

HAMPSHIRE & ISLE OF WIGHT BUTTERFLY REPORT - 2019

Hampshire and Isle of Wight Butterfly Report 2019

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Introduction

A very warm welcome to the 2019 Annual Butterfly Report of the Hampshire and Isle of Wight Branch of Butterfly Conservation.

The production of each Report is always a major milestone for the Branch. It takes an enormous team effort and every year I think the Report cannot get any better. But the editorial and production team under Bob Annell refuse to sit on their laurels and each year the design and content of the Report seems to go from strength to strength. I particularly enjoy the Common and Scarcer Species Summary reports and the remarkable amount of detail in each species account: flight period charts, a photograph, total count changes, a distribution map, transect site trends, earliest and latest dates, an expert narrative and more besides. If only party political manifestos could be this comprehensive.....and reliable!

New for 2018 was the section on some of our Day-flying Moths and it will be interesting to see how this develops. Thank you to everyone who submitted their moth data and please keep up the good work for the coming year.

Just 65 recorders submitted data in 1988. This year the ultimate figure is likely to around 2,500 recorders submitting over 100,000 records of over 460,000 butterflies and day-flying moths. These are remarkable figures. They show the high level of interest in our butterfly and moth fauna but also underline the improvements made in recent years in the use of technology to aid recording and reporting.

The value of all this work does not just lay in a wonderful butterfly report. Some members may be unaware that we have a data exchange agreement with the Hampshire Biodiversity Information Centre (HBIC). Our ability to share data with HBIC about the presence and distribution of our butterflies allows local planning authorities to make better informed decisions about the ecological implications of proposed infrastructure and housing development. This is particularly important for many of our scarcer species. We also receive a useful contribution from HBIC towards our printing and postage costs from the fees paid by developers to access the HBIC database. Good quality data is a building block of conservation so do please keep your records coming.

I must once again thank Jacky Adams, Bob & Jean Annell, Andy & Linda Barker and Kelvin Richards for all the time and skill they devote to the production of this Report. Managing the database and checking for odd or inconsistent records is itself a large task. I would also like to thank the report writers for their willingness and ability to translate numbers on a spreadsheet into pithy and informative species accounts, against a tight clock. It really is a great team effort.

With my best wishes for the new recording season,

Clive Wood Chair, January 2020

Preamble & Overview

This is the thirty-fifth Annual Butterfly Report to be issued by our Branch, following the first 'pioneering prototype' edition edited by Matthew Oates in 1985. A time consuming task indeed in those days without the aid of today's technology.

There are some changes in this year's report. Included for the first time is a Reserves Summary, also a Big Butterfly Count review and a general review of moths recorded on transect. For more detail on what's happening on our three reserves, please refer to the April Newsletter.

Generally, 2019 was considered a successful year for butterflies, boosted of course by the large influx of migrant Painted Lady which topped the table nationally during the Big Butterfly Count. However, this species was far more abundant in the north of England and although high numbers were recorded in Hampshire & Isle of Wight, they were a mere 15% of the individuals recorded during 2009.

In Hampshire 'whites' fared less well than in 2018 as did most of the 'blues'. It was a particularly poor year for Purple Emperor and Speckled Wood.

Although Small Pearl-bordered Fritillary records increased this year, the species in Hampshire seems to be confined only to the narrow portion of Bentley Wood within the county administrative boundary.

A few scarcer migrants were also reported this year. In neighbouring West Sussex, over 100 Long-tailed Blue were recorded (many seen egg laying), but here in Hampshire we only received one single sighting.

Other confirmed species were Queen of Spain Fritillary, Large Tortoiseshell & Camberwell Beauty, the last two being seen early in the year in the New Forest.





Interesting to note that the most species diverse tetrad was an area embracing Stockbridge Down (38 species), the highest number of records were from Magdalen Hill Down (3,753) and the highest annual abundance was in a tetrad at Whippingham on the Isle of Wight (37,503).

We continue to receive records from more and more sources although transects still contribute the largest portion of data (65%). Butterflies seen outside the transect cube should be recorded on a 'casual' system, eg our Hampshire Spreadsheet, iRecord or Living Record. All records are of great value.

Hopefully the Annual Report contains something for everyone, but if you have any comments/thoughts please do contact me.

Deadline for butterfly records and images to be included in the 2020 report is 30 November 2020.

As always, my thanks to all who have submitted records, to those who have contributed to this report in any way and to the Records Sub-Committee for their help and support throughout the year.

Bob Annell

County Butterfly Recorder February 2020

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 (1995-2019) 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.

Flight period: This is the period when the adult butterfly (imago) is on the wing.

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 Conservation Strategy 2015-2025*, as adopted for Hampshire and the Isle of Wight. Six butterfly 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: 2019 Mid Blue: 2010-2018 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 2019. 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.*

Bob Annell

Common Species Summary

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

It was a much better year for Red Admiral and Peacock, also of course Painted Lady but not in such large numbers as further north in the UK.

Comma & Green-veined White both dropped five places and Large White experienced it's lowest position in five years.

Not once in the last twenty years has Meadow Brown been more widely distributed (present in 697 tetrads) however the species has not topped the table since 2012 but has been the most abundant species for all but one of those twenty years (2013).

Speckled Wood returned to its more usual position following its exceptional performance in 2018.

			Positions (by Tetrad)						
Species	Tetrads	Records	7019 ⁷⁰		2017	2016	2015		
Gatekeeper	723	7,655	1	3	2	4	1		
Small White	715	8,128	2	1	5	1	3		
Red Admiral	700	4,371	3	9	1	2	7		
Meadow Brown	697	12,010	4	4	3	5	2		
Large White	671	5,497	5	2	4	3	4		
Brimstone	635	7,085	6	7	7	6	6		
Peacock	631	3,873	7	12	8	7	5		
Painted Lady	617	3,251	8	16	15	17	14		
Speckled Wood	566	6,906	9	5	9	8	9		
Common Blue	521	4,249	10	8	10	15	11		
Comma	519	2,128	11	6	6	9	8		
Marbled White	449	3,321	12	15	16	13	16		
Holly Blue	428	2,179	13	11	13	12	12		
Ringlet	417	3,685	14	13	14	14	15		
Green-veined White	396	2,014	15	10	12	10	13		
Orange-tip	361	2,132	16	17	19	18	19		
Small Tortoiseshell	353	976	17	14	11	11	10		
Small Copper	342	1,676	18	18	18	20	20		
Small Skipper	300	2,674	19	20	20	19	18		
Large Skipper	272	2,236	20	19	17	16	17		
Small Heath	224	3,230	21	22	22	22	22		
Silver-washed Fritillary	201	1,951	22	21	21	21	21		
Brown Argus	146	973	23	23	24	27	24		

Scarcer Species Summary

The 23 scarcer species, all recorded in less than 100 tetrads, are the same as last year, although the list order has changed. Purple Hairstreak dropped from 25th to 33rd, whilst Clouded Yellow also had a poor year, dropping to 34th. On a positive note, Dark Green Fritillary recorded its best year for some time, moving up to 26th, whilst Chalk Hill Blue and Dingy Skipper each rose five places, to 29th and 30th respectively. Most other species more or less held position, and encouragingly, most species in the bottom ten showed increased tetrad coverage. Whilst Pearl-bordered Fritillary has restricted distribution (just 16 tetrads) it is doing well due to favourable management by Forestry England. Brown Hairstreak moved up three places to 39th, and appears to be spreading within Hampshire. Conversely, Small Pearl-bordered Fritillary, at the bottom of the list continues its precarious existence as a Hampshire species, with just 12 records from two tetrads.

			Positions (by Tetrad)							
Species	Tetrads	Records	2019	2018	2017	2016	2015			
Green Hairstreak	98	338	24	26	27	25	27			
White Admiral	92	394	25	24	23	26	25			
Dark Green Fritillary	85	619	26	30	28	28	28			
Essex Skipper	84	233	27	28	25	24	23			
Silver-studded Blue	77	786	28	29	29	31	30			
Chalk Hill Blue	67	759	29	34	33	34	33			
Dingy Skipper	66	382	30	35	32	29	29			
Grizzled Skipper	64	271	31	33	34	30	31			
Grayling	53	495	32	31	30	32	32			
Purple Hairstreak	50	169	33	25	31	35	35			
Clouded Yellow	49	93	34	27	26	23	26			
White-letter Hairstreak	49	82	35	32	37	42	41			
Small Blue	46	418	36	37	35	33	34			
Wall	39	161	37	38	39	38	37			
Purple Emperor	29	53	38	36	36	39	36			
Brown Hairstreak	25	76	39	42	44	44	44			
Adonis Blue	24	229	40	39	40	37	39			
Duke of Burgundy	21	123	41	41	38	36	38			
Glanville Fritillary	18	90	42	40	42	40	42			
Pearl-bordered Fritillary	16	277	43	43	41	41	40			
Marsh Fritillary	16	63	44	44	45	45	46			
Silver-spotted Skipper	11	70	45	45	43	43	43			
Small Pearl-bordered Frit.	2	12	46	46	46	46	45			

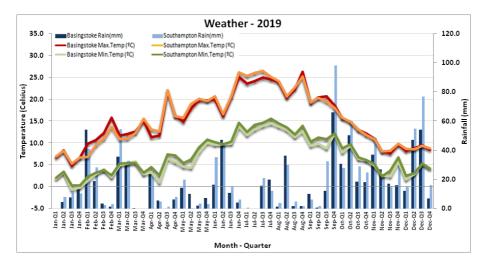
Weather Report 2019

Dave Owen

As in previous years, this report has been compiled with reference to Meteorological Office summaries and data from private weather stations at Southampton and Basingstoke (Chineham, run by Simon Neil).

http://www.metoffice.gov.uk/climate/uk/summaries/2019)

www.southamptonweather.co.uk



2019 was another rather warm year.

January started very dry with negligible rain in the first two weeks as high pressure dominated. This eased away to allow unsettled cold north-westerly winds later in the month.

February started cold with an unusually heavy snowfall affecting the north of Hampshire on the first day of the month. The chaos that ensued caused Basingstoke to make the national news and nearby Odiham recorded 19cm of snowfall. However, the month ended up very mild with a spell of rather stormy weather arriving in the first week. Thereafter, spells of warm southerly winds culminated in an extraordinary final week with new day time temperature records being set on several days although nights were still rather chilly under clear skies.

March was another warm month at over 1°C above normal with average rainfall. After a changeable start it became increasingly settled after mid-month with plenty of warm weather.

After an unsettled start **April** became dominated by high pressure and was a bit warmer and drier than normal with a very warm spell around Easter.

May started cool and unsettled until a good spell of warmer and settled conditions became established by mid-month. Although it turned unsettled during the final week it was not far from an average month and the driest May for four years overall.

June looked like being a poor summer month with a lot of cool and wet weather in the second week. A short hot spell at the end of the month meant that temperatures came out close to average but it was very wet.

July started quite unremarkable with a lot of dry weather but the second half became increasingly hot and thundery with wide variations in rainfall as a result. The 25th was the key day with a new UK temperature record set in Cambridge at 38.7°C with local temperatures widely reaching 35°C. It was another above average month at over 1°C above normal and nights were especially warm.

August ended up a rather warm month but after a quiet start it turned rather autumnal with spells of wet and windy weather. Things improved after mid-month with a hot spell that peaked on the Bank Holiday weekend. Otherwise it was a pretty average month.

After an unsettled start, **September** saw a very pleasant spell of weather that lasted until the final third of the month which then became very wet. That meant it became a rather wet month although in other respects it was pretty average.

October was a wet month with the jet stream sending low pressure areas further south than normal. With temperatures and sunshine a little lower than normal it was rather poor overall.

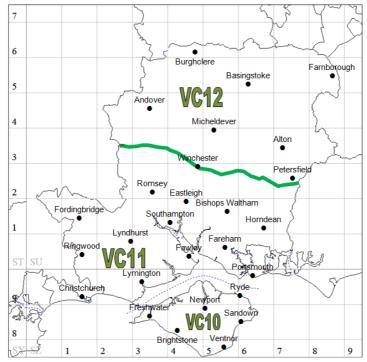
November followed a very similar pattern with the jet stream further south than usual leading to frequent spells of rain. It was poor in all respects being cooler, wetter and duller than normal.

In **December** there was little respite from the train of unsettled weather heading in off the Atlantic with a lot of rain leading to local flooding issues. It was only in the last week that conditions eased and some tentative drying out could begin. Unlike November it was milder than average.

To summarise, the fairly mild winter and spring was followed by a summer of mean monthly temperatures which were above average for June, July and August. It was however, the seventh wettest summer since 1910.

This resulted in an early emergence for some of our spring species in Hampshire & Isle of Wight, including the Pearl-bordered Fritillary. Also of note was the extremely early Holly Blue recorded at the end of January.

Associated with the early emergence of some species is the increased possibility of second (even third) broods during the extended summer period. The mis-match of availability of larval foodplant is also a consideration. A puzzle to ponder.



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 2019

Transect Summary

Andy & Linda Barker

This brief account provides an overview of transect recording for the year and the pattern of change. It is best read in conjunction with the Table on Page 64.

The total number of active transects walked in 2019 was 158, with 142 of these having data for both 2019 and 2018. As the transect routes are unchanged from one year to the next, this large sample provides a very good representation of overall species trends. For species that are poorly represented on transects, the flight period graphs and overall trends are based on all data received.

As many of you will know, the transect recording season runs for 26 weeks from the beginning of April to the end of September. Once again we can report a high level of completion, with 85% of transects having achieved 20-26 weeks coverage and 67% with 23-26 weeks. Obtaining such comprehensive data makes all the difference, and contributes significantly to our understanding of local, regional and national trends. This in turns helps prioritise conservation efforts for those species in greatest need. Many thanks to all those involved, your efforts are very much appreciated.

Relative to 2018, the number of butterflies recorded on transect rose slightly (+15%), but as stated last year, this is partly a reflection of the extra transects (there were 11 new transects in 2019). A generally dry and sunny April/May ensured a good start to the season, with species like Orange-tip, Dingy Skipper and Green Hairstreak all doing particularly well, and peaking one to three weeks earlier than 2018. Of the hibernating species, Brimstone and Peacock were seen in good numbers in the spring, whilst post-hibernation numbers for Small Tortoiseshell and Comma were considerably down. This had knock-on effects later in the year.

A period of exceptionally wet weather in June slowed things down, such that summer species like Meadow Brown, Gatekeeper, Silver-washed Fritillary, Chalk Hill Blue and Silver-studded Blue all peaked slightly later than 2018. It seems that the double-brooded Lycaenids such as Brown Argus, Common Blue and Holly Blue, were particularly affected, with their summer broods being much reduced. In most years the summer brood is usually stronger than that seen in spring.

In overall terms the skippers did well in 2019 and, apart from Speckled Wood and Grayling, this was also true of the 'browns', including a very encouraging rise for the Wall. Most fritillaries were also up, but migrant species showed a mixed picture, with Painted Lady having its best year for a decade, Red Admiral doing well, but Clouded Yellow significantly down. Orange-tip and Brimstone both rose, but other 'Pierids' such as Green-veined White and Large White declined from the highs of 2018. Small White also dropped back, and was on its way to a very poor season, until a late resurgence in late August and early September. The worrying decline of Small Tortoiseshell continues, whilst White Admiral and Comma were also disappointing. Small Copper which had such a great end to the 2018 season, showed well in spring 2019, but was disappointing later in the year. In overall terms 2019 can probably be regarded as a positive season, but as usual there were clear winners and losers.

Big Butterfly Count

Jacky Adams

	Hampshire & Isle of Wight Count	Ranking in Hampshire & Isle of Wight				Ranking in UK		
Species	2019	2019	2018	2017		2019	2018	2017
Gatekeeper	9,700	1	3	1		4	3	1
Meadow Brown	7,019	2	4	5		6	5	3
Small White	5,083	3	1	3		3	1	4
Large White	4,064	4	2	4		5	2	5
Painted Lady	2,435	5	15	13		1	13	14
Peacock	2,419	6	14	7		2	4	6
Red Admiral	2,348	7	8	2		7	9	2
Common Blue	1,401	8	6	11		13	6	9
Brimstone	1,250	9	11	9		18	17	17
Marbled White	1,122	10	19	17		17	19	18
Ringlet	979	11	17	15		12	14	11
Comma	949	12	5	6		11	11	7
Speckled Wood	900	13	7	10		9	8	10
Green-veined White	646	14	9	14		10	7	12
Holly Blue	565	15	10	16		15	12	15
Small Tortoiseshell	534	16	16	12		8	10	8
Small Copper	543	17	18	18		16	16	16
Six-spot Burnet	418	18	12	8		14	15	13
Silver Y	98	19	13	19		19	18	19

Rankings: Green - top five; Red - bottom five; Blue - intermediate

The 'Big Butterfly Count' is a nationwide survey aimed at helping to assess the health of the environment. It asks people to carry out a 15 minute count of butterflies in their local area on a bright day between mid July and mid August, when many common species will be on the wing. This survey has been running since 2010 and currently focuses on 19 widespread species made up of 17 butterflies and two day flying moths, as listed above.

Thanks go to all those who carried out this survey locally in 2019. Counts took place at over 1,400 sites in Hampshire and a further 275 on the Isle of Wight. As shown above, all 19 species were recorded somewhere in our two counties, with Gatekeeper, Meadow Brown, Small White and Large White being amongst the 'top five' species seen, as has been the case since 2014. Marbled White also had a good year locally shooting up the ranks.

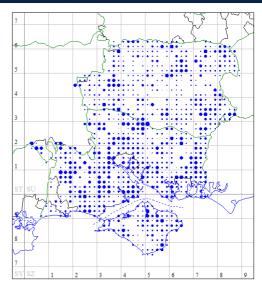
There was a well reported influx of the migrant Painted Lady in 2019, with this taking fifth spot locally. The increase in this species was more notable elsewhere in the country with Painted Lady being the Big Butterfly Count's most recorded species across the UK as a whole. Similarly, while Small Tortoiseshell had a good year nationally, being eighth most frequently seen, this was not mirrored locally, where it remains in 16th position.

Butterfly Record Coverage 2019

Recorded tetrads in 2019 – 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 2019 records: 98,402 No of tetrads in 2019: 961



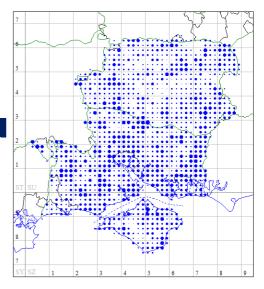
Butterfly Record Coverage 2015 - 2019 (Millennium Atlas +15)

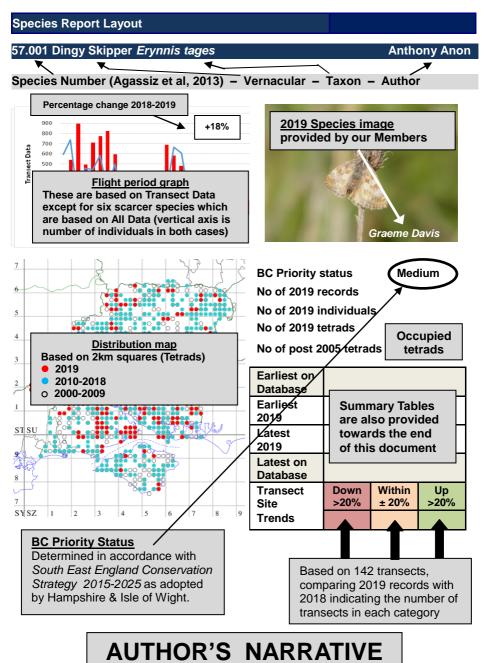
Recorded tetrads in the five years 2015 to 2019 – as per the preceding map, the bigger the circle, the greater the recording effort.

No of records: 442,730 No of tetrads: 1,147

Tetrad Coverage 2014 - 2019





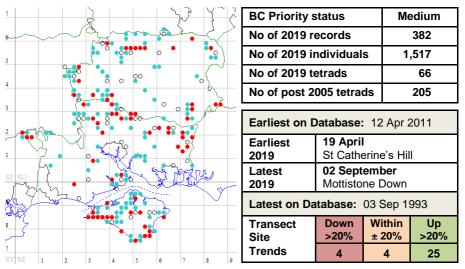


Generally prepared using information & data available on 30 November 2019

57.001 Dingy Skipper Erynnis tages

180 160 +30% 140 Transect Data 120 100 80 60 40 20 An May Jun .tot 2019 2018





This was an excellent year for Dingy Skipper with the transect trend up by 30%. The first were singles seen on 19 April on St. Catherines Hill and in the Meon Valley. By 30 April they were being seen everywhere on the chalk downlands, including 12 on Stephen Castle Down, seven on Martin Down, four on Noar Hill, two on The Mountain and on the new Magdalen Hill Tree and Shrub East transect two were recorded plus one on North Down.

Noar Hill is a great place to find Dingy Skipper (when also looking for Duke of Burgundy) and good numbers were reported there in May, including 17 on 12 May, 14 on 14 May, 12 on 21 May and ten on 23 May.

On Danebury Hill ten were on transect on 14 May, on Beacon Hill 16 on 23 May and seven at Bramshott on 13 May. From the north of the county there were amazing counts of 55 at Old Burghclere Chalk Pits and 91 on Quarley Hill.

On the Isle of Wight Dingy Skipper were seen on Mottistone Down from 20 April when three were seen and six on transect on 25 April, and on 13 May seven at Coombe Bottom. On Bonchurch Down there were five on 13 May and 47 on 01 June. Sightings continued through June with one at Brook on 01 August and one at Mottistone on 02 September suggesting a second brood there.

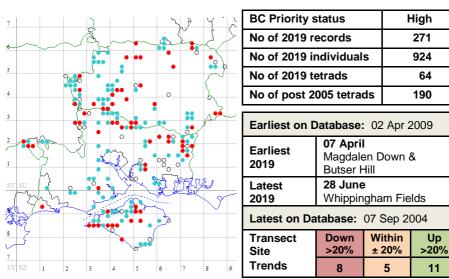
Jenny Mallett

57.002 Grizzled Skipper Pyrgus malvae

100 90 +6% 80 70 Transect Data 60 50 40 30 20 10 Ju Ap Jun Aua 2019 2018



Jenny Mallett



It was another good year for Grizzled Skipper with an earlier start on 07 April when two were seen on Butser Hill and one on Magdalen Hill Down. Magdalen Hill Original transect maintained last year's second position in the top 20 rankings of all Hampshire & Isle of Wight transects and the butterfly was also recorded on all the other transects at Magdalen Hill Down.

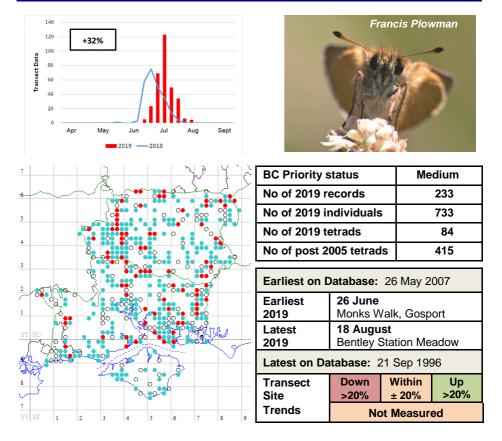
It could be described as 'abundant' on Martin Down, with records of six on 23 April, 12 on 10 May, 41 on 15 May and 22 on 21 May with good numbers continuing until 24 June. On Yew Hill Reserve two were recorded on 10 May, 14 May and 21 May and one on 07 June. In Botley Wood, where it has hung on precariously, there were two seen on 12 May, three on 19 May and two on 21 May.

On the Isle of Wight Mottistone Down was the place to see Grizzled Skipper with the first two on 11 April, five on 20 April, 11 on 25 April, 16 on 10 May and three on 21 May. On 11 May one was recorded at Afton Down Chalk Pit and three on Tennyson Down.

The last record of the season was on 28 June at Whippingham Fields.

Mervyn Grist

57.005 Essex Skipper Thymelicus lineola



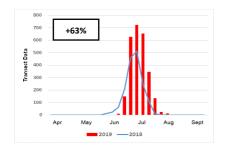
Overwintering as an egg makes this species late emerging, particularly this year due to the cool spring. The first double figure day sightings came at the end of June with 18 at Monks Walk, Fraterfields Wood, Gosport but rose rapidly thereafter with 38 there on 04 July and a maximum of 40 at Hawley Meadows on 12 July. As the hot July closed populations fell sharply with a last significant day count of five at Petersfield Heath on 04 August.

The transect site list was headed by Pilot Hill again with a total of 126 sightings increased due to a requested delay to the onset of sheep grazing this year. Decent stems of their main food plant Cocksfoot grass persisted into July. Next at 31 was Sims Wood (SE New Forest), followed by 26 at RSPB Hazely Heath. Non- transect good sites were Monks Walk, Gosport (87), Hawley Meadows (50) and Creech Wood (35). The recently started transect at Harewood Common also benefitted from late grazing with 18 versus six last year.

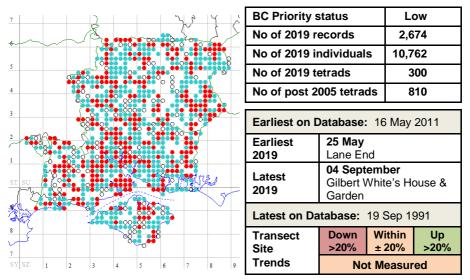
Combining all records showed a 37% rise from the low point of 535 in 2018. There were no records from the Isle of Wight.

57.006 Small Skipper Thymelicus sylvestris

Mervyn Grist







This active species is found throughout Hampshire and Isle of Wight as its principal larval food plant, Yorkshire Fog (a grass) is tolerant of most soil types. The earliest multiple record was at Fleming Park, Eastleigh on 14 June. Then there followed a rapid general build up into July. The last significant day count was at Chosley Farm, Odiham on 23 August – a much longer flight period than its near relative, the Essex Skipper. More than one hundred individuals were counted on 21 Hampshire sites.

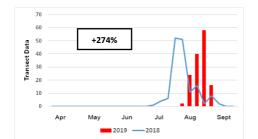
Transect totals reached 438 at Bramshott Common, 367 across the Martin Down areas, and 313 on the RSPB Hazely Heath areas in the north east of Hampshire. Non-transect high counts were at Havant Thicket (191) and the southern part of Hawley Meadows (124). The five transects on our Magdalen Hill Down reserve yielded 278 in total.

Sixteen sites with various geologies and elevations held the species on the Isle of Wight. By far the largest total was at Whippingam Fields in the lower Medina valley with 300 sightings followed by Kemp Hill Moor Copse in east Wight with 42.

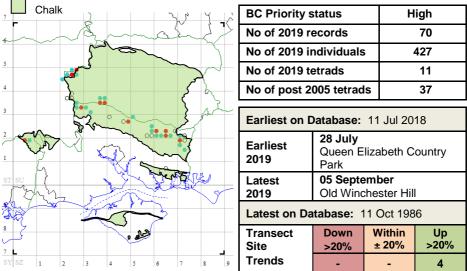
Combining all records yields 10,762 individuals, a 61% increase over 2018's total but well below the 15,961 in 2014.

57.008 Silver-spotted Skipper Hesperia comma

Andy Barker





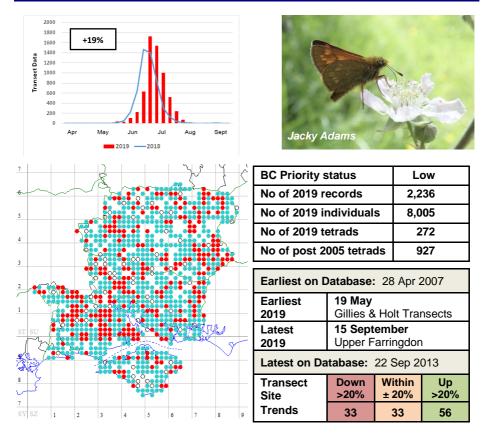


This rare species is known from just eight Hampshire sites (Broughton Down, Old Winchester Hill, St. Catherine's Hill, Perham Ranges, Oxenbourne Down/Queen Elizabeth Country Park, Beacon Hill NNR, Stockbridge Down and Martin Down), and is absent from the Isle of Wight. The Broughton Down transect was not walked in 2019, but St.Catherine's Hill and the Meon Valley sites all showed significant increases. It is encouraging to note that Beacon Hill NNR produced an Annual Index of 12 - its best tally since 2013.

The season began 17 days later than 2018, with larval development no doubt affected by the wet June. Incredibly, the flight period graph shows peak season a full four weeks later than 2018. However, in the absence of Broughton Down transect data (an early site) this is a slightly distorted picture, as the Meon Valley sites tend to emerge later. The highest counts were 50 on 11 August at Broughton Down, and 41 on 27 August at Old Winchester Hill. After a strong flight period throughout August, the season tailed off quickly in the first week of September, finishing five days earlier than 2018. The late start and early finish gave a very short season of just 40 days.

57.009 Large Skipper Ochlodes sylvanus

Amanda Scott



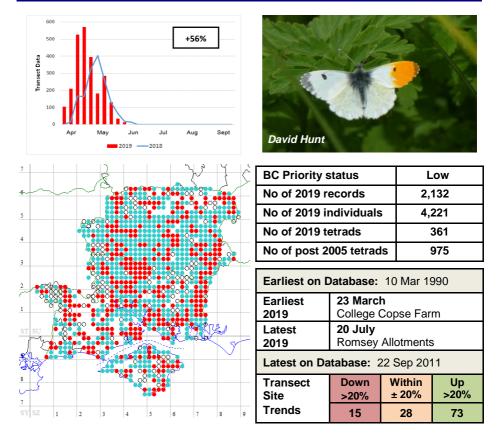
The year continued the upward trend that has persisted since 2016. The season began only a little later than in 2018, followed closely by the Isle of Wight's first sighting on 22 May (Red Cliff, Sandown). The latest mainland record (at Upper Farringdon) was, however, a month later than in 2018, just a week shy of the 2013 record. The season ended earlier on the Isle of Wight, where the final record was 05 August (Briddlesford Woods), ten days later than 2018.

As in previous years, most records (64%) were of one or two individuals. The average number of individuals per record was 3.57. Numbers of individuals sighted peaked in the first week of July, a week later than in 2018, possibly due to the bad weather three weeks earlier as emergence began. The highest number of individuals for a single record (107) was in that week, at Standing Hat, New Forest, and the second highest (84) was at the same location on 08 July; 54% of individuals were sighted in those two weeks. The highest count for the Isle of Wight was 10, on 01 June at Brook Down.

Overall, this was another good year for the Large Skipper.

58.003 Orange-tip Anthocharis cardamines

Bob Whitmarsh



Orange-tip were recorded between late March and mid July. Overall there were 2,132 records (including 146 from the Isle of Wight (IoW)), made up of 4,221 individuals (239 IoW) including 1,293 singletons. Of the overall records, 1,477 records were on transect. The most seen at any one time was 30 at Hunton Lane on 24 May and the same number at Martin Down on 15 May, both off-transect and 3-4 weeks after the main peak in numbers. Where the gender was determined in the off-transect records there were 133 males and 32 females, a ratio of 4.2:1.

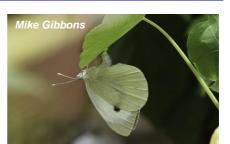
The total of 2,532 Orange-tip counted on transect (149 loW) was up relative to 2018, with a rise of 56% on transects walked both years. Twelve transects recorded 50 or more individuals in total but the most seen on transect was 109 at Breamore. Out of 142 transects, 58 more detected gains than losses. In 2019 the counts on transect peaked during the end of April, two weeks earlier than in 2018.

2019 was a much better year than 2018 for the species (57% increase in total numbers) continuing a steady increase seen in Hampshire since 2015.

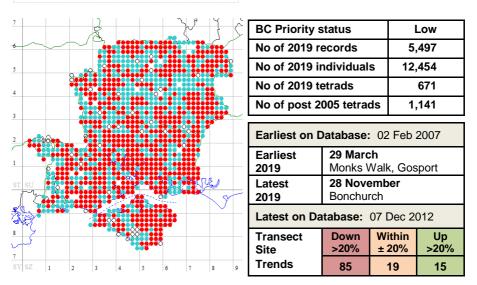
(The photo shows an extremely rare male/female gynandromorph).

58.006 Large White Pieris brassicae





Jacky Adams



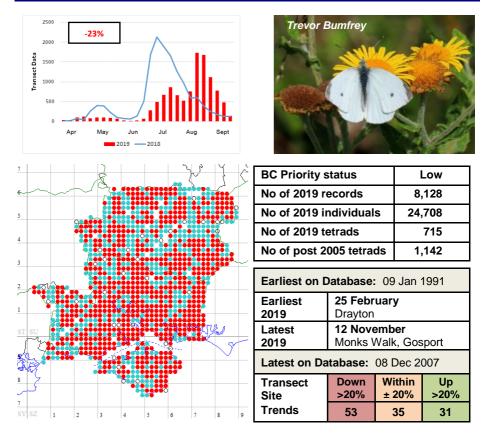
While fewer Large White were seen in 2019 than in 2018 (a good year for the species) numbers were comparable with many previous years.

Adults started to be seen regularly in early April but spring numbers were generally low. The summer brood started to emerge in early July, with both mating pairs and egg laying being recorded in the second week of that month, before numbers peaked over the following two weeks. In contrast to 2018, there was then a second peak in numbers in late August with the highest casual counts all seen during this period. The highest Hampshire count, 100 at Old Winchester Hill, was recorded on 23 August, while the greatest Isle of Wight numbers (64) came from a count at Osbourne House on 31 August.

Most transects saw a decrease in numbers of Large White compared to 2018. The transect at Mottisfont Park and Gardens bucked this trend with an increase in its annual index of 48% to 337, the greatest recorded this year. In contrast the highest annual index on the Isle of Wight was at Kemphill Moor Copse where its total of 211 was a 56% decrease on the 2018 figure.

58.007 Small White Pieris rapae

Jacky Adams



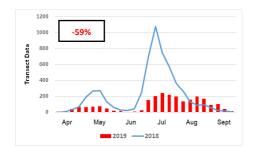
Having had a good year in 2018, numbers of Small White eased back in 2019 with the butterfly dropping from top to third rank in the Big Butterfly Count and being seen less frequently on transects, particularly in the northern half of Hampshire. Nonetheless, this remains one of the most common and widespread species seen in the two counties.

This species overwinters as a pupa. In 2019 adults were seen slightly earlier than in 2018, starting to emerge in numbers towards the end of March but spring numbers were very low and the usual summer peak was modest compared to 2018. However numbers then started to rise, peaking on transects in late August, possibly as a result of migration from the continent.

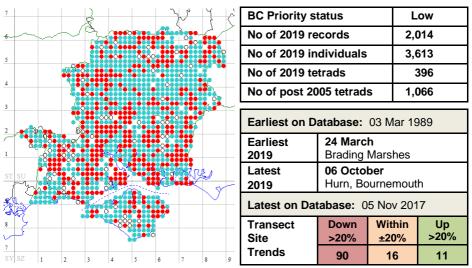
All casual counts of over 100 occurred during the second half of August and early September, with the highest number, some 150 individuals, being recorded near Hucklesbrook in the Avon Valley. Other notable totals were seen at Old Winchester Hill, Noar Hill, Stockbridge Down, Fort Cumberland at the entrance to Langstone Harbour and in a Big Butterfly Count near Lepe. On the Isle of Wight the greatest casual sighting was of about 60 individuals at Brading Marshes RSPB Reserve in late August.

58.008 Green-veined White Pieris napi

Jacky Adams







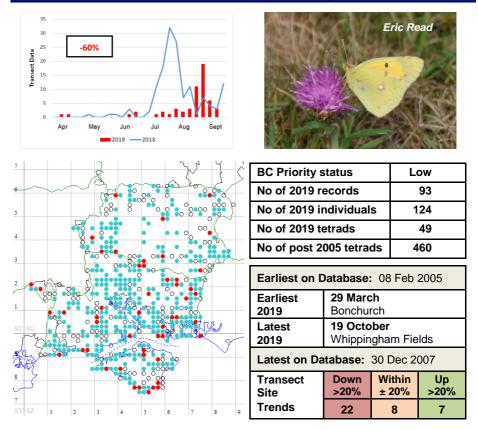
Green-veined White had a poor year in 2019, although it remains a widespread species.

Last year's report noted that this species may be vulnerable to drought and wondered what impact the long dry spell seen in 2018 would have on its numbers. The 2019 figures show that something certainly had a negative impact, with numbers on transects falling by nearly 60% and 77% of transects where the species was recorded in 2018 seeing either a significant drop in sightings or having no record of it at all. Winnall Moors Transect again had the highest annual index at 188, only a third of the numbers seen there last year.

The adult butterflies started to emerge in the last week of March, some three weeks earlier than in 2018. There was a low spring 'peak' from late April through May, with the highest casual total on the Isle of Wight recorded at Sandford in early May, albeit with only nine seen. The summer brood started to emerge in late June with a peak in the third week of July followed by a second, smaller peak in early September. The highest casual count in Hampshire was on 28 August, when 42 were recorded at Queen Elizabeth Country Park.

58.010 Clouded Yellow Colias croceus

Mike Gibbons



For those thinking 2019 would be a good Clouded Yellow year because of the Painted Lady invasion, it would prove quite disappointing. Numbers were the lowest since 2013 with the combined transect trend down 60% from 2018.

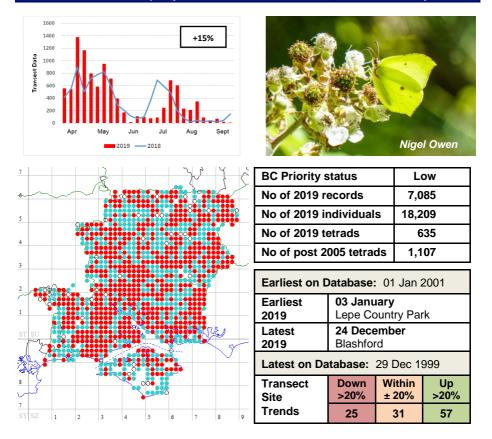
As is the usual case, most records were of ones and twos throughout the two counties with the main arrivals starting from late June. However, warm weather in February, March and April brought some early observations across the two counties.

Compared to recent years the flight period ended early with the last butterflies being seen in mid-October, which was extremely early for Hampshire and the Isle of Wight.

Egg laying was noted at Southbourne Undercliff on 08 September but numbers of adults at this location were well down in the autumn.

58.013 Brimstone Gonepteryx rhamni

Jacky Adams



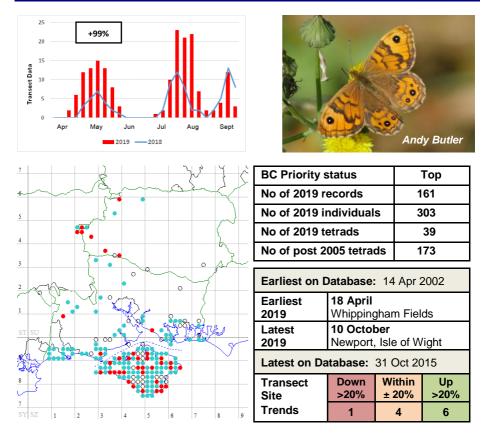
Brimstone continued to flourish in 2019, with the second year on year rise in numbers recorded on transects. Unlike in 2018, when few Brimstone were seen prior to the commencement of transect walks in April, males were widely recorded from about mid-February onwards, with the paler females seen a few weeks later and mating pairs recorded from late March.

Egg laying was observed from late April through to late May, with reports of newly emerged Brimstone from late June, although numbers for the annual brood did not peak until the second half of July, about two weeks later than in 2018. Brimstone over-winters as an adult, so it is not surprising that occasional sightings were still being recorded into November.

Brimstone is a widespread and common butterfly throughout Hampshire being recorded in nearly 600 Big Butterfly Counts and on 150 transects in the County. Highest transect annual indices were at Pamber Forest (506) and Breamore (465). It is less widespread or common on the Isle of Wight where it was only recorded on 29 Big Butterfly Counts and six transect routes, with the highest annual index being 64 at Kemphill Moor Copse.

59.002 Wall Lasiommata megera

Pete Durnell



After a series of poor years Wall numbers picked up markedly on the mainland particularly around its current stronghold in the Shipton Bellinger area. On the Isle of Wight it was observed at a good number of locations but counts were generally fairly low with just a single double figure count at Shepherds Chine on 15 May.

The first sighting of the year came from Whippingham on the 18 April. None were reported from the mainland until 15 May when two were seen at Quarley Hill Fort near Andover.

There were welcome records again from Titchfield Haven on 28 May and on the transects at Stockbridge Down and Mockbeggar but just a single individual was observed at this species former stronghold at Pennington. There were no records from any other mainland localities.

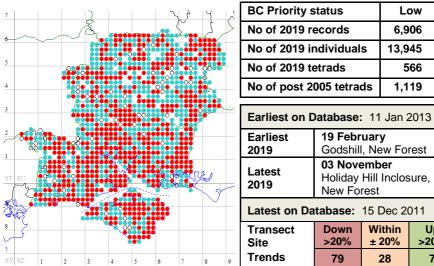
Excellent numbers were recorded on the Shipton Bellinger transect throughout August with a peak count of 12 nearby on the 13 August.

Evidence of a third generation came from the Isle of Wight with records from Newport on 08 and 10 October.

59.003 Speckled Wood Pararge aegeria

1600 1400 -36% 1200 Transect Data 1000 800 600 400 200 0 2019 2018





Speckled Wood were down to earth with a bump following their record year of 2018 as can be easily seen from the Transect Site Trends figures above, with an average of 89 individuals per transect in 2019 compared to 133 per transect in 2018.

There were only nine single weekly transect counts exceeding 30 individuals this year, three of these were at Mockbeggar and three at the adjacent Blashford transects. The first double figure counts were reported from Gosport & Brockenhurst on 17 April.

The highest single weekly count on transect was 47 (Mockbeggar), followed by 41 at Kemphill Moor Copse (Isle of Wight) and Mockbeggar again with 41 & 39. Three of these four results were recorded in September, the other mid August.

The top annual count of 370 was achieved at Kemphill Moor Copse followed by 256 at Mockbeggar & Blashford North.

The highest individual counts overall were at Fleming Park, Eastleigh (42, 28 & 24) and at Fattingpark Copse on the Isle of Wight (26). During the Big Butterfly Count, the highest count was 20 at Shipton Bellinger.

Vice County 11 remains the stronghold of the species with 7.80 individuals/km² followed by Vice County 10 with 4.64/km² and Vice County 12 at 4.12 individuals/km² (based on recorded tetrads only).

Low

6,906

13,945

566

1,119

Within

± 20%

28

79

Up

>20%

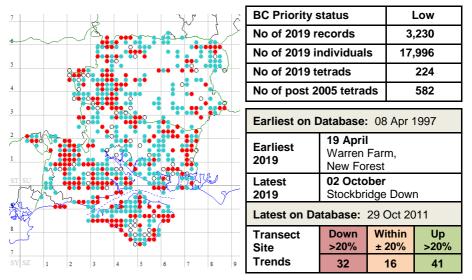
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59.005 Small Heath Coenonympha pamphilus

Mark Tutton







Overall compared with 2018, the year was slightly better for Small Heath. Total numbers were up by a reasonable 25% and 41 transects showed a greater than 20% increase in numbers. Sixteen transects remained the same and more worryingly 32 showed an overall decrease.

The first sighting was on the Warren Farm transect and this began a bumper first brood exceeding 2018, ramping up steadily to nearly 2,000 individuals reported during the third week of June. This was significantly more than the previous year's first brood which peaked at 750.

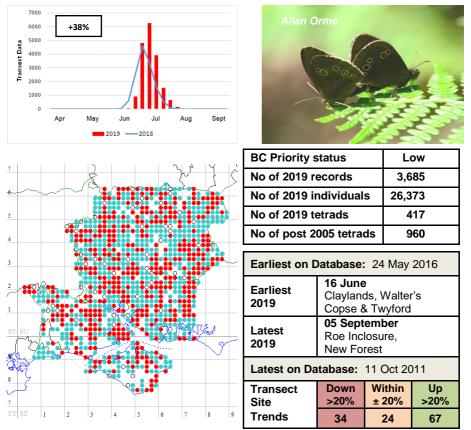
However the second brood did not match that of the previous year's peak numbers, reaching a climax in mid-August and slowly tailing off through September.

The highest daily count in excess of 1,000 individuals was on 05 July at Old Winchester Hill. Stockbridge Down had several daily records of over 200 and the Isle of Wight site at Whippingham Fields had several daily reports in excess of 100.

Low numbers continued through September with Stockbridge Down still producing reasonable numbers right up until the end of the month.

59.009 Ringlet Aphantopus hyperantus

Rupert Broadway



It was a very good 2019 season for the Ringlet, which is widespread across the two counties in rough grassland and woodland rides. Transect data indicates a rise of nearly 40% compared to 2018.

Ringlet were a little later than in 2018 with first sightings on the mainland and Isle of Wight being on 16 June. As usual numbers fell off sharply as summer progressed and it was nearly gone by the end of August.

The highest counts of the year came from the Basing Wood transect which recorded 377 on 01 July and 750 the following week; with 372 recorded from the Breamore transect on 4 July. Numbers on the Isle of Wight were generally more modest with the Island providing approximately 6% of total records received, the highest recorded count being 65 on the Briddlesford Woods transect on 09 July.

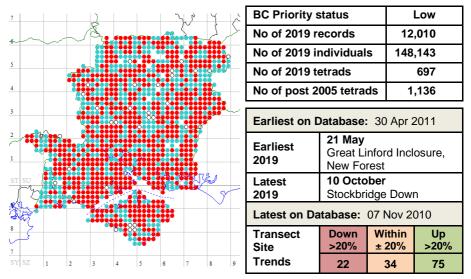
It is remarkable how the life cycle of this species often mirrors that of one of its close relatives, the Marbled White, which often shares its grassland habitat. Such was the case in 2019 when both flight periods and improvement in transect numbers compared to 2018 correlated very closely.

59.010 Meadow Brown Maniola jurtina

Susan Clarke







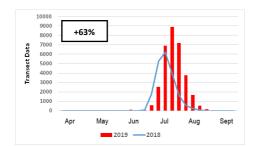
This is a very common species, able to breed wherever there are patches of suitable grassland. It also has a surprisingly long flight period which, in 2019, started in late May and finished in early October. The peak was in early July, a week or so later than in 2018.

The Meadow Brown seems to be a very flexible species and there is evidence it can over-winter as either a fairly small or a rather mature caterpillar. That might, at least partly, account for its long adult emergence period. (For details see the recently published "Life Cycles of British & Irish Butterflies" by Peter Eeles). This flexibility probably helps to "even out" the effects of unusual weather patterns and, taken as a whole, the Hampshire population seldom shows much fluctuation, although individual sites can be affected by local factors such as the timing and frequency of grassland mowing.

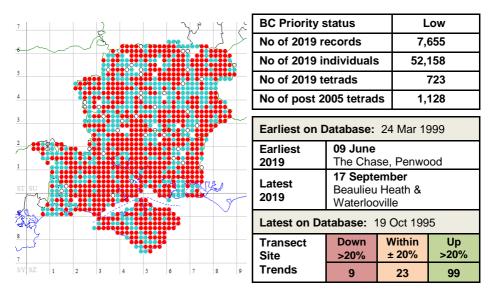
At some sites, this species can be very numerous and this was noted by several of the recorders who took part in the "Big Butterfly Count 2019". One recorder said "It was impossible to count all the Meadow Browns in the field. Every step I took another rose up (it was a dry patch on a rainy day). I put 100 but it may have been more."

59.011 Gatekeeper Pyronia tithonus

Bob Taylor







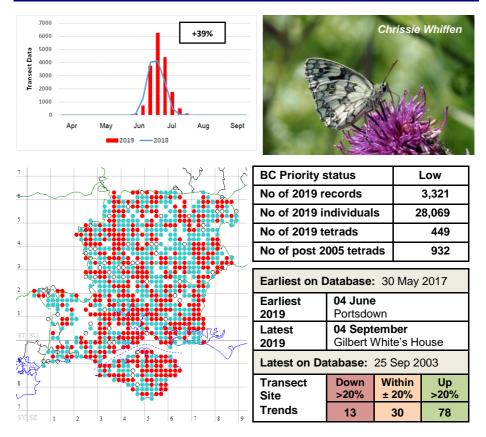
Gatekeeper saw out the decade with one of its best seasons in 20 years. The transect record was up 63% and the overall total up 67%. 75% of transects showed an increase of over 20% compared to 2018. The flight season started relatively late.

The early sighting at Penwood was two days earlier than the first sighting of 2018 with the first Isle of Wight at Haylands being on 25 June. In comparison to 2018 the flight period shifted to the right by at least a week. The peak week of 22 July saw nearly 30% more recorded than in 2018 and the following week also recorded more than the peak of 2018. Unlike 2018 specimens were still being recorded through to the middle of September with three recorded on 17 September.

Whippingham Fields (Isle of Wight) again recorded the most (2,371) with 786 recorded on 12 July but surprisingly this was a decrease on its 2018 total. In comparison 2018 saw only two other transects exceed 500 whilst in 2019 eleven transects recorded over 500. Latchmore casual walk doubled to 1,110 and both Frohawk and Bramshott Common recorded more than 900.

59.012 Marbled White *Melanargia galathea*

Rupert Broadway



It was an excellent season for the Marbled White which can occur in the region in large numbers in its favoured habitat. Last year's report speculated that the previous summer's prolonged heatwave may have caused the species to complete its life cycle quickly and disappear; if so it certainly responded well in the less extreme weather of 2019 with the transect data showing an increase of nearly 40% on 2018.

The first few records in early June were all from the Portsmouth area; with the Whippingham Fields transect providing the first records from the Isle of Wight. This latter site provided counts of around 1,600 on 28 June and 05 July. Elsewhere there were 773 recorded from Pitt Down on 04 July and 999+ at Thorness on the Isle of Wight the following day, indicating a peak in the last week of June and first week of July.

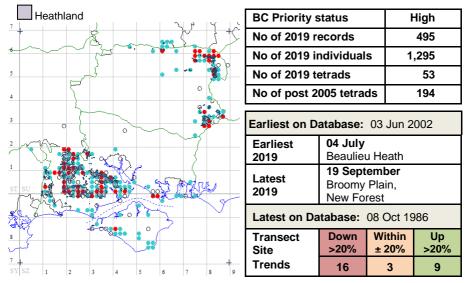
The Marbled White traditionally comes and goes within a few weeks and 2019 was no exception, with only 100 or so of over 3,300 records in total after 31 July, a count of 40 from Chawton on 18 August being the most noteworthy late record; and only two recorded sightings in September.

59.013 Grayling Hipparchia semele

Nigel Owen





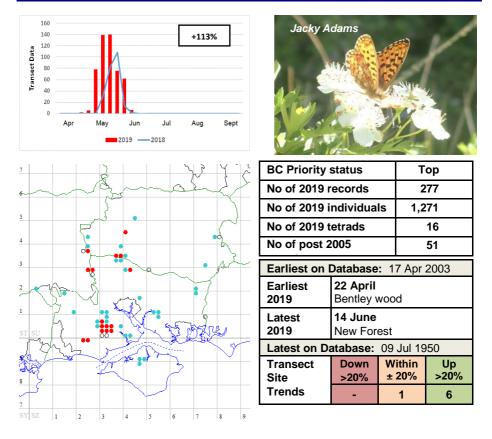


Overall, Grayling records increased significantly in 2019, with an increase of just under 22% on the numbers of individuals seen, and a more modest 3% rise in the number of separate records. However, this picture is skewed by the increase in transect work during the year. Five new transects were started this year on the heathlands of the New Forest, specifically to increase our understanding of Grayling in its most significant Hampshire habitat. These five transects account for 142 records, and 386 individuals, approaching 30% of all this year's records. So, without this extra effort, it can be assumed that we would be reporting a decrease in numbers. The current level of monitoring will hopefully continue in future years, thus providing more comparable data.

In addition to its stronghold in the New Forest, Grayling is also found in coastal settings, and also in the north east of the county. Indeed, the highest single count, of 24 individuals, came from a transect at Eversley Common. The 12 records totalling 18 individuals from Mottistone Down were the only Isle of Wight sightings. This season's flight period was shorter than last, with no June records, and emergence in the first week in July. The peak season was from late July through the month of August. The final record was a week earlier than last year's latest.

59.014 Pearl-bordered Fritillary Boloria euphrosyne

Andy Barker



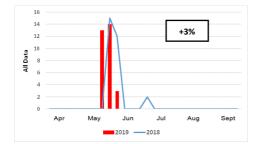
The decade concluded with another April emergence for this species, giving a total of 6/10 first sighting dates in April for the years 2010-2019. This compares with 3/10 for 2000-2009, and just 2/10 for 1990-1999. The average emergence date in each decade has moved from 05 May for the 1990's, to 02 May for 2000-2009 and 30 April for 2010-2019. This phenological shift undoubtedly reflects the overall warming recorded in the UK since the start of the new Millennium.

A warm spring certainly benefits this species and 2019 proved to be a very good year. The dry and sunny weather throughout May gave an excellent flight season, with transects recording significant increases. The New Forest remains the Hampshire stronghold, with woods east of Brockenhurst producing peak counts of 70 on 12 May and 49 on 14 May. In central-west Hampshire, Bentley Wood (Eastern Clearing) peaked at 19 on 13 May, whilst sites near Stockbridge gave a maximum of 11 on 12 May. The small colony near Winchester had a modest peak of seven on 13 May.

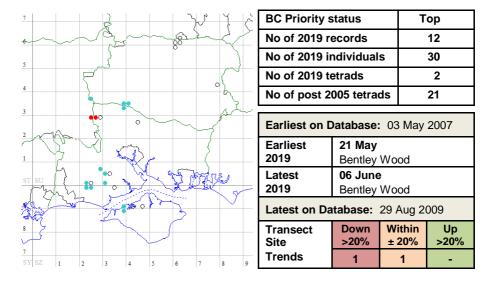
The start of wet weather in early June marked the end of the season, with just six individuals seen during the second week of June.

59.015 Small Pearl-bordered Fritillary Boloria selene

Linda Barker







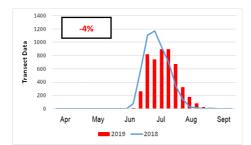
The Small Pearl-bordered Fritillary was first seen one week earlier in 2019, 21 May, compared to 28 May in 2018. Individuals were seen on transect on three occasions over a period of 16 days, three on 23 May, one on 01 June and three on 06 June making an annual index of seven, a slight improvement on 2018 when the Annual Index was five. There were five non-transect counts, two counts for 21 May of two and four, and counts of four on 23 May, six on 01 June and seven on 02 June.

In 2018 I reported that the Small Pearl-bordered Fritillary had been recorded from two New Forest sites; Holmsley Inclosure, where two were seen, last recorded here in 2012, and in nearby Brownhills Inclosure, again two were seen, last records here in 2015. These two sightings were encouraging but sadly there were no records for 2019.

Although the signs are not good please do not give up looking for this rare and beautiful butterfly.

59.017 Silver-washed Fritillary Argynnis paphia

Rupert Broadway





	BC Priority s	status	L	ow		
	No of 2019 r	1,9	51			
s	No of 2019 in	ndividual	s 6,7	'92		
	No of 2019 to	etrads	2	201		
	No of post 2	005 tetra	ds 6	34		
3						
	Earliest on Database: Late May 1893					
	Earliest11 June2019Sims Wood			d		
st su	Latest 05 September 2019 Wootton Coppice					
	Latest on Database: 23 Sep 2017					
	Transect Site	Down >20%	Within ± 20%	Up >20%		
7 -	Trends	35	28	31		

This is by some distance the most frequently encountered Fritillary in the region, being present in most large woodlands and particularly eye-catching due to its large size and swooping flight. Transect data indicates that overall numbers were slightly down on 2018 and the main flight period both started and finished a week or so later.

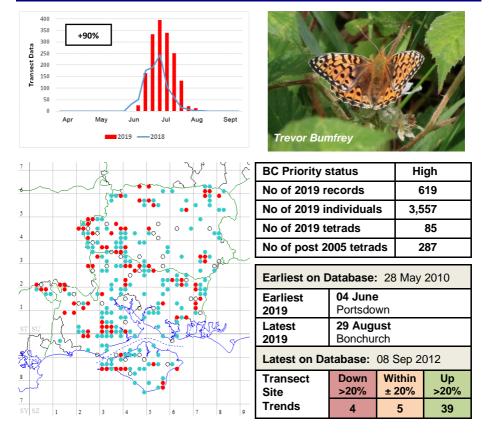
As in 2018 Kemphill Moor Copse provided the highest Isle of Wight counts, peaking at 87 on 23 July. On the mainland, it peaked at 100 on the Frohawk transect in the New Forest on 08 July. Individual counts of 30 or more were reported through the summer at many other sites such as Pamber Forest, Crab/West Wood, Havant Thicket, Creech Wood and Straits Inclosure, the latter reporting 65 on 29 June.

The butterfly was on the wing from the second week in June, enjoying a sustained peak through July, thereafter diminishing to finish in the first week in September. Isle of Wight sightings accounted for approximately 8% of records received.

Records in 2019 predominantly came from woodland sites, with a smattering from other habitats providing some evidence of dispersal and giving a clue to its comparative success relative to its close relations.

59.019 Dark Green Fritillary Speyeria aglaja

Mark Tutton



The species had a much better year in 2019 than in 2018 with overall records up some 90% bucking the trend for a good number of other species. Emergence started in early June, a little earlier than the previous year, but good numbers were seen right through July and August. The first sighting on the Isle of Wight was in mid June a couple of weeks later than on the mainland.

A very impressive record of over 500 individuals was recorded at Quarley on 06 July with three other records of more than 100 individuals, including one record of 256 at Brook Down on the Isle of Wight. There were, pleasingly, several hundred daily records that ran into double figures showing that good numbers were being consistently recorded at various sites and throughout the flight period.

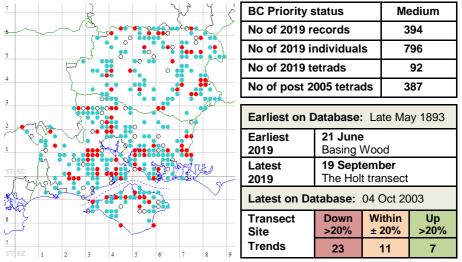
The transect records confirmed the mid-county strongholds for the species to be sites such as Martin Down, Danebury Hill Fort, Broughton Down etc whilst on the Isle of Wight, Brook Down and Bonchurch Down led the way.

59.021 White Admiral Limenitis camilla

Andrew Brookes







It was a disappointing year, when the long, hot summer of 2018 promised more. The number of individuals recorded was down by over a third, while the total transect count was down by a quarter. The flight season was late, beginning at various sites on 21 June. Highest tallies were at best mediocre, Pamber Forest with 21 on 02 July, pipped by Havant Thicket with 25 three days later. The insect's former county stronghold, the Straits Inclosure, was bested by the Abbotts Wood Inclosure nearby with just 14 on 1 July 2019. The only pleasant surprise was Kings Copse, Exbury, when 14 were seen on 02 July 2019, a rare double figure for the New Forest.

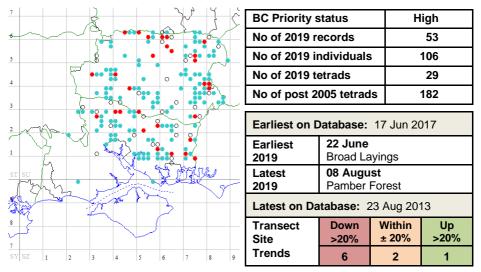
The pattern was repeated on the Isle of Wight; Walter's Copse near Yarmouth sporting 17 on 28 June, while last year's hotspot, Kemphill Moor Copse, triumphed again with the island's zenith of 18 on 01 July. The much larger Briddlesford Copse to the south remains a cause for concern, peaking with just 11 on 15 July; a woodland where White Admiral could once be reckoned in dozens.

There was just the slightest hint of an autumn brood with the sighting of a singleton on 19 September 2019 at The Holt, Rowlands Castle whence, ironically, none were reported during the summer.

59.022 Purple Emperor Apatura iris

100 90 -56% 80 70 60 All Data 50 ar 30 20 10 0 May Ap Jun Aua Sept 2019 --2018





The Purple Emperor season in 2019 in Hampshire was a very long emergence in the middle of June with the last record coming in early August. Number of records and tetrad coverage was reminiscint of those in 2016, a poor year for the species. It is possible that two main perils hit the species in 2019. The late autumn drought of 2018 may have affected the Sallow so that caterpillars starved. Then the very wet and stormy June of 2019 may have led to many of the chrysalises being vulnerable, with heavy bird predation taking place just before they were due to emerge. July was warm and sunny but numbers in many places were well down, best counts coming from Alice Holt Forest and West Wood again in 2019.

We had records from up to 26 sites. These came from Alice Holt Forest, Ampfield Wood, Basingstoke Canal, Basing Forest, Bells Copse, Bentley Station Meadow, Bentley Wood, Botley Wood, Crab Wood, Creech Wood, Great Pen Wood, Havant Thicket, Headley Gravel Pit, Kitts Grave, North Baddersley, Oakhanger, Pamber Forest, Pitt Down, Queen Elizabeth Country Park, Straits Inclosure, Southleigh Forest, Warren Heath, Wonston, West Walk, West Wood, and Whiteley Pastures. Again, there were no records from the south-west of Hampshire or the Isle of Wight. The egg lay was also poor which doesn't bode well for 2020, only time will tell.

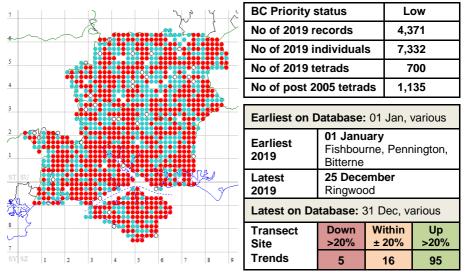
Ashley Whitlock

59.023 Red Admiral Vanessa atalanta

Linda Barker







The Red Admiral had a good year in 2019 compared to 2018 with transect data showing an overall increase in numbers of 160%. Numbers of this butterfly vary and are unpredictable. There are several migrations and once in the UK these butterflies breed. There is evidence that, in the milder areas of the UK, Red Admiral overwinter and egg laying can take place during this period which accounts for the fact that adults can be seen every month of the year and this year they were seen in 47 out of the 52 weeks.

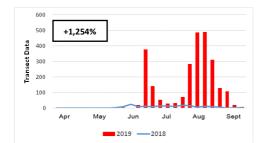
The flight period graph, based on all transect data, shows strong peaks in mid-July and end of September, with weekly numbers building up to 230, dipping down and peaking again at 256. There were not any obvious peaks in 2018 when the highest weekly count was 86.

Looking at transect data from Breamore on the edge of the New Forest, the Annual Index was 118 compared to 35 in 2018 but not as high as the figure for 2017 which was 174. Peak counts at this site for 2019 were 20 and 26 compared to five and eight in 2018.

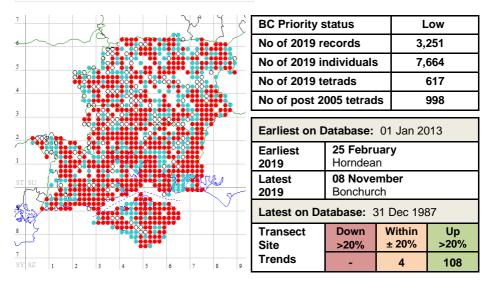
The highest non transect count of the year was 50 on 26 July at Arreton Down, Isle of Wight.

59.024 Painted Lady Vanessa cardui

Bob Whitmarsh





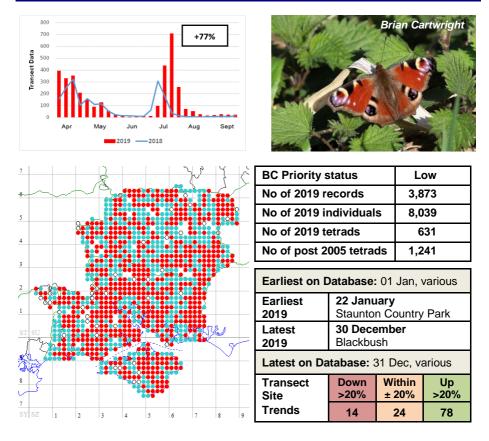


2019 was a bumper year for Painted Lady. They were recorded between late February and early November, however the main peaks in numbers, at least 375 per week, were in the periods 24-30 June and 19 August - 01 September. Overall there were 3,251 records (including 449 from the Isle of Wight (IoW)), made up of 7,664 individuals (1,622 IoW) including 1,914 singletons. Of the overall records, 1,409 were from transects. The relatively large number of observations from the IoW (where the density of all sightings was 3.8 per km² compared to only 1.2 per km² in North Hampshire) reflects the species northwards migration from the continent. However, the most Painted Lady seen at any one time was 106 near Ventor, IoW on 21 August mostly flying south out to sea!

The total of 2,596 Painted Lady counted on transect (432 loW) was 13 times more than in 2018. Twelve transects recorded 50 or more individuals in total with the most seen being 120 at Kemphill Moor Copse. Unsurprisingly 108 more transects detected gains in numbers relative to 2018 rather than losses. Although 2019 was a good year for Painted Lady numbers fell far short of the record years of 1996 and 2009.

59.026 Peacock Aglais io

Bob Taylor

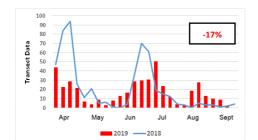


Encouragingly the Peacock reversed its recent trend and put in its best showing since 2015. The transect index was up 77% and the number of individuals by over 100%. Two-thirds of transects showed an increase over 2018. The improvement was undoubtedly helped by the weather. Whilst spring numbers were modestly up compared to 2018, the summer weather in 2019 did not match the drought of the summer of 2018 and as a result nearly three times the number were recorded from July onwards than in 2018 (5,524 compared to 1,911).

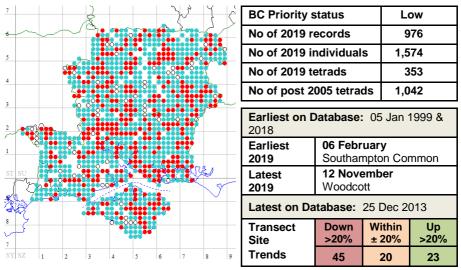
Unlike 2018 Peacock were regularly seen in February and March and by the time the transect season started on 01 April, 466 had been recorded. There was also a better late showing with nearly 50 individuals recorded from October onwards with the last one recorded in late December. Whilst most records were for one or two specimens as is usual, 75 were recorded at Wonston on 24 July and there were a further 17 records of 20 or more. In 2018 no site recorded three figures but in 2019 four sites managed this, Ridge Copse in the Test Valley (149), Monks Walk Gosport (130), Breamore (114) and Blashford Lakes North (102).

59.027 Small Tortoiseshell Aglais urticae

Andrew Brookes







This species continues to struggle with a further drop in transect numbers and wider records depressingly similar to 2018's abysmal tally, itself fewer than half of that in 2017. Moreover, for the first time, not a single record of larvae was submitted. The decline is hard to understand; habitat loss is clearly not a factor and the summer weather was generally good, with fellow nettle-feeding Vanessids such as the Peacock exhibiting no comparable decline. Meanwhile, the species continues to prosper further north.

Some crumbs of comfort can be found in the individual tallies, several significantly higher than 2018's zenith(!) of 12, with 30 seen at Rockbourne, just inside the Hampshire border south of Salisbury, on 18 July, followed by 26 at Fawley on 04 August 2019.

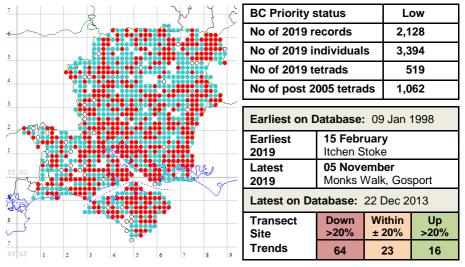
On the Isle of Wight, 30 were logged at Arreton Down on 26 July 2019. Reports diminished rapidly after August, dwindling from 31 in September to just two in October; once again there was clearly no autumn brood.

59.031 Comma Polygonia c-album

John Levell







Disappointingly Comma numbers continued the downturn recorded last year with the transect trend declining a further 29% on that of 2018. With three distinct peaks on 01 April, 08 July and 17 September in 2019 records still failed to reach the numbers recorded in the early and mid season peaks of 2018.

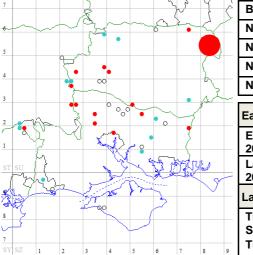
Only two transect sites recorded double figure counts, Mockbeggar recording 15, 29 and 24 on 02, 14 and 17 September respectively and Testwood recording 11 and 10 on 01 July and 15 July. No sites on the Isle of Wight reached double figures.

Field observations from two sites recorded double figure counts, Monks Wood with 10, 13, 10 and 16 on 01 April, 07 April, 25 May and 03 June respectively and West Wood with 21 on 10 July and 10 on 12 July. Good numbers of the species were recorded during the Big Butterfly Count.

With the vast majority of both transect and field observations consisting of one or two individuals it clearly illustrates the importance of all, big and small records, across the entire area of both the Isle of Wight and Hampshire enabling the compilation of the annual statistical analysis.

59.033 Marsh Fritillary Euphydryas aurinia





BC Priority s	tatus Top				
No of 2019 r	ecords		63		
No of 2019 in	ndividuals	5	564		
No of 2019 to	etrads		16		
No of post 2	005 tetrad	ls	32		
Earliest on Database: 27 Apr 2007Earliest10 May2019Martin Down					
Latest 2019	05 June NE Hampshire				
Latest on Database: 20 Jun 2004					
Transect Site	Down Within Up >20% ±20% >20%				
Trends	1	1	4		

The Marsh Fritillary seems to have enjoyed an excellent year, broaching on the spectacular. The main sites all did well compared to recent years, helped no doubt by favourable weather before and during the flight period. Martin Down numbers were the highest since 2007, with a count of 74 recorded on 23 May.

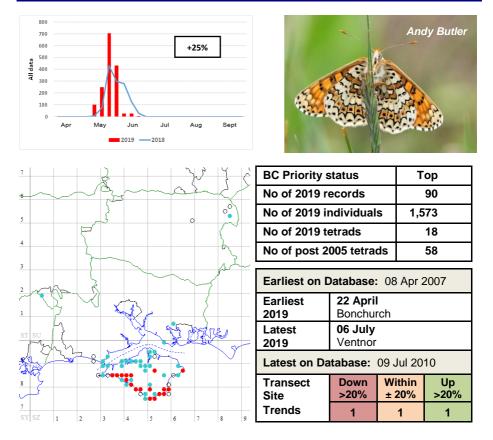
The officially introduced colony in northern Hampshire is thriving and showing an upward trend. All Hampshire data showed an increase of 2% on 2018. Four transects showed an increase greater than 20% in 2019.

This species has a relatively short flight period and has a very limited distribution in Hampshire. Unfortunately, there were singles seen at various locations, all verified by photographs, which are likely to have been released. It is difficult to ascertain whether any are wanderers from an existing colony, but the locations make this unlikely.

Mike Gibbons

Andy Butler

59.034 Glanville Fritillary Melitaea cinxia



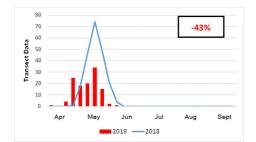
Spring web counts remained much the same as the previous year including another increase at Binnel Bay and, at long last, a number of webs being recorded in the St.Catherine's Lighthouse area; this after a gap of many years. Unfortunately the webs at the Wheeler's Bay site were virtually all wiped out by the attentions of a Great-spotted Cuckoo *Clamator glandarius* that worked its way systematically from web to web eating all the larvae it could find. It stayed for almost a month. The effects of this will be discovered in 2020.

The adult butterfly was not seen quite so widely across the Island as last year but at a few sites good numbers were recorded. For example at Watcombe Bottom (a private site) there were 311 seen on the 22 May and 247 at Shepherd's Chine on the 01 June. At St. Catherine's there was a count of 68 on the 25 May, a sign that this site is, perhaps, returning to its former status.

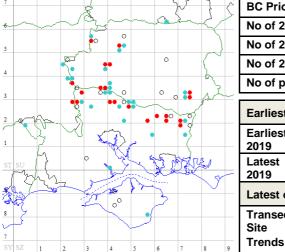
Although the trend over the years is showing a decline for this butterfly it is still here in viable numbers and there is no reason why it can't continue in this state for the foreseeable future.

60.001 Duke of Burgundy Hamearis lucina

Ashley Whitlock







BC Priority s	status Top				BC Priority status		
No of 2019 r	19 records 123						
No of 2019 in	ndividual	S	6	18			
No of 2019 to	etrads			21			
No of post 2	005 tetra	ds		56			
Earliest on Database: 08 Apr 2017							
Earliest 2019	01 April Noar Hill						
Latest 2019	06 June Noar Hill						
Latest on Database: 02 Oct 2011							
Transect Site	Down >20%		ithin 20%	Up >20%			

2

1

1

Probably one of the longest flight periods on record with a record first male being seen on the 01 April at Noar Hill, and then up to the second week of April very few had emerged as the weather became very cool and damp over most of Hampshire hampering any other records from other sites.

In the middle of April the weather became warmer and sightings from other wellknown sites filtered through and the season really started. May was more or less about average. Best counts came from the Meon Valley with Butser Hill having counts of well over a hundred at peak season and Isle of Wight Hill counts of 80 plus for a woodland site.

The species was only recorded at five transect sites with Bentley Wood having only one record of one individual.

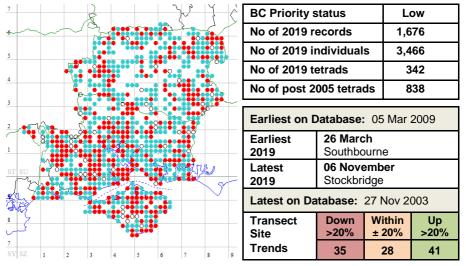
The butterfly was on the wing for about nine weeks, and although it only just made it into June a bad weather bomb then put paid to any second generation in August. It will be interesting to see how it fares in the 2020 season.

John Levell

61.001 Small Copper Lycaena phlaeas







The 48% recovery of numbers recorded on transects in 2018 has faltered with 2019 showing a smaller percentage decline in records of 13%. Three distinct peaks getting progressively shallower throughout the season failed to repeat the third very high peak of late 2018.

Transect records show once again that Whippingham Fields on the Isle of Wight was the most consistent site with impressive counts rising to a high of 106 on 20 September. Mainland sites never achieved these high numbers but consistent transect counts from Pilot Hill and the Chalton transect on Windmill Hill, reached 34 on 30 April and 40 on 24 July respectively.

Caesar's Camp, close to the Hampshire Surrey border, provided the highest mainland field record count of 104 on 25 July. Stockbridge Down continues to provide consistently high numbers of records during field observations with 52 on 14 May.

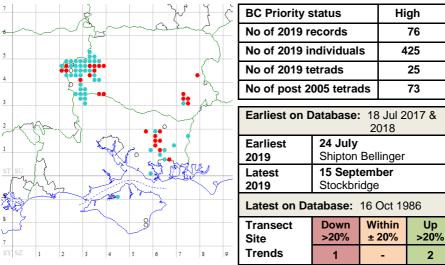
Despite the appearance of the high counts recorded above, of the 1,600 plus records the vast majority of both transect and field observations are below ten individuals, ones and twos making up the bulk of them. Recorded across the entire area of the Isle of Wight and Hampshire they provide the vital base for the annual statistical analysis.

61.003 Brown Hairstreak Thecla betulae

Clive Wood







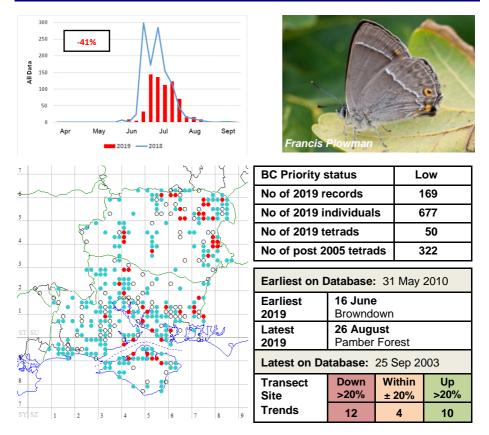
Further evidence that this under-recorded species seems to be expanding its range in Hampshire came with the sighting of a solitary female at Stockbridge Down on 08 September. A lone male was seen a week later. These sightings prompted four volunteers from Butterfly Conservation and National Trust to undertake an egg search in sheltered areas north-west of the lower (eastern) car park with the National Trust Ranger in November 2019. The result was 28 live eggs, a single predated egg and confirmation that Stockbridge Down is a newly recorded breeding site for the species. Excellent news!

Some 34 egg counts were recorded during the year around Stockbridge Down, Shipton Bellinger, Andover, Selborne, Soberton and Southwick, a very large increase on recent years. This dedication produced a total count of 339 eggs including a notable record of 122 eggs near Soberton on 02 February.

The annual adult count was similar to 2018 with a shorter flight season but higher peak counts during early/mid August. The highest single count was ten at Shipton Bellinger on the 22 August compared with a lowly three at Noar Hill on the 25 August. Eight adults were recorded on transect on 11 August at Shipton Bellinger, a fine return.

Andy Bolton

61.004 Purple Hairstreak Favonius quercus



Another mainly warm, dry summer in 2019 enabled this species to have a decent year, though not reaching the epic performance of 2018, with a much shorter and more typical flight period of 72 days, compared to 103 days in 2018.

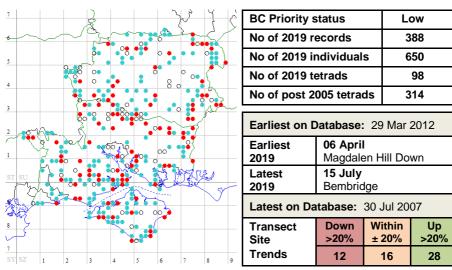
Mid June to mid July of this transect season didn't produce the consistently high counts of 2018, nevertheless evidence from the Butterfly Trends table (see Page 64) still stacks up well, showing 12 transects with a decrease of over 20% and ten with a gain of over 20% compared to 2018. Six sites gained this species and eight lost it; even with an overall drop in numbers of -41% it was still a decent season in the context of having to follow an exceptional one! Although Purple Hairstreak numbers fell in 2019 compared to 2018, on transect numbers actually showed a small gain, indeed the number of transects recording this species rose from 23 to 26.

Good counts on individual transect sections: Basing Wood and Kemphill Moor Copse Isle of Wight both with 12, Pamber Forest with 11 and Briddlesford Woods Nature Reserve on the Isle of Wight with ten. Top non-transect counts were 54 at Harewood Forest, and 50 at Fattingpark Copse, Isle of Wight. There was one excellent record of a fully grown larva, found on leaf litter at Upper Inhams Copse on 24 May 2019.

61.005 Green Hairstreak Callophrys rubi

100 90 +37% 80 70 Transect Data 60 50 40 30 20 10 0 Apr Ju Aua Sept 2019 2018





The first recorded adult of 2019 was the same date as in 2018. The latest sighting was three weeks later than 2018 on the Isle of Wight. Transect numbers peaked over the middle of May. The Isle of Wight was first with eight individuals, with the mainland a week later with 89 individuals. Mainland numbers remained strong for a week before and after the peak. Isle of Wight transect numbers dropped 31% from 42 in 2018 to 29 in 2019.

Transect flight periods were 48 days for the Isle of Wight and 83 days for the rest of Hampshire. The Isle of Wight represents 10% of the transect totals, down from 20% in 2018.

Overall it was a better season for Green Hairstreak with total individuals of 650. This was an increase of 24% from 2018. Of interest this is only 51% of total individuals (1,283) recorded in 2014.

Barton Common transect had the highest seasonal total of 28 individuals. Of the Isle of Wight transects both Coombe Bottom & St Boniface Down and Mottistone Down had the highest seasonal number of individuals, eight each. The highest single count was 24 at Martin Down on 15 May.

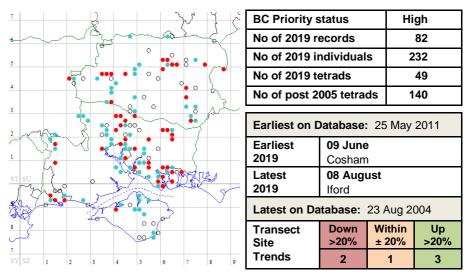
Tani Read

61.006 White-letter Hairstreak Satyrium w-album

Andrew Brookes







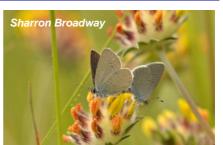
After last year's unprecedented surge in records and numbers, a decline in 2019 was all but inevitable. The reports nevertheless confirmed the status of the butterfly as a widespread and occasionally common species in Hampshire, except in the New Forest where mature elms remain few and very localized. A sedentary tree-top dweller difficult to observe on the wing, quite a few records were of ova and larvae, the former sometimes found on branches brought down by winter storms. Particularly gratifying were the first records from the Branch's elm trials plantation at Great Fontley, where 20 ova were found on DED-resistant hybrids, and a solitary larva on Japanese Elm.

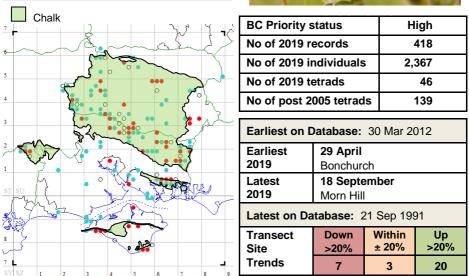
The butterfly's higher counts were all made between mid-June and mid-July in Gosport, Portsmouth, Southampton (Peartree Green), Basingstoke and Christchurch (Iford), while the top tally of 13 was made at the Saxon Fields housing estate in Andover. This apparent urban predilection is no coincidence, as resistant cultivars, and species such as the Siberian elm (marketed by Hillier 1963-79), occur far more commonly as amenity trees in town than country.

Records from the Isle of Wight were typically few, comprising a solitary sighting at Shalfleet on 15 July.

61.010 Small Blue Cupido minimus

35(300 +41% 250 Transect Data 200 150 100 50 0 May Jul Sept Apr Jun 2019 2018





Our smallest butterfly enjoyed a second successive good year with a 41% increase in adults seen on transect. Two thirds of transects recorded an increase of 20% or more. This was in marked contrast to the other "blue" species apart from Chalk Hill Blue which held steady.

One characteristic of the Small Blue is its ability to disperse and find suitable habitat. A decent sized colony at Pitt Down near Winchester was wiped out by Highland cattle grazing out the foodplant in 2011. Unfortunately, Hampshire Countryside Service was unaware of its existence at the time. There had been little sign of the return either of the foodplant or the butterfly until this year but a total count of 28 adults in 2019 is an encouraging development.

Old Down, Basingstoke remains a stronghold for the species with a count of 202 on transect on 03 June 2019. Other triple figure counts included Martin Down (131) and Watcombe Bottom (187) on 22 May 2019, and Brook Down (100) on the 01 June 2019, the latter two sites on the Isle of Wight.

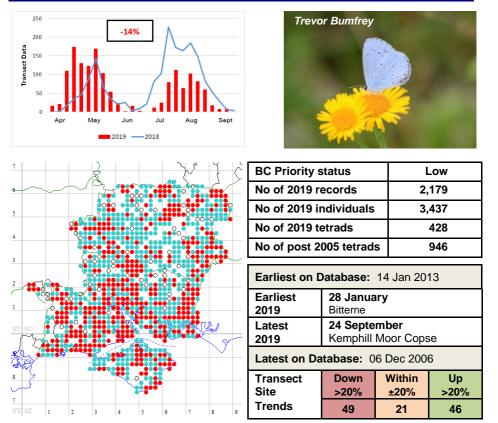
The highlight of a reasonable second brood was a count of 16 adults near Magdalen Hill Down on 20 August.

53

Clive Wood

61.012 Holly Blue Celastrina argiolus

Rupert Broadway



In a reversal of the previous year's fortunes, the Holly Blue had an excellent showing in spring 2019 followed by a more modest summer performance. Overall the transect data showed a slight decline from 2018, but nothing of great concern.

Following a single January record, it got going properly at the end of March and then enjoyed a sustained peak from mid-April to mid-May with 18 being recorded at Magdalen Hill Down on 20 April and 26 at Martin Down on 15 May. A more modest peak from late July to mid-August was boosted by records from the Big Butterfly Count.

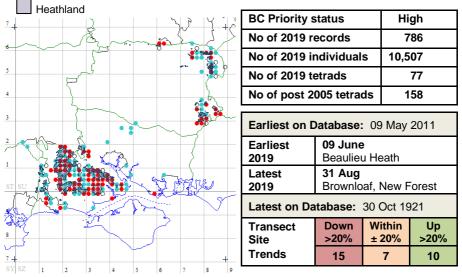
In mid-August, several counts of up to 20 were recorded from the hedgerows in the Shipton Bellinger area – no doubt a bycatch from Brown Hairstreak hunting!

Once again, the Isle of Wight accounted for approximately 10% of records received – consistent with 2018. All told, not a bad year for the Holly Blue, with the hope that the underwhelming summer numbers don't herald a poor start in 2020.

61.014 Silver-studded Blue Plebejus argus

3000 2500 1500 500 0 Apr May Jun Jul Aug Sept 2019 -2018





After an excellent year in the hot summer of 2018, this year was more mixed for Silver-studded Blue. The significant increase in records is more than explained by the five new transects started this year across the New Forest heathland. Whilst the new transects were designed to cover habitat suitable for Grayling, they also produced 171 records of Silver-studded Blue, and a total of 2,426 individuals. Interestingly, while the two species share habitat, Grayling only emerge as Silver-studded Blue numbers decline, with very little overlap.

Emergence of Silver-studded Blue was later than last year and, although the latest record was over a week later than in 2018, there were only four records after mid-August. The highest three counts were all from Dibden Bottom, New Forest, where 250 were seen on 01 July, 2019.

There were 15 records of 100 or more individuals, all from the first two weeks in July. There was no repeat of last year's exceptionally large colony counts, when over 500 individuals had been reported on three occasions. This species remains widely distributed across the heathlands of the New Forest and the heaths to the north east of the county.

Nigel Owen

No of 2019 in	019 individuals 2,750				
No of 2019 to	etrads	1	46		
No of post 2	005 tetrac	ls 4	51		
Earliest on Database: 08 Apr 2002					
Earliest 2019	22 April Magdalen Hill Down				
Latest 2019	23 September Portsdown				
Latest on Database: 31 Oct 2005					
Transect Site	Down Within Up >20% ± 20% >20%				
Trends	47 11 16				

BC Priority status

No of 2019 records

46%

600 500 Transect Data 400 300 200 100 0 May Jun .Inf Aug An 2019 2018

7

5 4 3

> 1 2 13 4 5 6 7

61.015 Brown Argus Aricia agestis



It was a better than average year for Brown Argus in Hampshire and the Isle of Wight despite a 46% fall in numbers compared to the 2018 figures. However the transect data showed that trends were not uniform and there was actually an increase in the numbers for 2019 for 16 out of 74 sites. For the first brood the numbers were approximately the same as in 2018 but peaked a week earlier. For the second brood numbers were roughly half those of 2018 and actually peaked two weeks later. Interestingly there was no gap between the two broods with at least a few Brown Argus found in every week of the season after it emerged.

The highest counts in Hampshire were 63 and 64, for the first and second broods respectively, at Magdalen Hill Down. The only other counts over 20 were for the second broods at Beacon Hill National Nature Reserve (40) and at Brook House Meadow, Wonston (50.

On the Isle of Wight the greatest first brood numbers were at Bonchurch Down (20) and the largest second brood number was 13 at Fattingpark Copse, north-east of Newport.

Phil Budd

Low

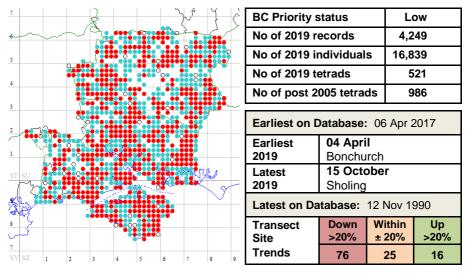
973

61.018 Common Blue Polyommatus icarus

Graeme Davis







Common Blue hit the headlines in 2019, as news of a come back was sparked by the warm summer after the increase in 2018 on 2017/16 records. However, in Hampshire the trend showed a 46% decrease. This was particularly evident in the second brood.

Common Blue emerged earlier than 2018 with the Isle of Wight having the first record in April, but numbers remained low until steadily climbing into mid May. The first largish count was at Martin Down on the 15 May of 85.

There were eight triple number counts this year compared to 15 the previous year. Of these two were from the Isle of Wight, at Bembridge Down (165 on the 03 August), and Monks Walk (125 on the 23 August). On the mainland Stockbridge Down had the largest triple number count of 214 individuals on the 22 August.

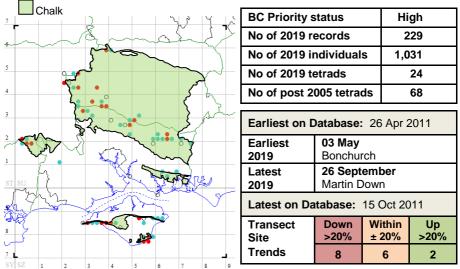
The stronghold for our beloved blue is without a doubt Butterfly Conservation's own flagship reserve Magdalen Hill Down with 2,052 recorded. Whippingham Fields on the Isle of Wight is also a strong contender with 1,489 records as is Martin Down with 1,006 records. Lets hope 2020 is the 'blues' year within our county!

61.019 Adonis Blue Polyommatus bellargus

Andy Barker







2019 proved to be a disappointing year for this species, with most transects showing declines of 20-50%. Peak counts were in the 20-55 range, with the best Hampshire sites being Martin Down and Old Winchester Hill. On the Isle of Wight, it was Brook Down, Mottistone Down and Bonchurch Down that produced the best counts.

A mild winter, followed by a warm spring meant the first brood peaked a fortnight earlier than 2018, but unfortunately for most sites, the peak was only half that of the previous year. Even so, good weather throughout May produced peak counts of 40 on 01 June at Bonchurch Down and Brook Down, Isle of Wight, whilst in Hampshire, 38 were seen on 23 May at Martin Down. The latter part of the first brood was affected by wet June weather, but a few Adonis Blue lasted into early July.

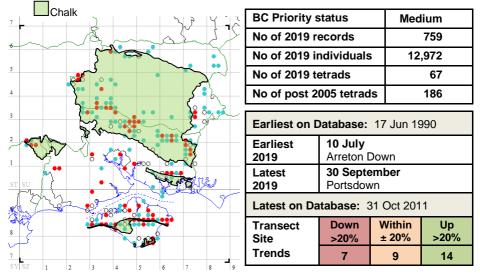
For most sites, the second brood didn't really start until the second week of August. It peaked in late August/early September and, although numbers were slightly up on the first brood, they were well down on the previous year. For the Isle of Wight, the best count was 55 at Bonchurch Down on 25 August, and for Hampshire it was 31 at Martin Down on 05 September.

61.020 Chalk Hill Blue Polyommatus coridon

Andy Barker







2019 was a good year for this species, with 14 transects showing a significant increase, nine little changed and just seven with marked decline. Once again, dispersal was evident, with stray individuals turning up at various locations in both Hampshire and on the Isle of Wight.

The season began with an exceptionally strong count of 200 at Arreton Down, Isle of Wight, on 10 July. Clearly first emergence must have been a few days prior to this. This site went on to peak at 621 on 13 August. Indeed, most sites peaked in the first half of August. The other Isle of Wight sites of note were Mottistone Down (229) and Ashey Down (100).

Hampshire produced the best count of the season, with 705 at Stockbridge Down on 02 August. After this, the best sites were: Old Winchester Hill (342), Magdalen Hill Down (238), and St.Catherine's Hill (154). The best late season count was 67 at Mottistone Down, Isle of Wight, on 02 September, with occasional counts of 10-15 at Arreton Down up to 17 September. Thereafter it was just ones and twos until the end of the month.

Moths recorded on transect

Species	Records	Individuals	Transects
Six-spot Burnet	210	584	31
Cinnabar	169	219	43
Brown Silver-line	124	206	32
Silver Y	116	137	45
Speckled Yellow	94	178	21
Burnet Companion	84	210	17
Small Purple & Gold	78	163	10
Common Heath	66	85	23
Yellow Shell	41	51	21
Five-spot Burnet	23	51	8
Mother Shipton	19	22	13
Common Carpet	19	19	7
Humming-bird Hawk-moth	17	18	13
Lesser Treble-bar	16	16	6
Narrow-bordered Five-spot Burnet	15	26	4
Orange Underwing	13	15	4
Garden Grass-veneer	12	50	2
Scarlet Tiger	12	14	7
Latticed Heath	11	13	5
Cistus Forester	9	15	1
Blood-vein	7	30	5
Totals - 2019	1,214	2,209	99
Totals - 2015	684	1,186	40

Andy Barker & Bob Annell

Bob Annell



The table contains only those species which returned a total count of over ten individuals during 2019.

The map is more an indication of areas of recorder effort rather than distribution of moths.

Over the past couple of years, transect recorders have been encouraged to record any moths they encounter during their normal transect walk. The focus is on day flying moths, but inevitably other moths have been disturbed and also recorded.

The total figures at the bottom of the table clearly indicate the increase in moth recording over the last five years even allowing for the fact that the number of transects walked has increased from 129 to 164 over the period.

The number of different species recorded over the same period has increased from 48 to 75 with Six-spot Burnet easily the most abundant this year, even though seen on less transects than Cinnabar moth in second place.

Silver Y had a relatively quiet year but Brown Silver-line were fairly abundant particularly on the heathland transects.

Note that Cistus Forester was only recorded on the Pilot Hill transect.

Although not included in the above table, it was good to see a Small Grass Emerald recorded during the first year of the Black Down transect in the New Forest.

The data show that 130 of the 392 transect recorders included moths in their returns during 2019, so why not give it a try to see if we can increase the percentage of transects recording moths in Hampshire & Isle of Wight next year?

54.008 Six-spot Burnet Zygaena filipendulae



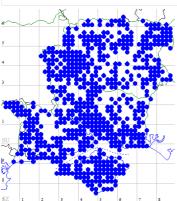


Andy Barker

This is a common species of flowery grasslands, especially chalk downland sites such as Magdalen Hill Down and St.Catherine's Hill. The full grown larvae are often seen in June amongst the larval foodplant, Bird's-foot Trefoil (*Lotus corniculatus*), and the golden cocoons are conspicuous on grass stems. 2019 appears to have been a mediocre year, with numbers well down on 2018, and peaking two weeks later. This moth will often be seen visiting flowers such as knapweed and scabious, but look carefully at the markings to distinguish it from other similar burnet moths. Visit the HantsMoths website <u>www.hantsmoths.org.uk</u> to find out more about Hampshire and Isle of Wight moths.

72.031 Cinnabar Tyria jacobaeae





Andy Barker

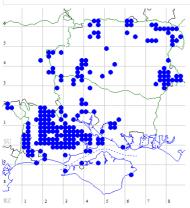


This is one of the commonest day-flying moths of Hampshire & Isle of Wight, and will be seen more or less anywhere, where its larval foodplant, Common Ragwort (*Senecio jacobaea*) is found. The full grown larvae with their conspicuous orange and black hoop markings are frequently spotted on ragwort in grasslands. The flight season typically extends from May to August, peaking in early to mid June. 2019 transect data shows an uncharacteristic dip at this time due to some very wet weather, but otherwise the flight period is much the same as 2018. Look carefully at the markings to distinguish the Cinnabar from burnet moths.

70.275 Common Heath Ematurga atomaria

Apr May Jun Jul Aug Sept

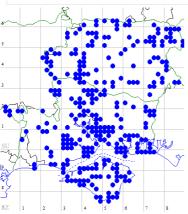




This common species is highly variable in appearance, with males and females often looking quite different. Although sometimes found at grassland sites and in woodland rides, it is the heathlands of Hampshire where this species is most often encountered. Heathers are the favoured larval foodplant, but away from the heaths, it will use clovers and trefoils. There are few recent records from the Isle of Wight. Flight season is late April to end July, with 2019 transect data (mostly New Forest heathland sites, e.g. Beaulieu Heath, Broomy Plain) showing a pronounced peak in late May/early June. This and the strength of season broadly matches 2018.

72.084 Mother Shipton Euclidia mi







To the inexperienced observer, this beautiful dayflying moth could be mistaken for a Dingy or Grizzled Skipper. The moth's name comes from the distinctive forewing markings, showing a "witch-like" profile, with pronounced nose, chin and eye. If you spot this you'll have no problem with identification.

The Mother Shipton generally flies from early May to early July, but is usually only seen in ones and twos. It favours flower-rich grasslands (including woodland rides), with an abundance of larval foodplants such as Bird's-foot trefoil (*Lotus corniculatus*), and clover. The 2019 transect data shows a peak around the third week of May, which is about a week earlier than that in 2018.

Andy Barker

Andy Barker

Summary of Earliest/Latest Butterfly Sightings 2019

Bob Annell

The earliest and latest sightings for 2019 are summarised with the all-time earliest and latest dates for our area held on the Branch database. Please interpret these all-time dates with caution as our records for earlier years are far from complete.

Species	Earliest on Database	Earliest 2019	Latest 2019	Latest on Database
Dingy Skipper	12 Apr 2011	19 Apr	02 Sep	03 Sep 1993
Grizzled Skipper	02 Apr 2009	07 Apr	28 Jun	07 Sep 2004
Essex Skipper	26 May 2007	26 Jun	18 Aug	21 Sep 1996
Small Skipper	16 May 2011	25 May	04 Sep	19 Sep 1991
Silver-spotted Skipper	11 Jul 2018	28 Jul	05 Sep	11 Oct 1986
Large Skipper	28 Apr 2007	19 May	15 Sep	22 Sep 2013
Orange-tip	10 Mar 1990	23 Mar	20 Jul	22 Sep 2011
Large White	02 Feb 2007	29 Mar	28 Nov	07 Dec 2012
Small White	09 Jan 1991	25 Feb	12 Nov	08 Dec 2007
Green-veined White	03 Mar 1989	24 Mar	06 Oct	05 Nov 2017
Clouded Yellow	08 Feb 2005	29 Mar	19 Oct	30 Dec 2007
Brimstone	01 Jan 2001	03 Jan	24 Dec	29 Dec 1999
Wall	14 Apr 2002	18 Apr	10 Oct	31 Oct 2015
Speckled Wood	11 Jan 2013	19 Feb	03 Nov	15 Dec 2011
Small Heath	08 Apr 1997	19 Apr	02 Oct	29 Oct 2011
Ringlet	24 May 2016	16 Jun	05 Sep	11 Oct 2011
Meadow Brown	30 Apr 2011	21 May	10 Oct	07 Nov 2010
Gatekeeper	24 Mar 1999	09 Jun	17 Sep	19 Oct 1995
Marbled White	30 May 2017	04 Jun	04 Sep	25 Sep 2003
Grayling	03 Jun 2002	04 Jul	19 Sep	08 Oct 1986
Pearl-bordered Fritillary	17 Apr 2003	22 Apr	14 Jun	09 Jul 1950
Small Pearl-bordered Fritillary	03 May 2007	21 May	06 Jun	29 Aug 2009
Silver-washed Fritillary	Late May 1893	11 Jun	05 Sep	23 Sep 2017
Dark Green Fritillary	28 May 2010	04 Jun	29 Aug	08 Sep 2012
White Admiral	Late May 1893	21 Jun	19 Sep	04 Oct 2003
Purple Emperor	17 Jun 2017	22 Jun	08 Aug	23 Aug 2013
Red Admiral	01 Jan*	01 Jan	25 Dec	31 Dec*
Painted Lady	01 Jan 2013	25 Feb	08 Nov	31 Dec 1987
Peacock	01 Jan*	22 Jan	30 Dec	31 Dec*
Small Tortoiseshell	05 Jan 1999/2018	06 Feb	12 Nov	25 Dec 2013
Comma	09 Jan 1998	15 Feb	05 Nov	22 Dec 2013
Marsh Fritillary	27 Apr 2007	10 May	05 Jun	20 Jun 2004
Glanville Fritillary	08 Apr 2007	22 Apr	06 Jul	09 Jul 2010
Duke of Burgundy	01 Apr 2019	01 Apr	06 Jun	02 Oct 2011
Small Copper	05 Mar 2009	26 Mar	06 Nov	27 Nov 2003
Brown Hairstreak	18 Jul 2017/2018	24 Jul	15 Sep	16 Oct 1986
Purple Hairstreak	31 May 2010	16 Jun	26 Aug	25 Sep 2003
Green Hairstreak	29 Mar 2012	06 Apr	15 Jul	30 Jul 2007
White-letter Hairstreak	25 May 2011	09 Jun	08 Aug	23 Aug 2004
Small Blue	30 Mar 2012	29 Apr	18 Sep	21 Sep 1991
Holly Blue	14 Jan 2013	28 Jan	24 Sep	06 Dec 2006
Silver-studded Blue	09 May 2011	09 Jun	31 Aug	30 Oct 1921
Brown Argus	08 Apr 2002	22 Apr	23 Sep	31 Oct 2005
Common Blue	04 Apr 2019	04 Apr	15 Oct	12 Nov 1990
Adonis Blue	26 Apr 2011	03 May	26 Sep	15 Oct 2011
Chalk Hill Blue	17 Jun 1990	10 Jul	30 Sep	31 Oct 2011

* Recorded on this date in several years

This table was compiled by Dr Andy Barker and is based on 142 Hampshire & Isle of Wight transects with data for both 2018 and 2019.

Species	Combined Transect Trend	>20% Decrease 2019	Within ±20% No Change	>20% Increase 2019	0 /19 1+/18 Loss	1+/19 0/18 Gain
Dingy Skipper	+30%	4	4	25	2	11
Grizzled Skipper	+6%	8	5	11	5	2
Small/Essex Skipper	+43%	31	25	74	7	7
Silver-spotted Skipper	+274%	-	-	4	-	2
Large Skipper	+19%	33	33	56	4	9
Orange-tip	+56%	15	28	73	6	10
Large White	-38%	85	19	15	-	1
Small White	-23%	53	35	31	-	-
Green-veined White	-59%	90	16	11	13	5
Clouded Yellow	-60%	22	8	7	18	7
Brimstone	+15%	25	31	57	1	1
Wall	+99%	1	4	6	1	3
Speckled Wood	-36%	79	28	7	2	-
Small Heath	+25%	32	16	41	18	11
Ringlet	+38%	34	24	67	3	5
Meadow Brown	+27%	22	34	75	-	-
Gatekeeper	+63%	9	23	99	-	-
Marbled White	+39%	13	30	78	8	13
Grayling	-2%	16	3	9	8	2
Pearl-bordered Fritillary	+113%	-	1	6	-	1
Small Pearl-bordered Frit.*	+3%	1	1	-	1	-
Silver-washed Fritillary	-4%	35	28	31	10	6
Dark Green Fritillary	+90%	4	5	39	4	21
White Admiral	-26%	23	11	7	11	2
Purple Emperor*	-56%	6	2	1	6	1
Red Admiral	+160%	5	16	95	2	16
Painted Lady	+1254%	-	4	108	-	54
Peacock	+77%	14	24	78	1	6
Small Tortoiseshell	-17%	45	20	23	25	10
Comma	-29%	64	23	16	14	4
Marsh Fritillary*	+2%	1	1	4	1	2
Glanville Fritillary*	+25%	1	1	1	1	-
Duke of Burgundy	-43%	2	1	1	1	1
Small Copper	-13%	35	28	41	3	9
Brown Hairstreak	-3%	1	-	2	-	1
Purple Hairstreak*	-41%	12	4	10	8	6
Green Hairstreak	+37%	12	16	28	8	12
White-letter Hairstreak*	-46%	2	1	3	2	3
Small Blue	+41%	7	3	20	4	2
Holly Blue	-14%	49	21	46	10	7
Silver-studded Blue	-13%	15	7	10	3	1
Brown Argus	-46%	47	11	16	23	6
Common Blue	-46%	76	25	16	9	1
Adonis Blue	-47%	8	6	2	2	1
Chalk Hill Blue	+4%	7	9	14	1	3

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

2019 rank position of BC Reserves (based on transect) for particular species in top 20 compared with 160+ other Hampshire and IoW sites with butterfly transects. (bracketed) values are 2018 positions.

"p" if present on site but not ranked in top 20. Compiled by: Dr Andy Barker

$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$		Magdalen Hill Down				Yew	DOM	
	Species	Original	<u> </u>			N(T&S)	Hill	BSM
		9 =(13=)	15= (13)	p(p)	p(-)	19 (20)	p (10)	-
	Grizzled Skipper	2 (2)	18 =(19)	p(p)	9 (19)	p(p)	18= (11)	-
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Small/Essex Skipper	18 (p)	p(p)	p(p)	p(p)	p(18)	p(p)	p(p)
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Silver-spotted Skipper	- (-)	-	-	-	-	-	-
	Large Skipper	(p)	(p)	(p)	(p)	(p)	(p)	16 (18)
Small White 2 (4) 15 (20) $p(p)$	Orange-tip	9= (p)	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)
	Large White	p(p)	15 (p)	p(p)	p(p)	p(p)	p(p)	p(p)
	Small White	2 (4)	15 (20)	p(p)	p(p)	p(p)	12 (p)	p(p)
Brimstone 1 (3) 12 (12) 17 (p) p(p) p(p) p(r) p(r) p(r) p(r) p(r) p(p)	Green-veined White	20 (p)	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)
Wall - <td>Clouded Yellow</td> <td>3 (3)</td> <td>p(p)</td> <td>8=(14)</td> <td>- (p)</td> <td>- (p)</td> <td>- (-)</td> <td>-</td>	Clouded Yellow	3 (3)	p(p)	8= (14)	- (p)	- (p)	- (-)	-
	Brimstone	1 (3)	12 (12)	17 (p)	p(p)	p (p)	p (17)	(p)
Small Heath 15 (15) $p(p)$	Wall	-	-	-	-	-	-	-
Small Heath 15 (15) $p(p)$	Speckled Wood	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)
Meadow Brown 10 (5) p (15) p(p) p(p) <td></td> <td>15 (15)</td> <td>p(p)</td> <td>p(p)</td> <td>p(20)</td> <td>p(p)</td> <td>10 (14)</td> <td>p(p)</td>		15 (15)	p(p)	p(p)	p(20)	p(p)	10 (14)	p(p)
Meadow Brown 10 (5) p (15) p(p) p(p) <td>Ringlet</td> <td>p(p)</td> <td>p(p)</td> <td>p(p)</td> <td>p(p)</td> <td>p (20)</td> <td>p(p)</td> <td>9 (p)</td>	Ringlet	p(p)	p(p)	p(p)	p(p)	p (20)	p(p)	9 (p)
Marbled White 5 (5) 3 (8) 6 (6) $p(p)$ $p(16)$ 20 (p) $p(p)$ Grayling -	Meadow Brown	10 (5)	p (15)	p(p)	p(p)	p(p)	p(p)	p(p)
Grayling -<	Gatekeeper	p(p)	p(p)					p(p)
Grayling -<	Marbled White	5 (5)	3 (8)	6 (6)	p(p)	p (16)	20 (p)	p(p)
Small Pearl-bordered Frit. - </td <td>Grayling</td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td>	Grayling		-		-		-	
Silver-washed Fritillary -(p) - - - - p(p) Dark Green Fritillary 19= (-) 11 (-) p(-) - - p(p) - - p(p) - p(p) - - - - - p(p) - - - - - - p(p) p(p) <t< td=""><td>Pearl-bordered Fritillary</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	Pearl-bordered Fritillary	-	-	-	-	-	-	-
Dark Green Fritillary 19=(-) 11 (-) p(-) - - p(p) - White Admiral - - - - - - p(p) - - p(p) p(p)<	Small Pearl-bordered Frit.	-	-	-	-	-	-	-
Dark Green Fritillary 19= (-) 11 (-) p(-) - - p(p) - White Admiral - - - - - - p(p) - - p(p)	Silver-washed Fritillary	-(p)	-	-	-	-	-	p(p)
White Admiral - - - - - - p(p) Purple Emperor -	Dark Green Fritillary		11 (-)	p(-)	-	-	p(p)	-
Purple Emperor -					-	-		p(p)
Red Admiral p(p)	Purple Emperor	-		-	-	-		- (-)
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	· · · · ·	p(p)	p(p)	p(p)	(q)q	p(p)	p(p)	p(p)
Peacock 7 (p) 20 (p) p(p) p(p) 6 (p) p(p)	Painted Lady							p(p)
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1						p(p)
Comma p (p) p(p) p(p) p(p) p(p) p(p) p(p) p(p) p(p) p(p) 14 (1 Marsh Fritillary -								- (p)
Marsh Fritillary -		. ,	. ,					14 (18)
Glanville Fritillary -								-
Duke of Burgundy -		-	-	-	-	-	-	-
Small Copper 4 (9) p(p) p(p) p(p) 12 (p) p(p) p(p) Brown Hairstreak - - - - - p(r) Purple Hairstreak - - - - - p(r) Green Hairstreak 2 (16) 14= (p) - (p) - (-) p(10) 14= (p) p(-) White-letter Hairstreak - - - - - - - - - - - p(-) White-letter Hairstreak -		-	-	-	-	-	-	-
Brown Hairstreak - - - - p(-) Purple Hairstreak - - - - - p(-) Green Hairstreak 2 (16) 14= (p) - (p) - (-) p(10) 14= (p) p(-) White-letter Hairstreak - - - - - - - - Small Blue 13=(12) 5 (5) 10 (4) 13=(18) 16= (8) 18= (p) - Holly Blue 6 (15) p (19) p(p) 20= (p) p(p) p (18)	,	4 (9)	(q)q	(q)q	(q)q	12 (p)	(q)q	p(p)
Purple Hairstreak - - - - p(-) Green Hairstreak 2 (16) 14= (p) - (p) - (-) p(10) 14= (p) p(-) White-letter Hairstreak - <	· · ·			1 4 7				p(-)
Green Hairstreak 2 (16) 14= (p) - (p) - (-) p(10) 14= (p) p(-) White-letter Hairstreak - <		-	-	-	-	-	-	1.()
White-letter Hairstreak -		2 (16)	14 = (p)	- (n)	- (-)	n(10)	14= (p)	
Small Blue 13=(12) 5 (5) 10 (4) 13=(18) 16=(8) 18=(p) - Holly Blue 6 (15) p (19) p(p) 20= (p) p(p) p(p) p (18)								
Holly Blue 6 (15) p (19) p(p) 20= (p) p(p) p (18)		13= (12)			13 =(18)	16= (8)		<u> </u>
								p (18)
		-	-	-	(-)	-	-	-
		1 (1)	17 = (17)	9 (p)	9 (9)	16 (19)	p(p)	p(p)
	8	,	. ,		~ ~ /			p(p)
Adonis Blue 13 (14=) (14=) - (11=)		()	-			- (/	-	-
			20 (20)	()	· · · /	p(p)	15 (14)	- (p)

Hampshire & Isle of Wight Butterfly Report 2019

Butterfly Conservation

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