



HAMPSHIRE & ISLE OF WIGHT BUTTERFLY REPORT - 2016

Hampshire and Isle of Wight Butterfly Report 2016

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Summary of Earliest/Latest Butterfly Sightings 2016 2015-2016 Butterfly Trends in Hampshire and Isle of Wight

Introduction Clive Wood

W. Furneaux's 1919 book *British Butterflies and Moths* provides a reminder of how much has changed in entomology over the years. Accounts of species are accompanied by a practical guide to the collection and display of butterflies and moths. In his Lepidopterist's Calendar, Furneaux advises readers each April:

"....to put all apparatus and appliances into perfect working order. The cyanide bottle should be freshly charged, nets examined, and all setting boards, breeding cages &c. put in perfect trim for the new season's work."

Conservation was not Furneaux's concern although he did question whether "the reckless slaughter.....for ornament or gain has caused the Mazarine Blue to be permanently removed from our list of natives."

The world had other priorities in 1919 and Furneaux did not feel any need to ask his readers to record the presence and abundance of species. The pressures on our native fauna have increased greatly since Furneaux's time and today we know that high quality recording is the cornerstone of conservation. It would be easy to question the value of recording when the latest State of Nature report notes that 60% of UK species have declined over the last 50 years and 31% have declined strongly. We know that many butterflies and moths are in long-term decline.

These insights are only possible because of records. Recording has allowed us to target scarce conservation resources on the Small Blue at Sparsholt College near Winchester and at Magdalen Hill Down. Survey work has underpinned our projects to help the Duke of Burgundy at various sites across the county and to re-introduce the Marsh Fritillary to north-east Hampshire. It may prove too late to keep the Small Pearl-bordered Fritillary in the New Forest, particularly set against climate change, but without surveys we would be less able to target our work to help the Pearl-bordered Fritillary in the Forest.

Recording helps in other ways. The work by Linda Barker and now Jacky Adams to organise the Wider Countryside Butterfly Survey in Hampshire and the Isle of Wight feeds directly into Butterfly Conservation's efforts to influence the effectiveness of new agri-environmental schemes. Records drive BC's landscape-scale conservation projects. They support funding bids to grant-awarding bodies.

For all these reasons and more, this report is dedicated to the volunteers who have walked the meadows, downs, lanes, woods and by-ways of Hampshire and Isle of Wight and submitted their records. Thank you for your time and skill, whether for one record or 1,000.

I must also thank our County Butterfly Recorder, Bob Annell, for his tremendous work in getting this Report ready for posting with our Spring newsletter. Ably assisted by Andy Barker and Kelvin Richards, this formidable team effort has deprived the Royal Mail of several hundred pounds of postage costs, money which we can put to much better use on our conservation work.

Matthew Oates remarked at last year's AGM that we are overdue a really good butterfly year. I hope this report whets your appetite for a fantastic recording season to come.

Best wishes

Clive Wood Chair March 2017 2016 Overview Bob Annell

It was a disappointing year with the lowest number of records since 2012.

This was possibly due to the preceding wet winter and the horrendous rainfall at the end of June just when the wider countryside species usually contribute to a significant rise in numbers.

Despite the number of records being over 18% lower than in 2015, tetrad coverage was down only 2%, with 2016 figures being boosted by the inclusion of The Garden Butterfly Survey records for the first time.

As you will see from the Species Reports, records of most species are significantly lower than 2015. The major exception is Red Admiral, up by an astonishing 184% compared to 2015.



Overall species on transect were down 36% and showed a distinct shortfall during June, July and August, compared to 2015.

The low temperatures during the last week of April made it extremely difficult for recorders to achieve a meaningful count.

The Hampshire Branch has now identified six species as Top Priority: **Duke of Burgundy, Small Pearl-bordered Fritillary, Pearl-bordered Fritillary, Marsh Fritillary, Glanville Fritillary & Wall**.

Over the next few years we will be looking to increase our monitoring of sites where these species and other key species are found. A number of new transects are being proposed.

2016 saw the one millionth butterfly record record on the county database. The sighting occurred on 15th May 2016, Record No. 6,791:

Holly Blue recorded by Peter Billinghurst at Ibthorpe



The first of our 'second' million, a Pearl-bordered Fritillary recorded by Jean Annell near Lyndhurst, also on 15th May 2016.

Many thanks to all who submitted records in 2016. We look forward to receiving your records for 2017, but please remember to submit by 30 November to ensure inclusion in the next Annual Report.

Bob AnnellCounty Butterfly Recorder
March 2017

Where does the data come from?

Kelvin Richards

Each year, the Hampshire and Isle of Wight Branch Recorder receives data from a number of sources in a number of different formats and with varying quality. Before the data is imported into the branch database, it is verified to eliminate any 'suspect' species sightings and cleaned/validated to get the records consistent.

Recause of delays in receiving files well into 2017, the data used for the species.

Because of delays in receiving files well into 2017, the data used for the species reports in this annual report was a subset.

As of mid-February 2017, the number of records received in 2016 from each source was as follows but there's probably more to come!

Transects	40,003
Big Butterfly Count	8,824
Garden Butterfly Survey	3,687
iRecord App	117
iRecord Butterflies	1,213
Migrant Watch Painted Lady	91
Wider Countryside Butterfly Survey	545
Living Record	4,090
Spreadsheets	5,891
Pre-2016	983

Total Import = 65,444

In addition, a few members' records are directly imported from Mapmate 'Sync' files.
Only a few records are now received in hard copy. Whilst we are grateful for these, we would encourage recorders to use any of the available electronic methods which would save us having to type these into the database.

2016 saw the introduction of an improved spreadsheet format and 65% of the 51 submitted spreadsheets utilised the new format resulting in cleaner data. Hopefully more recorders will move to the latest version for 2017.

Some Recorders continue to be creative in recording their sightings:

- How many variants of "Small Pearl-bordered Fritillary" can you come up with?
 (Just the correct one if you use the latest spreadsheet).
- Does your name really change from being the recorder to being the determiner?
- o Did you really see a butterfly in 1900 or even July 2017 or July 2018?
- In the excitement of spotting a Red Admiral on January 1st please only record it once
- Yes, there is a difference between "16/08/2016" and "16/08/2016"
- Were you at Nore Hill in Surrey or Noar Hill in Hampshire? Your grid reference is in Hampshire so we'll assume you mean Noar Hill.
- Interestingly, there were far far fewer 'at sea' sightings in 2016, usually caused by confusing SZ and SU in grid references.

The computer can spot many of these errors but the sighting has to be corrected by hand (potentially leading to mis-recording) or thrown away which seems an awful shame given the effort made in recording it. As I'm sure you were told at school. "Please check your work before handing it in".

If using the Branch spreadsheet, it would be helpful if you would indicate the total number of records.

Despite the 'reprimand', we really appreciate your sightings so please continue to submit them and help us grow the Hampshire and Isle of Wight database well beyond the millionth sighting.

Bentley Station Meadow (BSM)

The volunteers have been busy in the meadow continuing a programme of targeted management to meet the requirements of the options under our current Higher Level Stewardship scheme which include restoration towards species-rich semi-natural grassland, and maintenance of successional areas and scrub. We aim for a mosaic of habitats and different age structures, with open rides and sunny glades. So how do butterflies respond to all this hard graft?

Generally, the numbers followed the national downward trend, yet despite the number of Comma falling from 29 in 2015 to 19 in 2016, Bentley Station Meadow was still ranked 14th out of 84 Hampshire transects that had data for both years. As a smaller site with a shorter transect, it is very positive news that it is in the top 20 rankings. The Comma requires woodland rides and edges, with sallow being one of the favoured caterpillar foodplants, so it looks like we got the seal of approval from this butterfly.

BSM was also ranked 15th out of the 62 sites with Silver-washed Fritillary data for both years. The main foodplant is Common Dog-violet growing in shady or semi-shady positions on the woodland floor in broadleaved and Oak woodlands with sunny rides and glades. Another success.

On the 23 July, Sue Clarke saw a White Admiral nectaring on bramble near the footbridge where light had been let in by a work-party. Sightings of this butterfly are patchy, with the highest ever count on transect of just three in 1997. Even so, to see a single specimen is still good news and gives us hope that our management will eventually benefit all the woodland and meadow species.

Speckled Wood had its 4th best year with 51 seen. Another species of woodland rides and glades, it requires certain grasses such as False Brome, Cock's-foot and Yorkshire-fog as larval foodplants. Orange-tip decreased once again from 17, to 13, but eggs were seen on the 13 May on the food-plant Lady's Smock in the north Meadow.

It's lovely to receive records of other species that frequent the meadow. Here is a brief list from the transect year, Bullfinch, Goldfinch, Chiffchaff, Wren, Jay, Chaffinch, Nuthatch, Blackcap, Goldcrest; Broad-bordered Bee Hawk-moth on Bugle (a plant that did very well at BSM in 2016) and an early sighting of female Broad-bodied

Chaser dragonfly, Common Mouse-ear,
Common Sorrel, Greater Stitchwort; Tormentil,
Adders-tongue Fern, Lesser Celandine, Wood
Speedwell, Thyme-leaved Speedwell, Herb
Paris (40 individual plants were counted in
flower in one of the wooded areas), Agrimony,
Common Knapweed, Greater Birds-foot- trefoil,
Tufted Vetch, Betony, Angelica, Red Clover,
Upright Hedge-parsley, Meadowsweet,
Enchanters Nightshade, Hedge Bedstraw,
Brooklime, Water Mint and many orchids.



A meeting in the meadow in August with a new BC member, Jane Stone, led to a discussion about grazing with her hardy breed of Icelandic Horses. Jane agreed to loan them to us for the winter grazing period. They have certainly made an impact on the excessive grass growth and the brambles.

Magdalen Hill Down (MHD)

2016 was officially a dismal year for butterflies. December 2015 was a very wet month which set the trend for a wet and mild winter. A similar pattern over spring and summer resulted in rapid and abundant grass growth that out-competed the lower growing herbs. This pattern explains why the average turf height for the end of August was 24.9cm – the highest since Andy Barker began measuring in 1993. Grazing pressure on the reserve will increase accordingly in future years to keep the growth in check.

So how did the butterflies on our Hampshire reserves fare? On the Original transect, Brimstone dipped to 148 in 2016 having previously enjoyed its best ever year at Magdalen Hill Down in 2015 with 245 recorded.

Chalk Hill Blue was notably down nationally in 2015, and continued to decline in 2016, with just 294 recorded on the Original transect, an all-time low since records began in 1990. On the plus side, MHD Original still ranked third place for this species in the rankings across 130 Hampshire transects. Common Blue (another species suffering national declines) ranked fourth, and Gatekeeper came in at a comfortable third.

Small Tortoiseshell had a poor year, although 2016 was still the second best year since 2004 making MHD still a good place to see this butterfly.

Small Blue beat its best count on transect, up by one from 65 in 2015 to 66 in 2016, with MHD holding second & third place across 130 transects and all five transects in the top ten. Marbled White and Meadow Brown had their second best year since 1995, although counts on the Original for these species ranked 13 out of 26 years of recording, and Orange-tip rose to rank second with 26 records on the Original.



The highlights of the year were Brown Argus and Grizzled Skipper (MHD Original) holding the No.1 spots. This is excellent news and shows that they responded favourably to targeted habitat management over the winter months.

Red Admiral, another winner at MHD, ranked top spot across all five transects since records began with 58 recorded. Good numbers were seen in July and September. Comma had its third best year since 2004, with Speckled Wood ranking 5/27. A new transect was set up in 2016 to monitor Tree & Shrub East, an area under habitat improvement for the possible introduction of Duke of Burgundy in the future.

It is a good place to see Green Hairstreak.

2016 saw the arrival of five semi-feral Exmoor ponies, a hardy breed that readily eats thistle, clematis, bramble and hawthorn, making them ideal animals to use in conservation grazing. The Rare Breeds Survival Trust lists the Exmoor pony as endangered. The Skylark continues to be a success story at Magdalen Hill Down, with the total area of potential suitable nesting habitat on MHD estimated at 75 ha. It's probable that more than eight pairs of birds successfully nested over the season (D. Stewart, 2016).



Yew Hill

2016 saw a decline in numbers of butterflies recorded on transect – down from 2,527 in 2015 to a low of 1,776. Although 29 species were seen, they were in lower numbers than previous years notably Common Blue and Brown Argus, the former following a national trend of decline. The Chalk Hill Blue continued to drop to an all-time low of 25 seen on transect. Meadow Brown and Marbled White held their own, while Gatekeeper increased slightly from 226 the previous year to 285 in 2016. The most notable species were Comma, Green Hairstreak and Red Admiral with Small Blue and Dingy Skipper having their 7th and 8th best years, respectively, out of 27 years recording on the reserve. Yew Hill is a relatively small site with a short transect, so it has done very well to be ranked 5th place for Gatekeeper and 6th for Marbled White across all Hampshire & Isle of Wight transects.

There is still plenty of rabbit activity at Yew Hill, which provides the patches of bare ground required for the foodplant of the Dingy Skipper, Common Bird's-foot-trefoil, to grow in a sparse sward, preferably in a sunny, sheltered situation.

For reasons mainly relating to land tenure, Yew Hill was not entered into the new Natural England Countryside Stewardship Agreement that began in January 2016, due to the current lease falling short of the required minimum five year tenure. The popular scheme allows farmers and land managers the potential to earn an amount per hectare for environmental management to (among other criteria) look after wildlife, and their habitats. The outcome of not entering into the agreement is that the Branch no longer receives an income towards managing the reserve.

Environmental funding is becoming harder to secure and this will inevitably have a negative effect on what we are able to achieve. The answer is simply that we need more volunteers to take an active role in helping us to carry out practical habitat management.



The Hampshire Conservation Volunteers continue to provide us with a solid service, and in 2016 they cleared the fence lines around the reserve from invading hawthorn and clematis, followed by cutting and raking the small area known as the Reservoir front which can only be managed by hand. The livestock continue to graze the site and 2016 saw five steers plus a flock of 21 sheep seemingly very happy on Hill Top over the winter months. The Reserve had a

break from winter grazing, but will be pulse grazed in Jan/Feb 2017 for a short time. If you are a keen bee expert, do keep your eyes peeled for the specialist cleptoparasite Cuckoo-bee *Sphecodes spinulosus*, which was recorded at Yew Hill by Mike Edwards in 2015 when he was undertaking a comparative re-survey of the 2003-2004 invertebrates on Magdalen Hill Down, Extension. Please send us your records.

Below are shown the top twenty-five most recorded species of butterfly in 2016, ranked by number of records, and their comparative rankings from 2012-2015.

Meadow Brown was once again in top position with Small White replacing Gatekeeper in second position.

Red Admiral climbed into sixth place, its best year since 2012 which was another poor year for other species generally.

Large Skipper remains very stable in seventeenth and Silver-studded Blue appears in the table for the first time.

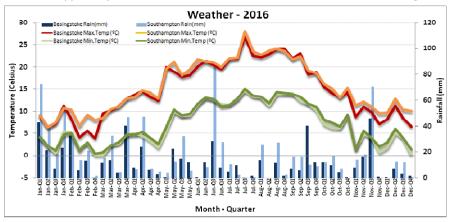
				Р	ositior	ıs	
Species	Records	Individuals	2016	2015	2014	2013	2012
Meadow Brown	7,492	54,512	1	1	1	2	1
Small White	6,204	16,237	2	4	3	1	5
Large White	4,764	11,774	3	6	10	3	8
Brimstone	4,445	9,272	4	3	2	4	6
Gatekeeper	4,403	20,259	5	2	6	6	2
Red Admiral	4,241	9,604	6	15	9	15	4
Speckled Wood	3,958	7,891	7	5	4	5	3
Peacock	2,670	7,261	8	7	5	7	12
Ringlet	2,530	15,546	9	9	11	10	7
Green-veined White	2,393	5,087	10	13	14	8	14
Marbled White	2,182	16,181	11	11	13	14	10
Common Blue	1,725	5,522	12	8	8	12	13
Small Skipper	1,646	6,224	13	10	12	16	15
Comma	1,597	2,339	14	12	15	11	11
Holly Blue	1,525	2,175	15	16	19	21	18
Small Tortoiseshell	1,493	2,701	16	14	7	9	20
Large Skipper	1,448	4,172	17	17	16	17	17
Orange-tip	1,242	2,132	18	21	18	19	16
Small Heath	1,076	3,126	19	18	17	13	9
Silver-washed Fritillary	926	2,526	20	19	20	18	19
Small Copper	669	1,339	21	23	22	22	22
Painted Lady	618	1,122	22	20	26	25	31
Brown Argus	362	962	23	22	21	24	25
Silver-studded Blue	345	3,448	24	28	32	30	29
Chalk Hill Blue	290	4,281	25	24	23	20	21

This report has been compiled with the aid of the following websites:

http://www.metoffice.gov.uk/climate/uk/summaries/2016/

http://southamptonweather.co.uk/

and data supplied by Simon Neil from his weather station at Chineham, Basingstoke



2016 proved to be a rather warm year although in many ways it was uneventful, especially after the dramatic end to 2015.

The extreme flooding in the north-west and record breaking warmth of the previous December led into a mild and unsettled start to 2016.

JANUARY was a mild one at over 1°C above average but concealed a quiet and cold spell mid-month which saw the lowest temperatures of the year on the 20th when Basingstoke fell to -5.9°C. It was largely unsettled and rather wet with Southampton recording 27.6mm of rain on the 27th alone.

The unsettled end to January extended well into **FEBRUARY** with associated mildness that was eventually replaced by colder and more settled conditions with a return of night time frosts from mid-month. It was slightly warmer than average with rainfall close to average.

MARCH was frequently unsettled, notably late in the month when Storm Katie brought some damaging winds across the south on the 28th. Conditions were briefly settled midmonth but not enough to prevent it being rather wet. Temperatures were also disappointing.

APRIL was quite unsettled again and although it started quite warm, it became unseasonably cool, especially later in the month which led to temperatures being about 1°C below normal. Rainfall was close to average.

MAY saw a significant change in conditions with the onset of winds largely from an easterly quarter. Being late Spring, these winds brought warmer weather with them and it led to a warm month at 1°C above average. Rainfall also became variable with the advent of localised thundery rainfall.

The easterly winds that dominated in May extended well into **JUNE** and it wasn't until the last third of the month that westerly winds returned. The month was far from settled across the south and ended up rather wet with a number of thundery spells. The 23rd was a particularly wet day at both our chosen stations with 34.2mm falling in Southampton, the wettest day of the year here. It was also rather warm although much of this was down to mild nights rather than daytime heat.

Despite a westerly regime dominating for much of **JULY**, high pressure to the south kept our area largely settled. There was also some heat in the middle of the month as the westerly winds eased. The highest temperatures of the year were on the 19th when Basingstoke clocked 32°C with Southampton close behind. This was generally the driest July since 1999 and slightly warmer than normal.

The mildly unsettled pattern continued into **AUGUST** but southerly winds brought hot weather into the south-east especially for a time after mid-month. Beyond that a more settled pattern emerged leading to a sunnier and warmer month than normal. Both stations recorded 30.1°C on the 24th.

SEPTEMBER was very warm, the warmest since 2006 across England, and featured a heatwave that peaked on the 13th when Gravesend reached 34.4°C, the warmest day of the year and very unusual for such a late date. Spectacular thunderstorms brought an end to the hot spell leading to Basingstoke's wettest day of the year on the 16th when 38.6mm of rain fell. The weather remained rather warm until the month end, albeit unsettled. Rainfall came in close to average aside from the local variations caused by the storms.

OCTOBER was unusual in that easterly winds were dominant after an unsettled start. The lack of Atlantic influence brought a very dry month. Temperatures and sunshine were close to average.

NOVEMBER was cold. Temperatures averaged over 1°C below normal with northerly winds establishing early in the month. An unsettled spell developed for a time after midmonth with wet and windy conditions before a quiet cold end. It was rather wet, mainly due to the unsettled weather in the third week of the month.

DECEMBER was very mild although not as mild as the record breaker the year before. That said, both the start and end of the month brought quiet frosty weather to our area. In between, a prolonged spell of southerly winds brought the warmth and with high pressure close by, it led to a dry month.

Glossary of Terms

Butterfly transect: A method of monitoring butterflies, involving walking a fixed route at a given site, once a week from the first week of April to the last week of September, counting the number of each species seen. For the purpose of comparison between other butterfly transects both locally and nationally, there are a fixed set of guidelines. These primarily relate to weather conditions and the time of day under which the transect is walked. For further details of transect methodology, see http://www.ukbms.org/.

Annual Index graphs: An Annual Index is the sum total of weekly counts for a particular butterfly species on a given transect in a particular year. The graphs show an average Annual Index for all transect monitored sites where the species is found, 1992 to 2016, and a graph featuring the Annual Index for an individual site with a trend of interest.

Flight period graphs: These are the periods on which the adult butterfly was on the wing this year compared to last.

Butterfly counts: Butterfly transects do not monitor population size, but because of a consistent methodology, they allow us to monitor change from one year to the next. Other counts sent in by recorders will be a function of the area of a site covered and the amount of time spent. In a quantitative way they give an idea of important sites, but would only give an indication of population size.

BC Priority Status: Regional priority is shown as listed in the *Butterfly Conservation Regional Action Plan for South-East England 2016-2025.* In addition, Hampshire & Isle of Wight Branch has identified six species as 'Top Priority'.

Wider Countryside Butterfly Survey: The Wider Countryside Butterfly Survey (WCBS) was established in 2009 to improve data on the population status of butterflies across the countryside as a whole. This is important given that most site-based monitoring is biased towards good quality semi-natural habitat relatively rich in butterflies. Wider countryside monitoring is organised in partnership with the **British Trust for Ornithology** (BTO).

The WCBS method is based on the BTO's Breeding Bird Survey (the 'BBS'), counting along two parallel 1-km long transects subdivided into 10 sections, located within randomly selected 1-km squares. The differences are that butterflies are counted in a more restricted area than for birds and at different times of the day. Only 2-4 visits are required compared to 26 visits on the traditional UKBMS 'Pollard walk' transects.

Species distribution maps: The distribution maps in this report were produced using *MapMate* recording and mapping software. These show the 2-km squares (tetrads) for which records were received since 2000.

Red: 2016

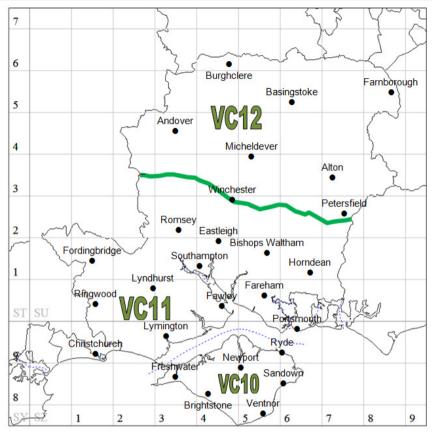
Mid Blue: 2010-2015 Open Black: 2000-2009

A blue or open black circle does not necessarily mean that the species no longer occurs, merely that the site may not have been visited in 2016. For maps of pre-2000 records, see *Butterflies of Hampshire*.

Vernacular and scientific names of plants: Plant names follow Francis Rose, 2006, *The Wild Flower Key*, revised and expanded edition, Warne.

Species Number: is in accordance with Agassiz, D.J.L., Beavan, S.D. and Heckford, R.J. (2013) *Checklist of the Lepidoptera of the British Isles*.

Location Aid



The above map shows strategically placed Hampshire towns/villages to help in locating sites identified on the Species Maps.

It also serves to indicate the primary Vice Counties within Hampshire, VC10, VC11 & VC12. Vice Counties are a system devised in 1852 by the botanist H.C. Watson (1804-81) of dividing the British Isles into approximately equal areas. The boundaries that Watson selected were principally county boundaries as defined in an atlas published by the Society for the Diffusion of Useful Knowledge in 1844. These reflected the political boundaries as they existed then. Watson tried to define areas of approximately equal size and so some of the larger counties (including Hampshire) were divided into "vice counties". The system was later extended to cover Irish vice-counties. These boundaries are fixed and do not change as do administrative county boundaries.

Vice-county 10 is the Isle of Wight. Vice County 11 covers the entire present Hampshire administrative boundary roughly south of a line between Stockbridge, Winchester and Petersfield but also includes parts of present day Dorset westwards to Bournemouth. Vice County 12 covers the northern half of Hampshire together with a part of present day Wiltshire around Tidworth and a very small part of Berkshire in the extreme north-west of the county.

BUTTERFLY REPORT 2016

Wider Countryside Butterfly Survey

Jacky Adams

As explained in the Glossary, this nationwide survey randomly selects kilometre squares and looks at the butterflies that fly there. It has taken place each summer since 2009 and the information below looks at results for the squares surveyed in Hampshire and the Isle of Wight in the months of July, August and September.

	2009	2010	2011	2012	2013	2014	2015	2016
No. Squares	37	27	17	29	34	39	36	34
Total No. Walks	75	53	30	56	65	74	63	65
Av. Butterflies/walk	90	72	61	39	102	77	92	66
No. Species recorded	29	28	26	24	31	29	29	24

Occurrence: This looks at the percentage of all squares monitored where a particular species is present. Species seen in more than 70% of the squares monitored in 2016 are shown below, together with their history.

	2009	2010	2011	2012	2013	2014	2015	2016
Meadow Brown	97.30	88.89	100.00	96.55	88.24	94.87	94.44	97.06
Large White	94.59	96.30	82.35	72.41	100.00	89.74	83.33	94.12
Small White	97.30	88.89	82.35	68.97	94.12	87.18	80.56	94.12
Gatekeeper	94.59	92.59	100.00	79.31	88.24	94.87	97.22	76.47
Red Admiral	51.35	62.96	70.59	68.97	61.76	71.79	50.00	76.47

Relative Abundance: This looks at what percentage each species makes up of all the butterflies recorded that year. Species which individually accounted for more than 5% of the total recorded in 2016 are shown below, together with their history.

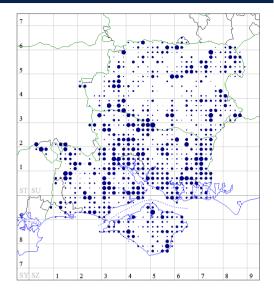
	2009	2010	2011	2012	2013	2014	2015	2016
Meadow Brown	17.27	18.50	16.22	27.65	15.93	22.64	31.48	23.90
Small White	13.66	16.92	16.06	6.52	21.34	5.74	8.35	15.28
Large White	17.55	7.58	12.32	4.48	12.78	4.28	7.49	11.25
Ringlet	5.01	12.53	7.16	12.81	10.28	10.64	6.54	10.09
Gatekeeper	9.63	16.76	15.63	12.25	8.48	16.78	15.54	8.34

Butterfly record coverage 2016

Recorded tetrads in 2016 – the bigger the circle, the greater the recording effort.

This methodology better illustrates the 'cold spots' that require more targeted effort in coming field seasons.

No of 2016 records: 65,979 No of tetrads in 2016: 843

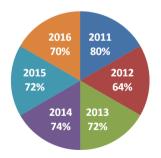


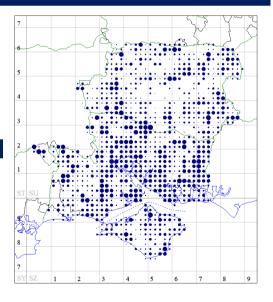
Butterfly record coverage 2015 - 2016

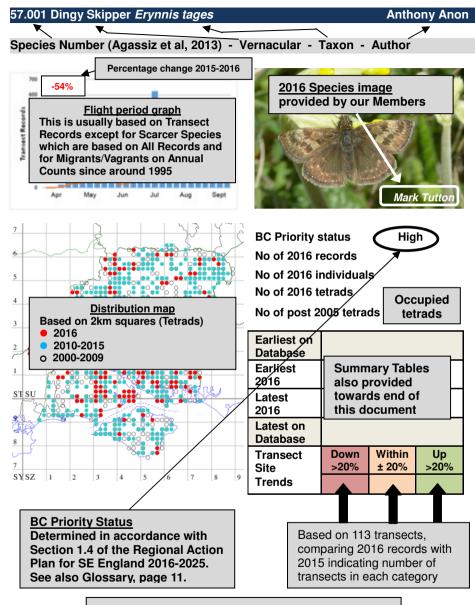
Recorded tetrads in the two years 2015 to 2016 – as per the preceding map, the bigger the circle, the greater the recording effort.

No of records: 143,644 No of tetrads: 984

Tetrad Coverage 2011 - 2016

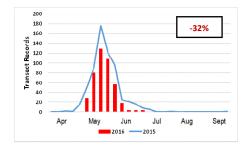






AUTHOR'S NARRATIVE

Generally prepared using information & data provided on 30th December 2016





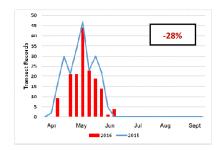
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BC Priority status	High
No of 2016 records	262
No of 2016 individuals	1,174
No of 2016 tetrads	44
No of post 2005 tetrads	191

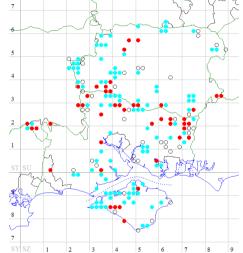
Earliest on Database	12 Apr 2011					
Earliest 2016	24 Apr Little Butser Hill Mark Tutton					
Latest 2016	_	Beacon Fillinghurst	Hill			
Latest on Database	03 Sep	03 Sep 1993				
Transect Site	Down >20%	Within ± 20%	Up >20%			
Trends	18	4	5			

The first Dingy Skippers of the season were seen by Mark Tutton on Butser Hill, one on 24 April and two on 27 April, but we then had a cold, wet spell and it was not until early May that the butterfly really began to appear. Notably on 05 May, Ashley Whitlock reported 34 at Chalton Down, and Alan Thornbury ten on Noar Hill. Mervyn Grist saw ten on transect on Pilot Hill on 05 May followed by 27 on 08 May. On 23 May Kevin Freeborn reported 35 at Queen Elizabeth Country Park, Arthur Greenwood 25 on his Bramshott transect and Tony James 17 at Noar Hill.

June was a miserable month. It rained on 17 days with a total of nearly six inches - the wettest at Fontley since 1996. Nevertheless there were a few sightings with Jan and Bryn Jones seeing one on 11 June and a further two on the 22 June on the new 'Tree and Shrub East' transect on Magdalen Hill, and Ian Riddett three on the Bonchurch, Isle of Wight, transect on 27 June. In summary, not a good year, with 18 transects having a greater than 20% decrease and only five a greater than 20% increase.



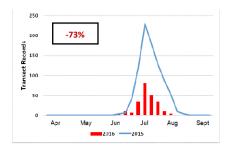




BC Priority status	High
No of 2016 records	168
No of 2016 individuals	580
No of 2016 tetrads	46
No of post 2005 tetrads	172

Earliest on Database	26 Mar 2012					
Earliest 2016	17 Apr Butser Hill Mark Tutton					
2010	Wark It	шоп				
Latest	27 Jun	Casbrook				
2016	Simon L	ayton				
Latest on Database	30 Nov	30 Nov 2012				
Transect Site	Down >20%	Within ± 20%	Up >20%			
Trends	14	4	7			

As with Dingy Skipper the earliest sightings of Grizzled Skipper were on Butser Hill with Mark Tutton counting seven on 17 April and 20 on 27 April. Though Robin Laing also had one at Mottistone Down Isle of Wight on 17 April and Andy Barker seven on Magdalen Hill (Original) transect on 20 April, when Catherine Hadler saw four on Stockbridge Down. With improving weather in early May Ashley Whitlock reported 18 on Butser on 04 May, Glynne Evans four on Broughton Down and on 06 May, Andy and Linda Barker 12 on Magdalen Hill Down, On 08 May, Glynne Evans found nine at Porton Down, and Kevin Freeborn 25 at Queen Elizabeth Country Park, Small numbers were reported frequently during the second half of May, interestingly two at Frater by Chris Lycett, two at Yew Hill by Nick Radford, and on 14 May Martin Warren reported three on a visit to Magdalen. Singletons were seen at Bentley Wood East (David Lambert), Cheriton (Peter Thompson) and the last was on Casbrook Common on 27 June (Simon Layton). It was not a good year for the butterfly with 14 Hampshire transects having a greater than 20% decrease and only seven an increase, but to quote Andy Barker 'incredibly from none on transect a decade or so ago Magdalen Hill Down (Original) now holds number one spot for the species, ahead of sites like Martin Down and Stockbridge Down'.





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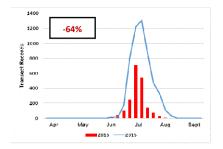
BC Priority status	Low
No of 2016 records	187
No of 2016 individuals	566
No of 2016 tetrads	67
No of post 2005 tetrads	372

Earliest on Database	26 May 2007			
Earliest 2016	21 Jun Southampton John Vetterlein			
Latest 2016	17 Aug St Mary Bourne Peter Billinghurst			
Latest on Database	21 Sep 1996			
Transect Site	Down Within Up >20% >20%			
Trends	Not Measured			

Although close focus binoculars greatly assist identification when the orange skippers don't skip, some Essex Skippers must still be overlooked, as the difference in reported locations (64) with Small Skippers (191) suggests. Main adult emergence was two weeks later than in 2015 with only six late June records. This is much later than Small Skipper due to the small larva's need to breakout from its over winter protective eggshell on a cold spring night before feeding could start.

Transect data show a 73% fall in adult numbers versus 2015. Former stronghold Pilot Hill was heavily sheep grazed this year reducing its total 79% to 80. Challenger site Monks Walk, Elson (Francis Plowman) yielded 77. Of the other sites Petersfield Heath (AC Smallbone) came next with 66.

Records from the Basingstoke area and elsewhere confirm a Hampshire wide distribution but no records came from the Isle of Wight this year. Unusually Essex Skippers were not seen anywhere after mid August.





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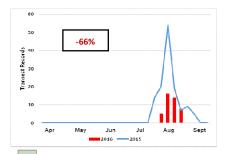
BC Priority status	Low
No of 2016 records	1,646
No of 2016 individuals	6,224
No of 2016 tetrads	218
No of post 2005 tetrads	747

Site Trends	Not Measured			
Transect	Down Within Up >20% + 20% >20%			
Latest on Database	19 Sep 1991			
Latest 2016	14 Sep Portsdown Richard Jones			
Earliest 2016	22 May The Holt Chris Weeks			
Earliest on Database	16 May 2011			

Small Skippers were in flight from late May to late August with one record in September. The overall week count plot by date is similar to 2015 but at depressed levels and with a particularly low tail. They were widespread across the two counties on 191 sites. Open woodlands, heaths, chalk downs and meadows were occupied from Pamber Forest to Mockbeggar to Beacon Hill, Warnford.

The overall transect total count was reduced 64% from 2015. Former Small Skipper stronghold Pilot Hill was 74% down due in part to increased sheep grazing. However counts exceeded 300 on four transect areas - Bramshott Common, Magdalen Down (all areas), Martin Down (excluding Kitts Grave transect), and Havant Thicket where Ashley Whitlock & Richard Symonds recorded a dense population. But on the huge north eastern Hazelely Heath RSPB reserve David Braddock reported a thinly spread 181 over four adjacent transect routes.

Of the five reported Isle of Wight locations, John Rowell recorded the largest population with 272 along the Whippingham Fields transect walks.





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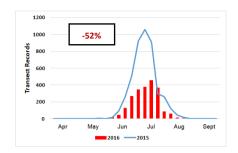
BC Priority status	High
No of 2016 records	36
No of 2016 individuals	185
No of 2016 tetrads	7
No of post 2005 tetrads	32

Earliest on Database	13 Jul 1997			
Earliest 2016	28 Jul Oxenbourne Down Alan Thornbury			
Latest 2016	15 Sep Old Winchester Hill Ashley Whitlock			
Latest on Database	11 Oct 1986			
Transect Site	Down Within Up >20% >20%			
Trends	3	1		

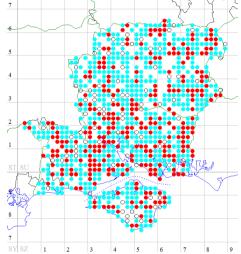
It was another poor year for this species, with only seven sites producing records, and three out of four transects showing decreases of more than 20%. The previously reliable Beacon Hill National Nature Reserve produced none at all.

The first sighting was of three at Oxenbourne Down on 28 July (Alan Thornbury), just three days earlier than 2015. The strongest site, Broughton Down, began with three on 31 July (Graeme Davis), rising to a peak count of 36 on 13 August (Andy & Linda Barker), but even here, the transect count was only 20% of what it had been in 2015. St.Catherine's Hill peaked at a similar time, with eight on 15 August (Chris Piątkiewicz). Once again, Old Winchester Hill showed later emergence, with the first and highest count being 20 on 23 August, and the last on 15 September (both Ashley Whitlock).

Finally, after several years with no records, it is encouraging to report that two were seen at Martin Down on 14 August (Arthur Bryant), and a singleton at nearby Tidpit Common on 24 August (Michael Fussell). The only other site recording Silver-spotted Skipper in 2016 was the Leckford-A transect, with one on 30 August (Sheila Evans).







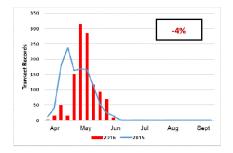
BC Priority status	Low
No of 2016 records	1,448
No of 2016 individuals	4,172
No of 2016 tetrads	290
No of post 2005 tetrads	899

Earliest on Database	28 Apr 2007			
Earliest 2016	08 May Catherington Chris Buckle			
Latest 2016	30 Aug Wootton Coppice Maarten Ledeboer			
Latest on Database	22 Sep 2013			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	65	15	20	

In common with many other species, the Large Skipper had an indifferent 2016 with numbers well down on the previous year. As usual, there was a smattering of May sightings following which it was recorded from many sites throughout June and July tailing off rapidly from the second week in August, with no September records.

The New Forest inclosures are the places to see this species in high numbers, but even here numbers were depressed. The peak count of 156 at Furzey Lawn Inclosure on 14 July (John Ruppersbery) was little more than 50% of the 2015 peak and was also the only three figure total of the year. Church Place Inclosure, Busketts Inclosure and Deerleap Inclosure also hosted respectable numbers. Outside of the New Forest, the only count of 20 or above came from Butser Hill/Ramsdean Down on 26 June (Ashley Whitlock).

Fortunately the Large Skipper is a species that is found throughout Hampshire and the Isle of Wight in both grassland and woodland edge habitats. As such it is well positioned to bounce back from a poor year, so we can hope for better things in 2017.





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BC Priority status	Low
No of 2016 records	1,242
No of 2016 individuals	2,132
No of 2016 tetrads	266
No of post 2005 tetrads	904

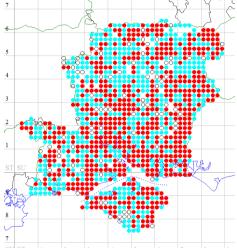
Earliest on Database	10 Mar 1990			
Earliest 2016	01 Apr Horndean Peter Laversha			
Latest 2016	05 Jul Hazleton Common Joy Spiller			
Latest on Database	22 Sep 2011			
Transect Site	Down Within Up >20% >20%			
Trends	31 33 26			

Orange-tips were recorded between week beginning 01 April & 10 June with just four sightings in July. Overall 2,194 individuals were recorded of which 1,149 were on transect. Where the gender was determined in the off-transect records there were 27 females and 139 males. 743 of the total individuals were singletons. The most individuals seen at any one time were 18 on 19 April at Wyck near Alton; the most seen on transect was 11 at Stockbridge Down on 13 May.

Total numbers on transect were only slightly down (4% less) relative to 2015. In 2016 the counts on transect peaked two weeks later than in 2015. Numbers on 31 transects were down by more than 20% relative to 2015 but unchanged at 33 transects and increased by over 20% at 26 transects. Nine transects didn't record Orange-tip in 2016, but did in 2015, with the reverse situation occurring at five transects.





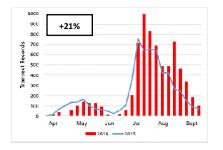


BC Priority status	Low
No of 2016 records	4,764
No of 2016 individuals	11,774
No of 2016 tetrads	588
No of post 2005 tetrads	1,102

Earliest on Database	02 Feb 2007			
Earliest 2016	17 Mar Wheelers Bay Andy Butler			
Latest 2016	31 Oct Woodcott Elizabeth Symmonds			
Latest on Database	07 Dec 2012			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	32 23 40			

This widespread species had a slightly better year than 2015, with a 17% increase based on transect records. Of the 113 transect monitored sights, an impressive 40 showed an increase of 20% or more, 23 showed no change but a slightly worrying 32 showed a decrease of 20% or more. Low numbers of mostly ones and twos were observed throughout Hampshire and the Isle of Wight in April and May. The first significant count was of 10 individuals from the Isle of Wight on 27 May (Peter Cambell). Low numbers continued to be recorded throughout June with 11 seen on the Windmill Hill, Chalton transect on 03 July (John Vigay), 11 at Havant Thicket on 16 July (Richard Symonds), 12 at North Oakley on 17 July (Geoff Baker) and a slightly more impressive count of 25 at Titchfield Haven on 18 July (Francis Plowman). Other reasonable counts were made at well distributed sites such as Portsdown Hill (16), Harewood Forest (15), Timsbury (27), Peel Common (31), Binstead Village (17), and on the transects of Parsonage Field (17), Magdalen Hill Down (18) and Old Winchester Hill (20).

The highest counts of the year came from the Windmill Hill, Chalton transect where John Vigay recorded 63 individuals on 23 July. 55 were noted near Fordingbridge on 30 July (Mike Gibbons) and 40 at Ower on 10 August (Bob Annell).





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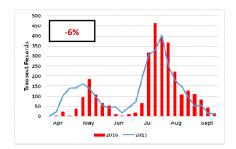
BC Priority status	Low
No of 2016 records	6,204
No of 2016 individuals	16,237
No of 2016 tetrads	622
No of post 2005 tetrads	1,105

Earliest on Database	09 Jan 1991			
Earliest 2016	17 Mar Cosham			
2010	Theo Ro	oberts		
Latest 2016	05 Nov Southbourne			
2010	Mike Gibbons			
Latest on Database	08 Dec 2007			
Transect Site	Down Within Up >20% >20%			
Trends	24 20 47			

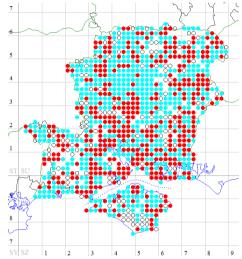
For the second year running, this common and widespread butterfly saw a year on year increase in overall numbers on comparable transects. The increase was particularly notable from mid-summer onwards, with an additional late boost occurring towards the end of August and start of September, possibly due to migrants from continental Europe supplementing local numbers. In addition to the transect data, Ashley Whitlock recorded around 100 Small White at Old Winchester Hill on 30 August, the highest individual count of the year.

The picture at individual transect level was more mixed, with over half the comparable transects seeing records rise by more than 20%, while over a quarter saw an equivalent fall in sightings. For the second year running, the greatest number were seen on the Breamore transect in west Hampshire, although the 377 Small White recorded between April and September was a drop of nearly 50% compared to the previous year.

On the Isle of Wight, Small White were seen most frequently on the Whippingham Fields transect, with over 170 sightings during the recording season.





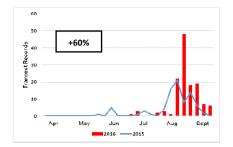


BC Priority status	Low
No of 2016 records	2,393
No of 2016 individuals	5,087
No of 2016 tetrads	407
No of post 2005 tetrads	1,005

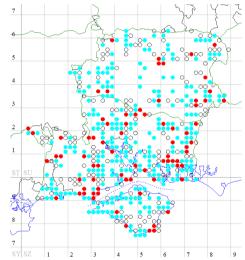
Earliest on Database	03 Mar 1989			
Earliest 2016	29 Mar Brambridge Brian Hedley			
Latest 2016	28 Sep Kings Copse Allan Orme			
Latest on Database	28 Oct 1999			
Transect Site	Down Within Up >20% >20%			
Trends	31 30 28			

Recent research suggests that this common and widespread butterfly could be adversely affected by periods of prolonged drought. Fortunately this was not tested in 2016, although numbers seen on comparable transects during April and June were notably lower than in 2015. From mid-July onwards, sightings increased and in most weeks slightly exceeded those of the previous year, with only a small overall year on year decrease in records.

This species favours damper conditions and was seen most frequently on the Winnal Moors transect near Winchester and the Lower Test Marshes transect near Totton, with around 360 and 250 sightings respectively during the weekly counts taken between April and September. However, in common with slightly over a third of all comparable transects, both these routes saw a fall of over 20% in sightings from 2015 figures. On the Isle of Wight the Whippingham (fields) transect had the highest total sightings of this species, with 115 recorded. This was a rise of over 30% compared to 2015. Just under a third of all comparable transects saw numbers of this species rise by over 20% between 2015 and 2016.







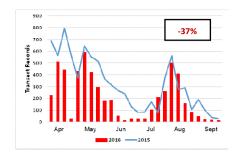
BC Priority status	Low
No of 2016 records	167
No of 2016 individuals	280
No of 2016 tetrads	77
No of post 2005 tetrads	430

Earliest on Database	08 Feb 2005			
Earliest 2016	21 Mar Hordle Alan Butterworth			
Latest 2016	29 Dec	29 Dec Southbourne Mike Gibbons		
Latest on Database	30 Dec 2007			
Transect Site	Down Within Up >20% + 20% >20%			
Trends	14 7 24			

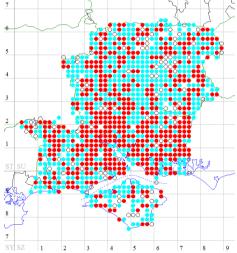
This was a notable year for the Clouded Yellow particularly for its early and late appearances. The first at Hordle on 21 March was soon followed by another at Southbourne Undercliff on the 25 March (Mike Gibbons) indicating emerging butterflies of local origin. Even though the weather had turned very cold by December, the sunny days brought the butterfly out at Southbourne Undercliff. Fresh looking males were seen on 04 December and 29 December (Mike Gibbons), the latter individual actively flying along the lower slopes.

The flight period graph totals were up by 50% on 2015, with 24 sites showing an increase greater than 20%, but this was far from being a 'Clouded Yellow year'. Old Winchester Hill held the maximum number of 11 on 30 August (Ashley Whitlock) with most other observations being singles throughout Hampshire & Isle of Wight. The maximum count on Isle of Wight was six at Shepherd's Chine on 15 September (Andy Butler).

Although the Clouded Yellow had an average year, it did peak in late August to early September in somewhat spectacular fashion. Migrants were recorded from late June with numbers building into July and August. The totals slowly fell away into October but these included butterflies emerging late at favoured coastal sites, a situation meaning fresh and more faded butterflies were flying together late into the autumn.







BC Priority status	Low
No of 2016 records	4,445
No of 2016 individuals	9,272
No of 2016 tetrads	501
No of post 2005 tetrads	1,060

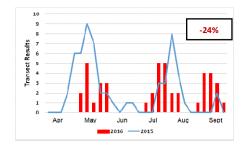
Earliest on Database	01 Jan 2001			
Earliest 2016	19 Jan Aldershot Ron Stephens			
Latest 2016	10 Nov Crab Wood John Solomon			
Latest on Database	29 Dec 1999			
Transect Site	Down Within Up >20% >20%			
Trends	61	61 16 10		

In common with most other species, Brimstones fared less well in 2016 than in the previous few years.

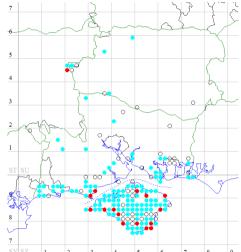
After the most successful year in 2013 for at least 30 years, Brimstones over 20 monitored sites showed an 11% average increase in 2014 followed by a further 12% in 2015. In 2016, however, a 37% reduction in numbers took them back to about 90% of the 2013 level.

There were relatively few sightings in the first quarter; in fact, May had arrived before numbers began to approach expectations, reflecting how weather conditions in Spring impacted on flying opportunities for the over-wintering adults. Although the highest daily totals were down on 2015, numbers of new adults were reported throughout July and August across both counties. The peak period was at the end of July and the beginning of August, with 54 individuals recorded on 30 July by Andy and Linda Barker west of Shipton Bellinger.

Daily sightings continued until the end of September, with a few sightings in October but only one individual was recorded between the end of October and the New Year.







BC Priority status	High
No of 2016 records	55
No of 2016 individuals	91
No of 2016 tetrads	16
No of post 2005 tetrads	163

Earliest on Database	05 Apr 2000		
Earliest 2016	05 May Shepherds Chine Andy Butler		
Latest 2016	09 Oct Whippingham Field John Rowell		
Latest on Database	06 Nov 2003		
Transect Site	Down Within Up >20% >20%		
Trends	4 2 1		

The year 2016 appears to have seen another significant step in the rapid decline of Wall in the two counties.

It was first recorded on the Isle of Wight at Shepherds Chine on the very late date of 05 May. On the mainland there were no records until 03 August when two were seen by Alan Thornbury at Lymington implying that any first brood emergence was so small that it was completely missed. Records from the Lymington-Keyhaven area were extremely sparse with only single individuals being picked up by Gordon & June Coster and Olly Frampton both in mid August.

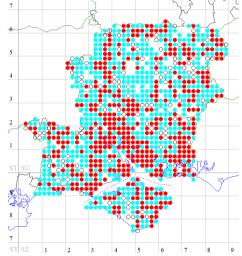
Away from the coast the only records were on the 12 August when one was seen at Shipton Bellinger (Andy Barker).

Numbers were low at most locations with 10 at Shepherds Chine on 13 May the only double figure count. Overall there was a 24% decline in the number of Wall records submitted compared to the previous year including reduced counts on most of the transects which record the species. The only bright spot was a slight increase in the numbers observed during the third brood on the island.

Observers are urged to make a special effort to record any first brood individuals on the mainland in 2017.







BC Priority status	Low
No of 2016 records	3,958
No of 2016 individuals	7,891
No of 2016 tetrads	444
No of post 2005 tetrads	1,064

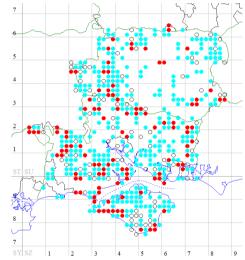
Earliest on Database	11 Jan 2013		
Earliest	22 Mar	Titchfield	
2016	Richard	Carpente	er
Latest	15 Nov Titchfield		
2016	Richard Carpenter		
Latest on Database	15 Dec 2011		
Transect Site	Down Within Up >20% >20%		
Trends	47	22	20

The Speckled Wood had a mixed year, but overall the majority of transects showed a decline in numbers compared to 2015. This multi-brooded species has a very long season, with records from late March until mid-November. Although it was a shorter season than in previous years, there is something about the Hampshire coastal microclimate which keeps the species thriving until late in the season. Over the last decade the final records of the year usually came from Gosport, so it is interesting to see that from just along the coast, Richard Carpenter had both the first and last record of this year, making Titchfield Haven the place to be for Speckled Woods.

Although the Speckled Wood is on the wing throughout the summer, there is a tendency for the late summer broods to be the largest, so whilst the majority of records were of less than five individuals, all the records of 20 or more individuals were in August and September. The highest number of individuals in a week was at the end of August, with over 989 individuals from the 24 August to 30 August, while the largest number of individuals (33) was recorded at Kitts Grave on 23 August by Gordon and June Coster.







BC Priority status	High
No of 2016 records	1,076
No of 2016 individuals	3,126
No of 2016 tetrads	114
No of post 2005 tetrads	517

Earliest on Database	08 Apr 1997		
Earliest 2016	30 Apr Warren Farm Jean Annell		
Latest 2016	28 Sep Old Winchester Hill Alan McVittie		
Latest on Database	29 Oct 2011		
Transect Site	Down Within Up >20% >20%		
Trends	30	15	8

Overall the year was very poor for the Small Heath compared to 2015. Numbers were down by 47% and 30 transects showed a greater than 20% reduction in numbers, 15 remained the same and only eight showed an increase.

The first sighting, which was ten days later than 2015 began the records of a particularly scarce first brood which built very slowly during May and reached a comparatively weak peak at the end of the month.

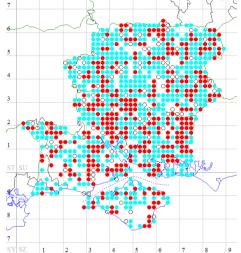
Transect data struggled to reach 100 most weeks during the first brood. However, it bounced back for the second brood with a peak of more than 300 records at the end of August, easily exceeding the previous year's second brood peak.

The highest daily count was at Conhalt Hill on 26 May (John Solomon) with only four other records of more than 50 received: at Brightstone Bay on Isle of Wight on 30 May (Andy Butler); and at Butser Hill/Ramsdean Down on 16 May, Martin Down 28 May and again Butser Hill/Ramsdean Down on 26 June (all Ashley Whitlock).

There were no records in October this year, the latest being 28 September at Old Winchester Hill (Alan McVittie) with a few stragglers being reported at the end of September.







BC Priority status	Low
No of 2016 records	2,530
No of 2016 individuals	15,546
No of 2016 tetrads	336
No of post 2005 tetrads	884

Earliest on Database	25 May 2011			
Earliest 2016		24 May Beacon Hill Barry Proctor		
Latest 2016	•	16 Sep Stockbridge Down Catherine Hadler		
Latest on Database	11 Oct 2011			
Transect Site	Down Within Up >20% + 20% >20%			
Trends	50	23	21	

The year began in a very promising way when Barry Proctor recorded two ringlets on 24 May 2016. This is the earliest ever emergence in the county, beating the previous record set in 2011 by just one day. Unfortunately, that was the only record-breaking to be done. Despite the fact that the flight season lasted three weeks longer than that of 2015, this was the second successive year in which just over half of the transect sites recorded an index decrease greater than 20%.

After that initial emergence it was almost two weeks before any further sightings. It wasn't until the third week of June that things really got underway and this was followed by a series of three-figured counts from across Hampshire in the first half of July. Three south-west sites, Perrywood Ivy, Furzey Lawn and Breamore, produced the only counts in excess of 200, all of these occurring between 08 and 19 July 2016.

The last significant numbers were noted on the chalk at Shipton Bellinger where Mike Gibbons recorded 80 on 06 August 2016. The season finished with just two September occurrences.





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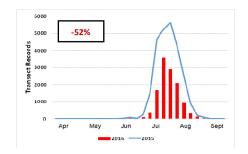
BC Priority status	Low
No of 2016 records	7,492
No of 2016 individuals	54,512
No of 2016 tetrads	571
No of post 2005 tetrads	1,104

Earliest on Database	30 Apr 2011			
Earliest 2016		03 Jun Magdalen Hill Andy & Linda Barker		
Latest 2016		03 Oct Portsdown Richard Jones		
Latest on Database	07 Nov 2010			
Transect Site	Down >20%	Within ± 20%	Up >20%	
Trends	73	20	11	

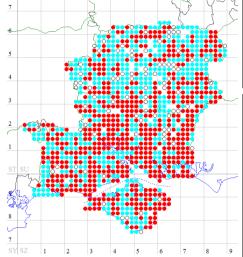
This is always a common grassland species but 2016 records suggest that at most sites fewer adults were seen than in 2015. However, when temperatures are low then females especially will often "skulk" deep in the grass and only fly occasionally. This behaviour does mean they are easily missed during recording. Still, it is likely that Meadow Brown populations were slightly depressed in 2016, along with many other butterfly species.

The main flight period started in early June with transect records showing a peak around mid-July, which is about two weeks later than seen in 2015. It was another fairly mild autumn and adults continued to be regularly recorded throughout September, often in good numbers. At Old Winchester Hill, 50 were recorded on 15 September (Ashley Whitlock).

The Whippingham Fields transect (Section 3), Isle of Wight provided the highest count of the year of 270 on 03 July (John Rowell). This compares with the previous high counts of 334 in 2014 and 1058 in 2015, both on Section 10 of the Whippingham Fields transect.





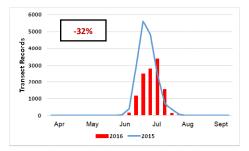


BC Priority status	Low
No of 2016 records	4,403
No of 2016 individuals	20,259
No of 2016 tetrads	577
No of post 2005 tetrads	1,091

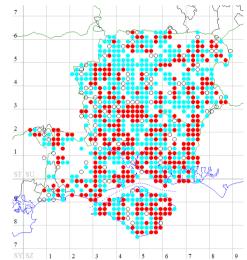
Earliest on Database	24 Mar 1999		
Earliest 2016	20 Jun Wootton Inclosure Maarten Ledeboer		
Latest 2016	26 Sep Chandlers Ford Shaun Webb		
Latest on Database	19 Oct 1995		
Transect Site	Down >20%	Within ± 20%	Up >20%
Trends	89	9	4

The Gatekeeper had an extremely poor year overall with a shorter flight period and was far less numerous than in 2015 with only five counts of over 100 compared to 38 in 2015 and 18 in 2014. Of the species trends 2015-2016 where there was comparable transect data the Gatekeeper had the second worst percentage record of all butterflies recorded (behind Peacock) with 87% of comparable transects showing a greater than 20% decrease. The number of transect records for this species peaked at only 65% of that of 2015 and was reached a week earlier than in 2015. Overall the flight period started a week later and finished a week earlier in 2016 than in 2015.

Whippingham Fields (Isle of Wight) again provided the largest counts with 534 on 22 July and 420 on 30 July, and two further counts of over 200 (John Rowell), but these were much lower than the peak of 844 recorded in 2015. No other site reached 200.







BC Priority status	Low
No of 2016 records	2,182
No of 2016 individuals	16,181
No of 2016 tetrads	342
No of post 2005 tetrads	839

Earliest on Database	31 May 1990		
Earliest 2016	07 Jun Spearywell Ryan Scott		
Latest 2016	20 Sep Portsdown Kathryn Jones		
Latest on Database	25 Sep 2003		
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	52	19	22

The Marbled White suffered a further decline in 2016 when compared to 2015. A 32% decline in numbers based on transect trends, with 52 sites showing a decrease of over 20%, 19 no change and 22 greater than 20%. A 28% decline based on individuals recorded, with the number of records down by 13%.

The earliest record was from Great Copse, on the 07 June 2016 (Ryan Scott), the same day as 2015. The latest record was on the 20 September 2016 at Portsdown (Kathryn Jones). With peak counts in the second and third week of July, both a fortnight later than 2015. The colder, wetter than average June weather possibly accounted for this extended flight period.

The largest count of 295 was on 16 July 2016 at Section 8, Whippingham Fields transect, Isle of Wight, (John Rowell), with a total count for Whippingham Fields transect on that day of 2016 of 1051. Whilst numbers overall were down, Whippingham Fields provided the majority of highest counts in 2016. Other sites where high counts were made included Breamore (Bob Taylor), Mottistone Down (Robin Lang), Leckford (Glynne Evans), Danebury Hill (Mervyn Grist) and Pitt Down (Rupert Broadway).





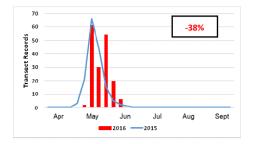
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BC Priority status	High
No of 2016 records	290
No of 2016 individuals	751
No of 2016 tetrads	43
No of post 2005 tetrads	187

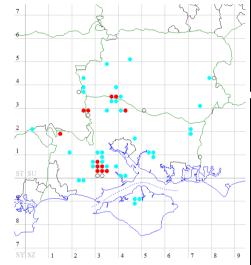
Earliest on Database	21 May 2011				
Earliest 2016	06 Jul Mottistone Down Robin Lang				
Latest 2016	14 Sep Ibsley Common Judy Hunt				
Latest on Database	08 Oct 1986				
Transect Site	Down Within Up >20% + 20% >20%				
Trends	9	9 2 8			

The Grayling had a rather poor year, with a significant decline in both overall numbers (down over 25%), and number of records (down by 12%). The results from the transects, however, were more mixed, with significant increases in records in eight of the 19 transects which recorded the species, and overall numbers on transect down by only 1% on the previous year. The earliest record was a week later than the previous year, perhaps reflecting poor weather throughout June. Records from transects show the peak flight period slightly later than last year, with high numbers through to the middle of August. The maxima was 49, seen at Beaulieu Heath on 12 August (Gordon & June Coster), and this was one of only ten records which reached double figures, with four of these from Hazeley Heath, and three from Beaulieu Heath.

Sightings continued into September with good numbers across Hazeley Heath in the week before the latest sightings on 14 Sept, which included three individuals still on transect at Ibsley Common (Judy Hunt).







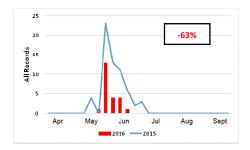
BC Priority status	Тор
No of 2016 records	157
No of 2016 individuals	638
No of 2016 tetrads	12
No of post 2005 tetrads	49

Earliest on Database	17 Apr 2003			
Earliest 2016	07 May New Copse Bob Annell			
Latest 2016	13 Jun Standing Hat Aimee Cockayne			
Latest on Database	09 Jul 1950			
Transect Site	Down ± 20% >20% 1 1			
Trends				

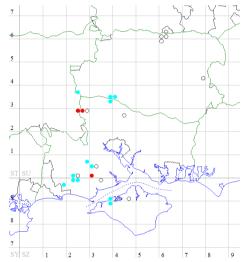
The cold April caused this species to emerge 10 days later than the previous year and a wet June finished the season a few days earlier. This resulted in a rather poor performance, with six out of eight transects showing a decrease of more than 20%.

In the New Forest stronghold the distribution remains largely unchanged although none was seen at Wootton Coppice Inclosure. Modest to good numbers were noted in woodlands east of Brockenhurst, the season peaking with a count of 40 at Ramnor Inclosure on 15 May (Ashley Whitlock). Several other observers returned 20+ counts up to 29 May.

As usual, there were various records from Bentley Wood (Eastern Clearing), peaking at 40 on 14 May (Mike Gibbons). Porton Down was not visited this year, but low numbers persist in private woodlands near Stockbridge, with a peak count of nine on 26 May (Ashley Whitlock). Following the unexpected 2015 reappearance of Pearl-bordered Fritillary at West Wood, Winchester, it is encouraging to report that 2016 also produced sightings from this area. The first were four at Farley Mount Country Park on 22 May (Paul Harfield), then four at West Wood, two on 24 May and a further two on 29 May (Andy & Linda Barker).







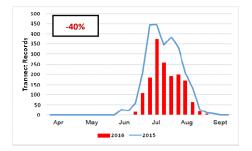
BC Priority status	Тор
No of 2016 records	13
No of 2016 individuals	21
No of 2016 tetrads	3
No of post 2005 tetrads	21

Earliest on Database	03 May 2007			
Earliest 2016	24 May Bentley Wood David Lambert			
Latest 2016	19 Jun Roydon Common Ron Cooke			
Latest on Database	31 Aug 1991			
Transect Site	Down			
Trends				

While this butterfly had another poor year at Bentley Wood, Eastern Clearing, the situation in the New Forest can only be described as a disaster. The total number of records for this species in Hampshire for 2016 was just 13, compared with 31 in 2015. Of those 12 were from Bentley Wood, with just one record of one individual from the New Forest.

At Bentley Wood the first sighting was 11 days later than last year, although numbers seen were similar to the previous two years. The Annual Index was eight, compared to six in 2015 and seven in 2014, but this was very poor compared to 186 counted in 2011. Five recorders sent in non-transect counts, with peak counts of six and four on 29 May (Mike Gibbons and Ashley Whitlock).

The single New Forest record was at Roydon Woods on 19 June (Ron Cooke). The lack of other New Forest records was despite some 20 New Forest butterfly recorders monitoring Holmsley, Brownhill and Wootton Coppice Inclosures for this species on an almost daily basis from 23 May to 17 July. Sadly, no Small Pearl-bordered Fritillaries were recorded on any of these visits.





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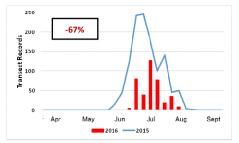
BC Priority status	Low
No of 2016 records	926
No of 2016 individuals	2,526
No of 2016 tetrads	148
No of post 2005 tetrads	579

Earliest on Database	Late May 1893			
Earliest 2016	18 Jun Botley Wood Richard Carpenter			
Latest 2016	13 Sep Catherington Jordan Walker			
Latest on Database	20 Sep 2010			
Transect Site	Down Within Up + 20% + 20% >20% 12			
Trends				

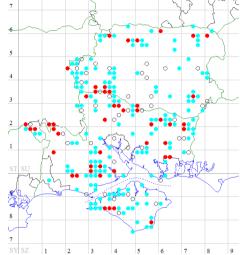
After some encouraging population recoveries last year it proved to be a disappointing season for this woodland fritillary. Whilst emergence in Hampshire was on a par with that of 2015 it was 17 days later than last year on the Isle of Wight.

Although the flight period followed a typical pattern, numbers remained depressed throughout. This is very well illustrated by the fact that only five counts of 35 or above were received, all of these falling between 14 July and 22 July 2016. At Pamber Forest, Graham Dennis had 42 on two dates, a significant drop compared to the high of 123 at that site last year. Elsewhere, Alison Harper recorded 41 at Crab Wood, Ashley Whitlock noted 35 at Biddenfield Estate and there were 35 at Ampfield Wood NW & SW (Andy & Linda Barker). Coincidentally, the highest counts on the Isle of Wight were in exactly the same date range with 12 at Walter's Copse (Helen Parry) on 14 July 2016 and 13 at Firestone Copse (AJ Redfern) on 22 July 2016.

A far from auspicious season ended with a total of eight mainland sightings in the first two weeks of September.





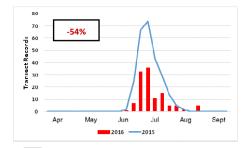


BC Priority status	High
No of 2016 records	150
No of 2016 individuals	284
No of 2016 tetrads	49
No of post 2005 tetrads	242

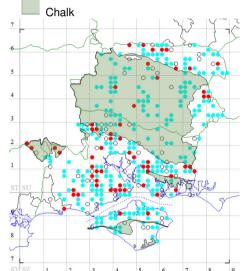
Earliest on Database	28 May 2010			
Earliest 2016	08 Jun Afton Down Ashley Whitlock			
Latest 2016	25 Aug Godshill. Hugh Insley			
Latest on Database	08 Sep 2012			
Transect Site	Down Within Up ± 20% > 20% 27 2 2			
Trends				

After a slight improvement in 2015, this spectacular species struggled again in 2016 with a 67% decrease based on transect records. Of the 113 transect monitored sites, where the butterfly is present, only two showed an increase of 20% or more, two showed no change and a disturbing 27 showed a decrease of 20% or more. Although fairly widespread throughout Hampshire and the Isle of Wight, this species continues to struggle in many areas. Apart from the few well known larger sites such as Martin Down, which is well managed, this species was generally only seen in low numbers. The first Dark Green Fritillaries of the year were recorded from the warm southerly sites of Afton and Brook Downs on the Isle of Wight on 08 June (Ashley Whitlock). Throughout the rest of June and early July it was recorded widely over the counties albeit in low numbers.

Throughout the New Forest, this species was only seen in ones and twos at a handful of sites. The first significant count was made on the Pitt Down transect by Rupert Broadway, who recorded 12 on 01 July. 18 were seen on the Martin Down North transect 4 days later by Linda Smith and the two best sites for this species throughout the season continued to be Pitt Down and Martin Down. The highest number seen was a reasonable count of 25 recorded by Ashley Whitlock at Pitt Down on 17 July.





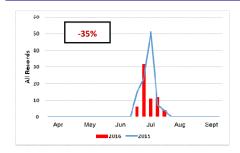


BC Priority status	High
No of 2016 records	152
No of 2016 individuals	276
No of 2016 tetrads	58
No of post 2005 tetrads	342

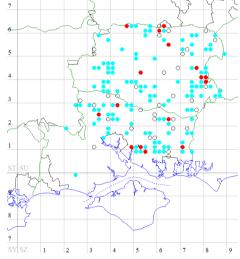
Earliest on Database	Late May 1893			
Earliest 2016	22 Jun Hocombe Mead Andy & Linda Barker			
Latest 2016	24 Aug Wood Green Hugh Insley			
Latest on Database	04 Oct 2003			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	19	9	8	

An appalling year, as this exquisite butterfly goes into freefall. Of the 156 records submitted, 64% were of singletons; only three double-figure tallies were made, all from the same site, Havant Thicket, by the same recorder (Ashley Whitlock), the year's 'zenith' being 13 on 05 July. Not even the Isle of Wight could offer comfort, the renowned Walters Copse near Newtown peaking at just eight on 14 July (Helen Parry). The total number recorded fell by 54% from the 2015 level. Quite why this insect has done so poorly remains the stuff of conjecture, but it is clearly not a species favoured by mild winters. Transect data inevitably confirmed the demise, with 19 of transects hosting the insect experiencing declines of over 20%.

The above map illustrates the general absence of the species on the chalk, the preferred habitat being woodlands with honeysuckle.







BC Priority status	High
No of 2016 records	29
No of 2016 individuals	36
No of 2016 tetrads	16
No of post 2005 tetrads	162

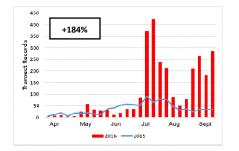
Earliest on Database	20 Jun 2007		
Earliest	03 Jul Alice Holt		
2016	Ashley Whitlock		
Latest	31 Jul Alice Holt		
2016	Ollie Frampton		
Latest on Database	23 Aug 2013		
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	3	1	-

The Purple Emperor season in Hampshire was extremely poor, with the species being recorded at only 16 sites compared with the season of 2015 when the species was noted from within 31 tetrads.

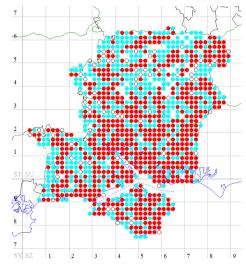
Ashley Whitlock noted it first at Alice Holt Forest (1) with two males giving chase at this Assembly Point on the 03 July. But even Alice Holt Forest, normally the best site in Hampshire, really struggled with numbers, the best coming from Abbotts Wood Inclosure and Straits Inclosure on the 07 July when 14 individuals were seen. This was the highlight of the season with most other sites only producing one or two individuals.

Three sites in the north of the county produced records; these were Herbert Plantation, Pamber Forest & Silchester Common, where counts matched a normal Purple Emperor season!

Matthew Oates confirmed that his larval counts in Wiltshire were also down.







BC Priority status	Low
No of 2016 records	4,241
No of 2016 individuals	9,604
No of 2016 tetrads	613
No of post 2005 tetrads	1,086

Earliest on Database	01 Jan, various years			
Earliest 2016	01 Jan Cadnam Bob Spedding			
Latest 2016	31 Dec Chessel Down Julie Curtis			
Latest on Database	31 Dec, various years			
Transect Site	Down Within Up >20% 20% 70			
Trends				

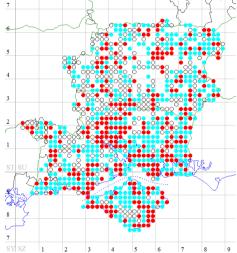
Records for 2015-2016 show the Red Admiral had a good year in 2016, with total adult sightings recorded on transect for the Branch's two counties up 184% on 2015, and the largest increase recorded of all the butterfly species flying in the two counties in 2016. 87 Transects where this butterfly was recorded showed an increase of more than 20% or remained the same, and only eight transects recorded a decrease of more than 20%. However, large annual differences in numbers of Red Admiral are a familiar pattern in the records. Changes in migration levels resulting from circumstances overseas may have a big impact on numbers and are not necessarily a sign of long-term growth of this species' population.

The Red Admiral was again recorded in every month of 2016, with counts of individuals peaking at over 450 in mid-July.

Thomas and Lewington (The Butterflies of Britain and Ireland, 2014 edition) stated that 'in all but very mild winters, even in the south of England this species fails any attempted hibernation'. However even more recent research (Marc Botham, Centre for Ecology & Hydrology, 2016) confirms that there is evidence that the species is now resident in Southern England.







	BC Priority status	Low
	No of 2016 records	618
	No of 2016 individuals	1,122
-	No of 2016 tetrads	287
-	No of post 2005 tetrads	895

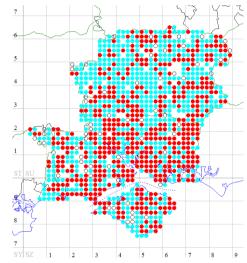
Earliest on Database	01 Jan 2013		
Earliest	24 Jan Marchwood		
2016	Simon King		
Latest	31 Oct Locks Heath		
2016	Phillip Lowe		
Latest on Database	31 Dec 1987		
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	40 20 20		

Painted Lady were observed in two main periods between 27 May and 8 July and 22 July and 23 September. 1,122 Painted Lady were recorded, of which only 183 were on transect. 43% fewer individuals were recorded on transect in 2016 than in 2015 but, surprisingly, in 2016 the off transect figure was only down about 12%. Clearly, experienced observers know where to look for Painted Lady whereas the butterflies don't know where the transects are! The transect counts peaked on 05 June (week 10), with the largest numbers seen on the south-west coast of the Isle of Wight. Two other peaks in numbers occurred on 04-07 August and 26-29 August.

During 2016 the transect sites with a decrease in the numbers of Painted Lady were equal to the number of transects which either stayed the same or increased in number combined. 19 transects recorded Painted Lady in 2015 but not in 2016. 2016 was a disappointing year compared to the above average numbers seen in 2015.





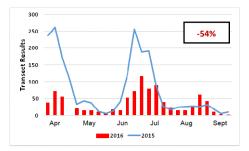


BC Priority status	Low
No of 2016 records	2,670
No of 2016 individuals	7,261
No of 2016 tetrads	500
No of post 2005 tetrads	1,154

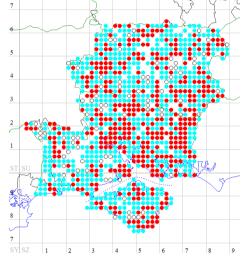
Earliest on Database	01 Jan, various years			
Earliest 2016	11 Jan Titchfield Richard Carpenter			
Latest 2016	29 Dec St Lawrence Helen Woodman			
Latest on Database	31 Dec, various years			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	81 9 1			

Concerns that the cold and wet end to the summer of 2015 would impact the spring population of Peacocks proved to be justified as the number of transect records struggled to make one third of the numbers of 2015. The summer population fared better but even so were still well down on 2015. Of the 91 transects with comparable data Peacocks had the worst percentage species trend of all the butterflies recorded with 90% showing a greater than 20% decrease.

Regular sightings started in the second week of March and on a positive note were sustained better than in 2015 continuing through until the second week of October. The maximum counts in 2016 were 38 on Stockbridge Down on 31 July and 30 at Noar Hill on 09 June. In total there were only seven sightings of over 20, although mention must be made of 11 at Keyhaven on 11 October. There were few larval records submitted, the largest were 600 and 1000 by Paul Harfield at Stephens Castle Down on 19 June and 25 June.







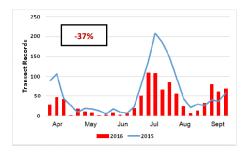
BC Priority status	Low
No of 2016 records	1,493
No of 2016 individuals	2,701
No of 2016 tetrads	395
No of post 2005 tetrads	997

Earliest on Database	05 Jan 1999			
Earliest 2016	04 Feb Bishops Waltham Rod Pointer			
Latest 2016	28 Dec Blashford Bob Taylor			
Latest on Database	25 Dec 2013			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	61 14 10			

Another very disappointing year, with no more than a handful of double-figure tallies. The spring emergence was poor, with just one record of note: 17 at Magdalen Hill Down on 12 April (Gordon & June Coster). The summer brood emergence peaked in early July, with a modest clutch of good numbers, beginning with 42 at Windmill Hill, Chalton on 03 July (John Vigay), surpassed by the year's zenith of 53 at Hucklesbrook, between Ringwood and Fordingbridge, three days later (John Edward).

Overall, the total number recorded on transect fell by 54% on 2015. The only pleasant surprise was the apparent occurrence of an autumn brood, with two tallies of 20 recorded at Old Winchester Hill and Noar Hill (Ashley Whitlock) on 30 August and 01 September respectively, the first time this phenomenon has been noted for many years. Transect data confirmed the decline; 61 of transects hosting the butterfly suffered a drop in numbers in excess of 20%.

Rupert Broadway





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BC Priority status	Low
No of 2016 records	1,597
No of 2016 individuals	2,339
No of 2016 tetrads	416
No of post 2005 tetrads	998

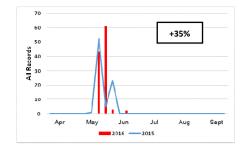
Earliest on Database	09 Jan 1998		
Earliest 2016	12 Mar Emsworth Jane Brook		
Latest 2016	25 Oct Bishops Waltham Dennis Trunecka		
Latest on Database	22 Dec 2013		
Transect Site	Down Within Up >20% >20%		
Trends	47	20	18

The Comma didn't have a particularly good season in 2016, with both the total number of records and total number of individuals falling by around 40%.

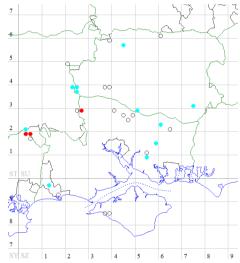
Transect records confirmed this picture at most monitored sites in spring and summer, although it did perk up a little in the fine late summer and autumn weather.

Mockbeggar Lakes, near Ringwood, appears to be something of a stronghold for this species, with 29 being recorded on 13 September, 14 on 18 September and 12 on 11 September – three of the top five counts of the year (John Levell). The only other double figure counts recorded were of 12 at Monks Walk, Elson (Gosport) on 15 July (Francis Plowman) and ten at Shipton Bellinger on 06 August (Mike Gibbons).

As ever, the Comma enjoyed a relatively long season with records starting to come in from mid-March, peaks in April, July and September, and a few October sightings. Given a reasonable autumn showing, perhaps the fortunes of the Comma will look up again in 2017.







BC Priority status	Тор
No of 2016 records	9
No of 2016 individuals	22
No of 2016 tetrads	3
No of post 2005 tetrads	26

Earliest on Database	22 Apr 2007				
Earliest 2016	20 May Martin Down				
2010	Linda Smith				
Latest	19 Jun Martin Down				
2016	Gordon & June Coster				
Latest on Database	11 Jul 2006				
Transect	Down	Within	Up		
Site	>20% ±20% >20				
Trends	1	1 1 1			

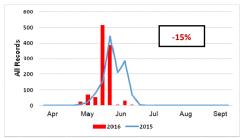
The Marsh Fritillary's fortunes took a turn for the better in 2016 from two well watched sites. At Martin Down a peak of 29 was recorded on 26 May and 23 were seen there on 29 May (Gordon and June Coster). Into early June numbers fell dramatically with ones and twos recorded up to 19 June. These are very respectable numbers compared to recent years here.

In the Eastern Clearing at Bentley Wood it was recorded more frequently than in recent years with a maximum of 4 seen on 23 May (Graeme Davis).

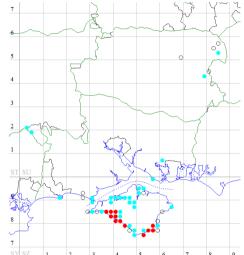
Transect data reflects the increase in numbers compared to 2015 with the flight period graph showing an increase of 35% on that year.

One was seen nectaring on Horseshoe Vetch 05 June (Andy & Linda Barker) at Martin Down.

These two sites of contrasting habitats demonstrate the importance of correct management for the butterfly. The sunny warm spring was critical for the improved numbers during the flight period.





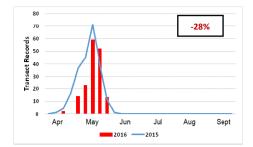


BC Priority status	Тор
No of 2016 records	40
No of 2016 individuals	1,058
No of 2016 tetrads	12
No of post 2005 tetrads	54

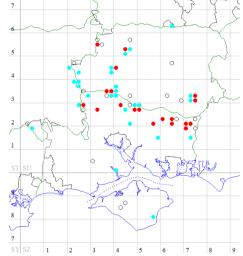
Earliest on Database	08 Apr 2007			
Earliest 2016	01 May Wheelers Bay Andy Butler			
Latest 2016	30 Jun Wheelers Bay Andy Butler			
Latest on Database	09 Jul 2010			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	1	-	1	

The web counts this spring continued to show an increase at most sites, especially Shepherd's Chine where 498 webs were logged. There was also good news from Binnel where three webs were found, this after an absence of five years. The once major colony at Compton is slowly recovering and numbers reached 178 this year. The Isle of Wight Natural Histoy & Archaeological Society has carried out this survey at all traditional sites for the past 33 years and the average number of webs recorded annually works out to 475, so this year, with a count of 898, can be seen to be above average although Shepherd's Chine accounted for over half the total (these figures exclude the Wheeler's Bay colony).

The highlights of the records of adult Glanvilles were the five seen at Binnel on 14 May, 475 at Shepherd's Chine and environs on 28 May and 30 at Watcombe Bottom on 27 May (all Andy Butler). At most of the other sites numbers were fairly low and were perhaps a reflection of the uncertain weather. A single adult was seen near Knowles Farm/Watershoot Bay on 06 June so they are still hanging on somewhere near there. Also two were seen along the cliff top west of La Falaise Car Park on 19 May.





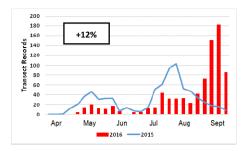


BC Priority status	Тор
No of 2016 records	122
No of 2016 individuals	743
No of 2016 tetrads	19
No of post 2005 tetrads	55

Earliest on Database	09 Apr 2011		
Earliest 2016	13 Apr Noar Hill Mark Jones		
Latest 2016	10 Jun West Butser Hill Ashley Whitlock		
Latest on Database	02 Oct 2011		
Transect Site	Down Within Up + 20% >20%		
Trends	1	2	1

The Duke of Burgundy relies heavily on good spring weather, and with the first part of April being warm and dry the species was first noted at Noar Hill on the 13 April. On transect in excess of 60 individuals were seen at Noar Hill on 13 May (Anthony James), and nearby a single individual was noted on Selborne Common. On the same date the Duke appeared *en-masse* at Oxenbourne Down and this was one of the best counts ever of 16 in a day. On the 16 May when the weather was in a settled warm period 57 were seen at Ramsdean Down and in the Test Valley where the species relies on Primrose as a main foodplant there were 42 on 19 May. In the north of the county, the species was recorded at Andover Down (Graeme Davis), Angle Down (Andy Bolton & Mervyn Grist) and Kiblet Down (Andy & Linda Barker).

It remains extant in the Stockbridge area and Butser Hill where the core of the main colonies in Hampshire are located. Low counts came from Old Winchester Hill and Beacon Hill in the Meon Valley. Deacon Hill still holds the only viable population in the Winchester area and Bentley Wood Eastern Clearing on the Hants/Wiltshire border. Bad weather hit the species towards the end of May, but it managed to linger on into the first week of June.





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BC Priority status	Low
No of 2016 records	669
No of 2016 individuals	1,339
No of 2016 tetrads	196
No of post 2005 tetrads	727

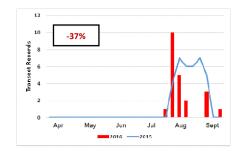
Earliest on Database	05 Mar 2009		
Earliest 2016	12 Apr Titchfield M Carr		
Latest 2016	02 Nov Wheelers Bay Andy Butler		
Latest on Database	27 Nov 2003		
Transect Site	Down Within ± 20% >		Up >20%
Trends	36	10	28

The Small Copper often peaks late in the year in the kind of late summer and autumn weather experienced in 2016; thus 332 records were received totalling 485 insects up to 31 August, whereas a further 292 sightings totalling 776 individuals were recorded after that date. The monitoring season officially finishes at the end of September, although some transects are walked beyond that date, so transect counts don't always provide an accurate picture.

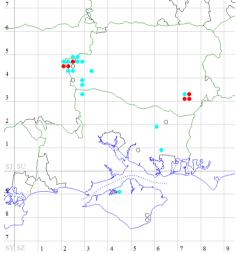
The Small Copper is recorded from many sites over the two counties, but a disproportionate number often comes from a single stronghold, Whippingham Fields, between East Cowes and Newport, from where John Rowell recorded a total of 209 in 2016 (down from 351 in 2015), including 69 on 16 September and 36 on 11 September.

Other creditable individual counts included 33 at Mockbeggar Lakes on 15 September (John Levell) and an early season high of 20 on 07 May at Gunner Point (Mark Tutton).

The Small Copper was on the wing from early March to early November, but it was a strong late showing that saved the season and will, hopefully, stand it in good stead for a strong 2017.







BC Priority status	High
No of 2016 records	25
No of 2016 individuals	132
No of 2016 tetrads	6
No of post 2005 tetrads	24

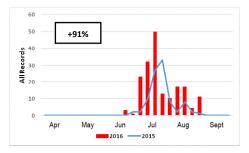
Earliest on Database	24 Jul 2	011	
Earliest	30 Jul 9	Shipton Be	ellinger
2016	Alan Th	ornbury	
Latest	24 Sep	Noar Hill	
2016	Anthony	James	
Latest on Database	16 Oct 1986		
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	1 1 -		

Shipton Bellinger and the area in and around Noar Hill and Selborne continued to provide the only sightings of this beautiful butterfly. Andy & Linda Barker and Alan Thornbury recorded the first sightings on 30 July 2016 at Shipton Bellinger. Numbers soon reached a peak at this site with 16 recorded by Mike Gibbons on 06 August. Ten were recorded on transect on the same day by Mervyn Grist. The flight season at Shipton Bellinger ended in mid-September with one seen on transect on 13 September (Mervyn Grist).

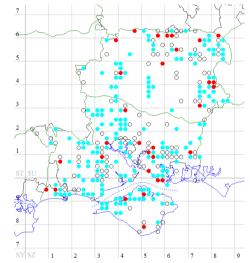
The recorded flight season at Noar Hill started and ended two-weeks later than Shipton Bellinger. One adult was recorded on 12 August (Ashley Whitlock and Tony James) with a peak count of eight on 01 September (Ashley Whitlock). The maximum count on transect was a mere two on 11 September (Tony James).

An egg search by Mervyn Grist on 05 March at Shipton Bellinger including sections of the transect route found 102 eggs. New timed egg survey routes have also been established around Selborne. Seven eggs were found at two locations on 18 February (Clive Wood).

No reports were received from the Isle of Wight.







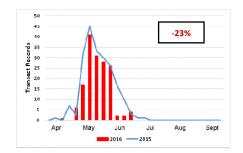
BC Priority status	Low
No of 2016 records	79
No of 2016 individuals	194
No of 2016 tetrads	31
No of post 2005 tetrads	280

Earliest on Database	31 May	2010	
Earliest	22 Jun	Christchu	rch
2016	Mike Gi	bbons	
Latest	01 Sep Noar Hill		
2016	Ashley Whitlock		
Latest on Database	25 Sep 2003		
Transect	Down Within Up		
Site	>20% ± 20% >20%		
Trends	6	-	6

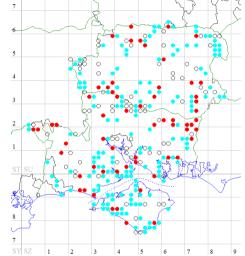
In 2016, this species had a one week earlier start to its season and four days later end than 2015, giving a flight period of 72 days. The Transect Trends table shows that six transects showed a loss of 20% or more, with six showing a gain of 20% or more against 2015. This should be an indication of equilibrium, albeit at a low population base.

Although the butterfly is recorded on so few transect sites, at least in 2016 this number doubled from four to eight, with locations ranging from the Isle of Wight up to Hazeley Heath and Pamber Forest. The latter two sites had the highest Annual Indexes (13/12), and highest transect counts, each with three individuals on the 05 and 06 August respectively (Dave Braddock/Graham Dennis). The number of records received from all sources was also substantially up, indicating a better season.

Away from transects, the top three counts were of 12 at Whiteley on 19 July (Paul Harfield), ten at Browndown South on 03 July (Alan Thornbury) and seven in Harewood Forest on 31 July (John WH Solomon). The only egg record was 11 at Westfield Copse, Axmansford on 17 March (Pete Eeles & Andy Bolton).







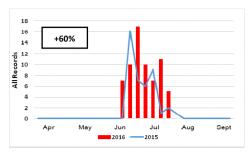
BC Priority status	Low
No of 2016 records	182
No of 2016 individuals	438
No of 2016 tetrads	63
No of post 2005 tetrads	267

Earliest on Database	29 Mar 2012		
Earliest 2016	20 Apr Noar Hill		
Latest 2016	Anthony James 02 Jul Abbotstone Down Ashley Whitlock		
Latest on Database	30 Jul 2007		
Transect Site	Down Within Up >20% >20%		
Trends	24	11	8

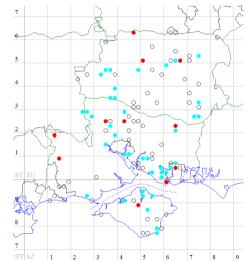
The Green Hairstreak is the only hairstreak that hibernates as a chrysalis, making it the first hairstreak to appear in spring. In 2016 the first recorded sighting was six days later than 2015. The flight period was 74 days compared to 88 days in 2015. Transect numbers peaked on 13 May 2016 at 26, then plummeted after 10 June 2016 and did not recover.

Overall the transect records showed a 23% decrease from 2015. Total rainfall (using Southampton data) in 2016 was less than 2015 but June of 2016 was second to January 2016 in amount of rainfall for the entire year! The wet June was surely a contributing factor to the shorter flight period and plummet of numbers in mid June. Looking at totals from a selection of transects over the past ten years (2007-2016) 2016 was second lowest with 88. The lowest of 49 was in 2012 (also a very wet June), and the highest 307 in 2011. The ten-year average is 157.

Noar Hill was the top transect with records totalling 22 for the season. The highest individual sighting was a field record from Andy Butler on 29 May 2016 at Brook Down on the Isle of Wight, a count 39!





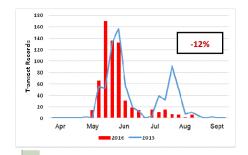


BC Priority status	High
No of 2016 records	24
No of 2016 individuals	34
No of 2016 tetrads	11
No of post 2005 tetrads	91

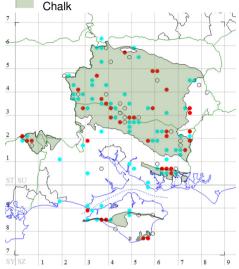
Earliest on Database	25 May	2011	
Earliest	19 Jun	Meon Val	ley
2016	Paul Ha	rfield	
Latest	05 Aug Overton		
2016	Margaret Rainford		
Latest on Database	23 Aug 2004		
Transect Site	Down >20%	Within ± 20%	Up >20%
Trends	-	1	-

As ever, the number of records submitted remains dismally low, although as a novelty several noted the discovery of ova on elms along the Meon Valley Trail in February (Paul Harfield). Records were so few and random as to defeat analysis, but again suggest the insect is much under-recorded. The highest tally of 9 was recorded at IBM Cosham, Portsmouth (Paul Harfield), a well-known hotspot, though in 2016 without competition from the various haunts across the water at Gosport, notably the MoD munitions depot, whence not a single report was received. Despite this setback, the total number recorded actually rose 60% on 2015. Moreover, several new haunts were added: the wayleave at Newtown Common near Burghclere (Tony Filbee), and Whitsbury (Mike Gibbons) north of Fordingbridge near the Wiltshire border, a significant 'first' for this area.

As has become the norm, the Crabtree Plantation near Basingstoke was the only transect to feature the insect. Records from the Isle of Wight were all of sightings on the disease-resistant LUTECE elms planted at Towngate, Newport, with a maximum of five seen on 02 July (Caroline Dudley).







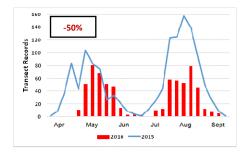
BC Priority status	High
No of 2016 records	245
No of 2016 individuals	1,508
No of 2016 tetrads	36
No of post 2005 tetrads	119

Earliest on Database	30 Mar 2012			
Earliest 2016	12 May Ashley V	Γhe Mount Vhitlock		
Latest 2016	29 Aug Noar Hill Gordon & June Coster			
Latest on Database	21 Sep 1991			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	12	8	4	

Our smallest butterfly did well to record a drop of only 12% on transect in a generally poor year for butterflies. This good result can be attributed to excellent habitat management work that has continued over recent years at several core sites across the county. For example, 219 were recorded on transect on the restored habitat at Old Down, Basingstoke, slightly up on the count for 2015 (207). This included a peak count of 75 on 10 June 2016 (Jill Lincoln). The Small Blue continued to do well on Magdalen Hill Down.

Martin Down remains a stronghold for the species with three off-transect counts of over 100 recorded in late May by Ashley Whitlock and Gordon & June Coster. At Old Burghclere Lime Quarry, 170 were recorded by Graham Dennis on 05 June. There was a welcome increase in sightings from the Isle of Wight with a remarkable 250 recorded by Andy Butler near Ventnor on the 27 May.

The second brood was very poor in contrast to 2015. Counts may have been affected by the cloudy conditions seen in July and August. The highest single count was six recorded on 26 August at Sparsholt College (Maggie Shelton).





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BC Priority status	Low
No of 2016 records	1,525
No of 2016 individuals	2,175
No of 2016 tetrads	347
No of post 2005 tetrads	863

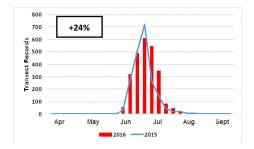
Earliest on Database	14 Jan 2013			
Earliest	03 Mar Fl	eming Park		
2016	Gordon &	June Coste	er	
Latest	31 Oct Andover			
2016	Terry Stevens			
Latest on Database	06 Dec 2006			
Transect Site	Down Within Up >20% >20%			
Trends	61	15	13	

On the face of it, the 2016 transect data for the Holly Blue looks pretty disastrous, with 61 monitored sites showing declines of over 20% on 2015 and only 28 showing little change or a corresponding increase, and the overall flight period graphs indicating a decline of 50% across all transects.

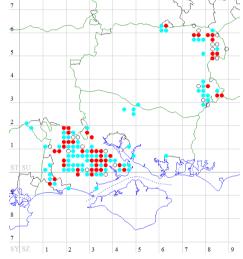
This has to be set against the fact that 2015 was a particularly good year for this species. The overall number of records received in 2016, together with the fact that it remains widespread across the two counties and is, in any case, subject to significant annual fluctuations, gives little cause for longer term concern.

The flight period in 2016 spanned an impressive eight months, with distinct peaks in mid May and mid August, and it was clearly a species that benefited from the fine late summer and autumn weather.

Individual counts were modest with the best, as in 2015, coming from the Shipton Bellinger area where Mike Gibbons recorded ten on 06 August and Andy & Linda Barker counted 12 six days later. That apart, the vast majority of records were of ones and twos.





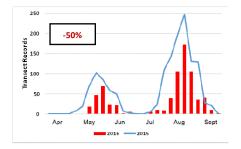


BC Priority status	High
No of 2016 records	345
No of 2016 individuals	3,448
No of 2016 tetrads	47
No of post 2005 tetrads	139

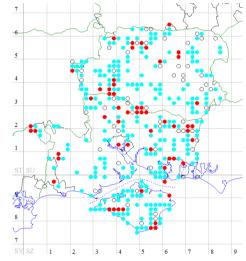
Earliest on Database	09 May 2011			
Earliest 2016	08 Jun Silchester Graham Dennis			
2010	Granan	Dennis		
Latest	01 Sep Turf Hill			
2016	Susan Clarke, Dave Green			
Latest on Database	30 Oct 1921			
Transect Site	Down Within Up >20% + 20% >20%			
Trends	7	3	7	

The Silver-studded Blue had a reasonable year in 2016, with records on transects showing a 24% increase on the previous year, although overall numbers and individual records were down considerably. It was seen on 17 transects, one more than in 2015, although seven transects did see a significant reduction in numbers. The first record in early June was two days earlier than the previous year, with a notable early emergence on Bramshott Common from 10 June (Arthur Greenwood), although the species stronghold remains the heaths of the New Forest. The maxima was 250, seen on Beaulieu Heath on 06 July (John Ruppersbury) which was one of only five records of one hundred or more. This was in marked contrast to the previous year's exceptional maxima of over 2,000, which may explain some of the decline in overall numbers.

The overall number of separate records declined by just under 15%. Whilst numbers remained consistent in July, records after mid-August were again very few. At Latchmore, none were seen in the two weeks prior to the final sighting on 01 September (Sue Clarke & Dave Green).







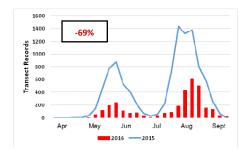
BC Priority status	Low
No of 2016 records	362
No of 2016 individuals	962
No of 2016 tetrads	59
No of post 2005 tetrads	352

Earliest on Database	08 Apr 2002			
Earliest 2016	13 May Pilot Hill Mervyn Grist			
Latest 2016	23 Sep Chilbolton Glynne Evans			
Latest on Database	31 Oct 2005			
Transect Site	Down Within Up + 20% >20%			
Trends	35	6	1	

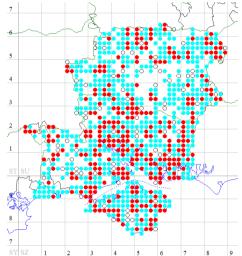
2016 was a poor year for Brown Argus in Hampshire and on the Isle of Wight. This trend is clearly reflected in the transect data, which show a greater than 20% decline in numbers in 35 out of 42 transects where this species is present.

Furthermore, Brown Argus was not recorded at 15 sites where it was present in 2015 and only seen at one site where it was not recorded the previous year. There was an overall 50% decline in numbers on transect as compared to 2015 with both broods appearing in only half the numbers as were seen in 2015.

The best site for Brown Argus in terms of numbers in 2016 was Magdalen Hill Down (maximum transect count 39). Other Hampshire sites with counts greater than ten on any one date were Beacon Hill (Warnford), Cheesefoot Head, Martin Down and at a site west of Shipton Bellinger. Brown Argus was recorded at six sites on the Isle of Wight in 2016 with the highest count (15 on 26 May) at Mottistone Down.







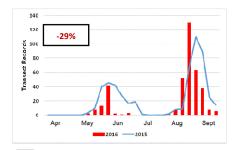
BC Priority status	Low
No of 2016 records	1,725
No of 2016 individuals	5,522
No of 2016 tetrads	304
No of post 2005 tetrads	888

Earliest on Database	08 Apr 2011			
Earliest 2016	23 Apr Itchen Valley Zoe Caals			
Latest 2016	02 Nov Southbourne Mike Gibbons			
Latest on Database	12 Nov 1990			
Transect Site	Down Within Up + 20% >20%			
Trends	79	7	5	

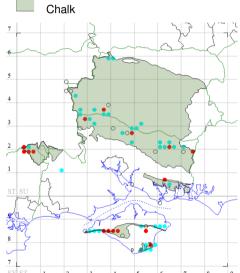
This lovely butterfly had a rather poor year with a general 69% decrease based on transect records. Of the 113 transect monitored sites, where this species is present, a disappointing 79 showed a decrease of 20% or more, seven showed no change and only five showed an increase of 20% or more.

The year began with ones and twos being recorded across the counties. The first significant record of 14 individuals was recorded by Robin Lang on the Mottistone transect on 19 May. This was followed by a good count of 42, again on the Isle of Wight at Bonchurch Down (Andy Butler). The first record of any significance on the mainland was from Beacon Hill, when Ashley Whitlock counted 25 on 27 May. Apart from the Isle of Wight, where the species seems to have been most abundant, other sites where the first brood was recorded include Stockbridge Down, Magdalen Hill Down, Noar Hill, Old Winchester Hill and especially Martin Down where 50 were noted on 28 May (Ashley Whitlock).

Numbers continued to be rather low throughout most of July with counts of more than 10 individuals recorded at sites such as Broughton Down and Old Burghclere Lime Quarry. Higher numbers of over 40 were seen at Noar Hill and Old Winchester Hill towards the end of August.







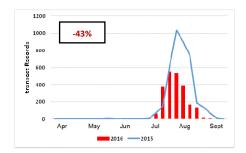
BC Priority status	High
No of 2016 records	67
No of 2016 individuals	254
No of 2016 tetrads	16
No of post 2005 tetrads	63

Earliest on Database	26 Apr 2011			
Earliest 2016	12 May Horringford Irene Pavitt			
Latest 2016	23 Sep Martin Down Linda Smith			
Latest on Database	15 Oct 2011			
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	9	2	3	

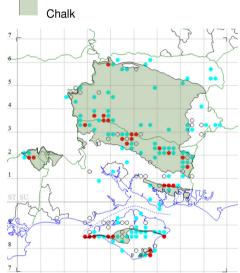
Another poor year for this species, with a majority of transects (nine out of 14) showing more than 20% decline. Even so, the number of sites and geographical distribution across the two counties remains largely unchanged. Martin Down, Old Winchester Hill, Brook Down and Mottistone Down all produced double-figure counts, but the previously strong population at Bonchurch Down has crashed. This site produced a transect Annual Index of 556 as recently as 2013, but in 2016, the equivalent figure was just 20, with a maximum weekly count of just four (several dates).

The first brood began in mid May and peaked with counts of 28 at Martin Down on 28 May and 50 at Brook Down on 08 June (both Ashley Whitlock). Seven consecutive rainy days from 10-17 June brought this brood to an abrupt end, with only five individuals noted after 8 June, the last being one at Bonchurch Down on 27 Jun (lan Ridett).

The second brood began with one at Old Winchester Hill on 09 August (Alan McVittie). It peaked earlier and more strongly than 2015, with a maximum of 70 at Martin Down on 29 August (Linda Smith). The season finished with five at Martin Down on 23 September (Linda Smith).







BC Priority status	Medium
No of 2016 records	290
No of 2016 individuals	4,281
No of 2016 tetrads	28
No of post 2005 tetrads	160

Earliest on Database	17 Jun 1990			
Earliest	13 Jul Old Idsworth			
2016	Richard	Symonds		
Latest 2016	03 Oct Portsdown Richard Jones			
Latest on Database	31 Oct 2011			
Transect Site	Down Within Up >20% >20%			
Trends	19 2 2			

A decline in transect numbers across most sites suggested that Chalk Hill Blue generally fared poorly during 2016. The decline in total numbers was also reflected in a short flight season which started a week later than normal and generally drew to an end by mid-September, much earlier than 2015. However, a single late record from Portsdown was getting towards the limit of the season, showing that on some sites the species was still hanging on until late into the Autumn.

Numbers were also strongly down compared to previous peaks, and whereas in 2013 the largest numbers recorded on an Isle of Wight site was over 50,000 individuals, the best that could be achieved in 2016 was 800 individuals on Brook Down on 31 July (Andy Butler). Over the summer there only were seven days on five sites where over 100 individuals were recorded, again significantly down compared to the peaks of the last decade, and in Hampshire the maximum number recorded was at Stockbridge Down, where only 200 were recorded on the 30 July (Bob Annell).



2016 was not an especially interesting or unusual year for migrant Lepidoptera species. There was only one record of a Monarch (*Danaus plexippus*), which was recorded from Browndown near Gosport by Francis Plowman on 18 July. Although one or two individuals are recorded in most years from the British Isles, as migrants from North America, it is very difficult to determine whether sightings are of genuine migrants or captive bred and released/escaped. This can usually only be verified if they coincide with migrations of birds from across the Atlantic.

There were no reported observations of Long-tailed Blues (*Lampides boeticus*) in Hampshire and the Isle of Wight during 2016. This species seems to be becoming a more regular migrant in recent years with significant numbers recorded in 2006, 2013 and 2015. As the food-plants of this species include various cultivated members of the pea family, it is worth keeping an eye open in gardens and parks, particular along the coast.

There were reports of various even more exotic butterflies recorded in 2016. These included a Citrus Swallowtail (*Papilio demoleus*) seen at Sholing on 21 July (Julie Thomas), a Malachite (*Siproeta stelenes*) seen at Dibden Purlieu on 16 August (Jill Noble), and a Malay Lacewing (*Cethosia hypsea*) recorded by Ruth Williams at Deerleap (near to the New Forest Wildlife Park) on 09 September. Other unusual butterflies seen included a Tiger Longwing (*Heliconius hecale zuleika*) at Warsash Common on 16 September (Colin Tabeart) and a Giant Owl Butterfly (*Caligo eurilochus*) at Abbotts Ann on 27 September (Siriol Jamieson). All of these are exotic species which can only have been reared in captivity and either released or escaped.

The earliest and latest sightings for 2016 are summarised with the all-time earliest and latest dates for our area held on the Branch database. Please interpret these all-time dates with caution as our records for earlier years are far from complete.

Species	Earliest on Database	Earliest 2016	Latest 2016	Latest on Database
Dingy Skipper	12 Apr 2011	24 Apr	06 Aug	03 Sep 1993
Grizzled Skipper	26 Mar 2012	17 Apr	27 Jun	30 Nov 2012
Essex Skipper	26 May 2007	21 Jun	17 Aug	21 Sep 1996
Small Skipper	16 May 2011	22 May	14 Sep	19 Sep 1991
Silver-spotted Skipper	13 Jul 1997	28 Jul	15 Sep	11 Oct 1986
Large Skipper	28 Apr 2007	08 May	30 Aug	22 Sep 2013
Orange-tip	10 Mar 1990	01 Apr	05 Jul	22 Sep 2011
Large White	02 Feb 2007	17 Mar	31 Oct	07 Dec 2012
Small White	09 Jan 1991	17 Mar	05 Nov	08 Dec 2007
Green-veined White	03 Mar 1989	29 Mar	28 Sep	28 Oct 1999
Clouded Yellow	08 Feb 2005	21 Mar	29 Dec	30 Dec 2007
Brimstone	01 Jan 2001	19 Jan	10 Nov	29 Dec 1999
Wall	05 Apr 2000	05 May	09 Oct	06 Nov 2003
Speckled Wood	11 Jan 2013	22 Mar	15 Nov	15 Dec 2011
Small Heath	08 Apr 1997	30 Apr	28 Sep	29 Oct 2011
Ringlet	24 May 2016	24 May	16 Sep	11 Oct 2011
Meadow Brown	30 Apr 2011	03 Jun	03 Oct	07 Nov 2010
Gatekeeper	24 Mar 1999	20 Jun	26 Sep	19 Oct 1995
Marbled White	31 May 1990	07 Jun	20 Sep	25 Sep 2003
Grayling	21 May 2011	06 July	14 Sep	08 Oct 1986
Pearl-bordered Fritillary	17 Apr 2003	07 May	13 Jun	09 Jul 1950
Small Pearl-bordered Fritillary	03 May 2007	24 May	19 Jun	31 Aug 1991
Silver-washed Fritillary	Late May 1893	18 Jun	13 Sep	20 Sep 2010
Dark Green Fritillary	28 May 2010	08 Jun	25 Aug	08 Sep 2012
White Admiral	Late May 1893	22 Jun	24 Aug	04 Oct 2003
Purple Emperor	20 Jun 2007	03 Jul	31 Jul	23 Aug 2013
Red Admiral	01 Jan*	01 Jan	31 Dec	31 Dec*
Painted Lady	01 Jan 2013	24 Jan	31 Oct	31 Dec 1987
Peacock	01 Jan*	11 Jan	29 Dec	31 Dec*
Small Tortoiseshell	05 Jan 1999	04 Feb	28 Dec	28 Dec 2016
Comma	09 Jan 1998	12 Mar	25 Oct	22 Dec 2013
Marsh Fritillary	22 Apr 2007	20 May	19 Jun	11 Jul 2006
Glanville Fritillary	08 Apr 2007	01 May	30 Jun	09 Jul 2010
Duke of Burgundy	09 Apr 2011	13 Apr	10 Jun	02 Oct 2011
Small Copper	05 Mar 2009	12 Apr	02 Nov	27 Nov 2003
Brown Hairstreak	24 Jul 2011	30 Jul	24 Sep	16 Oct 1986
Purple Hairstreak	31 May 2010	22 Jun	01 Sep	25 Sep 2003
Green Hairstreak	29 Mar 2012	20 Apr	02 Jul	30 Jul 2007
White-letter Hairstreak	25 May 2011	19 Jun	05 Aug	23 Aug 2004
Small Blue	30 Mar 2012	12 May	29 Aug	21 Sep 1991
Holly Blue	14 Jan 2013	03 Mar	31 Oct	06 Dec 2006
Silver-studded Blue	09 May 2011	08 Jun	01 Sep	30 Oct 1921
Brown Argus	08 Apr 2002	13 May	23 Sep	31 Oct 2005
Common Blue	08 Apr 2011	23 Apr	02 Nov	12 Nov 1990
Adonis Blue	26 Apr 2011	12 May	23 Sep	15 Oct 2011
Chalk Hill Blue	17 Jun 1990	13 Jul	03 Oct	31 Oct 2011

^{*} Recorded on this date in several years

This table was compiled by Dr Andy Barker and is based on 113 Hampshire & Isle of Wight transects with data for both 2015 and 2016.

Species	Combined Transect Trend	>20% Decrease 2016	Within ±20% No Change	>20% Increase 2016	0 /16 1+/15 Loss	1+/16 0/15 Gain
Dingy Skipper	-32%	18	4	5	7	1
Grizzled Skipper	-28%	14	4	7	5	5
Small Skipper	-64%		-	-	-	-
Essex Skipper	-73%	-	-	-	-	-
Small/Essex Skipper	-75%	81	14	8	11	-
Silver-spotted Skipper	-66%	3	1	-	1	-
Large Skipper	-52%	65	15	20	8	8
Orange-tip	-4%	31	33	26	9	5
Large White	+17%	32	23	40	-	-
Small White	+21%	24	20	47	-	1
Green-veined White	-6%	31	30	28	3	2
Clouded Yellow	+60%	14	7	24	12	16
Brimstone	-37%	61	16	10	12	10
Wall	-37%	4	2	10	2	1
Speckled Wood	-24%	47	22	20	2	-
Speckled Wood Small Heath				20 8	_	
	-47%	30	15	•	7	3
Ringlet Meadow Brown	-19% -40%	50 73	23	21	7	-
		/3 89	9		-	-
Gatekeeper	-52%		_	4	1	-
Marbled White	-32%	52	19	22	6	5
Grayling	-1%	9	2	8	1	2
Pearl-bordered Fritillary	-38%	6	1	1	3	1
Small Pearl-bordered Frit.*	-63%	2	-	1	1	-
Silver-washed Fritillary	-40%	44	6	12	9	4
Dark Green Fritillary	-67%	27	2	2	10	2
White Admiral	-54%	19	9	80	6	6
Purple Emperor*	-35%	3	1	-	3	-
Red Admiral	+184%	8	17	70	2	3
Painted Lady	-13%	40	20	20	19	15
Peacock	-56%	81	9	1	-	-
Small Tortoiseshell	-54%	61	14	10	11	4
Comma	-37%	47	20	18	8	5
Marsh Fritillary*	+35%	1	1	1	-	1
Glanville Fritillary*	-15%	1	-	1	-	1
Duke of Burgundy	-28%	1	2	1	1	1
Small Copper	+12%	36	10	28	24	11
Brown Hairstreak	-37%	1	1	-	-	-
Purple Hairstreak*	+91%	6	-	6	4	5
Green Hairstreak	-23%	24	11	8	14	5
White-letter Hairstreak*	+60%	-	1	•	-	-
Small Blue	-12%	12	8	4	8	-
Holly Blue	-50%	61	15	13	15	5
Silver-studded Blue	+24%	7	3	7	1	2
Brown Argus	-50%	35	6	1	15	1
Common Blue	-69%	79	7	5	12	2
Adonis Blue	-29%	9	2	3	5	2
Chalk Hill Blue	-43%	19	2	2	2	2

^{*} Figures based on 'All Records' for species poorly represented on transect



