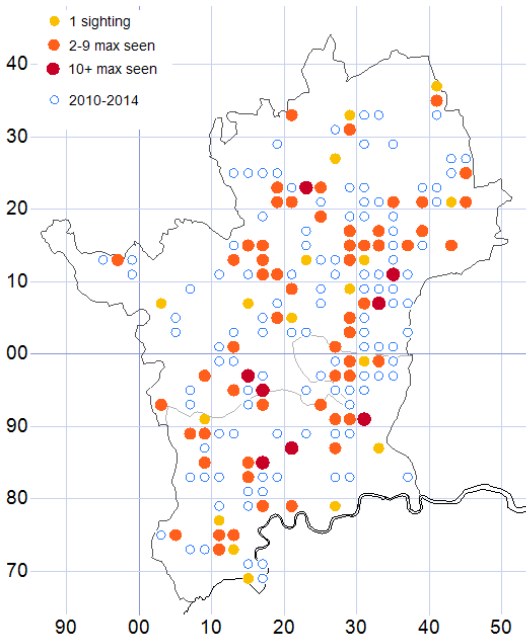


Photo Andrew Wood



First: 25 Jun

Last: 8 Sep

Peak week: 16-22 July

Distribution % squares	
2016	10% (55)
2015	11% (60)
2010-14 mean	13%

Abundance (transects)	
2016	6
2015	6
2010-14 mean	10

Distribution change	
Down 23% compared with 2010-2014	

Abundance change	
Down 40% compared with 2010-2014	

Another species whose emergence was pushed back probably owing to the poor April. Otherwise there was very little change from 2015 and both distribution and abundance were well down compared to longer term trends. One hopes this is down to the relative difficulty of seeing this butterfly but there were some worrying reports of absence too. It was noted as missing from Berrygrove Woods near Watford where Michael Kings reported, “particularly notable as I checked at least once a week through the summer”. Similarly Michael Hammerson reported, “The Highgate Wood staff tell me that they saw no Purple Hairstreaks this year.”

Green Hairstreak *Callophrys rubi*

Very rare & restricted

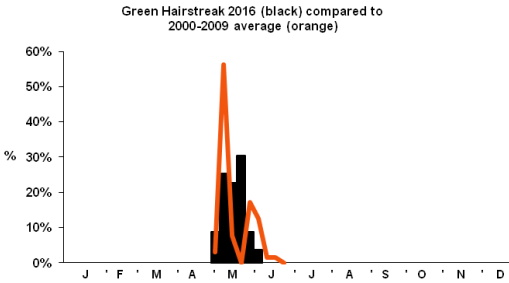
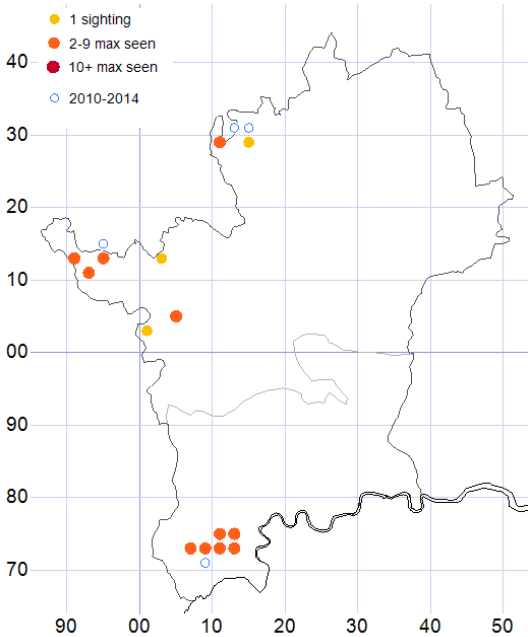


Photo Chris Benton



First: 4 May
Last: 7 Jun
Peak week: 21-27 May

Distribution % squares	
2016	2% (12)
2015	1% (8)
2010-14 mean	1%

Abundance (transects)	
2016	6
2015	5
2010-14 mean	11

Distribution change	
Up 100% compared with 2010-2014	

Abundance change	
Too little data to calculate	

It appears that the Green Hairstreak has extended its distribution in south west Middlesex around Hounslow Heath and Bedfont Lakes but this is probably a reflection of recorder effort rather than a real expansion of the species. Nonetheless the group of dots here is good news for this rare species. It was also newly recorded near Hoo Wood in the Great Gaddesden area and along the Wendover Arm of the Grand Union canal near Tring. There was also a record of an egg laying female at Oughtonhead Common near Hitchin where it has not been recorded in recent times. It was still recorded at Telegraph Hill, despite the poor condition of the site.

White-letter Hairstreak *Satyrion w-album*

Common around elm

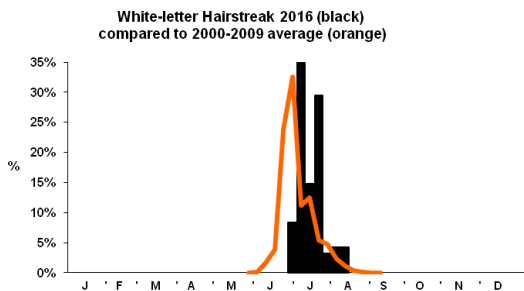
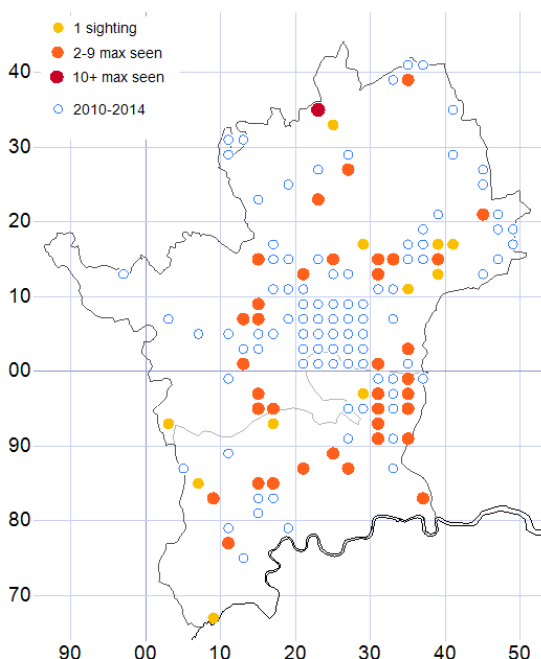


Photo Andrew Wood



First: 25 Jun

Last: 10 Aug

Peak week: 2-8 Jul

Distribution % squares	
2016	6% (33)
2015	4% (21)
2010-14 mean	7%

Abundance (transects)	
2016	2
2015	2
2010-14 mean	2

Distribution change	
Down 14% compared with 2010-2014	

Abundance change	
No Change	

The increase in distribution over 2015 probably reflected recorder effort, which in itself is good news. Its flight was later than the long term trends. Although it is associated with tree tops, it can be found low down. We had two such reports, from Andrew Wood, of this butterfly at woodland sites where it has not been previously recorded. It was photographed low down on a grass stem at Balls Wood and mud puddling on the ground at Bramfield Woods.

Small Blue *Cupido minimus*

Very rare & restricted

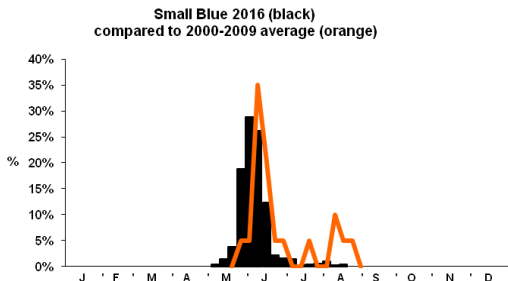
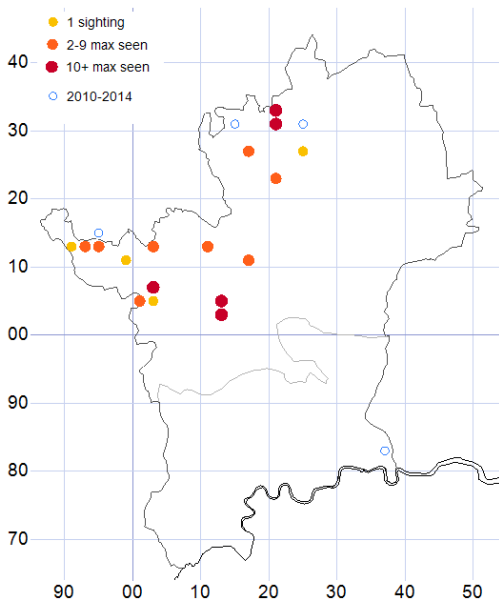


Photo Andrew Wood

First: 6 May

Last: 13 Aug

Peak week: 28 May–3 Jun



Distribution % squares

2016	2% (11)
2015	2% (10)
2010-14 mean	1%

Abundance (transects)

2016	136
2015	292
2010-14 mean	26

Distribution change

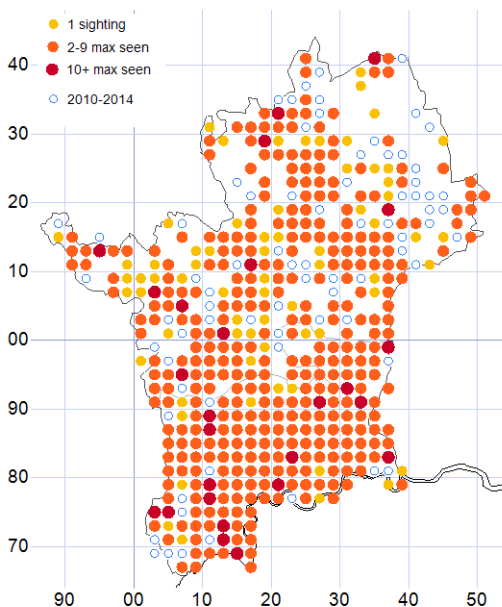
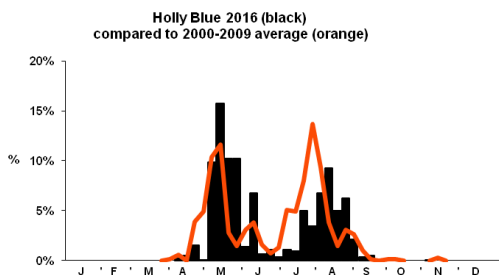
Up 100% compared with 2010-2014

Abundance change

Up 423% compared with 2010-2014

Numbers were down from the amazing 2015. We were able to survey at Butterfly World, despite its closure, and good numbers were recorded. It was found right on the edge of the site alongside the footpath that follows the site boundary. It was found in very small numbers on a steep cutting east of Redbourn and at Tringford, but was not seen in Stevenage. All the other known colonies continued to do well. Interestingly the normally partial second brood that was so obvious last year was virtually absent, hopefully this just means that a higher proportion of larvae are spending the winter in hibernation rather than emerging as adults in late summer. It is also notable that peak flight was earlier in 2016 than 2015. We continue to work with several landowners to ensure the survival of this rare butterfly.

Holly Blue *Celastrina argiolus*



Widespread & common



Photo Chris Benton

First 22 Mar

Last: 31 Oct

Peak week: 7-13 May

Distribution % squares

2016	58% (325)
2015	57% (323)
2010-14 mean	42%

Abundance (transects)

2016	11
2015	17
2010-14 mean	10

Distribution change

Up 39% compared with 2010-2014

Abundance change

Up 10% compared with 2010-2014

The Holly Blue declined in numbers from 2015 but maintained its wide distribution. The first brood was the larger which suggests that its parasite may be beginning an upward turn in its cycle. There is now hardly a square in Middlesex that does not have a record for this species. Holly Blue will lay eggs on a range of plants beyond holly and ivy, Dave Miller noted egg laying on lucerne at Stanwell Moor and goats-rue was also seen to be used by Steve Murray at Tyttenhanger in May. Diane Andrews reported “watched a few eggs being laid on budding astilbe flowers on 5 June” in her north London garden and “being laid on a goat’s rue stem on 9 June at Crew’s Hill”. She further reported “no caterpillars seen on our astilbe since then”. We had several reports from different sites of this species taking minerals from mud and animal droppings on the ground.

Brown Argus *Aricia agestis*

Widely distributed

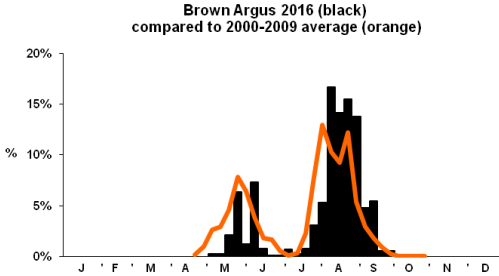
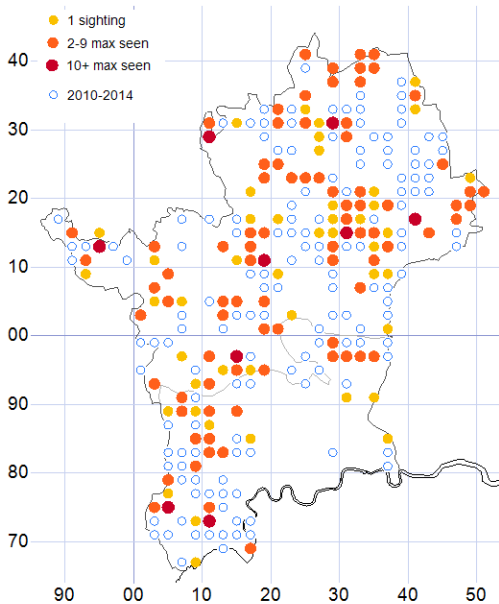


Photo Chris Benton

First: 6 May

Last: 2 Oct

Peak week: 6-12 Aug



Distribution % squares	
2016	14% (81)
2015	17% (94)
2010-14 mean	16%

Abundance (transects)	
2016	9
2015	9
2010-14 mean	14

Distribution change
Down 13% compared with 2010-2014

Abundance change
Down 35% compared with 2010-2014

Distribution was down but abundance remained the same as 2015. The spring brood was rather small and late in 2016, the summer brood was also late. The later brood is normally larger but it was particularly large in proportion to the spring brood this year, hopefully this will have bred successfully to produce a strong spring brood for 2017. Unlike many other species it has yet to penetrate into central and eastern Middlesex.

Common Blue *Polyommatus icarus*

Widespread & common

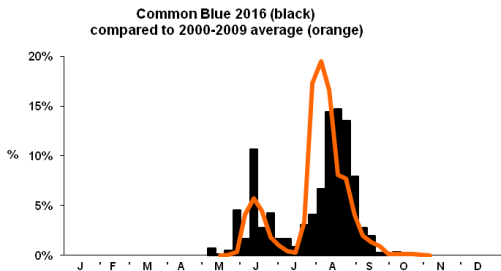
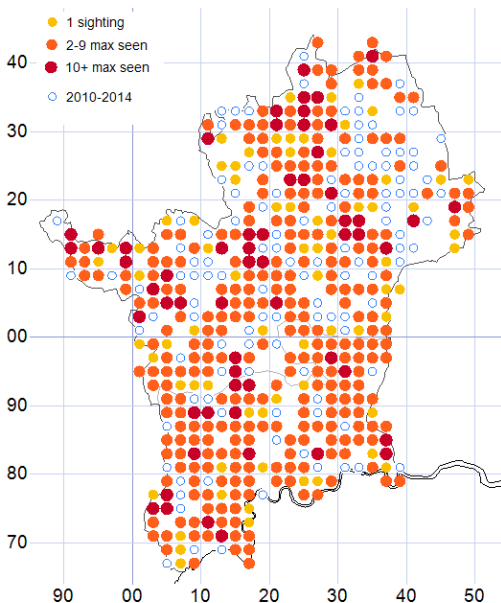


Photo Chris Benton

First: 1 May
Last: 18 Oct
Peak week: 13-19 Aug



Distribution % squares	
2016	42% (237)
2015	50% (330)
2010-14 mean	41%

Abundance (transects)	
2016	16
2015	36
2010-14 mean	38

Distribution change
Up 3% compared with 2010-2014

Abundance change
Down 58% compared with 2010-2014

Common Blue had a poorer year than 2015 and as with several other species the abundance dropped much more than the change in distribution, as in 2015 the spring brood was at its usual time, but the summer brood was rather late. In the 2016 Big Butterfly Count this species declined between 2015 and 2016 more than any other and that decline is very much reflected in our overall data.

Chalkhill Blue *Lysandra coridon*

Common at known chalk sites

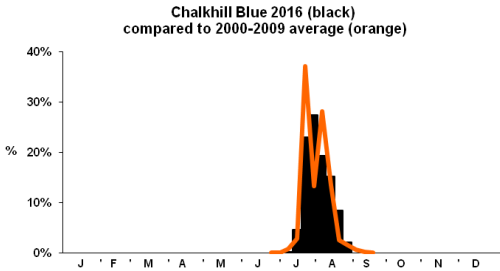
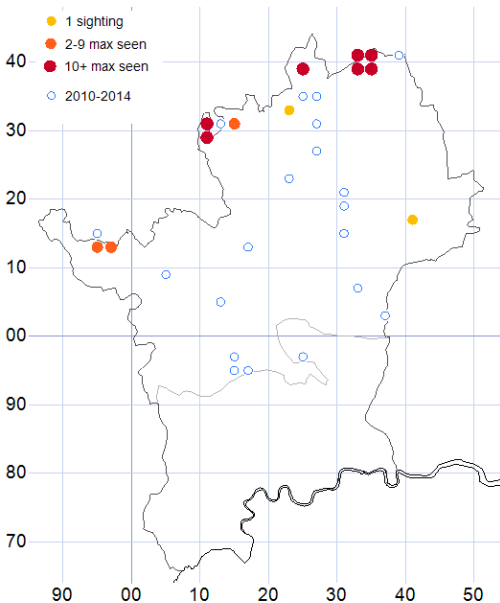


Photo Andrew Wood



First: 2 Jul
Last: 24 Aug
Peak week: 23-29 Jul

Distribution % squares	
2016	2% (10)
2015	2% (10)
2010-14 mean	2%

Abundance (transects)	
2016	117
2015	489
2010-14 mean	96

Distribution change
No change

Abundance change
Up 8% compared with 2010-2014

Distribution was unchanged in 2016, with only one record of dispersal outside its normal range, this being in Letchworth Garden City. The drop in abundance is probably over emphasised as the transect recording at Therfield Heath was curtailed this year owing to the walker’s indisposition. The flight pattern was similar to usual but the flight period finished a week before the end of August, again this was probably due to the difficulties in the Therfield Heath transect being covered. At the recently established colony at Ashwell, Chris James had good news, “Re Chalkhill Blues at Ashwell - still there and in greater numbers this year - at least 6-7 males and 2 females”.

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