

HAMPSHIRE & ISLE OF WIGHT BUTTERFLY REPORT - 2018



Hampshire and Isle of Wight Butterfly Report 2018

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Published by the Hampshire and Isle of Wight Branch of Butterfly Conservation, 2019. Butterfly Conservation is a Company limited by guarantee, registered in England (2206468).

Registered Office: Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP. Charity registered in England and Wales (254937) and in Scotland (SCO39268). VAT No. GB 991 2771 89.

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www.hantsiow-butterflies.org.uk

Printed by Hampshire Printing Services, Winchester.

Production of this publication is assisted by support from Hampshire County Council, Hampshire Biodiversity Information Centre, Portsmouth City Council and donations from Branch members.

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Introduction Clive Wood

Welcome to the 2018 Annual Butterfly Report of the Hampshire and Isle of Wight branch of Butterfly Conservation.

My youngest daughter is studying for a PhD in Clinical Psychology and I sometimes wonder if the highs and lows of working for the conservation of our butterflies and moths might prove to be a useful source of case material for her. It really has been a year of great highs and some depressing lows.

Let's start with the good news. Many of our resident butterflies enjoyed a strong summer after a "proper" winter and the return of some seasonality to our weather. Numbers recorded on transect increased by 13% over 2017 and we received over 95,000 records, a tremendous effort. Thank you to everyone who submitted a record. Many of the grassland "blues" enjoyed spectacular increases and I was particularly pleased to see a doubling in Common Blue numbers.

Even this performance was trumped by the Brown Argus. The Small Heath also had a strong year but the long-term decline in the distribution and abundance of this little jewel remains a puzzle. The Marsh Fritillary has successfully bred at our release sites in north-east Hampshire whilst some diligent survey work suggests that a new Brown Hairstreak colony has become established in the Meon Valley.

The lows come when you stand back from the detail and look at the bigger picture. Many of the speakers at Butterfly Conservation's excellent 8th International Symposium, held at Southampton University in April, gave fascinating presentations on individual conservation projects but few had anything positive to share when it came to the effectiveness of conservation policies at a supra-national or regional level. Agricultural practices have a major role to play in restoring biodiversity across the continent but the contribution of agri-environmental schemes in Europe remains ambivalent at best. Policies are often sound but the ability of nation states to permit exemptions around pesticide use, for example, can weaken the overall impact of environmental protections. The outlook for many less mobile habitat specialists seems unpromising when faced with land abandonment, intensification, rapid climate change, chemical deposition and pollutant threats to ecosystems. Hope must rest in policy makers and a better informed public taking much greater notice of the changes happening to our flora and fauna.

I must once again thank our County Butterfly Recorder, Bob Annell, for his superb contribution to the production of this wonderful report. My thanks also to Linda and Andy Barker for preparing the transect records and graphs, to Kelvin Richards for helping to manage the underlying data, Jacky Adams for her work on the Wider Countryside Butterfly Survey data and Jean Annell for helping to process the 'casual 'recording submissions.

With my best wishes for the new recording season,

Clive Wood Chair January 2019 In this year's report, the fiftieth anniversary of Butterfly Conservation, we have included for the first time a Transect Summary and also two pages on day flying moths seen during transect walks.

It must be mentioned here that on the recommendation of Butterfly Conservation Head Office, names will in future be omitted from the species accounts. This is to avoid any conflict with Data Protection. The process to comply would involve a considerable communication exercise which would be very time consuming and inevitably lead to a delay in the issue of this report resulting in increased postal costs.

As in previous years, the report is based on records available as at 30 November 2018 with the exception of a few records of species over-wintering as adults.

As at 30 November 2018, 94,881 records were received, the highest ever to date. This is partly due to an increase in the number of recorders which totalled over 2,500 this year – compare this to 1988 when 65 recorders supplied records for the report.

As might be expected, a significant number of these recorders were active during July and the records show that 88% of these also participated in the Big Butterfly Count.

In terms of butterflies, there was an early overall peak again this year with numbers taking a dive towards the end of July due to the extreme and prolonged heatwave. This affected not only available nectar sources but also resulted in larval foodplants withering much earlier than usual. It will be interesting to see how this affects the 2019 generations.

Tetrad coverage has increased over recent years and in 2018 embraced 80% of Hampshire and the Isle of Wight, a coverage not achieved since 2011.

Worthy of mention is the estimated number of Chalk Hill Blue at Brook Down on 03 August which accounts for 33% of the individuals recorded in 2018 (page 61). Also the increase in the number of tetrads occupied by White-letter Hairstreak is up from 22 in 2017 to 53 this year primarily due to the extreme efforts of one recorder (see pages 9 & 54).

Please remember to submit your annual records once only. The following systems all feed into the branch database: Transect Records, Big Butterfly Count, Branch Spreadsheets, Living Record, iRecord, Garden Butterfly Survey, MapMate (sync **cyb**) or hard copy. Images are also welcome and for consideration for the cover should preferably be in portrait format.

Deadline for butterfly records and images to be included in the 2019 report is 30 November 2019.

Once again, my sincere thanks to all those who have submitted records, to those who have contributed to this report, including the 'checkers' and to the Records Sub-Committee for their efforts and support throughout the year. Also to Francis Plowman who extracted the day flying moth records from the transect data for import into the county moth database.

Bob Annell

County Butterfly Recorder February 2019

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/.

25 Year Transect Trends: These are available on the Branch website. 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 the 25-year trend (1994-2018) for almost all Hampshire and Isle of Wight butterfly species, based on the average of the top 20-30 transect monitored sites where the species occurs.

Transect flight period graphs: These are the periods during which the adult butterfly was on the wing this year compared to last. Based on Transect Data except for six scarcer species which are based on All Data (vertical axis is number of individuals in both cases).

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* South East England Regional Action Plan 2015-2025, as adopted for Hampshire and the Isle of Wight. Six species have been identified 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 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: 2018

Mid Blue: 2010-2017 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 2018. For maps of pre-2000 records, see 'The Butterflies of Hampshire', by M Oates, J Taverner and D Green (Pisces Publications).

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*.

Magdalen Hill Down (MHD)

MHD has a mosaic of habitats ranging from the Original reserve of 23 acres, to the recreated chalk grassland meadows of the Extension and Northdown, the whole extending to 120 acres. Certain areas have a short turf height maintained through grazing to suit species such as Chalk Hill Blue and Brown Argus, while longer turf where grazing is less intense, benefits Large and Small Skipper. Five transects have been set up to monitor the 31 species that can be found there.

Results from the Original Transect

Taking into account Andy Barker's excellent annual summary of UKBMS transect data, the results for Magdalen Hill Down (original transect) 2018, recorded a total of 5,453 butterflies for the transect Weeks 1-26, making it the seventh best year since recording began (rank position out of 29 years of transect recording (1990-2018)). The 2018 total was 109% relative to 2017 (+9%). Relative to 2010 it was 107% (+7%), compared with 2000 it was 102% (+2%), and compared with 1990 it is 114% (+14%).

Chalk Hill Blue was notably down nationally in 2015 and continued to decline in 2016, with just 294 recorded on MHD Original transect, but in 2017 an upturn took it to second place in the rankings with a total tally of 775, a count equaled in 2018. The following ranked one of 29: Common Blue had its best ever year on the Original (797), as did Dingy Skipper (seven) - previous best was 1990 (four), Small White (452) - previous best was in 1995 (434), and Small Copper (28) - previous best was in 1990 (26).

Second best year (ranked two of 29) were Brimstone (294) second behind 2017 (312) and Orange-tip (27) second behind 1993 (30). Third best year (ranked three of 29) were Clouded Yellow (20) behind 1996 (23), 2000 (22) and equal with 2003 (20) and Speckled Wood (43) behind 2013 (58), 2014 (47). Fourth best year (ranked four of 29) were Brown Argus (626) - best year since 1997, and Ringlet (101).

The losers included Green Hairstreak which had increased the previous year but ranked 28 (equal worst year with 1991 (four)), Gatekeeper (101) ranked 26 of 29 - worst year was 2013 (70), Small Tortoiseshell (11) ranked 25 of 29 worst year was 2008 (three); Peacock (19) ranked 25 of 29 - worst year was 2004 (eight) and Marbled White (294) ranked 22 of 29 - worst year was 2008 (164).

Magdalen Hill Down (MHD)

On 08 May, 12 Amphibian and Reptile Conservation (ARC) volunteers led by Ralph Connolly carried out a survey of the site, following our existing transects and visual checks of the terrain in between.

The survey resulted in 20 records: 13 Slow-worms (the majority under refugia), five Common Lizards (majority in the open) and two Common Toads. There was also a broad distribution of records across the site. All of the more widespread reptile species (Slow-worm, Common Lizard, Grass Snake and Adder) and, to a lesser extent, amphibians make use of the transitional areas between open grassland and woodland as they provide a mosaic of cover, basking spots and prey. Maintaining and enhancing these areas will be key to our ongoing rotational cutting of scrub and creation of edge habitat. Given the results on what were far from ideal survey conditions, Magdalen Hill Down supports good populations of the more widespread reptile species, well distributed across the site. These appear to consist predominantly of Common Lizard and Slow worm. On 09 May, a large Grass Snake was sighted, which was encouraging, and on 15 May two adult Grass Snakes were found under refugia.

Chaz Harrison

Common Blue

Species seen on our Reserves during 2018

en-veined White

Brimstone Chalk Hill Blue Orange-tip Grizzled Skipper Brown Argus

Green Hairstrea

Bentley Station Meadow

In 2018 the meadow ranked 15th (out of 26 years). Butterflies seen on transect were on a par with previous years although a couple of notable surprises were a Chalk Hill Blue and a first record for Small Heath (two).

Holly Blue, Brown Argus and Speckled Wood all ranked one of 26 with their best ever years in the reserve, bringing the total number of butterflies recorded to 983, which is a decent tally given that some weeks were missed for unavoidable reasons. Species seen off transect included an immature male, Black-tailed Skimmer dragonfly in the northern meadow, Roe Deer and flowering Zigzag Clover on 06 June.

Unfortunately, due to a TB reactor in the cattle days before they were due to arrive at Bentley Station Meadow, grazing had to be postponed in 2018. However, we are delighted to report that the meadow will be grazed with a small flock of hardy rarebreed sheep in the future.

Yew Hill

Yew Hill is a small reserve made up of five acres of downland on the south-western edge of Winchester with further land around the Southern Water reservoir including 'Hilltop' leased from Southern Water, making a total area of 14 acres for the 35 species of butterfly that have been recorded there.

Grazing with sheep to manage Hoary Ragwort on Hilltop has been successful, so much so that we did not have to pull or take a cut and collect this year, resulting in no complaints from the neighbouring landowners. This field provides a safe haven for wildlife and birds and on a warm day in June Linnet, Yellowhammer and Common Whitethroat were observed, and on 29 June, a White-letter Hairstreak was seen nectaring on bramble by a recorder who had not seen one in this location since 1995.

An official transect was set up on Hilltop in 2018. The first year's results included a promising 118 Common Blue and 25 Brown Argus.

In 2018, on the reserve, Common Blue numbers increased from 86 to 218, Brown Argus increased to rank it 9th best year ever out of 29 years, but Chalk Hill Blue, although stable, is having a hard time, ranking 26th, with records of just 62 individuals. It has fallen way down on the numbers recorded in 1991 (2,787). Small Heath increased from 74 to 140, and the eight Small Copper butterflies counted gave this species its third joint best year since 1990. The overall results for 2018 (down a further 58 butterflies on 2017 figures) meant that Yew Hill finished with a ranking of 29th – the worst year since recording began.

Twenty-eight species were seen in 2018 as compared to 30 in 2017. Those not seen were Silver-washed Fritillary and Green Hairstreak although this species was seen off transect, so we know they are there.

Common Species Summary

This year's twenty-three most common species are shown below according to their tetrad coverage within Hampshire. Previous years' positions are also shown according to their respective tetrad coverage.

A good year for Small and Large White, but notice what a poor year it was for Red Admiral, dropping from first in 2017 down to ninth this year.

Although Meadow Brown and Gatekeeper were present in the same number of tetrads (around 56% of the three Vice Counties), far more records of the former were received.

A good year too for Speckled Wood, recorded in 600 tetrads, the highest occupancy of this species since 2011 (626 tetrads).

Remember 2009 when Painted Lady would have topped this table being present in 597 tetrads.

					Positions (by Tetrad)				
Species	Tetrads	Records	2018	2017	2016	2015	2014		
Small White	777	9,910	1	5	1	3	3		
Large White	736	7,472	2	4	3	4	8		
Meadow Brown	675	11,019	3	3	5	2	5		
Gatekeeper	675	5,891	4	2	4	1	4		
Speckled Wood	600	8,526	5	9	8	9	9		
Comma	597	2,837	6	6	9	8	10		
Brimstone	591	6,451	7	7	6	6	7		
Common Blue	587	5,685	8	10	15	11	11		
Red Admiral	561	2,192	9	1	2	7	6		
Green-veined White	547	3,762	10	12	10	13	12		
Holly Blue	495	2,482	11	13	12	12	17		
Peacock	463	2,303	12	8	7	5	1		
Ringlet	399	3,316	13	14	14	15	13		
Small Tortoiseshell	362	934	14	11	11	10	2		
Marbled White	350	2,503	15	16	13	16	15		
Painted Lady	330	653	16	15	17	14	19		
Orange-tip	326	1,470	17	19	18	19	16		
Small Copper	290	1,408	18	18	20	20	20		
Large Skipper	268	1,842	19	17	16	17	14		
Small Skipper	257	2,036	20	20	19	18	18		
Silver-washed Fritillary	242	1,984	21	21	21	21	21		
Small Heath	197	2,936	22	22	22	22	22		
Brown Argus	161	1,476	23	24	27	24	25		

Scarcer Species Summary

With the exception of White Admiral, the 23 scarcer species are recorded in less than 100 tetrads. Most species showed improvement relative to 2017, but this is partly due to an overall increase in records. There is no doubt that Purple Hairstreak had an excellent year, moving up six places, but the similar rise for White-letter Hairstreak partly reflects excellent recording effort by one individual. Most other species more or less held position, but those of greatest conservation concern had mixed fortunes. Duke of Burgundy and Pearl-bordered Fritillary each slipped two or three places, as Glanville Fritillary, Adonis Blue and Wall all edged up slightly.

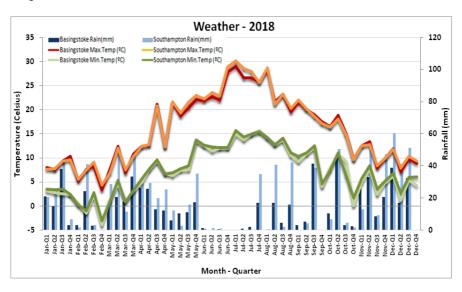
Encouragingly the Wall doubled both records and tetrads, as did the even rarer Marsh Fritillary. However, barring a miracle, the Small Pearl-bordered Fritillary appears to be heading for county level extinction, having produced just nine records for the whole season, and mostly from just one site.

		F	Positio	ns (by	Tetrad)	
Species	Tetrads	Records	2018	2017	2016	2015	2014
White Admiral	121	538	24	23	26	25	26
Purple Hairstreak	91	255	25	31	35	35	36
Green Hairstreak	88	282	26	27	25	27	27
Clouded Yellow	85	226	27	26	23	26	23
Essex Skipper	84	201	28	25	24	23	24
Silver-studded Blue	82	632	29	29	31	30	33
Dark Green Fritillary	64	361	30	28	28	28	28
Grayling	62	480	31	30	32	32	32
White-letter Hairstreak	53	104	32	37	42	41	41
Grizzled Skipper	52	282	33	34	30	31	30
Dingy Skipper	50	302	34	32	29	29	29
Chalk Hill Blue	48	702	35	33	34	33	35
Purple Emperor	45	97	36	36	39	36	37
Small Blue	43	333	37	35	33	34	34
Wall	33	105	38	39	38	37	31
Adonis Blue	20	316	39	40	37	39	39
Glanville Fritillary	20	76	40	42	40	42	43
Duke of Burgundy	16	126	41	38	36	38	38
Brown Hairstreak	16	59	42	44	44	44	42
Pearl-bordered Fritillary	14	145	43	41	41	40	40
Silver-spotted Skipper	8	103	44	43	43	43	44
Marsh Fritillary	8	56	45	45	45	46	46
Small Pearl-bordered Frit.	3	9	46	46	46	45	45

This report has been compiled with the aid of the following websites: http://www.metoffice.gov.uk/climate/uk/summaries/2018

http://southamptonweather.co.uk/

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



2018 was another rather warm year but this belies the cold that was experienced in late winter.

January was a mild but unspectacular month with average rainfall and only occasional frost. It was 1°C warmer than average and it took until late February to see a big change.

February continued a rather unsettled theme but the Atlantic dominated westerly regime flipped to an increasing cold easterly set-up in the final third of the month with winds originating from a very cold Western Russia. Snow showers started to penetrate west across our area at the month end with severe frost and sub-zero daytime temperatures. A minimum temperature of -11.7 °C was recorded at South Farnborough on the 28 Feb which was the lowest recorded temperature for the UK that month. This final week of February was by far the coldest of any in our county during 2018, both by day and night.

The exceptionally cold weather continued into early **March** and was accentuated by milder weather to the south which led to heavy snow and freezing rain near the coast. The bitter easterly gave way to more traditional milder south-west winds but a renewed very cold easterly returned mid-month with further snowfall. Things finally eased shortly after and the rest of March was milder and rather unsettled. The month came in nationally at 1.6°C below normal but it was not as cold as 2013.

April was typically mixed and much warmer than normal with the main feature being a hot spell after mid-month that produced the highest April temperatures since 1949. Otherwise rainfall was rather average although it was generally unsettled.

After an unsettled start, easterly winds predominated throughout **May** and it became very pleasant with high sunshine and temperatures well above normal making it the second warmest May since 1910.

As in 2017, the summer started in very promising fashion. **June** continued to be dominated by high pressure and easterly winds. It was very dry and sunny with temperatures pushing towards 2°C above normal making it the third warmest June since 1910. The final week saw a spell of persistent heat that would last well into August.

Unlike 2017, **July** started and maintained its glorious summer weather throughout. High pressure dominated again and it was dry, sunny and hot. This time it was the second warmest since the record series started in 1910.

As is often the case, **August** saw a deterioration in the good weather of earlier months. Things started well but after the first week it became much cooler and more unsettled from the west which meant that temperatures returned to average with a marked increase in rainfall.

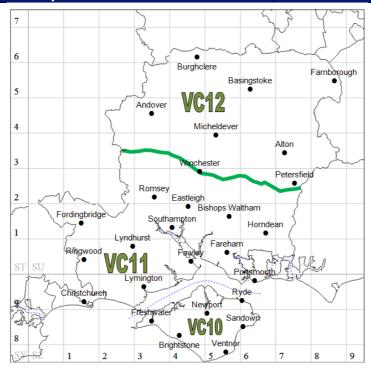
September initially brought some warm and settled weather but unsettled weather soon arrived from the west. The final week of the month turned dry and very cool, especially at night.

October was a dry month with temperatures again close to average but this masked some very warm weather in the second week with southerly winds and a cold end as north-easterly winds became established.

The cold weather extended into the start of **November** but the month was often unsettled and mild with south-westerly winds apart from an easterly interlude in the third week. As is often the case in autumn, the warmth of the English Channel enhances rainfall so it was a rather wet month as a result.

Much of **December** was unsettled with plenty of rain and mild south-westerly winds dominating but by Christmas, high pressure took charge and it was a dry end to the year although still quite mild. It was another very mild month with rainfall rather above average.

Location Map



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

It also serves to indicate the primary Vice Counties within Hampshire and the Isle of Wight, 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. The Hampshire Butterfly Database & this report include records from all three of these Vice Counties not just records within the current Administrative Boundary.

BUTTERFLY REPORT 2018

Transect Summary

Andy & Linda Barker

2018 was an extraordinary year, starting with a very cold March and then with an exceptional long, hot, dry and sunny summer from late May until August. Needless to say this will have affected the butterflies to a greater or lesser extent, and although warm sunshine is favoured by butterflies, prolonged drought conditions can cause problems for foodplants and thus the caterpillars. When a particular species does well or fares badly, it's difficult to be sure whether this is solely due to the weather, or other factors, or some combination, but from the transect data there were certainly some clear winners and losers in 2018. This brief account attempts to give an overview of transect recording for the year and the pattern of change. It is best read in conjunction with the Table on the inside of the back cover.

The total number of active transects walked in 2018 was 160, with ten of these being new ones. This is great to see, and with 135 transects with data for both years we have a meaningful representation of overall species trends, as the methodology and transect routes are unchanged from one year to the next. The transect recording season runs from the beginning of April to the end of September, and is 26 weeks duration. It's great to be able to report that 79% of transects achieved 20-26 weeks coverage and especially good to say that 68% of transects achieved 23-26 weeks. Obtaining such comprehensive data makes all the difference for assessing transect trends, so many thanks to all those involved, your effort is much appreciated.

Relative to 2017, the number of butterflies recorded on transect rose slightly (+13%), but this is partly a reflection of the extra transects. The season started slowly following the cold March weather, with most of the April-May species, like Orange-tip, Grizzled Skipper and Dingy Skipper peaking a week or two later than 2017, although numbers were not unduly affected. The hibernating species such as Brimstone, Small Tortoiseshell, Peacock and Comma emerged in reasonable numbers in the spring, but it was later in the year that they had problems.

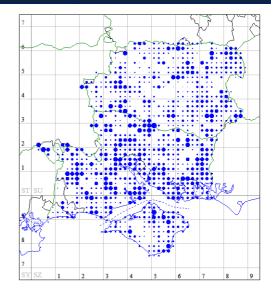
In general the whites did very well, with Small White and Large White reaching very high numbers in July, quite possibly a combination of home-grown individuals plus immigrants. All of the Lycaenids did well in 2018, especially the double-brooded species like Brown Argus and Common Blue, no doubt aided by the good weather between the broods. Small Copper deserves special mention for its truly exceptional third brood which achieved very high numbers in September. Canopy species such as Purple Hairstreak and Purple Emperor did very well in 2018, but many of the woodland fritillaries had mediocre or poor years, especially the Small Pearl-bordered Fritillary, which is close to being lost from Hampshire. Most summer species emerged early due to the prolonged hot dry weather, but the Nymphalids collectively did very badly. Small Tortoiseshell, Peacock and Comma were virtually absent after mid July, and hardly to be seen on Buddleias. Peacocks often go into hibernation from early August, and guite likely did so, but Small Tortoiseshell and Comma should have produced a late summer brood, but it just never happened. Even the usually reliable Red Admiral just never got going, and had an exceptionally poor year. Finally the Satyrids ('browns') which all have grass feeding larvae had a mixed performance, with Speckled Wood, Wall, Grayling and Small Heath doing well, but Gatekeeper and Ringlet doing very badly at most sites.

Butterfly Record Coverage 2018

Recorded tetrads in 2018 – 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 2018 records: 94,881 No of tetrads in 2018: 961

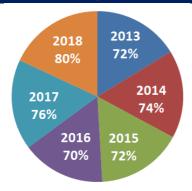


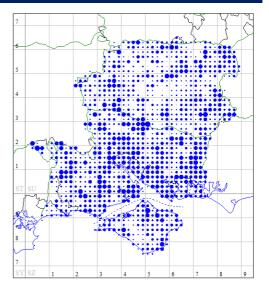
Butterfly Record Coverage 2015 - 2018 (Millennium Atlas +15)

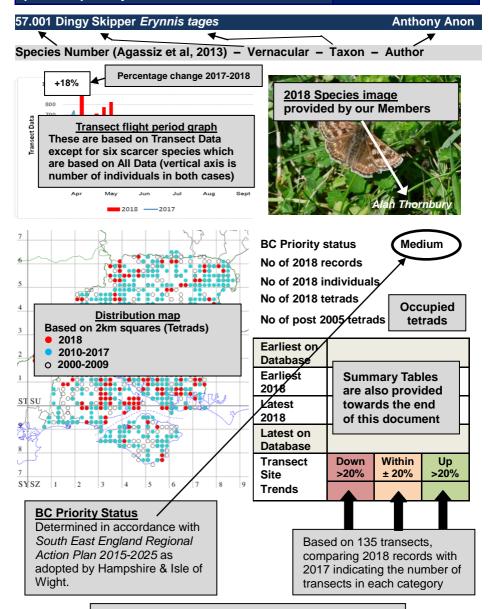
Recorded tetrads in the four years 2015 to 2018 – as per the preceding map, the bigger the circle, the greater the recording effort.

No of records: 333,093 No of tetrads: 1,121

Tetrad Coverage 2013 - 2018

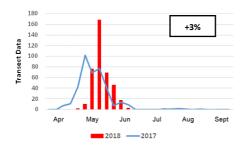






AUTHOR'S NARRATIVE

Generally prepared using information & data available on 30 November 2018





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BC Priority status	Medium
No of 2018 records	302
No of 2018 individuals	1,307
No of 2018 tetrads	50
No of post 2005 tetrads	197

Earliest on D	Earliest on Database: 12 Apr 2011				
Earliest 2018	04 May Magdalen Hill Down				
Latest 2018	07 August Martin Down				
Latest on Database: 03 Sep 1993					
	Danier Within III				

Transect Down >20%		Within ± 20%	Up >20%	
Trends	12	6	10	

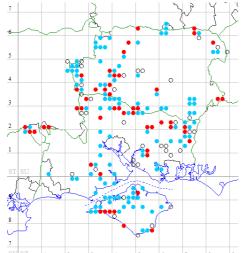
This was a much better year for Dingy Skipper than 2017. In particular it was the best ever year on our reserve at Magdalen Hill and there were good numbers on Yew Hill.

A few singles were recorded in early May but the season really started from 14 May with 12 seen on Butser Hill, 14 on Chalton Down, nine at Pitt Down and on the Isle of Wight 16 at Mottistone Down. This was followed on 17 May by 22 on Stockbridge Down and 90 at Old Burghclere Lime Quarry. On 19 May 12 were seen on Broughton Down and 11 at Noar Hill and on 20 May an amazing 147 on Quarley Hill (Test Valley). Numbers peaked at the end of May. On 23 May 26 were counted on Magdalen Hill, 20 on Martin Down, five on Beacon Hill, 17 at Queen Elizabeth Country Park and seven at Bramshot. On the Isle of Wight on 28 May there were 50 seen at Compton Bay, 65 at Wheelers Bay and on 31 May, 23 at Mottistone. Good numbers continued through early June, with 11 on Pilot Hill, ten at Porton Down, 12 at Noar Hill, six on Yew Hill and three at Magdalen Hill.

There was evidence of a second brood on Martin Down with two seen on 26 July, three on 03 August and finally a single on 07 August.





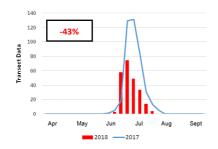


BC Priority status	High
No of 2018 records	282
No of 2018 individuals	786
No of 2018 tetrads	52
No of post 2005 tetrads	181

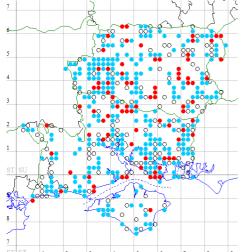
Earliest on Database: 02 Apr 2009						
Earliest 2018						
Latest 2018	18 June Pignal Inclosure					
Latest on Database: 07 Sep 2004						
Transect Site	Down >20%	Within ± 20%	Up >20%			
Trends	6	5	15			

It was an excellent year for Grizzled Skipper with the transect trend up by 41%, but owing to a cold and wet April the season did not get going until well into May. Singles were recorded at Mottistone, Isle of Wight on 17 April and two on transect on Magdalen Hill on 22 April, but on 03 May six were reported on Stockbridge Down, followed by seven on Magdalen on 05 May, and seven on Stockbridge transect on 07 May. By 10 May there were 26 seen on Butser, and on 14 May ten at Danebury, 12 in Botley Wood and 11 at Mottistone, Isle of Wight. On 15 May there were 14 on Magdalen, 40 at Stockbridge, five at Leckford and three on Beaulieu Heath. At Martin Down there were 20 seen on 19 May and the same number on 23 May. On 19 May there were nine at Broughton Down. On 20 May there were 24 on Quarley Hill Fort, four on transect at Danebury and ten at Bramshill, also three on our reserve at Yew Hill.

On 21 May 13 were seen in Queen Elizabeth Country Park, and on 27 May ten at Stephen Castle Down. Into June ten were recorded at Chilbolton on 02 June and seven at Stockbridge, six on Martin Down on 06 June, and the last was at Pignal, New Forest on 18 June. In summary good numbers seen at a wide variety of sites.







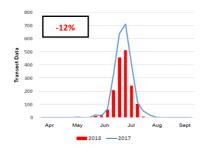
BC Priority status	Medium
No of 2018 records	201
No of 2018 individuals	535
No of 2018 tetrads	84
No of post 2005 tetrads	403

Earliest on Database: 26 May 2007					
Earliest 2018	20 June Titchfield Common				
Latest 2018	03 August Pilot Hill				
Latest on Da	Latest on Database: 21 Sep 1996				
Transect Site	Down Within Up >20% >20%				
Trends	Not Measured				

On those hot days skippers skipped about making precise identification difficult. In their 2018 flight season desperate graziers put animals on every patch of grass, thus the much lower reported total of individuals compared to 1,645 in 2017. The incorporated transect total was 43% down. Perhaps also, rapidly completed adult lives in the heat meant that few individuals were counted twice on transects. The Alresford Farm transect total declined from 198 (2017) to 44 individuals!

Conditions restored cooler Pilot Hill to top spot with 63 sightings, followed by Monks Walk/Fraterfield transect with 56 and then Old Down, Basingstoke with 21. The overall flight period started slightly earlier and finished abruptly within July.

Again just one recorded from Isle of Wight - at Newchurch. Does the main food plant persist on Isle of Wight?





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BC Priority status	Low
No of 2018 records	2,036
No of 2018 individuals	6,667
No of 2018 tetrads	257
No of post 2005 tetrads	780

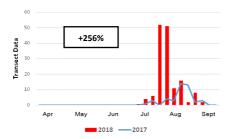
Earliest on Database: 16 May 2011

Earliest 2018	03 June Breamore			
Latest 2018	28 August Farlington Marshes			
Latest on Database: 19 Sep 1991				
Transect Site	Down Within Up >20% >20%			
Trends	Not Measured			

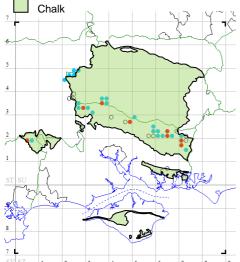
The on-transect individuals declined by 31% compared to 2017. This exceeded the all records decline of 23%, although the number of places/transect section visits was similar (961 v 983 in 2017). Perhaps less experienced recorders are lumping *lineola* in with *sylvestris*. Alternatively the chart above shows that the 2018 flight season was comparable to last year. If this summer's heat caused individual lives to be completed quickly then fewer may have been counted twice on transects.

The first multiple record was two at Bishops Waltham on 06 June. Highest transect total was 220 at Whippingham Fields followed by Noar Hill with 118 and The Mountain at 116. Non-transect high counts included Oxenbourne Down at 137, Twyford Waterworks with 77 and Hawley Meadows at 63. Casual records helped demonstrate the wide distribution in our counties over both chalky and acidic soils.

Records came from eight sites on the Isle of Wight, mostly on the chalk but none from the Ventnor area. Thirty at Kemp Moor Copse may justify the latin name.







BC Priority status	High
No of 2018 records	103
No of 2018 individuals	428
No of 2018 tetrads	8
No of post 2005 tetrads	36

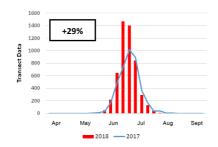
Earliest on Database: 11 Jul 2018

Edillost off Database: 11 out 2010				
Earliest	11 July			
2018	Broughto	on Down		
Latest 2018	10 September Old Winchester Hill			
Latest on Database: 11 Oct 1986				
Transect Site	Down Within Up >20% ± 20% >20%			
Trends	3 - 2			

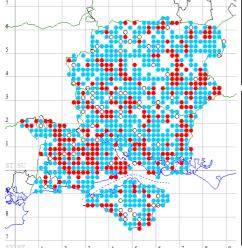
2018 marked an upturn in fortunes for this species, following a couple of poor years. Broughton Down remains the strongest population, with Old Winchester Hill, St. Catherine's Hill and Oxenbourne Down being the other strong sites. Although only seen at eight sites, the combined tally of individuals was 428 compared with just 337 in 2017. This rise is also reflected in the transect data. Worryingly, however, Beacon Hill NNR produced just a single record of one individual, as was the case at Stockbridge Down, but on the plus side, Martin Down produced several sightings.

The hot dry summer meant the season began very early, indeed six days earlier than in 2017, and two days earlier than the earliest date on record. The flight period graph shows peak season was a good two weeks earlier than 2017. Broughton Down peaked with 65 on 05 August, and St. Catherine's Hill produced a count of 21 on the same day. Further east, Old Winchester Hill peaked with 30 on 14 August. After two strong weeks in early August, the season quickly tailed off; the only double-figure count after mid August being 14 on 01 September at Old Winchester Hill.

The season was largely over by the end of the first week of September.







BC Priority status	Low
No of 2018 records	1,842
No of 2018 individuals	8,191
No of 2018 tetrads	268
No of post 2005 tetrads	927

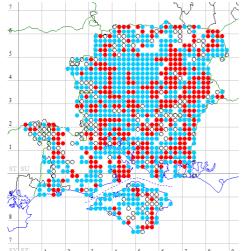
Earliest on Database: 28 Apr 2007						
Earliest 2018	15 May Testwood Park House					
Latest 2018	17 August Kings Copse Inclosure					
Latest on Database: 22 Sep 2013						
Transect Site	Down Within Up >20% >20%					
Trends	38 28 51					

From Abbotts Barton to Yateley and from Bonchurch to Wheelers Bay this ubiquitous butterfly has enjoyed a good season. Whereas cousins Small and Essex Skipper declined, Large Skipper continued its upwards trajectory from 2016 and 2017. Evidently the Large Skipper coped better with prolonged sunshine and lower rainfall that defined summer 2018.

First and last sightings were earlier than in 2017. On the Isle of Wight, the first report was 31 May (Mottistone Down) with final record on 26 July at Coombe Bottom and St Boniface Down. An apparently shorter season than the mainland experience. Most sighting reports were submitted as ones and twos with an average for the 1,842 records of 4.43 butterflies per sighting. However, as June progressed high double and triple figure sightings increased; 102 on 24 June at Standing Hat transect (near Brockenhurst); 168 and 141 at Furzey Lawn Inclosure and Brockishill Inclosure respectively (28 June) until a peak of 175 was registered on 06 July also at Furzey Lawn Inclosure. On the Isle of Wight, the highest count was 21 on 10 June at Newtown Rifle Range. Clearly, the centre of the universe for Large Skipper unequivocally remains the New Forest.







BC Priority status	Low
No of 2018 records	1,470
No of 2018 individuals	2,720
No of 2018 tetrads	326
No of post 2005 tetrads	946

Earliest 2018	11 April Blashford Lakes				
Latest 2018	23 June Foxbury				
Latest on Database: 22 Sep 2011					
Transect Site	Down Within Up >20% ± 20% >20%				

33

42

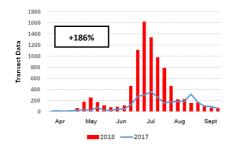
Earliest on Database: 10 Mar 1990

Orange-tip were mainly recorded between 11 April and 23 June. Overall there were 1,470 records (87 from Isle of Wight), made up of 2,720 individuals (870 Isle of Wight) including 932 singletons, of which 955 records were on transect. Where the gender was determined in the off-transect records there were seven females and 19 males. The most individuals seen at any one time was 50 on 20 April in Shedfield; the most seen on transect was 12 at Breamore on 08 May.

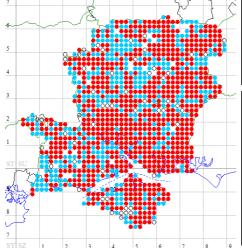
Trends

Total numbers counted on transect were 2% up relative to 2017. Nine more transects detected losses than gains. In 2018 the counts on transect peaked in early May, four weeks later than in 2017. This probably reflects the very cold weather in February and March. 2018 was a better year than 2017 for Orange-tip (8% increase in totals) although there was a shorter, and later start to the season and only a marginal increase in numbers counted on transect.

Since about 2009 numbers of Orange-tip have been following a gradual upward trend in Hampshire.







BC Priority status	Low
No of 2018 records	7,472
No of 2018 individuals	20,761
No of 2018 tetrads	736
No of post 2005 tetrads	1,126

Earliest on Database: 02 Feb 2007					
Earliest 2018	07 April Firestone Copse				
Latest 2018	22 October Wheelers Bay				
Latest on Database: 07 Dec 2012					
Transect	Down Within Up				

 Transect Site
 Down >20%
 Within ± 20%
 Up >20%

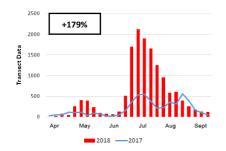
 Trends
 2
 9
 93

It was a good year for Large White, which saw its highest abundance since 2013, nearly three times the total recorded on comparable transects in 2017. This species is known to migrate to the UK from the continent but it is not possible to know how much any influx from Europe contributed to this increase.

Large White started to appear in numbers from mid April, with the peak for the spring brood in mid May. The summer brood was seen from late June, peaking in mid July, when the highest individual count of 100 was seen at Oxenbourne Down in East Hampshire.

Interestingly the two highest annual indices were recorded at transects on the Isle of Wight, at Whippingham Fields (585) and Kemphill Moor Copse (485). The highest transect annual index in Hampshire was at Breamore (285).

This species was seen widely in Big Butterfly Counts, being recorded in over 1,800 counts between 20 July and 12 August, with the highest total of 60 from a count at Church Crookham in Hampshire. On the Isle of Wight, top counts of 33 were seen at Freshwater Bay, Newchurch and Appley Park, Ryde.





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BC Priority status	Low
No of 2018 records	9,910
No of 2018 individuals	31,902
No of 2018 tetrads	777
No of post 2005 tetrads	1,133

Earliest on Database: 09 Jan 1991					
Earliest 2018	05 April Monks Walk, Gosport				
Latest 2018	26 October Eastney Beach				
Latest on Database: 08 Dec 2007					
Transect Site	Down Within Up >20% >20%				
Trends	4 8 93				

93

It was a good year for Small White, which saw its highest abundance since 2013, possibly, at least in part, due to migrants flying in from Europe.

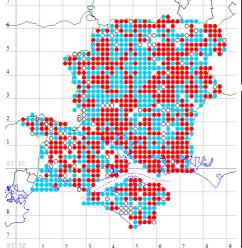
This species was recorded between the beginning of April and end of October, with the spring brood peaking in early May and the summer brood in mid July. It was seen most frequently and in highest numbers in southern Hampshire, where four counts of 100 and over were recorded between late June and mid July at Queen Elizabeth Country Park (135), opposite Cheesefoot Head, West Wood and Oxenbourne Down (all 100).

The highest annual index was on a transect at Breamore, where a remarkable 1,325 Small White were recorded between April and September, more than twice the number of sightings on the Whippingham Fields transect on the Isle of Wight, which had the next highest annual index (531).

Small White, which topped the chart on the Big Butterfly Count nationally in 2018, was recorded on over 2,200 counts locally, with the highest total of 85 from a count near the River Loddon in Hampshire. On the Isle of Wight, the top count was 30 at Whitwell.







BC Priority status	Low
No of 2018 records	3,762
No of 2018 individuals	9,104
No of 2018 tetrads	547
No of post 2005 tetrads	1,058

Lainest on Database. 03 Mai 1909			
Earliest 2018	11 April Wheelers Bay		
Latest 2018	18 October Copythorne		
Latest on Database: 28 Oct 1999			
Transect	Down	Within	Up

 Site
 >20%
 ±20%
 >20%

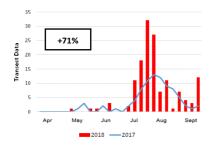
 Trends
 15
 24
 64

There was a pleasing increase in the number of Green-veined White seen in 2018 in both Hampshire and the Isle of Wight compared to the previous two years.

The adult butterflies started to emerge from their overwintering pupae in the second week of April, about a month later than in 2017 with numbers on transects rising to a peak in early to mid May.

The summer brood started to emerge towards the end of June, similar to 2017, but with a much more pronounced peak in numbers in the second week of July, following which sightings fell steadily, with no evidence of a third brood as occurred in 2017. A Big Butterfly Count on 'set aside' land near Quarley saw a total of 36 Green-veined White on 02 August, the highest individual sighting.

The highest transect annual index was again at Winnal Moors (565) in Hampshire, with the highest on the Isle of Wight being at Whippingham Fields (205). This species appears to prefer a damp environment, with research suggesting it could be vulnerable to drought so it will be interesting to see how it fares in 2019 after the long dry spell in 2018.





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BC Priority status	Low
No of 2018 records	226
No of 2018 individuals	394
No of 2018 tetrads	85
No of post 2005 tetrads	460

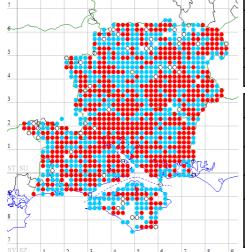
Earliest on Database: 08 Feb 2005					
Earliest	03 May				
2018	Wheelers Bay				
Latest	18 November				
2018	Southbourne				
Latest on Database: 30 Dec 2007					
Transect	Down	Within ± 20%	Up		
Site	>20%		>20%		
Trends	20 7 19				

It is interesting to note that the early observation at Wheelers Bay, Isle of Wight was followed closely by a mainland inland observation on 05 May at Corhampton Lane Farm, indicating an inland migration taking place. The coastal May dates indicate that no overwintering had been successful, as this is usually indicated by March/April observations. There was a steady stream of records through to mid June. From the beginning of July onward to November the butterfly was on the wing more or less continuously with numbers swelling with incoming migrants. Five were recorded at Magdalen Hill Down on 05 August which was notable and five were present at Titchfield Haven on 19/20 October. At Southbourne Undercliff a peak of 20 was recorded on 01 November. The combined transect trend was up 71% although there was a decrease in 20 transects. The graph shows that late July was the peak of the flight period. Only two helice female records were received, one at Southbourne Undercliff on 13 September and one at Barton-on-Sea on 19 October.

The Isle of Wight records were mainly from Wheelers Bay and the Whippingham transect, with maximums of four at Atherfield on 16 July, four at Whippingham on 05 August and five at Wheelers Bay on 03 October.







BC Priority status	Low
No of 2018 records	6,451
No of 2018 individuals	14,376
No of 2018 tetrads	591
No of post 2005 tetrads	1,093

Earliest on Database: 01 Jan 2001

Earliest	10 January				
2018	Lymingt	on			
Latest	09 December				
2018	Ibsley Common				
Latest on Database: 29 Dec 1999					
Transect	Down	Within	Up		
Site	>20% ± 20% >20%				
Trends	9 35 57				

35

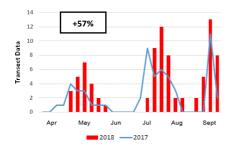
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Brimstone was the only one of the butterflies that overwinters as an adult to see an increase in its numbers on comparable transects in 2018.

This beautiful, leaf-shaped butterfly was recorded occasionally in January, February and early March, with sightings dotted between cold spells. It started to be seen more continuously from mid-March, some three weeks later than in 2017, appearing in good numbers during the spring months, when bright yellow males seek out paler females to mate.

Larvae were recorded in early June, with the annual brood emerging strongly in early July, about a week ahead of 2017. However, numbers dropped during August compared to the previous two years, probably due to a lack of nectar sources in the hot weather, although the species continued to be spotted into November.

This is a widespread butterfly, being seen on over 150 different transects and in about 500 different Big Butterfly Counts in 2018. It is less common on the Isle of Wight than in Hampshire. The highest transect annual indices were at Breamore (396) and Pamber Forest (358) in Hampshire, with the best annual index on the Isle of Wight being only 34 at Kemphill Moor Copse.





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BC Priority status	Тор
No of 2018 records	105
No of 2018 individuals	199
No of 2018 tetrads	33
No of post 2005 tetrads	168

Earliest on Database: 14 Apr 2002			
Earliest	05 May		
2018	Mottistone Down		
Latest	20 October		
2018	Titchfield		
Latest on Database: 31 Oct 2015			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%

5

Wall numbers on the mainland were again extremely low however records were received from a much wider range of locations than in recent years. On the island numbers were also generally low but with a couple of marked exceptions.

Trends

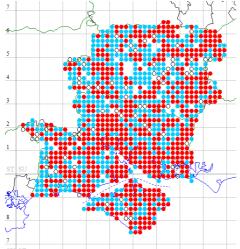
The first sighting came on the relatively late date of 05 May with three at Mottistone Down. The first individual on the mainland was not sighted until 31 May at Lower Pennington.

At Bonchurch Down there were excellent counts of 13 on the 11 of May and 17 on the 13 of May. At Atherfield counts of 11 on 27 July, seven on 11 August and six on 05 October indicated strong second and third generation emergence. Regular sightings from the Shipton Bellinger area during July and August were encouraging as were records from Titchfield, Kings Somborne, Eastney, Boscombe, Gosport and several locations in the New Forest.

Overall there was a 57% increase in the number of Wall recorded on the transects compared with the previous year with the second and third generations being particularly strong, presumably taking advantage of the fine summer weather.







BC Priority status	Low
No of 2018 records	8,526
No of 2018 individuals	21,192
No of 2018 tetrads	600
No of post 2005 tetrads	1,119

Earliest on Database: 11 Jan 2013					
Earliest	07 April				
2018	Portsdown				
Latest	08 November				
2018	Titchfield Haven				
Latest on Database: 15 Dec 2011					
Transect	Down	Within ± 20%	Up		
Site	>20%		>20%		
Trends	11 28 63				

Yet another excellent year for this multi-brood species with, in fact, the highest number of annual records ever (8,526), comprising 21,192 individuals equating to around 20 per recorder. Over 50% of transects had a greater than 20% increase in numbers. The highest single count during a transect walk was 109 on Roe South transect on 15 August and this transect also returned the highest total count of the year (465). Blashford North transect had a total count of 438 and Great Linford 340. These three transects are all located towards the south west of the New Forest National Park. The highest count during the Big Butterfly Count was 53 at Abbotstone on 08 August. All of the counts of 30 individuals or more were in August and September with the exception of 42 near Up Somborne on 19 July, 32 on Blashford North transect on 22 July and 30 near Shawford during the Big Butterfly Count on 28 July. The earliest double figure count was 11 at Monks Walk, Gosport on 26 April. Although there was a 46% increase in number of recorders submitting Speckled Wood records from the Isle of Wight (104 compared to 71 in 2017), records for the year only increased by 18% (601 to 665) with the numbers of individuals increasing by 11% to 1,497.





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BC Priority status	Low
No of 2018 records	2,936
No of 2018 individuals	14,371
No of 2018 tetrads	197
No of post 2005 tetrads	560

Earliest on Database: 08 Apr 1997				
Earliest	07 May			
2018	Whippingham Fields			
Latest	10 October			
2018	Bramshott Common			
Latest on Database: 29 Oct 2011				
Transect	Down	Within ± 20%	Up	
Site	>20%		>20%	
Trends	13	15	53	

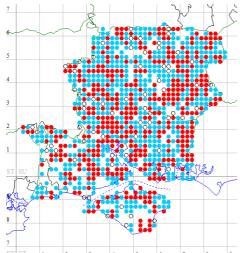
Overall the Small Heath had a bumper year for both first and second broods compared with 2017, the total count being up some 62%. The first brood began its emergence proper in mid May with a steady climb in numbers over the next three weeks peaking during the first week in June.

The second brood had a very early start in the first week in August with really good numbers reported for the next six weeks. The first specimens were reported from Whippingham Fields on the Isle of Wight on the 07 May and on the mainland from the Meon Valley on the 10 May. Whippingham Fields also reported the highest count anywhere with 93 on the 27 May.

A number of very late records, mainly of singletons, were made during the first two weeks of October, the latest being from Whippingham Fields on the Isle of Wight on the ninth and from Bramshott Common on the tenth. Records from Old Winchester Hill are on an upward trend over the past three years, and the overall figures for Hampshire now correlate very closely with those for England.







BC Priority status	Low
No of 2018 records	3,316
No of 2018 individuals	20,869
No of 2018 tetrads	399
No of post 2005 tetrads	934

Earliest 2018	03 June Billy Trail, Hayling Island			
Latest 2018	30 August Magdalen Hill Down			
Latest on Database: 11 Oct 2011				
Transect Site	Down >20%	Within ± 20%	Up >20%	
Trande	C4	20	00	

Earliest on Database: 24 May 2016

Transect records indicate a 25% decline in the overall total recorded compared to 2017 (which was a good year for this species), although Noar Hill bucked the trend with a modest increase in 2018. It remains, however, a common butterfly that can be encountered across the region in lightly or un-grazed grassland and woodland rides, where it can reach high densities. It is often active in cloudy and cooler weather, so no surprise that the hot summer didn't precipitate a population explosion.

As usual, emergence began in early June and numbers built, peaking over a three week period from late June to mid July and then declining gradually through August.

High counts came from Furzey Lawn Inclosure in the New Forest which reported 262 on 28 June and 251 the following week. Perrywood Ivy, Church Place and Brockishill Inclosures recorded counts of 200+ around the same time, as did the Breamore transect. The Pamber Forest and Ashford Hill transects also recorded high numbers during the peak period.

This species appears to do better on the mainland that on the Isle of Wight, which accounted for less than 5% of the records received in 2018.





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BC Priority status	Low
No of 2018 records	11,019
No of 2018 individuals	108,104
No of 2018 tetrads	675
No of post 2005 tetrads	1,128

Earliest on Database: 30 Apr 2011				
Earliest 2018	17 May Noar Hi	II		
Latest 2018	10 October St Catherines Hill			
Latest on Database: 07 Nov 2010				
Transect Site	Down >20%	Within ± 20%	Up >20%	

43

31

This butterfly is numerous, widespread and in Hampshire seldom shows much fluctuation in population size. It helps that the caterpillars will eat a range of different grasses and this species can be fairly flexible when choosing its breeding habitats.

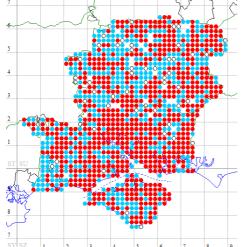
Trends

Despite slightly unusual weather patterns during early spring, the timing of the flight period was fairly normal. The earliest adult sighting was in mid May and then the peak flight period occurred around the end of June. Towards the end of the flight period there were many sightings of adults during September with the last recorded in mid October.

Demonstrating how numerous this species can be on the right site, the Whippingham Fields transect on the Isle of Wight once again provided the highest count of the year with 1.100 counted on Section 7 on 10 June.







BC Priority status	Low
No of 2018 records	5,891
No of 2018 individuals	31,160
No of 2018 tetrads	675
No of post 2005 tetrads	1,111

Earliest 2018 11 June Sparsholt Latest 2018 05 September Farlington Marshes Latest on Database: 19 Oct 1995 Transect Site Down 20% Within ± 20% Up > 20%				
Latest 2018	Earliest	11 June		
2018 Farlington Marshes Latest on Database: 19 Oct 1995 Transect Down Within Up	2018	Sparshol	lt	
Latest on Database: 19 Oct 1995 Transect Down Within Up	Latest	05 September		
Transect Down Within Up	2018	Farlington Marshes		
	Latest on Database: 19 Oct 1995			
Site >20% ± 20% >20%				Up
	Site	>20%	± 20%	>20%

19

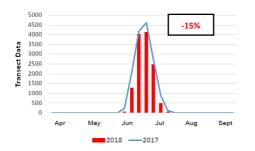
Earliest on Database: 24 Mar 1999

69

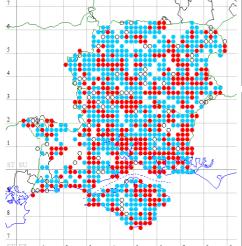
After a recovery in numbers in 2017, in 2018 Gatekeeper numbers showed a 14% decline on transect and an overall 22% decline which is almost certainly due to the very dry summer impacting late season nectar sources. As in 2017 the first Gatekeeper emerged in the first week of June and also like 2017 peaked in mid-July and at this stage the index was higher than the equivalent index for 2017, but from then on numbers dwindled much more rapidly than in 2017 with only 500 being recorded after early August. Usually small numbers of specimens are recorded through September but in 2018 they had finished by 05 September 2018.

Trends

Whippingham Fields (Isle of Wight) again provided the largest transect counts with 475 in Section 3 on 15 July 2018 and two further counts of over 200. In total Whippingham Fields recorded 2,767 Gatekeeper (an increase on 2017), five times as many as any other location, with Perrywood Ivy and Latchmore (New Forest) both managing respectable totals of over 500.







BC Priority status	Low
No of 2018 records	2,503
No of 2018 individuals	16,254
No of 2018 tetrads	350
No of post 2005 tetrads	895

Earliest on Database: 30 May 2017				
Earliest 11 June 2018 Sparsholt				
Latest 2018	20 August Sandleheath			
Latest on Database: 25 Sep 2003				
Transect Site	Down Within Up >20% >20%			

26

34

One might have expected a butterfly whose flight period coincides with mid summer to have thrived in the stellar weather of 2018, but that wasn't the case, with a modest decline compared to the previous year evident from transect records, the respective flight periods being virtually identical. It is a relatively short-lived species anyway so maybe the continuous hot weather enabled it to complete its adult life cycle quickly and fade away gracefully.

Trends

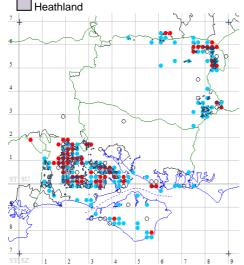
The Marbled White can be encountered at a diversity of sites throughout the two counties but is most at home in lightly or un-grazed grasslands with ample wild flowers for nectar. It does well on the Isle of Wight with the year's highest count of over 1,400 from the Whippingham Fields transect on 25 June. Hampshire sites didn't manage many records of more than 150 but respectable counts were received from a number of locations including Mountain (Meon Valley), Breamore, Magdalen Hill Down and Pitt Down.

Emergence began bang on time in the second week of June and, with the exception of one straggler, it was gone by the end of the third week in August, both in Hampshire and on the Isle of Wight.

13







BC Priority status	High
No of 2018 records	480
No of 2018 individuals	1,063
No of 2018 tetrads	62
No of post 2005 tetrads	193

Earliest on Database: 03 Jun 2002

23 June

Earliest

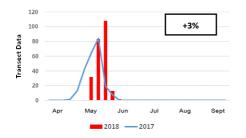
Trends

2018	Foxbury		
Latest 2018	26 September Hazeley Heath		
Latest on Database: 08 Oct 1986			
Transect	Down >20%	Within	Up >20%

After recent poor years, the Grayling fared better in 2018, with a 50% increase in records, although the total number of individuals seen rose by a more modest 17%. Within the monitored transects the increase was 26%, with 13 of the 24 sites seeing an increase of over 20%, although three transects saw a significant decrease in numbers.

Distribution is concentrated on the heathlands of the New Forest and sites such as Hazeley Heath and Browndown. Only eight individuals were recorded on the Isle of Wight, seven of these at Mottistone Down. Emergence was slightly earlier than last year, with four records in the last week of June, and the season was longer than usual, with strong numbers through July and August, and the latest sighting a few days later than last year.

The maximum count was 43, at Beaulieu Heath in the New Forest on 02 August, less than half last year's maximum seen at the same site. There were only eight other records in double figures, and the majority of records were of one individual. It is hoped to increase monitoring of Grayling in 2019, with four new transects planned for heathland areas of the New Forest.





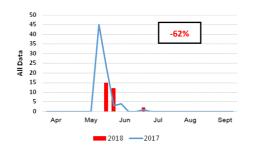
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BC Priority status	Тор
No of 2018 records	145
No of 2018	641
No of 2018 tetrads	14
No of post 2005	51

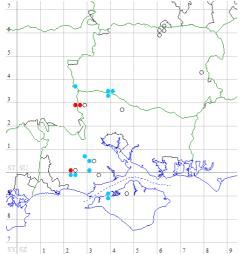
Earliest on Database: 17 Apr 2003				
Earliest 2018	<b>08 May</b> Pignal Inclosure			
Latest 2018	15 June Parkhill Inclosure			
Latest on [	Latest on Database: 09 Jul 1950			
Transect Site Trends	Down >20%	Within ± 20%	Up >20 %	
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Cold March weather caused late emergence for most spring butterflies, and this was the case for this species, which emerged two weeks later than in 2017. The season peaked in late May, but continued until mid June, giving a total flight period much the same as the previous year. Transects showed a mixed picture, but on balance it can probably be regarded as an average season. On a positive note, good weather in the latter part of the flight period probably gave good egg-laying opportunities, so the prospects for 2019 may be improved.

The New Forest is the Hampshire stronghold for this species, with woods east of Brockenhurst producing peak counts of 42 on 19 May and 34 on 27 May. In central-west Hampshire, Bentley Wood (Eastern Clearing) peaked at 15 on 28 May, whilst sites near Stockbridge gave a maximum of nine on 20 May. The small population near Winchester persists in low numbers, with a maximum count of ten on 19 May. The only other record for this species was a singleton at Porton Down on 02 June.







BC Priority status	Тор
No of 2018 records	9
No of 2018 individuals	29
No of 2018 tetrads	3
No of post 2005 tetrads	21

Earliest on Database: 03 May 2007				
Earliest	28 May			
2018	Bentley Wood			
Latest	03 July			
2018	Brownhill Inclosure			
Latest on Database: 29 Aug 2009				
Transect	Down   Within   Up   >20%   >20%			
Site	>20% ± 20% >20%			

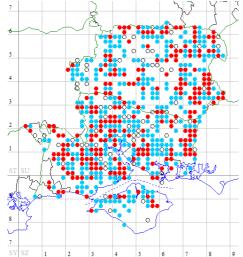
An improvement was noted in Bentley Wood, Eastern Clearing in 2017 with the transect Annual Index increasing from six in 2015, eight in 2016 to 20 in 2017. Unfortunately this upward trend did not continue as the Annual Index for 2018 was just five, all of which were recorded on 28 May. The highest non-transect counts received for Bentley Wood, Eastern Clearing, were nine on 02 June and six on 03 June.

**Trends** 

In 2017 I reported that the Small Pearl-bordered Fritillary were not seen in its usual haunts in the New Forest. In 2018, however, two were recorded in Holmsley Inclosure on 03 June where they have not been recorded since 2012 and in nearby Brownhill Inclosure where two were recorded on 03 July. They were last seen here in 2015. Although these two sightings are encouraging, I feel I'm reporting each year on a species heading for extinction in Hampshire and the Isle of Wight (last recorded on the Isle of Wight in 2011). Just eight years ago in 2010 I reported the number of individual butterflies as 576, this year that figure was just 29. I would like to encourage all who visit the New Forest to find time to visit Holmsley and Brownhill Inclosures and the surrounding woodland to look for this locally scarce butterfly.







BC Priority status	Low
No of 2018 records	1,984
No of 2018 individuals	7,789
No of 2018 tetrads	242
No of post 2005 tetrads	634

Earliest on Database: Late May 1893				
Earliest	11 June			
2018	Deerleap, New Forest			
Latest	05 September			
2018	Wootton Coppice			
Latest on Database: 23 Sep 2017				
Transect	Down	Within ± 20%	Up	
Site	>20%		>20%	
Trends	36 20 30			

36

20

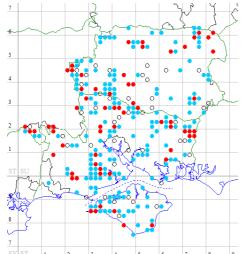
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The Silver-washed Fritillary followed an excellent 2017 with another creditable performance in 2018. Transect numbers were slightly down on last year, as were total number of records received, but not enough to cause concern. Its flight period coincided closely with 2017, emerging in the second week of June and surviving until the first week of September on the mainland. It was a little later to start and earlier to finish on the Isle of Wight.

On the Island, the highest numbers were recorded from the Kemphill Moor Copse transect, peaking at 90 on 15 July and accounting for almost two thirds of the individuals recorded. In Hampshire, the Crab Wood/West Wood complex proved an excellent location to see this butterfly in numbers with consistently high counts peaking at 80 at Crab Wood on 26 July. Other sites recording high numbers included Harewood Forest, Ampfield Wood, Pamber Forest and various locations in the New Forest, the Frohawk transect in particular yielding 112 on 03 July. The vast majority of records came from woodland sites throughout the region, but this species does wander, particularly in hot summers, and is partial to a buddleia bloom; accordingly there were a smattering of garden records.







BC Priority status	High
No of 2018 records	361
No of 2018 individuals	1,636
No of 2018 tetrads	64
No of post 2005 tetrads	268

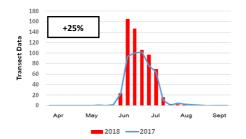
Earliest on Database: 28 May 2010			
Earliest	<b>14 June</b>		
2018	Kitts Grave		
Latest	20 August		
2018	Martin Down		
Latest on Database: 08 Sep 2012			

Latest on Database: 00 00p 2012				
Transect Site	Down >20%	Within ± 20%	Up >20%	
Trends	20	3	14	

The Dark Green Fritillary had a good year, with a 28% increase in the combined transect trend despite 20 routes having a greater than 20% downward trend. Starting its emergence nearly two weeks later than in 2017, peak numbers were seen during the last week of June with high overall numbers being recorded throughout July. The first specimens were reported from Kitts Grave and a huge count of 200 was made at adjacent Martin Down on 26 June.

On the Isle of Wight, the first was seen at Tennyson Down on the 22 June which also recorded the peak number seen on the island with 12 on the same day. The last records from the Isle of Wight were at Bonchurch Down on the 01 August and on the mainland at Martin Down on the 20 August.

At one of its Hampshire strongholds, Martin Down, this butterfly had a slightly improved position compared with the previous year though like many species there is a worrying downward trend that is also reflected in the numbers of both Hampshire in general and England as a whole.





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BC Priority status	Medium
No of records	538
No of 2018 individuals	1,259
No of 2018 tetrads	121
No of post 2005 tetrads	376

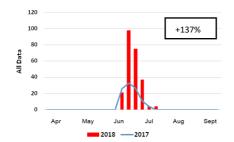
Earliest on Database: Late May 1893				
Earliest 2018	10 June Pamber			
Latest 2018	23 August Staunton Country Park			
Latest on Database: 04 Oct 2003				
Transect Site	Down >20%	Within ± 20%	Up >20%	
Trends	15	11	15	

While this sylvan denizen remains as ubiquitous as ever across the two counties, there was little evidence of a recovery in numbers. Indeed, data remained uncannily similar with those of 2017, peak sightings again concentrated in the last week of June and earliest days of July.

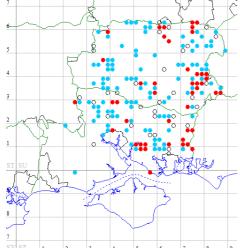
The highest single transect count on the mainland was 22 at Kings Copse on 18 June, to be trumped on 02 July by 25 on the Isle of Wight at the diminutive Kemphill Moor Copse near Havenstreet, and 21 at Briddlesford Copse nearby. Unfortunately, numbers were lower at the traditional Walter's Copse stronghold at Yarmouth, which might otherwise have completed an island hat-trick.

Numbers on the wing everywhere had dwindled to almost zero by mid-August; not the slightest hint of a second brood. The effect of the long summer drought on the butterfly's shallow-rooted honeysuckle host must remain a cause for concern.

The combined transect trend was a modest +25%, the number of transects exhibiting a greater than 20% rise in numbers equalled by those with a fall of the same magnitude.







BC Priority status	High
No of 2018 records	97
No of 2018 individuals	241
No of 2018 tetrads	45
No of post 2005 tetrads	174

Earliest on Database: 17 Jun 2017				
Earliest	19 June			
2018	Abbotts Wood Inclosure			
Latest	27 July			
2018	Morgaston Wood			
Latest on Database: 23 Aug 2013				
Transect	Down	Within ± 20%	Up	
Site	>20%		>20%	
Trends	-	-	6	

Purple Emperor enjoyed one of the best summers on record in 2018, although its main flight time was very short this year. It was first noted again in Alice Holt Forest on the 19 June.

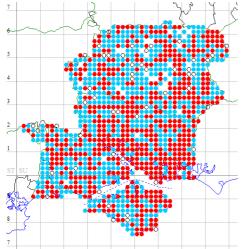
Purple Emperor numbers increased significantly during the first weeks of July, but the oppressive heat made the Emperor emerge in flight very early in the morning. The best count came from Abbotts Wood Inclosure with a count of 21 on the 28 June closely followed by Straits Inclosure with a count of 15 two days later.

Purple Emperor were seen at the following sites: Alice Holt Forest, Alresford Pond, Anton Lakes, Basingstoke Canal, Blackbushe Hangar, Botley Wood, Bentley Wood, Bells Copse, Bramshott Common, Browndown, Crab Wood, Creech Wood, Farley Mount, Havant Thicket, Morgaston Wood, Micheldever Woods, Noar Hill, Pamber Forest, Pilot Hill, Pitt Down, Queen Elizabeth Country Park, Straits Inclosure, Swanwick Lakes, West Wood, Whiteley Pastures, West Harting Down. Once again there were no reports coming from the New Forest.

Early counts from surrounding counties suggest the egg lay was very good, so hopefully there should be some good sightings in 2019.







BC Priority status	Low
No of 2018 records	2,192
No of 2018 individuals	3,016
No of 2018 tetrads	561
No of post 2005 tetrads	1,114

Earliest on Database: 01 Jan, various				
Earliest 2018	<b>03 January</b> Marchwood			
Latest 2018	22 December Drayton			
Latest on Database: 31 Dec, various				
Transect Site	Down   Within   Up   >20%   >20%			

98

8

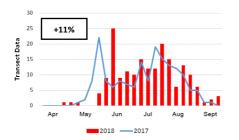
2018 was a poor year for this butterfly. 2016 and 2017 were good years with 2017 showing a 22% increase in numbers on 2016 but in 2018 numbers decreased by more than 70% compared to 2017.

**Trends** 

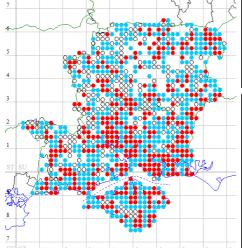
The flight period graph, based on transects, clearly shows how poor numbers were in 2018, with just small peaks in mid July and the end of September. Despite the small peak at the end of September, we were not treated this year to buddleia or ivy flowers covered in Red Admiral or the sight of large numbers of drowsy Red Admirals feeding from over ripe fermenting fallen fruit. It is not clear whether fewer Red Admirals migrated here in 2018 or, in common with other nettle feeding butterflies, whether they simply failed to produce many offspring.

Last year the transect at Breamore was used to illustrate how well the species fared, peaking at 24 in July and 25 again in September with an Annual Index of 174; this year those peaks were five and eight and the Annual Index was 35. Transect data for other sites shows a similar pattern with Hillier Gardens returning an Annual Index of 82 in 2017 and just 15 in 2018 whilst at Testwood Lakes the corresponding numbers were 122 and 29.

The highest count of the year was 20 at Arreton Down, Isle of Wight on 21 August.







BC Priority status	Low
No of 2018 records	653
No of 2018 individuals	884
No of 2018 tetrads	330
No of post 2005 tetrads	943

Earliest on Database: 01 Jan 2013						
Earliest 2018	26 April Ventnor					
Latest 2018	09 November Boscombe					
Latest on Database: 31 Dec 1987						
Transect Site	Down >20%	Within ± 20%	Up >20%			
Trends	25	25 22 24				

Painted Lady were observed between 26 April and 09 November. Weekly numbers peaked thrice on transect (mid June, early & late July). After the third peak counts declined steadily, barring a marked drop in mid August. In total 884 Painted Lady (133 on Isle of Wight) were recorded, of which 196 (27 on Isle of Wight) were on transect. Almost half of the total (459; 79 Isle of Wight) were seen during July and August and were attributed to the Big Butterfly Count. 11% more individuals were recorded on transect in 2018 than in 2017. The highest count was 20 at Brook Down on 10 June.

The number of transects where Painted Lady were seen in greater, similar or lesser numbers was roughly the same (in the range of 23 to 25 transects). 13 transects recorded Painted Lady in 2018 but not in 2017 whereas 18 transects had the opposite experience. In 2018 more Painted Lady were seen on transect than in 2017 but in a slightly shorter flight period, but 25% less were seen overall.

Since 2015 numbers have been in gradual decline.





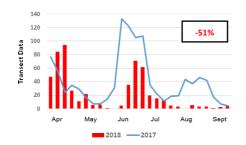
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BC Priority status	Low
No of 2018 records	2,303
No of 2018 individuals	3,952
No of 2018 tetrads	463
No of post 2005 tetrads	1,241

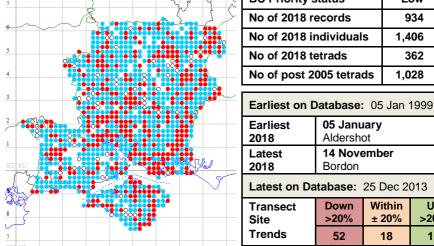
Earliest on Database: 01 Jan, various				
Earliest 2018	25 January Burton			
Latest 2018	17 December Fishbourne			
Latest on Database: 31 Dec, various				
Transect Site	Down >20%	Within ± 20%	Up >20%	
Trends	65	27	10	

Peacock has been in steady decline for a number of years in Hampshire and 2018 showed a further significant drop in both records and the total index. Transect numbers were down 35% and overall numbers were down 43%. The decline was across both spring and summer broods. Perhaps unsurprisingly due to a poor end to the summer of 2017 and a relatively cold winter Peacock were slow to appear but picked up towards the end of April. The summer brood started well up to mid July but from then on were seen in very small numbers for the rest of the summer, presumably impacted by the dry weather. As in 2017 most records were of only one or two individuals

The maximum count was a field record of 50 at Briddlesford, Wootton on 12 July and there were a small number of further field records of between ten and 20. The maximum number recorded on a section of a transect was 12 at Breamore in Section 8 on 08 July. Transects at Breamore (95) and Whippingham Fields (90) on the Isle of Wight recorded the highest Annual Indices.







BC Priority status	Low
No of 2018 records	934
No of 2018 individuals	1,406
No of 2018 tetrads	362
No of post 2005 tetrads	1,028

Zamoot on Zatabaoor oo can 1000			
Earliest	<b>05 January</b>		
2018	Aldershot		
Latest	<b>14 November</b>		
2018	Bordon		
Latest on Database: 25 Dec 2013			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	52	18	16

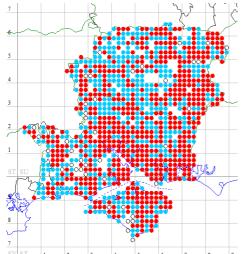
For those able to recall halcyon years when almost every buddleja teemed with Small Tortoiseshell and other vanessids, it is perhaps instinctive to dismiss recent years as 'poor', rather than 'average for the early 21st century'. However, even by this standard, 2018 was a great disappointment, with reports and numbers totalling fewer than half those of 2017 and numbers on a par with the habitat-specialist White Admiral.

Just four records featured double-figure tallies, two from the Isle of Wight including the year's zenith (!) of 12 from a site north of Parkhurst Forest on 20 July. There was no obvious autumn brood, numbers plummeting to a total of 14 in September, and just half that in October.

This sad decline was precisely mirrored by the combined transect trend of -51%.







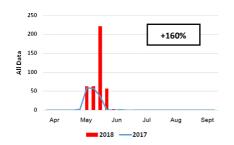
BC Priority status	Low
No of 2018 records	2,837
No of 2018 individuals	4,688
No of 2018 tetrads	597
No of post 2005 tetrads	1,040

Earliest on Database: 09 Jan 1998			
Earliest	13 March		
2018	Drayton, Portsmouth		
Latest	17 December		
2018	Boscombe		
Latest on Database: 22 Dec 2013			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	56	26	18

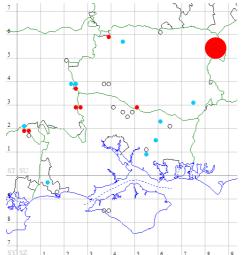
The Comma population took a decided downturn in 2018 with the transect trend recording a 38% decline on that of 2017. With reasonable early and mid season peaks it was the autumn, third peak, that completely failed to materialise. Despite the extremes of the weather we experienced this year, with the wet spring and very dry summer, the 25 year population trend, whilst recording the 2018 decline, does not show any significant decline in the long term average.

Very few mainland or Isle of Wight transect counts consistently reached double figures. Arlesford Farm transect recorded 17 on the 28 June with Windmill Hill, Chalton transect, recording 24 on the 10 July. Kemphill Moor Copse, on the Isle of Wight, recorded 18 on the 02 July.

Field observations provided slightly higher counts, similarly failing to show any increase after July. Pilley, Lymington, recorded 31 on 29 July; West Wood, Farley Mount Country Park, recorded 25 on 08 July. Worthy of note for consistency, Queen Elizabeth Country Park managed low double figure counts on at least four separate occasions.







BC Priority status	Тор
No of 2018 records	56
No of 2018 individuals	414
No of 2018 tetrads	8
No of post 2005 tetrads	26

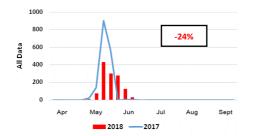
Earliest on Database: 27 Apr 2007			
Earliest	18 May		
2018	Central Hampshire		
Latest	13 June		
2018	Martin Down		
Latest on Database: 20 Jun 2004			
Transect	Down	Within ±20%	Up
Site	>20%		>20%
Trends		2	2

It is pleasing to report that 2018 was a very good year for the Marsh Fritillary in its limited Hampshire distribution. Emergence began in earnest at Martin Down on 19 May with seven being seen. This peaked at 45 on the Bokerley Dyke and Grims Ditch (south) area of the reserve on 23 May. Even on 01 June there were 37 still present. At Bentley Wood (east clearing) four were recorded on 28 May rising to eight on 03 June.

The new release site in north Hampshire peaked at 16 on 01 June. The combined transect trend was up 160% partly due to the new transect totals. The record from Magdalen Hill Down was undoubtably a release as there are no known colonies nearby.

Other records came from the Pilot Hill transect with one on 26 May and one larva was recorded on 24 July at Martin Down.

The unusually hot weather should have benefited the Marsh Fritillary, allowing ample time for good numbers of eggs to be laid at all sites.





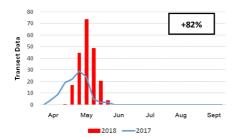
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BC Priority status	Тор
No of 2018 records	76
No of 2018 individuals	1,468
No of 2018 tetrads	20
No of post 2005 tetrads	54

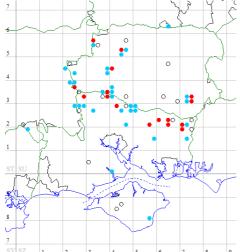
Earliest on Database: 08 Apr 2007			
Earliest	<b>07 May</b>		
2018	Whippingham		
Latest	29 June		
2018	Wheelers Bay		
Latest on Database: 09 Jul 2010			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	_	1	2

The spring web count this year was much the same as the previous year with the only improvement being at Binnel Bay where there was a welcome increase. An interesting observation was at Ventnor on 19 April where the emerged larvae were seen to be eating the leaves of Sea Beet *Beta vulgaris maritima*, as far as is known an unrecorded food-plant, in spite of their normal Ribwort Plantain *Plantago lanceolata* being present. The number of adults seen at all sites was high showing again a good survival rate from the larval stage and resulted in the butterfly being seen at many places throughout the Island where not normally recorded eg, Culver Down, Blackgang Landslip, Forelands and Bleakdown. As to be expected there were excellent numbers of summer webs to be found which could have helped strengthen the overall population in the coming year but this may not necessarily happen as the summer drought caused large numbers of the larval food-plant, Ribwort Plantain, to dry out and die, taking the early instar larvae with it.

2018 could be summed up as a year that promised a lot but may have been set back by the weather. We shall see.







BC Priority status	Тор
No of 2018 records	126
No of 2018 individuals	772
No of 2018 tetrads	16
No of post 2005 tetrads	56

Earliest on Database: 08 Apr 2017			
Earliest 2018	<b>22 Apri</b> l Noar Hil		
Latest 2018	<b>03 June</b> Noar Hil		
Latest on Database: 02 Oct 2011			
Transect Site	Down >20%	Within ± 20%	Up >20%
Trends	1	1	3

Despite a very cool March and wetter winter than average the Duke of Burgundy appeared at Noar Hill on the 22 April. May turned out to be one of warmest and driest on record and the butterfly was out in good numbers especially in the Meon Valley in the first two weeks of May. A count of well over 50 on the lower slopes of Ramsdean Down on the 10 May was one of the best of the season.

The butterfly is increasing in numbers and spreading all over the downland at Stockbridge Down. West of Winchester the woodland colony is very small, with single figures being seen on the 19 May with a count of seven. A good count came from another major colony reliant on primrose at Porton Down with 40 plus being noted at the Old Lodge on the 23 May.

The butterfly just managed to fly into June, and was noted in a private garden north of Andover, a female and male on primrose proving this little butterfly can turn up in the most unexpected places. It was also noted on private land east of Winchester as well, which may well have been a small colony undiscovered in the past.

Hopefully the butterfly should have produced a good egg-lay and wandered into new territories in such good weather, so hopefully there should be some interesting counts in 2019.





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BC Priority status	Low
No of 2018 records	1,408
No of 2018 individuals	3,941
No of 2018 tetrads	290
No of post 2005 tetrads	798

Earliest on Database: 05 Mar 2009			
Earliest 06 April			
2018	The Cha	ase	
Latest	06 November		
2018	Mockbeggar		
Latest on Database: 27 Nov 2003			
Transect Site	Down >20%	Within ± 20%	Up >20%

19

23

51

After the failure of the 2017 autumn flight peak, it made a welcome return this year. Three distinct peaks were recorded in late May, mid to late July, and then, with numbers rising to a maximum, the third and highest peak in mid September. The transect trend recorded an impressive +48% over 2017 reflecting this recovery.

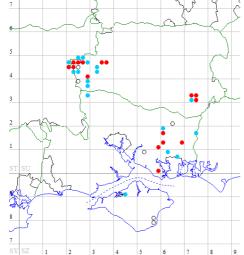
**Trends** 

Transect records show Whippingham Fields, on the Isle of Wight, as the most consistent site with impressive counts of 98 on 13 September and 93 on 17 September. No transect records on the mainland could reach comparable heights with Pilot Hill recording creditable counts of 38 on 09 September and 42 on 17 September. The only other mainland transect record to achieve a count of over 30 was Mockbeggar with 35 on 30 August.

Stockbridge Down provided a remarkable series of field observations with counts of 134, 125, 108 and 122 between 13 and 26 September. The majority of records are of ones and twos, recorded across the entire area of the Island and County with the long term average continuing to record a steady increase.







BC Priority status	High
No of 2018 records	59
No of 2018 individuals	251
No of 2018 tetrads	16
No of post 2005 tetrads	35

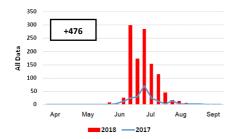
Earliest on Database: 18 Jul 2017			
Earliest	18 July		
2018	Shipton Bellinger		
Latest	14 September		
2018	Gosport		
Latest on Database: 16 Oct 1986			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	1	_	1

2018 provided good evidence that a new Brown Hairstreak colony has become established towards the southern end of the Meon Valley. Fifteen adults were observed in nine records between 17 August and 10 September in the area between Soberton and the M27 north of Fareham. The assumption is that adults have dispersed from the Noar Hill colony further up the Meon Valley.

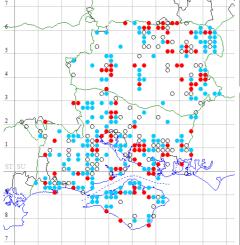
Good survey work has also shown that the species is more widely dispersed between Andover and Shipton Bellinger than hitherto known, albeit in lower densities than the main colonies around Tidworth. Both developments add greatly to our knowledge of the distribution of the species in Hampshire.

Transect counts were lower than in 2017 with five adults seen on the 26 July and 06 August at Shipton Bellinger and only three at Noar Hill on 23 August and 10 September. However, a remarkable 25 adults were observed just north of the transect route at Shipton Bellinger on 31 July.

Six egg counts were undertaken at different sites, a welcome increase on previous years. The best count was 72 at Bedlam Valley near Shipton Bellinger on 10 February.







BC Priority status	Low
No of 2018 records	255
No of 2018 individuals	1,141
No of 2018 tetrads	91
No of post 2005 tetrads	312

Farliest on Database: 31 May 2010

Larilest on Database. 31 May 2010			
Earliest	14 June		
2018	Axmansford		
Latest	16 September		
2018	Deerleap, New Forest		
Latest on Database: 25 Sep 2003			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%
Trends	4	3	16

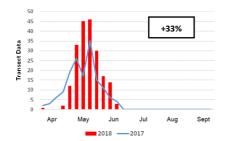
Hot dry conditions in 2018 really suited this species, with rapid development and emergence coupled with high levels of activity of the adults during late afternoons/ early evenings also leading to many more observations than usual. There was a two week later start to its season and and a two week later end than 2017, giving a notional flight period of 95 days.

The trends table shows four transects with a decrease of more than 20% and 16 with a gain of more than 20%, compared to 2017. Nine sites gained this species and only three lost it; this more than builds on last year's improvement, the combined trend up a staggering 476%! A remarkable year for this species and the second best performer of the year in Hampshire.

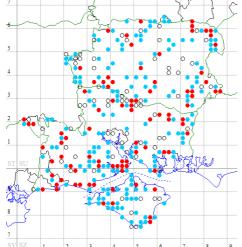
Transects recording this species increased from 16 to 23, from the Isle of Wight and the New Forest up to Hazeley Heath and Pamber Forest. The latter recorded a fine 20 on transect on 10 July, but this season was usurped by a count of 26 made on transect at Kemphill Moor Copse, Isle of Wight on 15 July.

Top non-transect counts were 142 at Harewood Forest, 73 at Smithley's Copse, Axmansford and 50 again at Harewood. Ten eggs were recorded at Westfield Copse on 23 March.

27







BC Priority status	Low
No of 2018 records	282
No of 2018 individuals	526
No of 2018 tetrads	88
No of post 2005 tetrads	294

Earliest on Database: 29 Mar 2012			
Earliest	<b>06 April</b>		
2018	Beaulieu Heath		
Latest	<b>22 June</b>		
2018	Martin Down & Hawkhill		
Latest on Database: 30 Jul 2007			
Transect	Down	Within ± 20%	Up
Site	>20%		>20%

16

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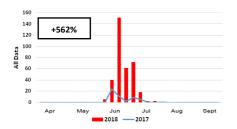
The first recorded adult sighting of 2018 was similar to 2017, which is two weeks earlier than Alan Thornbury's Hampshire flight chart. Transect numbers peaked over the middle of May. The mainland was first with 39 individuals, and the Isle of Wight a week later with 12 individuals. Mainland numbers remained strong throughout May.

**Trends** 

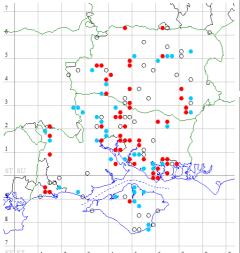
Transect flight periods were 49 days for the Isle of Wight and 78 days for the rest of Hampshire. The Isle of Wight represents 20% of the transect totals, up from 17% in 2017.

A better season for Green Hairstreak with a total of 526 individuals recorded. This was an increase of 58% from 2017. Of interest this is only 41% of total individuals (1,283) recorded in 2014.

Whippingham (Isle of Wight) transect had the highest seasonal total of 21 individuals. Of the mainland transects Martin Down (South) had the highest seasonal number of individuals at 16. The highest individual sighting was a field record of 18 at Godshill, New Forest on 04 May.







BC Priority status	High
No of 2018 records	104
No of 2018 individuals	382
No of 2018 tetrads	53
No of post 2005 tetrads	120

Earliest	03 June		
2018	Cosham		
Latest	23 July		
2018	Ashford Hangars		
Latest on Database: 23 Aug 2004			
Transect	Down	Within	Up
Site	>20%	± 20%	>20%
Trends	2	4	4

Earliest on Database: 25 May 2011

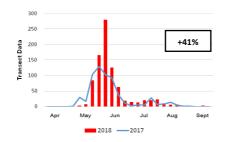
There can be few if any comparable quantum leaps in recording activity in the annals of the Branch, the number of reports increasing fourfold on 2017. The old ecologist mantra, 'where there can be life, there will be life' could now be reasonably paraphrased as 'where there's mature elm, there'll be White-letter Hairstreak', even in the heart of downtown Portsmouth.

The total number of imagines reported was over three times higher than in 2017, but given the obvious increase in recording effort, the comparison is irrelevant. Sightings peaked around 22 June, when the year's top tally of 14 was made at Peartree Green, Woolston, closely followed by several similar counts in Gosport and Southwick. But records were not confined to imagines, with ova, larvae, and even pupae reported from across Hampshire.

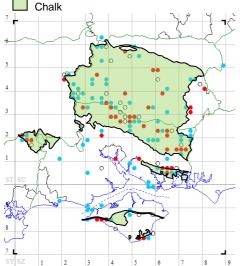
Alas, such industry was not repeated on the Isle of Wight, whence just two records were received, confirming the survival of the colony on the elm cultivar LUTECE outside the M&S superstore at Newport.

Tetrad occupancy increased from 22 in 2017 to 53 in 2018

Erratum: the 2017 report of a colony at Brighstone, IoW, was spurious, owing to an erroneous grid reference.







BC Priority status	High
No of 2018 records	333
No of 2018 individuals	1,490
No of 2018 tetrads	43
No of post 2005 tetrads	130

Earliest on Database: 30 Mar 2012

10

Earliest	06 May		
2018	Sparsho	lt	
Latest	02 September		
2018	Old Down, Basingstoke		
Latest on Database: 21 Sep 1991			
Transect	Down	Within	Up
Site	>20%	± 20%	>20%
Trends	10	5	12

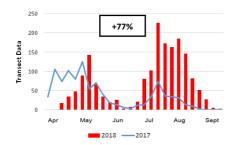
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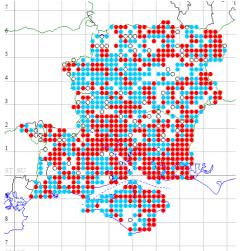
Like many grassland species the Small Blue had a much better year with a 41% increase in numbers seen on transect. The season began with a one on transect at Sparsholt on 06 May and rose strongly from mid-May to a total count of 315 adults across 11 sites on the 03 June.

Strong counts were recorded at Magdalen Hill Down and Morn Hill near Winchester, Old Down near Basingstoke, Martin Down, Noar Hill and Paulsgrove Chalk Pits. Old Burghclere Lime Quarry recorded 65 adults on the 02 June surpassed only by the 86 seen at Watcombe Bottom on the Isle of Wight on the 04 June. Old Down remains a stronghold with 345 adults on transect, up 46% over 2017.

A reasonable second brood saw double-figure counts at Stockbridge Down on 31 July and Magdalen Hill Down on 01 August. The season closed with a single count on the Old Down Basingstoke transect on 02 September.







BC Priority status	Low
No of 2018 records	2,482
No of 2018 individuals	4,229
No of 2018 tetrads	495
No of post 2005 tetrads	929

Earliest on Database: 14 Jan 2013			
Earliest 2018	<b>05 April</b> Drayton, Portsmouth		
Latest 2018	<b>09 October</b> Whippingham Fields		
Latest on Database: 06 Dec 2006			
Transect	Down	Within	Up

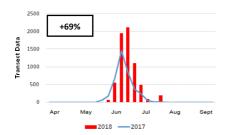
Transect	Down	Within ±20%	Up
Site	>20%		>20%
Trends	24	26	53

The gloomy prediction at the end of the 2017 report of a cyclical trough proved ill-founded, as the Holly Blue did very well in 2018. Overall transect data shows a more than 20% increase in over half of sites monitored and a corresponding decrease in less than a quarter, with overall numbers up by 77%.

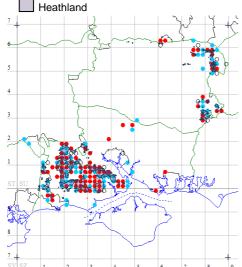
Unusually, there were no March records, no doubt at least partly due to the wintry conditions delivered by the Beast from the East. It got going in April and became widespread throughout both counties. This isn't a butterfly that forms large colonies and it is as much at home in suburban gardens with a few shrubs as anywhere, so no great surprise that nearly a quarter of the records received came from the 2018 Big Butterfly Count.

The spring brood peaked in mid May, a little later than 2017. This was followed by a very strong summer brood that achieved a sustained peak from late July to late August. Most double figure counts were achieved from this latter period. It remained widespread in September with a couple of October sightings. The Isle of Wight accounted for just over 10% of the records received.

23







BC Priority status	High
No of 2018 records	632
No of 2018 individuals	11,553
No of 2018 tetrads	82
No of post 2005 tetrads	153

Earliest on Database: 09 May 2011			
Earliest 2018	03 June Badminston & Blackwell Common		
Latest 2018	23 Aug Yew Tree Heath		
Latest on Database: 30 Oct 1921			
Transect Site	Down >20%	Within ± 20%	Up >20%

Silver-studded Blue had an excellent year in 2018, with an increase of 133% in individuals, and over 36% in the number of records. The New Forest remains the stronghold, accounting for around 70% of the county's records.

**Trends** 

Transect sightings increased by 69%, with 23 of the 26 transects where it was seen showing an increase of over 20% on last year.

Emergence was later than last year, with no sightings in May, but quickly reached a huge peak by mid-June, and although the season finished early in places, sightings remained strong through July. The count of 170 at Hasley transect in the north of the New Forest on 01 August shows that some colonies remained active later than usual, as does the count of 53 at Yew Tree Heath in the south of the New Forest on 17 August. The latest record was a day later than last year.

The maximum was 955 at Fair Cross Heath, near Lyndhurst on 02 July, one of three records of 500 or more, and one of the six records which exceeded last year's maximum.





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BC Priority status	Low
No of 2018 records	1,476
No of 2018 individuals	4,893
No of 2018 tetrads	161
No of post 2005 tetrads	423

Earliest on Database: 08 Apr 2002			
Earliest 2018	<b>06 May</b> Wheelers Bay		
Latest 2018	21 October Mockbeggar		
Latest on Database: 31 Oct 2005			
Transect	Down	Within	Up

Transect Site Down + 20% + 20% + 20% + 20% + 20% Trends + 20% + 20% + 20%

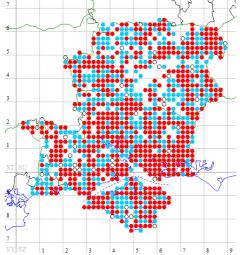
2018 was a very good year for Brown Argus in Hampshire, with the highest average index on the Hampshire butterfly transects since 1996 and it was the best year at Magdalen Hill Down since 1997. On transect in Hampshire and the Isle of Wight there was a 188% gain in numbers in 2018, as compared to 2017. 53 out of 62 of the transects saw an increase of numbers in 2018, as compared to 2017, with the butterfly being recorded at 23 additional transect locations. The first brood was twice as strong as in 2017 and the second brood three times stronger.

The highest transect counts in Hampshire were 100 at Beacon Hill, Exton (Vice County 11) and the same number at Barton Stacey Army Camp and at Brook House Meadow (both Vice County 12).

On the Isle of Wight (Vice County 10) the greatest number in one transect section was 17 at Whippingham Fields, and there was one transect section count of 15 at Bonchurch Down.







BC Priority status	Low
No of 2018 records	5,685
No of 2018 individuals	28,448
No of 2018 tetrads	587
No of post 2005 tetrads	975

Earliest on Database: 06 Apr 2017

Earliest 2018	<b>04 May</b> Crab Wood, Drayton Down		
Latest	<b>02 November</b>		
2018	Southbourne		
Latest on Database: 12 Nov 1990			990
Transect	Down	Within ± 20%	Up
Site	>20%		>20%

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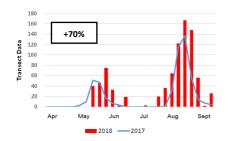
A great year for the Common Blue with 109% increase on comparable 2017 transects.

**Trends** 

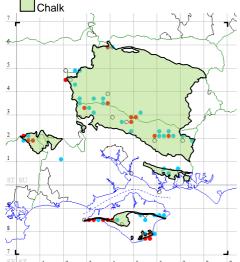
The butterfly this year seemed to have very vibrant colours, and I had witnessed myself many people mistaking them for Adonis. The start in early May recorded low numbers until later in the month when numbers started to pick up. There were 15 triple digit records, six of these being on the Isle of Wight (including three on the Whippingham Fields transect). On the mainland, triple digit figures were recorded during early August at Broughton Down, Old Winchester Hill, Beacon Hill, Exton and at Noar Hill.

The Isle Of Wight held the record for high counts this year, with high records from Atherfield, a maximum count of 310 individuals on the 16 July and Whippingham Fields 176 on the 02 Aug and 231 on the 05 Aug.

On the mainland Barton Stacey held the high record of 150 individuals on 19 July suggesting the second broods were very successful. The numbers were likely affected by the lower than average rainfall in June and July this year and above average sunshine.







BC Priority status	High
No of 2018 records	316
No of 2018 individuals	1,506
No of 2018 tetrads	20
No of post 2005 tetrads	68

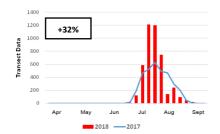
Earliest on Database: 26 Apr 2011		
Earliest	11 May	
2018	Bonchurch Down	
Latest	27 September	
2018	Martin Down	
Latest on Database: 15 Oct 2011		

Transect Site	Down >20%	Within ± 20%	Up >20%	
Trends	1	1	14	

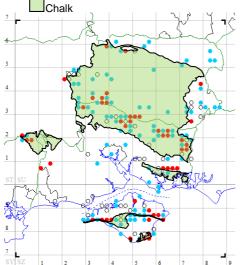
A very good year for this species, with14 out of 16 transects showing more than 20% increase. The principal sites remain unchanged, with Martin Down achieving counts of 100+, whilst Old Winchester Hill, and Mottistone Down had tallies of 40+. In total 18 sites recorded the species, equally split between Hampshire and the Isle of Wight.

Following the cold March, the first brood began a few days later than 2017. But good weather in late May and early June saw the species peak with a magnificent count of 103 at Martin Down on 06 June. This peak was about two weeks later than 2017, with the last of the brood seen at Martin Down on 27 June. The best Isle of Wight count was 28 at Mottistone Down on 22 May.

The hot dry summer meant the second brood started a good two weeks earlier than 2017, appearing at several sites from 24 July. As normal this brood was stronger than the first, and peaked in late August. The best counts were 107 at Martin Down on 30 August, 65 at Old Winchester Hill on 01 September and 42 at Mottistone Down on 14 August. The last record received was of 24 at Martin Down on 27 September, but given the high number it is likely the brood continued into October.







BC Priority status	Medium
No of 2018 records	702
No of 2018 individuals	12,329
No of 2018 tetrads	48
No of post 2005 tetrads	171

Earliest	01 July			
2018	Newchurch			
Latest	24 September			
2018	Portsdown			
Latest on Database: 31 Oct 2011				
Transect	Down	Within ± 20%	Up	
Site	>20%		>20%	
Trends	4	9	14	

Earliest on Database: 17 Jun 1990

2018 was a good year for this species, with a combined transect trend of +32%. The dry sunny weather probably helped this positive outcome, with 14 transects showing an increase of more than 20%, and just four transects showing a decline.

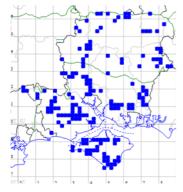
The flight season began just two days earlier than 2017, with many sites recording their first individuals in the first week of July. For most sites, the season peaked in the first week of August. There were an estimated 4,000 at Brook Down Chalk Pit (Isle of Wight) on 03 August, but most other top sites peaked in the 200-500 range. The maximum counts at the best sites were: St. Catherine's Hill (475), Stockbridge Down (328), Mottistone Down (287), Old Winchester Hill (272) and Magdalen Hill Down (234). Dispersal was evident, with stray individuals turning up at a number of sites, both on and off the chalk, in both Hampshire and on the Isle of Wight.

The season tailed off quickly from mid August, with 115 at Old Winchester Hill on 21 August being the only notable late count. From that day on there were no counts above 23, and the season was virtually finished by 09 September, although a few individuals lingered for another fortnight.

## 70.229 Speckled Yellow Pseudopanthera macularia







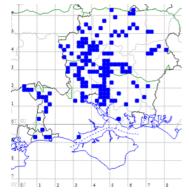
To encourage recording of day-flying moths, the Report now includes brief accounts of four day-flying moths. In these, the transect flight period graphs are combined transect data, and distribution maps are post 2000 records.

The Speckled Yellow is a widely distributed woodland moth that uses Wood Sage (*Teucrium scorodonia*) as its larval foodplant. It flies in May, and often accompanies the Pearl-bordered Fritillary butterfly, or flies in woods where this butterfly used to occur. It is well represented in New Forest woodlands, and in 2018 peak season was mid to late May, about a week later than 2017.

## 72.029 Scarlet Tiger Callimorpha dominula





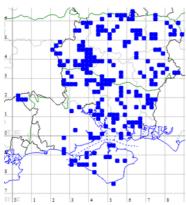


In Hampshire, this species is mostly associated with the river valleys of the Test, Itchen and Avon, where the favoured larval foodplant Common Comfrey (*Symphytum officinale*) is found in abundance. In central and west Hampshire it may turn up more or less anywhere, including gardens, especially if comfrey is present. Few transects record this beautiful day-flying moth, but Winnall Moors, Winchester, is a good place to visit in June and early July to see the species. In sunshine they are eye-catching with their colourful markings, but on cloudy days they will often be seen at rest on path-side vegetation.

## 72.083 Burnet Companion Euclidia glyphica





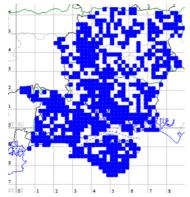


This species is widely distributed throughout Hampshire and Isle of Wight, although largely absent from the New Forest. If you've ever seen a flash of orangy-brown and had your hopes raised for Duke of Burgundy butterfly, but found it wasn't, it's likely to have been this moth. Its favoured larval foodplant is Bird's-foot Trefoil (*Lotus corniculatus*), and other Leguminosae, so it will be no surprise that grasslands, especially calcareous grasslands, are the favoured habitat. 2018 transect data shows that peak season was late May/early June, and seemingly slightly weaker than 2017. Visit the HantsMoths website <a href="https://www.hantsmoths.org.uk">www.hantsmoths.org.uk</a> to find out more about Hampshire and Isle of Wight moths.

## 73.015 Silver Y Autographa gamma







This has to be the most widely distributed and commonly encountered of all the day-flying moths. It occurs throughout Hampshire and Isle of Wight in more or less any habitat, including gardens. The gold-silver "Y" (or Greek letter gamma) on the forewing is distinctive, but keep an eye out for any that look different, as there are some similarly marked rarer species. As an immigrant from continental Europe, its numbers can fluctuate greatly from one year to the next. After a poor showing in 2017, you can see that 2018 was a much better year, with two defined peaks, one in late May/early June and the second in mid July.

The earliest and latest sightings for 2018 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.

	Earliest on	Earliest	Latest	Latest on	
Species	Database	2018	2018	Database	
Dingy Skipper	12 Apr 2011	04 May	07 Aug	03 Sep 1993	
Grizzled Skipper	02 Apr 2009	17 Apr	18 Jun	07 Sep 2004	
Essex Skipper	26 May 2007	20 Jun	03 Aug	21 Sep 1996	
Small Skipper	16 May 2011	03 Jun	28 Aug	19 Sep 1991	
Silver-spotted Skipper	11 Jul 2018	11 Jul	10 Sep	11 Oct 1986	
Large Skipper	28 Apr 2007	15 May	17 Aug	22 Sep 2013	
Orange-tip	10 Mar 1990	11 Apr	23 Jun	22 Sep 2011	
Large White	02 Feb 2007	07 Apr	22 Oct	07 Dec 2012	
Small White	09 Jan 1991	05 Apr	26 Oct	08 Dec 2007	
Green-veined White	03 Mar 1989	11 Apr	18 Oct	28 Oct 1999	
Clouded Yellow	08 Feb 2005	03 May	18 Nov	30 Dec 2007	
Brimstone	01 Jan 2001	10 Jan	09 Dec	29 Dec 1999	
Wall	14 Apr 2002	05 May	20 Oct	31 Oct 2015	
Speckled Wood	11 Jan 2013	07 Apr	08 Nov	15 Dec 2011	
Small Heath	08 Apr 1997	07 May	10 Oct	29 Oct 2011	
Ringlet	24 May 2016	03 Jun	30 Aug	11 Oct 2011	
Meadow Brown	30 Apr 2011	17 May	10 Oct	07 Nov 2010	
Gatekeeper	24 Mar 1999	11 Jun	05 Sep	19 Oct 1995	
Marbled White	30 May 2017	11 Jun	20 Aug	25 Sep 2003	
Grayling	03 Jun 2002	23 Jun	26 Sep	08 Oct 1986	
Pearl-bordered Fritillary	17 Apr 2003	08 May	15 Jun	09 Jul 1950	
Small Pearl-bordered Fritillary	03 May 2007	28 May	03 Jul	29 Aug 2009	
Silver-washed Fritillary	Late May 1893	11 Jun	05 Sep	23 Sep 2017	
Dark Green Fritillary	28 May 2010	14 Jun	20 Aug	08 Sep 2012	
White Admiral	Late May 1893	10 Jun	23 Aug	04 Oct 2003	
Purple Emperor	17 Jun 2017	19 Jun	27 Jul	23 Aug 2013	
Red Admiral	01 Jan*	03 Jan	22 Dec	31 Dec*	
Painted Lady	01 Jan 2013	26 Apr	09 Nov	31 Dec 1987	
Peacock	01 Jan*	25 Jan	17 Dec	31 Dec*	
Small Tortoiseshell	05 Jan 1999/ 2018	05 Jan	14 Nov	25 Dec 2013	
Comma	09 Jan 1998	13 Mar	17 Dec	22 Dec 2013	
Marsh Fritillary	27 Apr 2007	18 May	13 Jun	20 Jun 2004	
Glanville Fritillary	08 Apr 2007	07 May	29 Jun	09 Jul 2010	
Duke of Burgundy	08 Apr 2017	22 Apr	03 Jun	02 Oct 2011	
Small Copper	05 Mar 2009	06 Apr	06 Nov	27 Nov 2003	
Brown Hairstreak	18 Jul 2017/2018	18 Jul	14 Sep	16 Oct 1986	
Purple Hairstreak	31 May 2010	14 Jun	16 Sep	25 Sep 2003	
Green Hairstreak	29 Mar 2012	06 Apr	22 Jun	30 Jul 2007	
White-letter Hairstreak	25 May 2011	03 Jun	23 Jul	23 Aug 2004	
Small Blue	30 Mar 2012	06 May	02 Sep	21 Sep 1991	
Holly Blue	14 Jan 2013	05 Apr	09 Oct	06 Dec 2006	
Silver-studded Blue	09 May 2011	03 Jun	23 Aug	30 Oct 1921	
Brown Argus	08 Apr 2002	06 May	21 Oct	ct 31 Oct 2005	
Common Blue	06 Apr 2017	04 May	02 Nov	12 Nov 1990	
Adonis Blue	26 Apr 2011	11 May	27 Sep	15 Oct 2011	
Chalk Hill Blue	17 Jun 1990	01 Jul	24 Sep	31 Oct 2011	

^{*} Recorded on this date in several years

This table was compiled by Dr Andy Barker and is based on 135 Hampshire & Isle of Wight transects with data for both 2017 and 2018.

	1	1		1		
	Combined	>20%	Within	>20%	0 /18	1+/18
Species	Transect	Decrease	±20%	Increase	1+/17	0/17
	Trend	2018	No Change	2018	Loss	Gain
Dingy Skipper	+3%	12	6	10	5	3
Grizzled Skipper	+41%	6	5	15	2	5
Small/Essex Skipper	-12%	56	26	37	3	4
Silver-spotted Skipper	+256%	3	-	2	2	-
Large Skipper	+29%	38	28	51	9	5
Orange-tip	+2%	42	35	33	9	4
Large White	+186%	2	9	93	-	1
Small White	+179%	4	8	93	-	2
Green-veined White	+86%	15	24	64	4	7
Clouded Yellow	+71%	20	7	19	16	16
Brimstone	+18%	9	35	57	-	3
Wall	+57%	2	2	5	1	4
Speckled Wood	+45%	11	28	63	-	3
Small Heath	+62%	13	15	53	7	20
Ringlet	-25%	61	30	26	3	3
Meadow Brown	-1%	44	43	31	-	-
Gatekeeper	-14%	69	31	19	-	-
Marbled White	-15%	48	26	34	6	1
Gravling	+26%	3	8	13	1	6
Pearl-bordered Fritillary	+3%	3	3	1	1	-
Small Pearl-bordered Frit.*	-62%	1	-	-	-	-
Silver-washed Fritillary	-8%	36	20	30	5	11
Dark Green Fritillary	+28%	20	3	14	10	6
White Admiral	+25%	15	11	15	6	1
Purple Emperor*	+137%	-	-	6	-	5
Red Admiral	-71%	98	8	1	14	2
Painted Ladv	+11%	25	23	24	18	13
Peacock	-35%	65	27	10	4	-
Small Tortoiseshell	-51%	52	18	16	15	6
Comma	-38%	56	26	18	5	5
Marsh Fritillary*	+160%	-	2	2	-	2
Glanville Fritillary*	-24%	-	1	2	-	1
Duke of Burgundy	+82%	1	1	3	-	-
Small Copper	+48%	19	23	51	6	14
Brown Hairstreak	-29%	1	-	1	-	-
Purple Hairstreak*	+476%	4	3	16	3	9
Green Hairstreak	+33%	16	9	27	7	17
White-letter Hairstreak*	+562%	3	1	1	3	1
Small Blue	+41%	10	5	12	2	4
Holly Blue	+77%	24	26	53	9	9
Silver-studded Blue	+69%	1	2	23	-	9
Brown Argus	+188%	3	6	53	1	23
Common Blue	+109%	13	14	80	2	7
Adonis Blue	+70%	1	1	14	1	4
Chalk Hill Blue	+32%	4	9	14	-	5

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

