



**Butterfly
Conservation**

Hampshire &
Isle of Wight
Branch
40th Anniversary



**HAMPSHIRE & ISLE OF WIGHT
BUTTERFLY REPORT - 2022**

Hampshire and Isle of Wight Butterfly Report 2022

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Contents

	Page
Introduction	2
Preamble & Overview	3
Glossary of Terms	4
Common Species Summary	5
Scarcer Species Summary	6
Weather Report 2022	7
Location Map	8
Butterfly Report 2022	9
Transect Summary	9
Big Butterfly Count	10
Garden Butterfly Survey	11
Butterfly Record Coverage	12
Species Report Layout	13
Species Accounts	14-60
Index to Butterfly Species Accounts	
Adonis Blue	59
Brimstone	25
Brown Argus	57
Brown Hairstreak	49
Chalk Hill Blue	60
Clouded Yellow	24
Comma	44
Common Blue	58
Dark Green Fritillary	37
Dingy Skipper	14
Duke of Burgundy	47
Essex Skipper	16
Gatekeeper	31
Glanville Fritillary	46
Grayling	33
Green Hairstreak	51
Green-veined White	23
Grizzled Skipper	15
Holly Blue	55
Large Skipper	19
Large White	21
Long-tailed Blue	53
Marbled White	32
Marsh Fritillary	45
Meadow Brown	30
Orange-tip	20
Painted Lady	41
Peacock	42
Pearl-bordered Fritillary	34
Purple Emperor	39
Purple Hairstreak	50
Red Admiral	40
Ringlet	29
Silver-spotted Skipper	18
Silver-studded Blue	56
Silver-washed Fritillary	36
Small Blue	54
Small Copper	48
Small Heath	28
Small Pearl-bordered Fritillary	35
Small Skipper	17
Small Tortoiseshell	43
Small White	22
Speckled Wood	27
Wall	26
White Admiral	38
White-letter Hairstreak	52
Day Flying Moths	61
Summary of Earliest/Latest Butterfly Sightings 2022	63
2021-2022 Butterfly Trends in Hampshire and Isle of Wight	64
Reserves Summary	Inside back cover

A very warm welcome to the 2022 Annual Butterfly Report of the Hampshire & Isle of Wight Branch of Butterfly Conservation.

Having recently been reappointed as branch chair (I was previously chair from 2010 to 2013) it's been a pleasure to get the 'inside track' on how the branch has managed to go from strength to strength in the last decade, as epitomised in the quality of this report. The foundation of such success is, of course, all our contributors and especially those that go 'above and beyond' to fulfil vital roles – my thanks to you all.

It's hard to avoid the fact that 2022 will be remembered for all the wrong reasons, with global events taking their toll. The war in Ukraine, the global economic downturn and the cost-of-living crisis will have been felt by all of us, our families and friends, to a greater or lesser degree. This is where the importance of connecting with nature and its well-known mental health benefits has never been more important. I do hope that this report provides you with a much-needed boost and encourages you to plan your most memorable butterfly year in 2023!

It is also hard to ignore the impact of climate change on our Lepidoptera fauna. I'm pleased to say that, overall, our butterflies enjoyed the long, hot summer of 2022, with a 3% increase in sightings across all transects. If I had to select one highlight, then it would be a significant increase in the number of sightings of the Wall, a species that has been in worrying decline for some time. On a less positive note, it looks like we are on the verge of losing the Small Pearl-bordered Fritillary from the branch area, if it has not already been lost. This characteristic butterfly of damp woodland clearings and glades has been one of the hardest hit by climate change.

We also know from past experience, most notably the very memorable summer of 1976, that we may not see the impact of a hot summer until the following year. The summer of 1976 allowed several species to flourish and, in some cases, put in an extra brood that allowed numbers to build. We also know that the heat resulted in some losers, such as the Chalk Hill Blue, whose sole foodplant of Horseshoe Vetch desiccated in the heat, with numbers falling in 1977. To understand the impact of 2022, it is therefore even more important that we maintain a high level of recording in 2023 so that we can spot species in trouble and act accordingly.

On that note, I would like to thank all of you that send in records which, believe me, really does make a positive difference when it comes to making informed decisions. Whether your contribution is the occasional record, contribution to a transect that is walked week in and week out, or participation in an organised effort such as the Garden Butterfly Survey, your records are very much appreciated. Finally, I would like to thank everyone that has contributed to the writing of this report, and especially Bob Anell who has managed to herd cats and edit the report once again!

Peter Eeles
Chair, January 2023

Firstly I'm pleased to report that we have finally migrated all of our many years of records to a new database. Our previous MapMate database served us well for many years but was fast reaching capacity. As a result you may notice a slightly different format for the maps.

Over the past year, Butterfly Conservation has been gradually migrating records to the iRecord platform and as a result we have been able to include Garden Butterfly records in this report as well as a few useful records 'harvested' from iNaturalist. In the future we are also hoping to be able to include records from Bird Track but unfortunately the majority are currently only available at too coarse a grid resolution.

Although we have had access to a greater number of record sources, total records received are nearly 2% less than the same time in 2021. However, there have been far fewer recorders participating, mainly a consequence of a significant reduction in the number of participants taking part in the Big Butterfly Count (no restrictions on overseas travel now?). The number of individual butterflies counted per recorder in 2022 was 36.69 compared to 25.96 in 2021.

The earlier emerging species fared better with the warmer spring but then came the driest summer since records began and the reduced availability of larval foodplants may well impact on 2023 numbers. It was also a reasonable year for Clouded Yellow and a number of '*helice*' females were recorded. Sadly though, there was no sign of Small Pearl-bordered Fritillary in 2022; our first record on the database is from the New Forest in 1949 then more regularly from 1970 onwards. On a positive note, the first Purple Emperor was recorded on the Isle of Wight. Also this year we have added a narrative on Long-tailed Blue which was seen in a number of locations.

You will have already seen from the last Autumn Newsletter that 2022 marks 40 years since the formation of our Branch, so it is interesting to compare some of the statistics with today's level of recording. How our efforts have grown!

	1982	2022
Records	4,590	106,717
Individuals	26,602	404,669
Tetrad Coverage	83	995
Recorders	43	2,908
Recording days	85	303

On our reserves this year, Magdalen Hill Down clocked 99 recording days, Yew Hill 54 and Bentley Station Meadow 29.

My thanks to Mervyn Grist who stands down as a species report writer after many years and a welcome to Pete Eeles who has this year joined the writing team.

Finally my annual thank you goes to all those who submit their records. Hopefully even more of you will take up the challenge in future by also adding sightings to one of the accepted sources from which we gather our records, please see 'Recording / How to submit records' on the Branch website. Remember, records are the foundations of conservation and the common and the scarce species are equally important!

Deadline for butterfly records and images to be included in the next annual report is 30 November 2023.

Bob Annell

County Butterfly Recorder, January 2023

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 the time of day when and the weather conditions under which the transect is walked. For further details of transect methodology, see 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 (1998-2022) 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 *QGIS* mapping software. These show the 2km squares (tetrads) for which records were received since 2000.

Red: 2022

Mid Blue: 2010-2021

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 2022. 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*.

Common Species Summary

Bob Annell

This year's twenty-three most common species are shown below according to their tetrad coverage within the Hampshire & Isle of Wight Branch Boundary which embraces a total of 1,246 tetrads. Previous years' positions are also shown according to their respective tetrad coverage.

Meadow Brown tops the table in 2022. This is the first time this species has occupied more tetrads than any other Hampshire & Isle of Wight species since 2008.

Common Blue and Holly Blue returned to their more usual position in the table as did Ringlet.

Clouded Yellow climbed back into the table for the first time since 2016, however this cannot really be claimed as 'A Clouded Yellow Year'.

It was yet another year in 22nd place for Silver-washed Fritillary now remaining in 21st or 22nd position for the last ten years.

Species	Tetrads	Records	Positions (by Tetrad)				
			2022	2021	2020	2019	2018
Meadow Brown	772	13,213	1	2	3	4	4
Large White	760	8,101	2	3	2	5	2
Small White	759	9,540	3	1	1	2	1
Gatekeeper	745	8,415	4	5	4	1	3
Brimstone	680	6,901	5	7	7	6	7
Red Admiral	680	3,883	6	4	5	3	9
Peacock	676	4,338	7	6	6	7	12
Comma	652	4,110	8	8	8	11	6
Speckled Wood	651	8,518	9	11	11	9	5
Small Tortoiseshell	530	2,008	10	12	12	17	14
Common Blue	526	4,363	11	16	9	10	8
Holly Blue	514	3,078	12	17	10	13	11
Green-veined White	477	2,747	13	14	13	15	10
Ringlet	472	4,086	14	9	14	14	13
Painted Lady	436	1,179	15	15	20	8	16
Marbled White	412	3,221	16	10	16	12	15
Small Copper	382	1,179	17	13	15	18	18
Orange-tip	350	1,610	18	18	17	16	17
Small Skipper	315	1,589	19	19	21	19	20
Large Skipper	310	1,787	20	21	18	20	19
Small Heath	269	2,708	21	20	19	21	22
Silver-washed Fritillary	220	1,718	22	22	22	22	21
Clouded Yellow	206	507	23	31	24	34	27

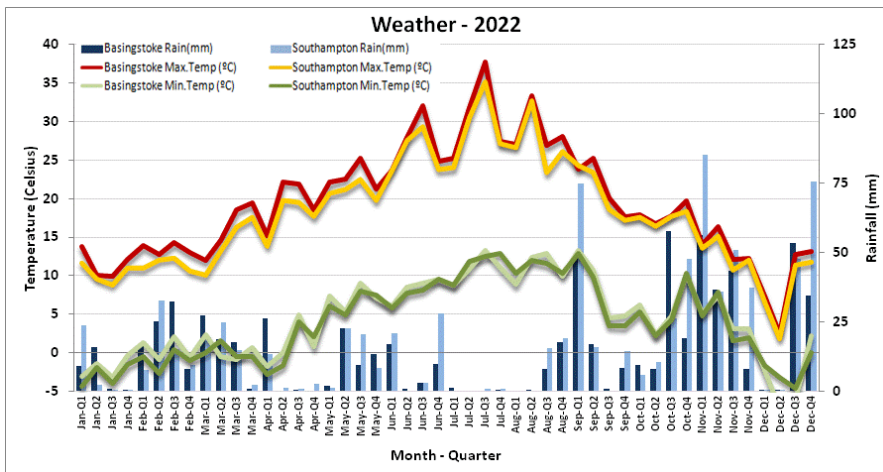
Although seen in more tetrads than the previous year, Brown Argus dropped to 24th place, as it was overtaken by Clouded Yellow. Of the scarcer species, only Essex Skipper, Dark Green Fritillary and White Admiral joined Brown Argus in being seen in more than 100 tetrads (just 8% of the Hampshire and Isle of Wight land area). Moving down the list, Green Hairstreak and Silver-studded Blue were largely unchanged, whilst Chalk Hill Blue moved up four places due to a 43% tetrad increase. The same was also true for Wall, which had a similar tetrad rise, plus a doubling of records. Purple Emperor also did well, but White-letter Hairstreak fared badly, falling four places, thanks to a significant drop in both sightings and tetrads. At 20 tetrads or less, the bottom five species are of real concern, and the inevitable seems to have happened for Small Pearl-bordered Fritillary, which had no 2022 sightings. Worryingly, at just nine tetrads, Pearl-bordered Fritillary has slipped down the list due to tetrad losses in central-west Hampshire.

Species	Tetrads	Records	Positions (by Tetrad)				
			2022	2021	2020	2019	2018
Brown Argus	149	797	24	23	23	23	23
Essex Skipper	123	293	25	25	27	27	28
Dark Green Fritillary	108	617	26	24	25	26	30
White Admiral	107	529	27	26	28	25	24
Green Hairstreak	86	275	28	27	29	24	26
Silver-studded Blue	82	758	29	28	26	28	29
Chalk Hill Blue	80	1,182	30	34	33	29	34
Dingy Skipper	78	510	31	29	32	30	35
Purple Hairstreak	72	171	32	30	30	33	25
Grayling	67	510	33	33	31	32	31
Wall	65	281	34	36	35	37	38
Grizzled Skipper	57	284	35	32	34	31	33
Small Blue	53	417	36	35	36	36	37
Purple Emperor	41	72	37	41	39	38	36
Adonis Blue	30	296	38	39	38	40	39
Brown Hairstreak	28	76	39	38	41	39	42
Glanville Fritillary	26	129	40	40	40	42	40
White-letter Hairstreak	24	43	41	37	37	35	32
Duke of Burgundy	20	150	42	42	42	41	41
Silver-spotted Skipper	14	104	43	45	44	45	45
Marsh Fritillary	11	82	44	44	43	44	44
Pearl-bordered Fritillary	9	312	45	43	45	43	43
Small Pearl-bordered Frit.	0	0	46	46	46	46	46

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).

www.metoffice.gov.uk/climate/uk/summaries/2022

www.southamptonweather.co.uk



Average figures quoted in this report compare to the period 1991-2020

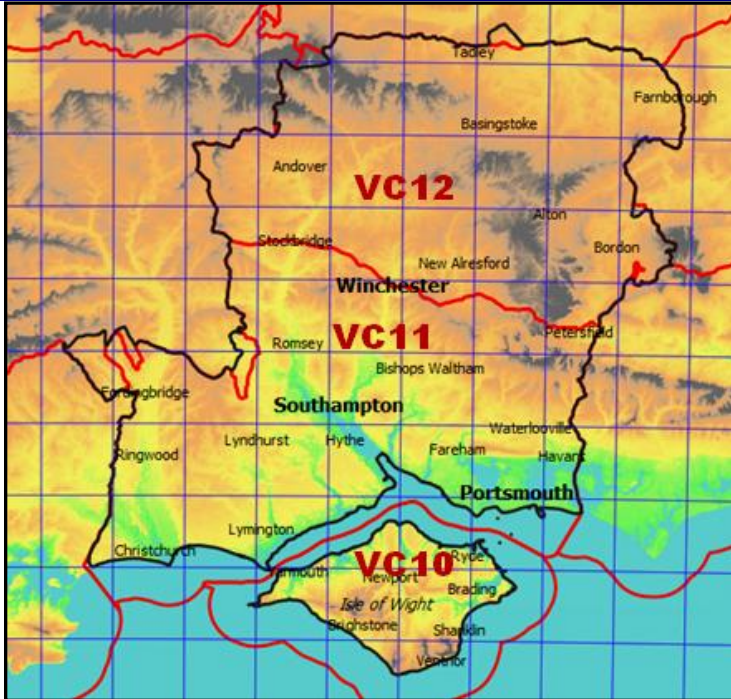
Based on records dating from 1884, 2022 was the warmest year on record for the UK. Each month, except December, was warmer than average. The months September to November were wetter than average, but this did not offset the low rainfall in the remainder of the year. It was the driest January to August period since 1976 leading to drought conditions being declared across Hampshire and the Isle of Wight.

January and March were particularly sunny, and May was the dulllest month of the year when compared to the average.

There were some extremes of weather with temperatures reaching the high 30°C in the summer months. Whilst staying warmer than average, we were battered by stormy weather in February. On 18 February we were hit by Storm Eunice, during which a new England gust speed record of 122 mph was recorded at the Needles on the Isle of Wight. A prolonged cold spell hit us in the first half of December and this was one of the most significant cold spells to affect the UK since 2010.

In Southampton temperatures in excess of 27°C were recorded for six consecutive days in July, and in August, also for six consecutive days, temperatures were in excess of 30°C.

Location Map



The above relief map shows the extent of our Hampshire & Isle of Wight Branch Boundary (black), together with Vice Counties (red with coastal buffer) and 10km grid lines (blue). The elevation shading is appropriate to the relief of our area with the darker grey indicating an elevation of over 200 metres above mean sea level.

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 & Isle of Wight Butterfly Database & this report include records from all three of these Vice Counties not just records within the current Administrative Boundary.

BUTTERFLY REPORT 2022

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.

Although there were a couple of cold weeks in April that created gaps in transect data, the season as a whole was warm and sunny, and coverage was good. If anything it was the extreme heat and drought in July that proved most challenging for recorders and butterflies alike. During the second and third weeks of July many transects were walked in temperatures of 30°C or higher.

We are fortunate to have such dedicated recorders. In 2022 a total of 172 full transects, and seven single species transects were walked, including several new sites. We'd like to express thanks to all involved, especially those who participated for the first time. Thankfully Covid restrictions did not impact on the season, so with 160 sites yielding data for both 2021 and 2022, we can report relative change figures for all species.

As many of you will know, butterfly transects are walked once a week, from 01 April to end September. It's not always possible to walk all 26 weeks, but of 172 full transects walked in 2022, 61% of these achieved 23-26 weeks coverage, with a further 18% walked 20-22 weeks. This gives a combined total of 79% of transects that were walked for 20 weeks or more, which is a great achievement.

There were more than 200,000 butterflies recorded on transect in 2022, and just under 3,000 moths. Relative to 2021, this is a 3.4% increase for butterflies, and a 27.5% increase for moths. The big increase in moths reflects the increased recording of day flying moths on transect, which is great to see. In time we hope to be able to report long-term trends for some of the commonest day-flying moths in the same way as we do for butterflies, so keep up the good work, and encourage others.

When looking at the individual species accounts in this Report, you'll notice from the flight period graphs that many species emerged a couple of weeks earlier than 2021, reflecting the generally warmer start to the season. In terms of which species did well and which fared badly, there is no denying that the extreme heat and drought probably played a part. Several of the grass-feeding Satyrids struggled, with declines for Small Heath (-37%), Marbled White (-24%) and Meadow Brown (-13%), whilst in complete contrast, Ringlet (+88%) and Wall (+257%) both had a great year. Red Admiral (-58%) and Peacock (-33%) had poor years, with both being conspicuously absent in late summer. Of the migrants, Clouded Yellow (+432%) had a good year, and even the rare Long-tailed Blue turned up on transect.

Small Pearl-bordered Fritillary was not recorded on any transect, nor indeed observed through *ad hoc* recording, so sadly it may now be extinct in Hampshire. However, to finish on a more positive note, other species that did well on transect in 2022 included Chalk Hill Blue (+38%), Comma (+61%), Green Hairstreak (+77%), Green-veined White (+98%), White Admiral (+101%), and Holly Blue (+119%).

Many thanks go to all those in Hampshire and the Isle of Wight who participated in the 2022 'Big Butterfly Count' which took place between 15 July and 07 August. This national survey has been running since 2010 and currently focuses on 18 common and widespread butterfly species and three day flying moths as listed in the table below. It asks members of the public to spend 15 minutes outside on a bright day, recording the greatest number of each species seen at the same time. Many surveys take place in gardens and other areas not well covered by more formal transects.

The number of counts carried out in 2022, both locally and elsewhere in the UK, was notably lower than in 2021, most probably because Covid restrictions were eased. In Hampshire and the Isle of Wight 1,781 recorders carried out just under 4,000 counts, with 41,712 individual butterflies recorded. While most recorders only carried out a single count, 57 keen souls carried out over ten counts each, with six of these managing at least 20.

Species	Hants/IoW Count	Hampshire/IoW Ranking					UK Ranking				
		2022	2021	2020	2019	2018	2022	2021	2020	2019	2018
Gatekeeper	8,848	1	5	3	1	3	1	4	3	4	3
Large White	6,953	2	2	1	4	2	2	2	1	5	2
Meadow Brown	6,596	3	4	4	2	4	4	3	5	6	5
Small White	5,636	4	1	2	3	1	3	1	2	3	1
Common Blue	1,761	5	15	7	8	6	10	15	8	13	6
Comma	1,670	6	7	10	12	5	8	12	10	11	11
Speckled Wood	1,606	7	14	12	13	7	11	13	12	9	8
Red Admiral	1,312	8	3	6	7	8	5	5	6	7	9
Peacock	1,262	9	6	5	6	14	6	7	4	2	4
Brimstone	1,048	10	13	9	9	11	17	18	15	18	17
Holly Blue	940	11	16	8	15	10	13	17	13	15	12
Ringlet	854	12	8	11	11	17	9	6	9	12	14
Small Copper	702	13	11	14	16	18	14	11	14	16	16
Marbled White	529	14	9	16	10	19	18	9	17	17	19
Green-veined White	515	15	12	13	14	9	12	10	11	10	7
Small Tortoiseshell	498	16	10	15	17	16	7	8	7	8	10
Six-spot Burnet	364	17	19	17	18	12	15	14	16	14	15
Painted Lady	323	18	17	18	5	15	16	16	18	1	13
Jersey Tiger	227	19	20				19	21			
Silver Y	68	20	18	19	19	13	20	19	19	19	18
Scotch Argus	Species not present						21	20			

As shown above, Gatekeeper was the most abundant species, both locally and nationally, during the window when the counts took place. Large White, Meadow Brown and Small White were the next three most abundant species seen, with these four species often featuring highly in this survey. At the other end of the scale it was not a good year for two of our regular migrants, with neither the Painted Lady butterfly nor the Silver Y moth seen in good numbers.

As mentioned earlier in this report, we are now able to access records from the Garden Butterfly Survey in time to include in this report.

Records of 35 different species were received from 93 gardens, a grand total of 7,414 butterflies within 82 tetrads (6.6% of our Hampshire Branch total).

The table below shows this year's top ten species together with their position (by number of records) since 2016. The numbers in brackets indicate the equivalent position of the species in this year's Common Species Table based on number of records (see page 5 of this report).

Species	Records	Individuals	Position (by Records)						
			2022	2021	2020	2019	2018	2017	2016
Small White	772	1,110	1 (2)	1	1	1	1	2	1
Large White	633	975	2 (5)	3	2	2	2	6	2
Holly Blue	437	579	3 (13)	8	3	13	3	7	5
Meadow Brown	410	828	4 (1)	5	7	5	5	9	7
Brimstone	367	498	5 (6)	4	6	7	6	3	4
Gatekeeper	353	706	6 (4)	7	9	6	9	10	10
Red Admiral	303	360	7 (11)	2	4	3	8	1	3
Comma	278	313	8 (9)	10	10	10	7	4	11
Peacock	263	377	9 (8)	6	5	9	10	8	6
Speckled Wood	254	334	10 (3)	9	8	4	4	5	9

The only year Small White has not headed the table is 2017 which coincided with the only year Large White also failed to reach the top three.

Vice County	Gardens
10 (Isle of Wight)	9
11 (South Hants)	55
12 (North Hants)	29

By far the greatest number of gardens submitting records were located in South Hampshire, although as in previous years the garden submitting the greatest number of records was in North Hampshire, close to the border with Wiltshire.

Seven gardens recorded only one butterfly and 18 recorded over 100.



Butterfly Record Coverage 2022

Recorded tetrads in 2022 – the darker the circle, the greater the recording effort, based on a logarithmic scale.

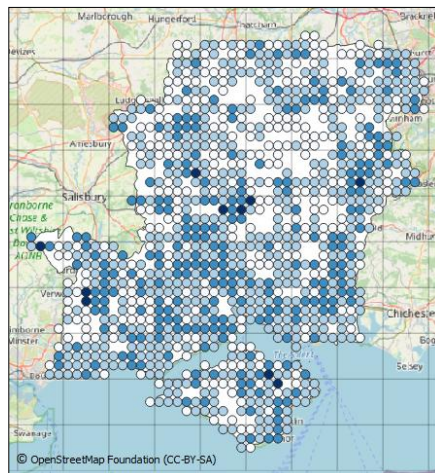
This methodology better illustrates the ‘cold spots’ that require more targeted effort in coming field seasons.

No of 2022 records: 106,717

No of tetrads in 2022: 995

Number of Recorders		
Source	2022	2021
Transects	345	337
WCBS	45	47
Big Butterfly Count	1,779	3,181
Garden Butterfly Survey	93	57
iRecord	650	687
iNaturalist	78	-
Living Record	88	77
Spreadsheets	60	45
MapMate	9	5
Overall	2,908	4,170

Shading denotes source not included previously



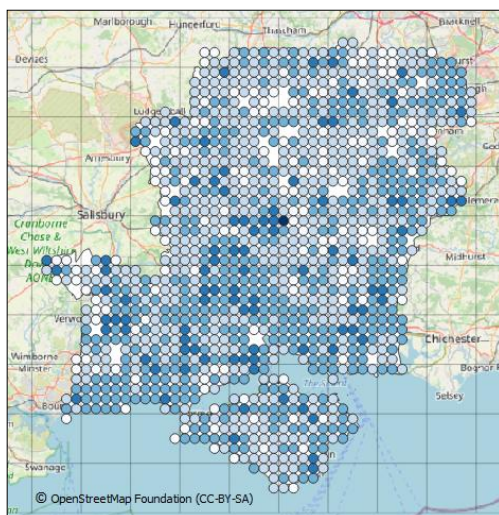
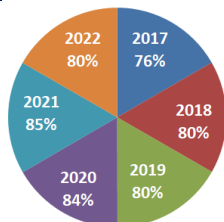
Butterfly Record Coverage 2020 - 2022

Recorded tetrads in the three years 2020 to 2022 (93% coverage) – as per the preceding map, the darker the circle, the greater the recording effort.

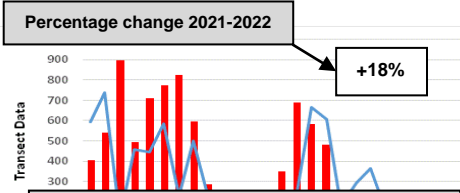
No of records: 344,770

No of tetrads: 1,162

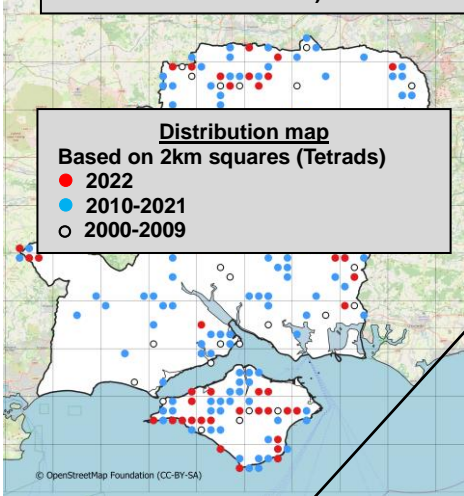
Tetrad Coverage 2017 - 2022



Species Number (Agassiz et al, 2013) – Vernacular – Taxon – Author



Flight period graph
 These are based on Transect Data except that All Data is used for some species poorly represented on transects (vertical axis is number of individuals in both cases).



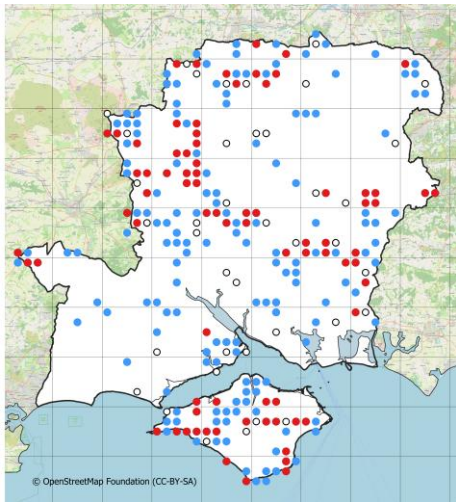
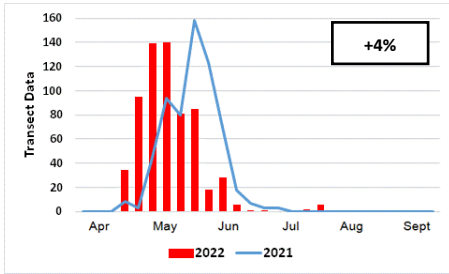
BC Priority Status
 Determined in accordance with *South East England Conservation Strategy 2015-2025* as adopted by Hampshire & Isle of Wight.

BC Priority status	High
No of 2022 records	
No of 2022 individuals	Adults
No of 2022 tetrads	Occupied tetrads
No of post 2005 tetrads	

Earliest on Database	Summary Tables are also provided towards the end of this document		
Earliest 2022			
Latest 2022			
Latest on Database			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%

Based on 160 transects, comparing 2022 records with 2021 indicating the number of transects in each category

AUTHOR'S NARRATIVE
 Prepared using information & data available on 30 November 2022 which excludes any records quarantined for further investigation



BC Priority status	High
No of 2022 records	510
No of 2022 individuals	2,000
No of 2022 tetrads	78
No of post 2005 tetrads	244

Earliest on Database: 12 Apr 2011			
Earliest 2022	16 April Butser Hill		
Latest 2022	15 August Butser Hill		
Latest on Database: 03 Sep 1993			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	14	8	20

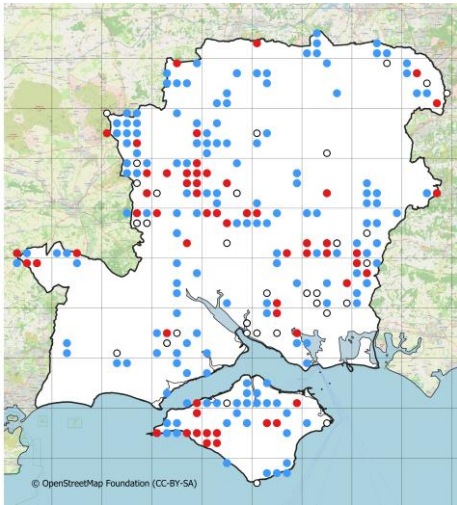
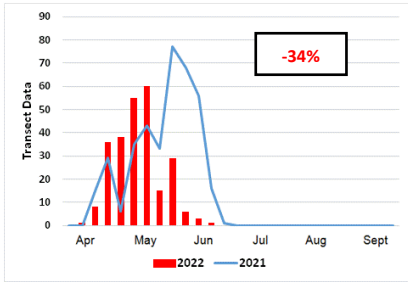
It was yet another good year for Dingy Skipper with the species being recorded in 78 tetrads, the highest since 2011. The total of 2,000 individuals was also the highest since 2011 from a very similar number of recorders.

Butser Hill provided both the earliest and latest sightings and it was good to see a small second generation again this year.

Pilot Hill had a total of 77 individuals and was also the transect with the highest single count (28) in mid May.

The highest count came from the Isle of Wight, 84 at Brook Down in late May and Dingy Skipper was present on ten of the 13 Isle of Wight transects. The Island's density of Dingy Skipper far exceeds either north or south Hampshire at 1.06 butterflies per square kilometre.

On the 'mainland' the highest count of 45 was recorded at four sites spanning from late April until early June.



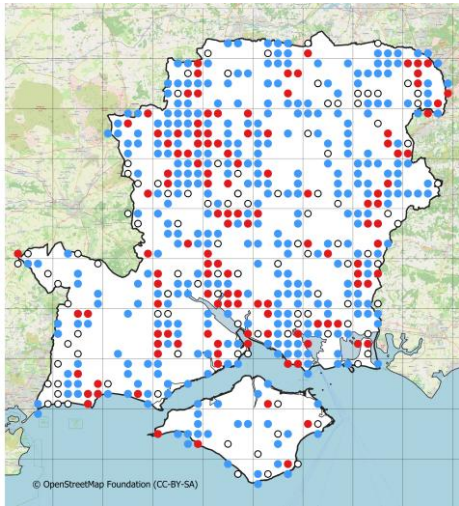
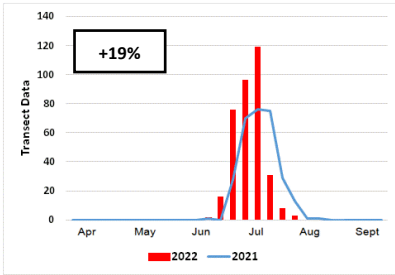
BC Priority status	High
No of 2022 records	284
No of 2022 individuals	853
No of 2022 tetrads	57
No of post 2005 tetrads	220

Earliest on Database: 02 Apr 2009			
Earliest 2022	11 April Butser Hill		
Latest 2022	22 June Queen Elizabeth Country Park		
Latest on Database: 07 Sep 2004			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	16	8	7

It wasn't the best year for Grizzled Skipper and numbers of individual butterflies were lower than 2021. Numbers recorded on transect were also 34% lower than 2021. The decrease of this species seen on 16 transects was greater than 20%, while seven transects saw numbers increase by more than 20%, resulting in the overall decrease of 34%. A total of 853 individuals were recorded across the counties, compared to 993 in 2021.

The flight season started five days earlier than 2021, with Butser Hill and Magdalen Hill Down beating Mottistone Down this time. Stockbridge Down had some phenomenal figures this year, with a high count of 40 on 06 May, and 21 on 04 May. Not to be outdone, Butser Hill recorded several counts of over 20 individuals. Magdalen Hill Down also remains a good place to see this butterfly. The woodland sites also keep producing small numbers, such as Bentley Wood, West Wood and Botley Wood.

On the Isle of Wight, the first individual was reported on the same date as last year, on 16 April at Mottistone Down. Brook Down saw an incredible 46 individuals on 28 May. Both sites are good places to see Grizzled Skipper on the Island, as is Bouldner Forest, on the northwest. Arretton, Compton and Shalcombe Down also produced sightings.



BC Priority status	Medium
No of 2022 records	293
No of 2022 individuals	803
No of 2022 tetrads	123
No of post 2005 tetrads	491

Earliest on Database: 26 May 2007			
Earliest 2022	14 June Micheldever		
Latest 2022	17 August Old Winchester Hill		
Latest on Database: 21 Sep 1996			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	Not Measured		

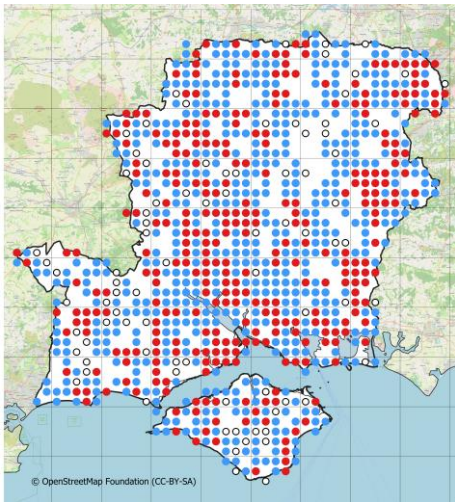
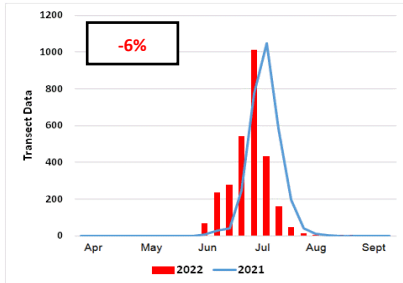
Peak emergence of most single brooded species was slightly ahead of last year, which was delayed due to the cooler spring in 2021. The same, too, was true of Essex Skipper, with the first individual a week earlier than last year.

A total of 803 individuals were recorded in 2022 compared with 875 last year. Even though individual numbers were down, the species showed a 19% increase in abundance on transect, following on from a 58% increase the previous year (2021). While this looks good for Essex Skipper, it is hard to ascertain its actual distribution and abundance due to the difficulty in distinguishing between it and Small Skipper from a distance.

Numbers recorded at some sites, including Magdalen Hill Down, Millers Pond, Monks Walk, Ox Drove Meadow, Chilbolton, Deacon Hill, Browndown North and especially Pilot Hill, were all in double figures. An incredible 31 were recorded at one site near Hawley.

Isle of Wight numbers remain low, with a handful of records only. Three individuals were recorded at Freshwater on 23 July.

Essex Skipper is possibly under-recorded across both counties. I have seen them on my local road verges; why not check yours?



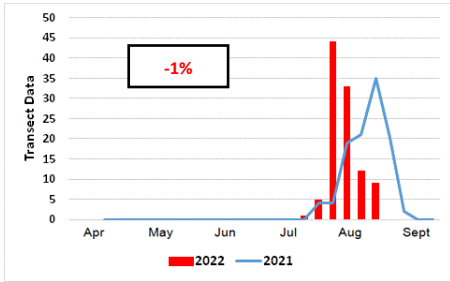
BC Priority status	Low
No of 2022 records	1,589
No of 2022 individuals	6,222
No of 2022 tetrads	315
No of post 2005 tetrads	888

Earliest on Database: 16 May 2011			
Earliest 2022	07 June Sparsholt		
Latest 2022	05 September Hyden Hill		
Latest on Database: 19 Sep 1991			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	Not Measured		

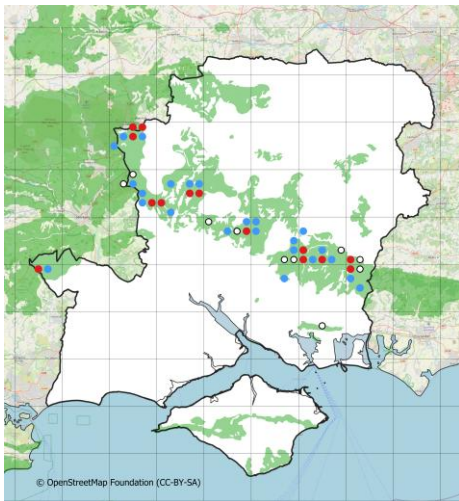
Small Skipper presents a confusing picture in 2022. While it shows a pleasing 12.5% increase in the number of records received, collectively, we saw nearly a thousand fewer individuals than last year. A total of 6,222 individuals were recorded in 2022, compared to 7,083 in 2021. While the number of individuals positively identified as Small Skipper on transects fell by 6% between 2021 and 2022, the sightings of undifferentiated Small/Essex Skipper (see Page 64) rose by 35% suggesting that the species most probably fared better than indicated above. We'll see what next year brings. In the meantime – let's not mow that grass!

As with its cousin, Small Skipper was a week or so ahead of last year's peak emergence. Ower Wood near Sparsholt had the first sighting, with Southampton following two days later. Unusually, the butterfly was seen into the first week of September, perhaps a sign of that incredibly hot summer.

Several sites had records of over forty individuals: Magdalen Hill Down, Deacon Hill, West Wood, Fleming Park, Monks Walk, The Hawk Conservancy, Pitt Down, Charlton Down, and Whiteley Pastures. Three sites had records of over 100! These were Fleming Park (151), Hawley (101), and Browndown North (100). Browndown was the best place to see Small Skipper on the Isle of Wight, with 165 individuals seen in July. Ningwood Common also had good sightings, with 37 seen on 20 June.



Chalk



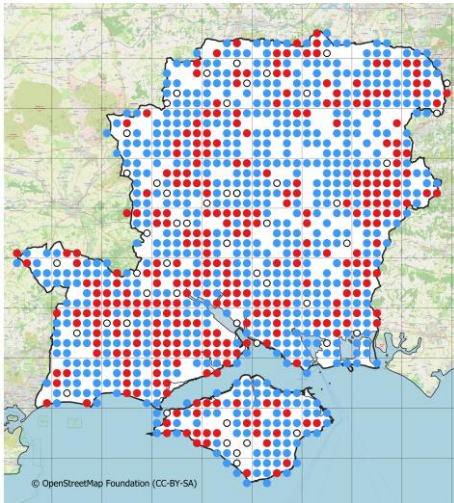
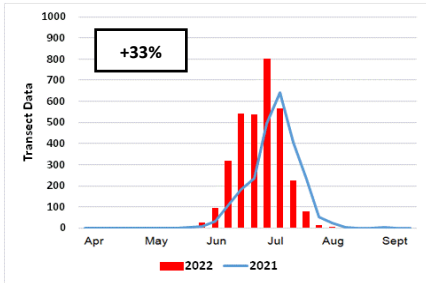
BC Priority status	High
No of 2022 records	104
No of 2022 individuals	484
No of 2022 tetrads	14
No of post 2005 tetrads	44

Earliest on Database: 11 Jul 2018			
Earliest 2022	23 July Perham Down		
Latest 2022	24 September Old Winchester Hill		
Latest on Database: 11 Oct 1986			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	3	-	2

The status and distribution of this highly localised species remains broadly unchanged. It was seen in good numbers at most of its known Hampshire sites, and had a good showing at Warren Hill, Wiltshire (Vice County 12 north Hampshire).

The season began nine days earlier than 2021, with a strong emergence in the last few days of July and early August. Peak season was in early to mid August, which is comparable to 2020, but three weeks earlier than 2021. The best counts were 35 on 06 August at Oxenbourne Down, 34 on 15 August at Old Winchester Hill and 31 on 29 July at Perham Down. St. Catherine’s Hill and Broughton Down gave tallies of 29, on 13 and 21 August, respectively, whilst 14 on 07 August was the best for Queen Elizabeth Country Park. At the sites with smaller populations, six were seen on 07 August at Stockbridge Down, two on 12 August at Martin Down NNR, and worryingly just two on 24 August at Beacon Hill NNR.

In central and west Hampshire the season had finished by end August, but as is often the case, Old Winchester Hill, in south-east Hampshire, continued for a further fortnight, concluding on 16 September, apart from one very late sighting eight days later.

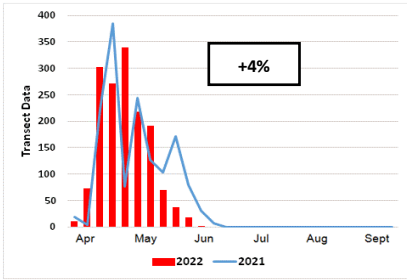


BC Priority status	Low
No of 2022 records	1,787
No of 2022 individuals	2,992
No of 2022 tetrads	310
No of post 2005 tetrads	957

Earliest on Database: 28 Apr 2007	
Earliest 2022	17 May Broughton Down
Latest 2022	15 August St Clair's Meadow
Latest on Database: 22 Sep 2013	
Transect Site	Down >20% Within ± 20% Up >20%
Trends	37 22 61

Large Skipper numbers improved in 2022, but the downturn of the previous two years (−50%, 2021; −21%, 2020) was not fully reversed. First sighting dates were earlier than 2021 on both the mainland (Broughton Down) and Isle of Wight (Compton Bay) by two weeks and five days, respectively. The last sighting date was earlier on the mainland (St Clair's Meadow) by nine days, but slightly later (three days) on the Isle of Wight (Briddlesford Woods). Flight periods were therefore longer in 2022 than 2021, by five days on the mainland and almost two weeks on the Isle of Wight. Numbers peaked in the week beginning 08 July, which was warm but before the highest temperatures of the summer heatwave. Numbers then fell off more quickly than 2021. The highest number of individuals for a single record was at Hurn on the mainland (33) and at Afton Down on the Isle of Wight (25).

The earlier emergence on the Isle of Wight and, especially, the mainland is possibly explained by the milder spring compared with the equivalent cooler and wetter period in 2021. In common with other Skipper species, numbers lowered markedly as the summer heatwave took hold, probably reflecting the high temperatures and impact on food resources.



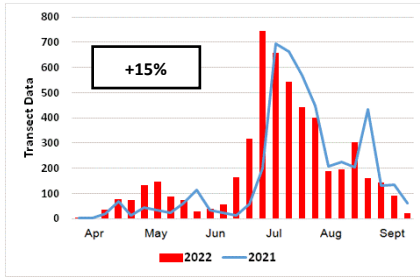
BC Priority status	Low
No of 2022 records	1,610
No of 2022 individuals	2,804
No of 2022 tetrads	350
No of post 2005 tetrads	1,026

Earliest on Database: 10 Mar 1990			
Earliest 2022	17 March	Lovedean	
Latest 2022	20 June	Bishops Green	
Latest on Database: 22 Sep 2011			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	38	30	38

This species continues to maintain a near constant presence. 2,804 individuals were counted in 2022 (including 171 on the Isle of Wight) of which 1,554 individuals were counted on transect (72 on the Isle of Wight). Since 1998, the log annual index in Hampshire, an indicator of numbers seen on transect, has remained between 1.1 and 1.6 but has indicated consistently higher counts in the last 12 years. The earliest sighting in 2022 was almost two weeks earlier than in 2021 but the last sighting occurred within three days of the 2021 date.

Twenty individuals were counted on 15 and 21 May (Eastleigh and River Loddon, respectively). The most individuals seen on transect was 12 on 24 April (Ashford Hill Woods & Meadows). Where gender was determined in the off-transect records there were 153 males and 29 females, a ratio of 5.3:1.

Numbers seen on transect varied during 2022 but unlike 2021 it was not possible to distinguish individual peaks. Rather, there was a single broad peak spanning 05 April to 14 June which reached a maximum of 331 individuals between 29 April and 05 May.



BC Priority status	Low
No of 2022 records	8,101
No of 2022 individuals	16,949
No of 2022 tetrads	760
No of post 2005 tetrads	1,171

Earliest on Database: 20 Jan 2020			
Earliest 2022	17 March	Wheelers Bay	
Latest 2022	19 November	Wheelers Bay	
Latest on Database: 07 Dec 2012			
Transect Site	Down >20%	Within ± 20%	Up >20%
Trends	40	26	48

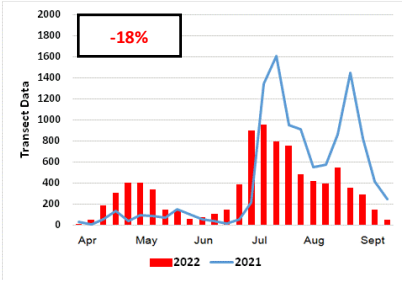
Large White increased 15% on 2021, following a dip of -23% in 2021 from 2020 within the transect trends. In total 16,949 individuals were recorded this year compared to 26,052 the previous year, suggesting a decrease. There was also an overall decrease in records by 1,246. This was also borne out in the Big Butterfly Count which saw a 9.45% decrease nationally.

Records both on the mainland and Isle of Wight started in March and ended November as in previous years, with not much of a difference between start and end dates. The peak was in July with 9,859 individuals recorded. The end of the year saw October with 66 individuals recorded, compared to 2021 where 36 were reported, suggesting a warmer October. November just saw two records.

The largest count this year was of 94 at Chilling, Southampton (VC 11) on 03 September and the first count in double figures was at Windmill Hill (VC 11) on the 22 May.

On the Isle of Wight the largest count was 23 at Ningwood on the 07 August, and the first double count was on 04 August in Newport of ten individuals.

The Large White seems to be holding its own and is still a widespread species.



BC Priority status	Low
No of 2022 records	9,540
No of 2022 individuals	22,096
No of 2022 tetrads	759
No of post 2005 tetrads	1,176

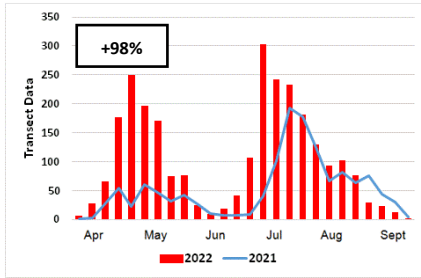
Earliest on Database: 09 Jan 1991							
Earliest 2022	17 March Eastney						
Latest 2022	04 November Bushfield						
Latest on Database: 08 Dec 2007							
Transect Site Trends	<table border="1"> <tr> <th>Down >20%</th> <th>Within ± 20%</th> <th>Up >20%</th> </tr> <tr> <td>74</td> <td>21</td> <td>19</td> </tr> </table>	Down >20%	Within ± 20%	Up >20%	74	21	19
Down >20%	Within ± 20%	Up >20%					
74	21	19					

Small White emerged slightly later in 2022 than 2021; 17 March compared to 26 February. Small White decreased on transect by 18%, this following on from a 2% decrease in 2021 from 2020. The Big Butterfly Count nationally also saw a decrease of 25.8%.

In 2021, 41,782 individuals were counted with 12,604 records; 2022 had 22,096 individuals from 9,540 records, showing quite a decline in individuals seen. Peak time was July, with 10,437 individuals counted. The end of the year saw 221 individuals counted in October, up on last year (115) and a single individual from November. The highest record was from Ewhurst Park (Vice County 12) on the 20 July with an amazing 170 individuals. Vice County 12 had the first triple count (100) on 14 July at Worldham. The first double count was from Monks Walk, Frater Fields (Vice County 11) on 15 April of ten individuals.

The Isle of Wight's two highest counts of 14 both came from East Cowes on the 17 and 26 July. The first double count seen on the Island was an early record from Brading on 21 April of ten individuals.

The Small White is still a widespread butterfly despite declines. How many are looking for the predicted Southern Small White amongst the flurries of whites?



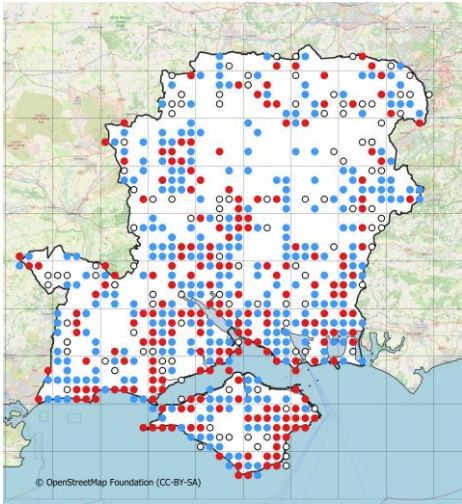
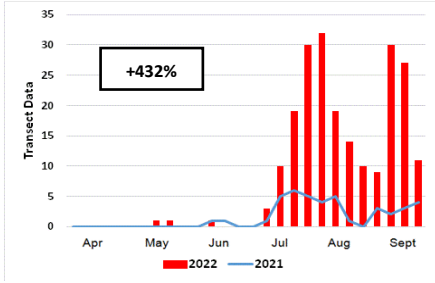
BC Priority status	Low
No of 2022 records	2,747
No of 2022 individuals	4,778
No of 2022 tetrads	477
No of post 2005 tetrads	1,108

Earliest on Database: 03 Mar 1989			
Earliest 2022	20 March Brading		
Latest 2022	11 October Selborne		
Latest on Database: 05 Nov 2017			
Transect Site Trends	Down >20%	Within ±20%	Up >20%
	21	30	54

On the face of it, 2022 was a good year for Green-veined White, with numbers recorded on comparable transects nearly double those seen in 2021. This is perhaps surprising for a species noted as preferring damp grassland, given the dry and at times hot conditions experienced during its main flying season which ran from late March through to early October.

The improvement was particularly notable in the spring brood, where overall numbers increased by over 200% compared to 2021. Numbers seen once the summer brood started to emerge also increased but by a more modest amount - about 50%. This resulted in an unusual flight pattern for this species, with spring numbers only slightly lower than those seen in the summer when usually the summer brood will be three or four times greater.

It was pleasing to see numbers at Winnal Moors transect near Winchester achieve their best annual index since 2018 (246) with numbers in the summer brood being three times greater than those seen in the spring. Kemphill Moor Copse transect had the best annual index on the Isle of Wight (153), although here over 70% of individuals were seen in the spring, raising concerns as to how well the species will fare next year.



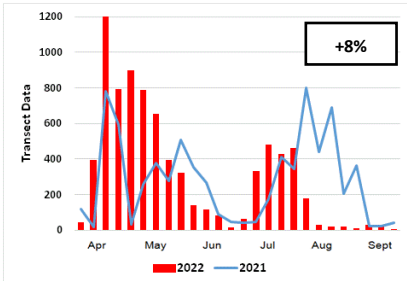
BC Priority status	Low
No of 2022 records	507
No of 2022 individuals	878
No of 2022 tetrads	206
No of post 2005 tetrads	551

Earliest on Database: 08 Feb 2005			
Earliest 2022	22 February Southbourne		
Latest 2022	20 December Tuckton		
Latest on Database: 30 Dec 2007			
Transect Site Trends	Down >20%	Within ±20%	Up >20%
	3	5	43

This turned out to be an extremely good Clouded Yellow year. It was well distributed throughout Hampshire and the Isle of Wight in mid-summer after a good spring arrival. The first Clouded Yellow of the year was recorded at Southbourne Undercliff on 22 February, likely to have emerged on the Undercliff having overwintered as a larva. The main appearance started from late March with records from Wheelers Bay on the Isle of Wight on 21 March and Chandlers Ford on 24 March. Sightings were then received from April with a marked peak in September, tailing off into October. Notable counts were made at Chilling with seven males on 03 September and Brownwich with 18 on 11 October. Southbourne Undercliff held 20 on 18 September rising to 40 by 20 September including three helice females. A mild autumn here led to late reports with the latest photographed on 22 November.

The Isle of Wight distribution consisted of a good scattering of ones and twos, the stronghold being Wheelers Bay Revetment with seven on 19 September.

The final record received was from Tuckton on 20 December which is the latest since 2016. This was quite remarkable as temperatures had plunged as low as -7°C in the previous days.

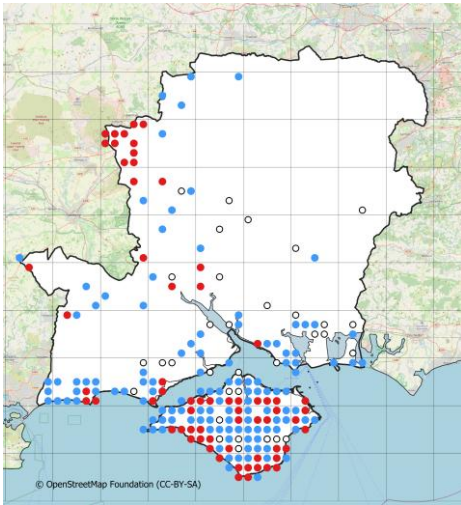
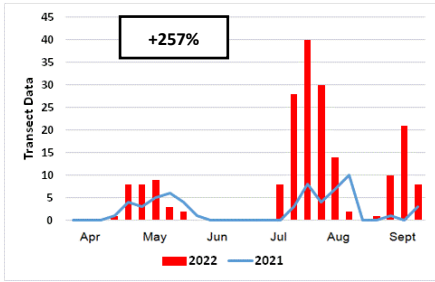


BC Priority status	Low						
No of 2022 records	6,901						
No of 2022 individuals	14,731						
No of 2022 tetrads	680						
No of post 2005 tetrads	1,147						
Earliest on Database: 01 Jan 2001 & 2022							
Earliest 2022	01 January Church Crookham						
Latest 2022	13 November Winchester						
Latest on Database: 29 Dec 1999							
Transect Site Trends	<table border="1"> <tr> <td>Down >20%</td> <td>Within ± 20%</td> <td>Up >20%</td> </tr> <tr> <td>31</td> <td>26</td> <td>44</td> </tr> </table>	Down >20%	Within ± 20%	Up >20%	31	26	44
Down >20%	Within ± 20%	Up >20%					
31	26	44					

It was a mixed year for Brimstone, with good numbers seen during the spring but fewer observations once the annual brood emerged.

Brimstone spends most of its life as an adult, hibernating over winter in that form. In 2022 it was seen occasionally in January, with numbers increasing to a peak in mid April, when females were also observed laying eggs. From that point, the number of adults gradually reduced through to the end of June, with first eggs and then larvae being spotted throughout that period. Numbers seen once the annual brood started to emerge in July were well down on 2021, although it is not unusual for summer sightings to be lower than in the spring. Usually, once they emerge, the adults will look to gorge on nectar to build up reserves for the coming winter and it has to be hoped that they were able to find sufficient after the hot dry summer.

This species is well distributed across Hampshire but less common on the Isle of Wight, which accounted for less than 5% of all individuals recorded. It was seen in good numbers on transects such as Pamber Forest in north Hampshire, Breamore in south west Hampshire and Ningwood Common on the Isle of Wight.



BC Priority status	Top
No of 2022 records	281
No of 2022 individuals	645
No of 2022 tetrads	65
No of post 2005 tetrads	198

Earliest on Database: 14 Apr 2002			
Earliest 2022	17 April Titchfield		
Latest 2022	13 October Cranmore		
Latest on Database: 10 Nov 2020			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	2	-	8

Whisper it quietly but Wall bounced back significantly in 2022.

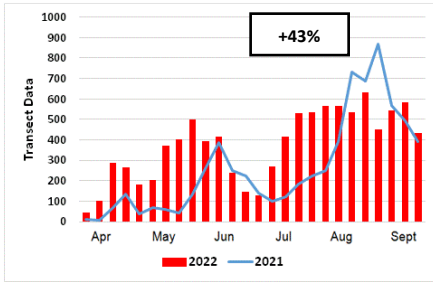
Unusually the first sightings of the year were on the mainland at Titchfield Haven on 17 April. On the Island it was recorded regularly throughout late April and May with 11 at Chilton Chine on 17 May. A couple of sightings at Normandy Marsh on 14 May were the first for many years.

Counts of 20 at Nettlecombe on 12 June and 21 at St Catherines Point on 24 July indicated the species was having a good year as did a series of sightings on the mainland from such disparate locations as Somerley, Calmore, Lymington, Martin Down, Hengistbury Head and Southampton Common.

At Shipton Bellinger the majority of records came later in the year at the time visitors were searching for Brown Hairstreak. Nine were then recorded on transect on 26 July, increasing to 25 on 01 August. Further counts of 20 at Bedlam Plantation on 04 August and 24 at Shipton Bellinger on the 05 August underlined the importance of the area for this species and were a fitting reward for the observers.

On the Island sightings continued to be made throughout the autumn with a count of eight at Niton on 20 September and five at Kempfill Moor on 09 October.

The resurgence of Wall across the two counties in 2022 after many years of decline was cause for celebration. Let's hope the recovery gathers pace in 2023.

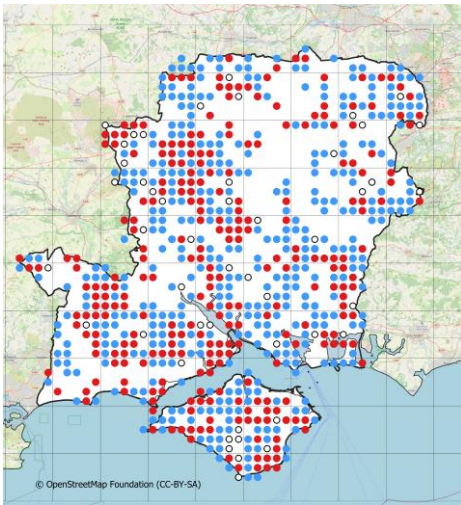
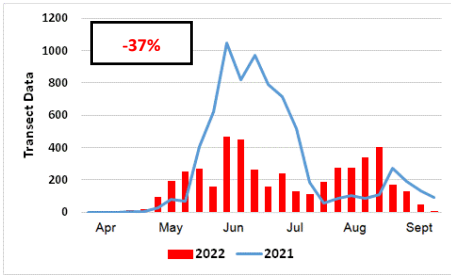


BC Priority status	Low
No of 2022 records	8,518
No of 2022 individuals	17,344
No of 2022 tetrads	651
No of post 2005 tetrads	1,134

Earliest on Database: 11 Jan 2013							
Earliest 2022	25 February Lower Test Nature Reserve						
Latest 2022	04 November Wildern LNR						
Latest on Database: 15 Dec 2011							
Transect Site Trends	<table border="1"> <tr> <td>Down >20%</td> <td>Within ± 20%</td> <td>Up >20%</td> </tr> <tr> <td>22</td> <td>23</td> <td>65</td> </tr> </table>	Down >20%	Within ± 20%	Up >20%	22	23	65
Down >20%	Within ± 20%	Up >20%					
22	23	65					

Reported every month from February until November, Speckled Wood enjoyed an excellent year across Hampshire and the Isle of Wight from its countryside, urban parks and scrubland to leafier areas of our cities. First and second-generation overlap is discernible in the flight period (transect) graph. Overall records were up 46% and numbers of individuals by 53% over 2021. The average number of butterflies per record was low (2.03) although confounded by some remarkable double counts: the first (ten) was at Blashford Lakes (10 April) with Lakeside (Eastleigh) noting 34 on 16 April. On the Isle of Wight six were counted on 15 April (Mottistone) but it wasn't until 02 June that the Island had its first double count of 25 at Yarmouth. On 16 April some 55 butterflies were recorded at Petersfield and 53 two days later at Silchester. These were the year's highest counts. For the Island, at Brading on 06 August, 75 were aggregated over six sites. As late as 24 September, 18 were seen on Blashford Lakes North Transect.

According to authors David Newland *et al* "numbers (of Speckled Wood) tend to increase following wet summers, but fall after drought years". Whatever befalls next year, 2022 was a real success for this species and a terrific recording effort.



BC Priority status	Low
No of 2022 records	2,708
No of 2022 individuals	8,284
No of 2022 tetrads	269
No of post 2005 tetrads	690

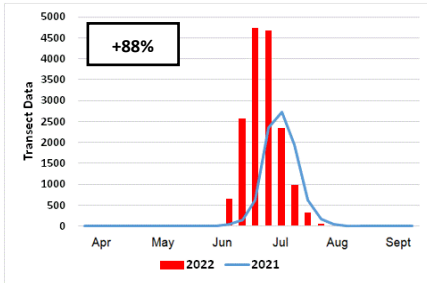
Earliest on Database: 08 Apr 1997			
Earliest 2022	23 April Blashford Lakes		
Latest 2022	11 October Arreton Down		
Latest on Database: 29 Oct 2011			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	42	20	18

The season for Small Heath started early, with reasonable numbers recorded in early May. First brood numbers were significantly down, with less than half the normal weekly totals, reaching a modest peak in the first week of June. First specimens were recorded on transect at Blashford Lakes on 23 April, and Mottistone Down on the Isle of Wight on 28 April.

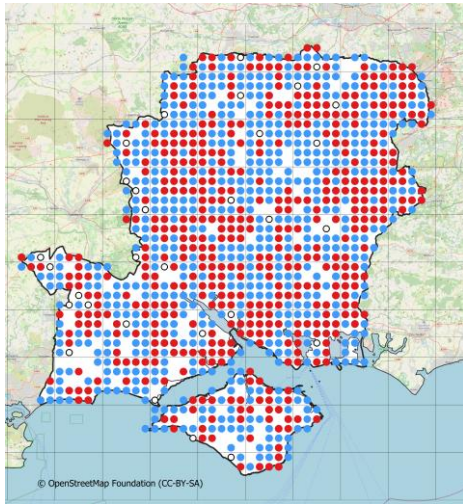
First and second broods merged with similar numbers recorded weekly to the end of the season with a modest peak in early August and two late records in October from Old Winchester Hill and Arreton Down.

Highest site counts reflected this butterflies' poor season with only one count of more than 100 at Stockbridge Down and 88 on the Isle of Wight at Whippingham Fields.

Transect numbers were 37% down on 2021, a continuation of the downhill trajectory. It will be interesting to see how this butterfly fares in coming years following a study (Carmen D. Soria et al 2011) that shows the Small Heath is being extirpated from parts of Spain where increased aridity (driven by climate change) is causing larval foodplants to wither prematurely, precluding the development of the second and/or third generations.



Chris Rose



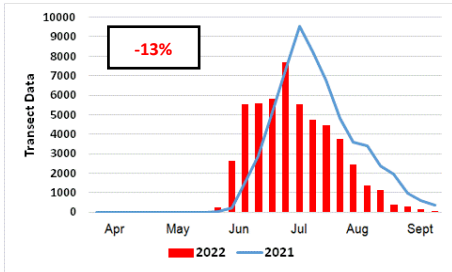
BC Priority status	Low
No of 2022 records	4,086
No of 2022 individuals	24,205
No of 2022 tetrads	472
No of post 2005 tetrads	1,043

Earliest on Database: 24 May 2016			
Earliest 2022	09 June	The Holt	
Latest 2022	30 August	Catherington Down	
Latest on Database: 11 Oct 2011			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	15	24	80

Ringlet did pretty well in 2022, despite its reputation for not being keen on extreme heat. Transect numbers rose by 88% compared to 2021 and there were creditable increases in the numbers submitted by casual observers.

West Wood near Winchester once again returned the highest counts peaking at 350 on 07 July, the wide grassy rides through mature woodland clearly being well suited to the requirements of this species. Elsewhere the Basing Wood transect reported 215 on 28 June and the Deacon Hill transect 217 on 13 July. Highest Isle of Wight counts came from the Bouldnor Forest 2 transect, with 131 on 28 June and the Ningwood Common transect with 107 on 04 July. Isle of Wight records contributed 7% of the overall total with the highest casual count of 32 at Bonchurch Down on 06 July.

Emergence commenced in the second week of June with transect peak numbers reported in the first couple of weeks of July, a week or two earlier than in 2021. Thereafter, numbers drifted downwards until the last sighting at the end of August, although it had disappeared in the Isle of Wight three weeks or so previously, no doubt assisted by the extreme July temperatures.



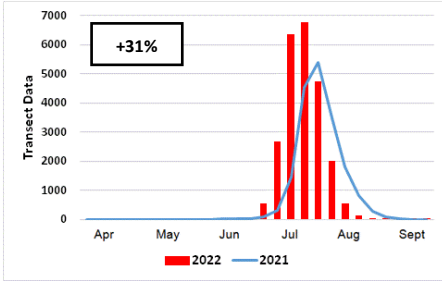
BC Priority status	Low
No of 2022 records	13,213
No of 2022 individuals	86,499
No of 2022 tetrads	772
No of post 2005 tetrads	1,165

Earliest on Database: 30 Apr 2011			
Earliest 2022	16 May Cranmore		
Latest 2022	13 November Brook Down		
Latest on Database: 13 Nov 2022			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	43	41	38

The United Kingdom Butterfly Monitoring Scheme (UKBMS) gives the status of this butterfly since 1976 as “Stable” with a change of only 1.0%. Certainly, within Hampshire and the Isle of Wight the numbers recorded usually do not vary much between years. It is also very common and can be seen reliably in most grassland habitats during the summer and into early autumn.

In 2022, peak numbers occurred in early to mid-July and good numbers of sightings continued until mid-October. Nine of the top twelve counts (all exceeding 200 individuals) came from Stockbridge Down and on the Isle of Wight there were five counts exceeding 100 with four of these records from Arretton Down. Even towards the end of the flight period on 08 October, 24 adults were recorded at Portsdown Hill, Paulsgrove. The peak occurred in the week commencing 04 July when a total of 11,475 individuals were recorded.

It seems likely that the summer drought and heatwave will have desiccated the grasses needed by Meadow Brown caterpillars, at least on some sites. However, grass growth generally recovered well in early autumn when some adults were still flying, so hopefully the impact on breeding success will not be severe.

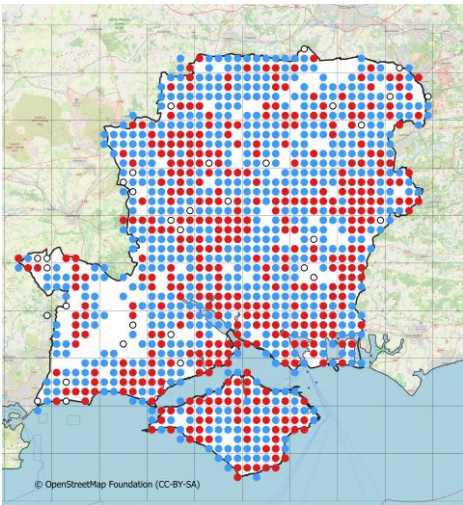
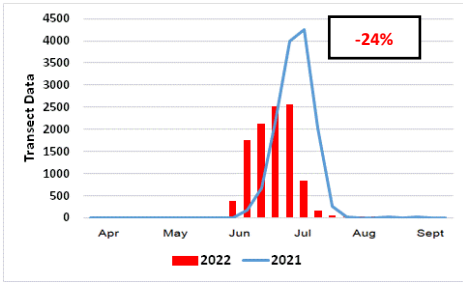


BC Priority status	Low
No of 2022 records	8,415
No of 2022 individuals	44,370
No of 2022 tetrads	745
No of post 2005 tetrads	1,165

Earliest on Database: 24 Mar 1999			
Earliest 2022	09 June	Hook Heath & The Holt	
Latest 2022	25 September	Zionshill Copse	
Latest on Database: 19 Oct 1995			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	23	44	65

After a relatively poor 2021 Gatekeeper numbers bounced back in 2022 with an overall increase of 17% and a 31% increase on transect. The number of records was also up albeit by a more modest 4%. The peak occurred in week of 22 July, a week earlier than 2021 and more in line with previous years. Like many summer species Gatekeeper were impacted by the dry summer with later summer numbers tailing off quickly, but by less than some other species. The net result was that the flight pattern was very similar to 2020. The flight period was virtually identical to the previous two years. The first records were on 09 June on The Holt and Hook Heath transects and the last record was on 25 September at Zionshill Copse Nature Reserve.

There were 15 counts of over 100 with the maximum count on Worthy Down on 15 July. Bouldner Forest recorded the highest daily count on transect with 134 on 18 July. Pamber Forest recorded the most on transect with 663, closely followed by the walked route at Latchmore with 659. Surprisingly numbers on the Island were down generally with last year's top transect, Ningwood Common, barely reaching 50% of its 2021 total.



BC Priority status	Low
No of 2022 records	3,221
No of 2022 individuals	17,402
No of 2022 tetrads	412
No of post 2005 tetrads	1,020

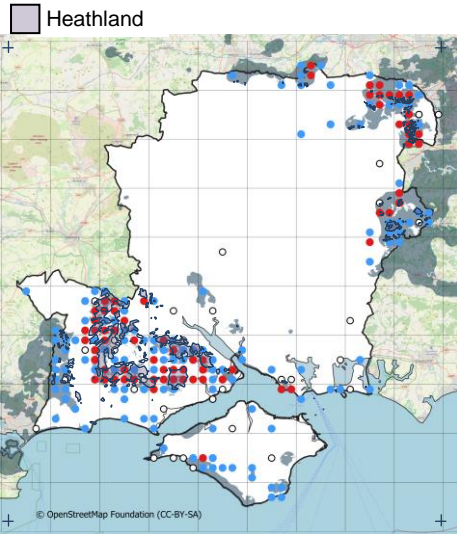
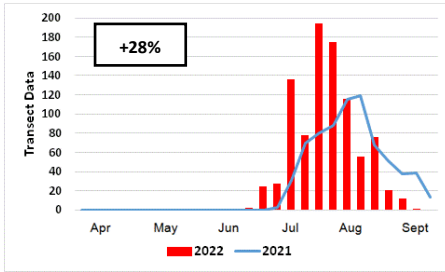
Earliest on Database: 22 May 2022			
Earliest 2022	22 May	Goodworth Clatford	
Latest 2022	14 August	Oakley	
Latest on Database: 25 Sep 2003			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	61	30	22

Marbled White started, peaked and finished earlier than in 2021, with the first sighting of the year being the earliest on the branch database, a clear week ahead of the previous record. Numbers recorded on transect were down by 24%.

On the Isle of Wight, it was on the wing between the first week of June and the first week of August, with peak counts of 166 from the Mottistone Down transect on 08 July and of 112 from Bonchurch Down on 06 July. Records from the Island represented approximately 11% of all reports, which is fairly consistent with the previous two years.

On the mainland, three figure counts were relatively few, the highest being 448, 308 and 207 from Stockbridge Down on 20 June, 16 June and 08 July respectively. Elsewhere 150 were reported from Pickett Down on 25 June, 137 from the Magdalen Hill Down (original) transect on 17 June and 111 from the Breamore transect on 07 July. Numbers started to tail off through July and there were only 42 August records from across the two counties.

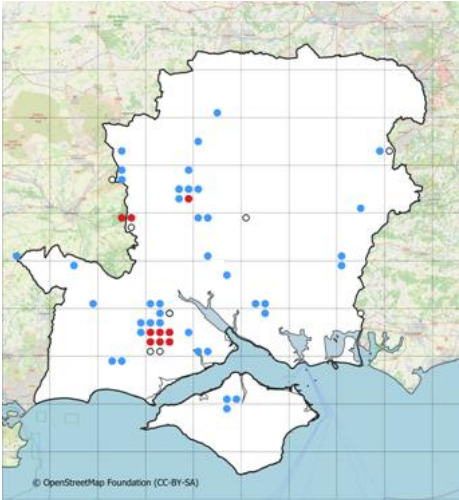
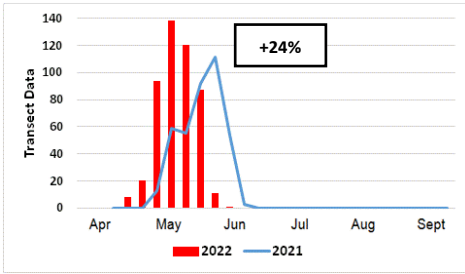
Not a vintage year for the Marbled White. It may be that its life cycle was accelerated by the exceptionally hot summer weather coinciding with its main flight period.



BC Priority status	High
No of 2022 records	510
No of 2022 individuals	1,999
No of 2022 tetrads	67
No of post 2005 tetrads	207

Earliest on Database: 03 Jun 2002							
Earliest 2022	29 June Dibden Purlieu						
Latest 2022	15 October Hampton Ridge						
Latest on Database: 15 Oct 2022							
Transect Site Trends	<table border="1"> <thead> <tr> <th>Down >20%</th> <th>Within ± 20%</th> <th>Up >20%</th> </tr> </thead> <tbody> <tr> <td>14</td> <td>5</td> <td>14</td> </tr> </tbody> </table>	Down >20%	Within ± 20%	Up >20%	14	5	14
Down >20%	Within ± 20%	Up >20%					
14	5	14					

It was another year of significant growth in Grayling numbers, with the annual total increasing by over 16%, and the records up by 5%. Total sightings on transect also rose by 28%, although the picture was more mixed, with some transects seeing significant reductions. Overall, it would appear that this species benefits from the hot, dry summers of recent years, as numbers have now doubled in the past five years. Emergence was earlier than last year's exceptionally late start, with three records in late June, and a further 28 records in the first week of July, all earlier than last year. Peak numbers were in July, when over 54% of the annual sightings were recorded, and significant counts included 189 on 15 July, and 162 on 25 July, both at Beaulieu Heath, by far the largest individual totals. September records were fewer than last year, although the latest sighting (at Hampton Ridge in the New Forest) was a week later than any previous records, and replaces a record which had stood for 35 years. Although the New Forest remains the stronghold, sightings from heathland in the north-east of Hampshire increased, with Hazeley Heath and Yateley Common the most consistent. Only nine records were received from the Isle of Wight, all from Mottistone.

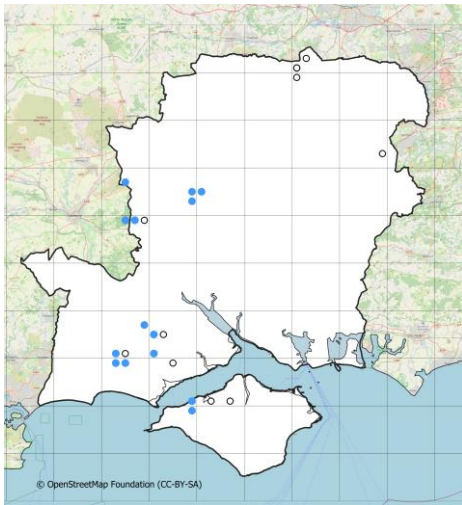
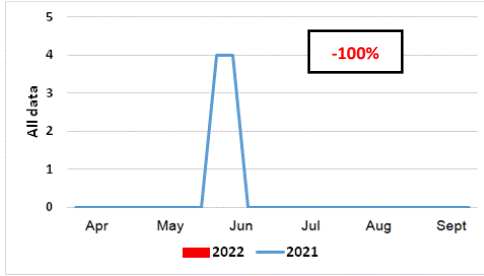


BC Priority status	Top
No of 2022 records	312
No of 2022 individuals	1,312
No of 2022 tetrads	9
No of post 2005 tetrads	51

Earliest on Database: 17 Apr 2003			
Earliest 2022	25 April New Forest		
Latest 2022	11 June New Forest		
Latest on Database: 09 Jul 1950			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	2	-	3

2022 gave rise to late April sightings in Bentley Wood and various New Forest locations. Although of similar duration to 2021, the flight season began and ended nine days earlier, and peaked a good two to three weeks earlier. The New Forest remains the county stronghold and, whilst individual transects showed a mixed performance, counts remain strong, with the overall trend positive. The best counts were of 86 at Parkhill Inclosure on 21 May and 72 at Pignal Inclosure on 18 May. Other New Forest sites gave peak counts in the twenties and thirties.

Whilst the New Forest populations remain strong, the future of the species in central-west Hampshire hangs by a thread. There were no records from West Wood, despite targeted visits by many recorders, and the only record from the Stockbridge area was of three in a private wood on 19 May, although the observer concedes it could be three sightings of the same individual. Despite ongoing conservation management, Bentley Wood (Eastern Clearing) had another mediocre year, with peak counts of ten on 21 May, and six on 22 May. All other recorders going to this well-visited site saw five or less, which is a real concern.



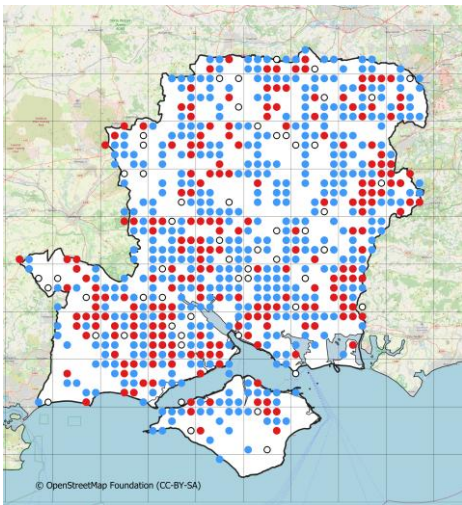
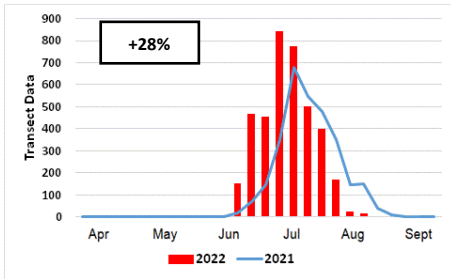
BC Priority status	Top
No of 2022 records	0
No of 2022 individuals	0
No of 2022 tetrads	0
No of post 2005 tetrads	21

Earliest on Database: 03 May 2007			
Earliest 2022	No records this year		
Latest 2022	No records this year		
Latest on Database: 29 Aug 2009			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	1	-	-

In 1988 30 sites were known across the two counties, but most colonies were small and precarious. By 2000 it was recorded from fewer than ten sites, and by 2021 it was known from just a single site. Sadly I have to report that with no records in 2022, it may now be extinct in Hampshire and the Isle of Wight.

Pamber Forest was the first of the transect monitored sites to lose its population. From an Annual Index high of 40 in 1990, it finished with 12 in 2006, then zero. The New Forest supported several small populations, the last three of which were Wootton Coppice (finished 2010), Roydon Common (finished 2016), and Holmsley Inclosure (last seen in 2018). The Isle of Wight had already lost the species some years earlier, going from Parkhurst Forest around 1997 and, finally, Cranmore in 2011.

The final Hampshire colony at Bentley Wood, Eastern Clearing had its best ever Annual Index of 197 in 2005, and although followed by a major decline, it revived to 186 in 2011. Sadly, however, the population crashed thereafter, with an annual index of just 34 in 2012, from which the species never recovered. An annual index of two in 2021 signalled the inevitable.



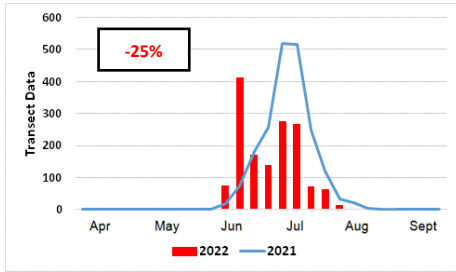
BC Priority status	Low
No of 2022 records	1,718
No of 2022 individuals	5,226
No of 2022 tetrads	220
No of post 2005 tetrads	688

Earliest on Database: Late May 1893			
Earliest 2022	10 June Godshill		
Latest 2022	01 September Walters Copse		
Latest on Database: 27 Sep 2021			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	26	19	38

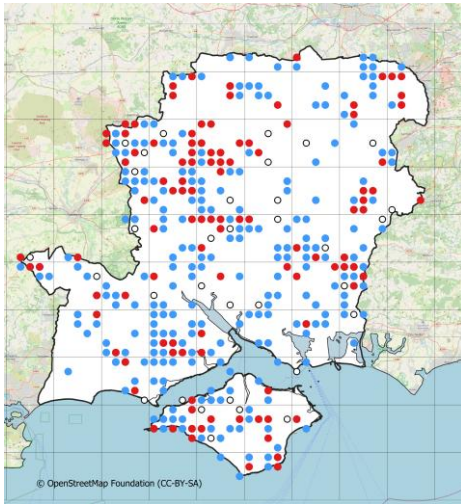
The fortunes of Silver-washed Fritillary took a turn for the better in 2022 following a couple of modest years, with the overall number of records up by 10% and transect quantities up by a very creditable 28%. This is very much a woodland insect, so may have been protected from the extreme summer heat that affected those species found in more open habitats.

The first sightings were recorded in the second week of June, a week or so earlier than in the previous year, with a peak in mid-July. Isle of Wight records contributed approximately 12% of the total, including the season’s highest count of 67 on the Kemphill Moor Copse transect on 15 July. In Hampshire, the highest numbers came from Harewood Forest with 60 on 05 July, with 51 in the Hampshire portion of West Harting Down on 13 July taking second place. Counts of 50 were recorded from Straits Inclosure on 27 June, West Wood on 03 July, and the Micheldever Wood transect on 16 July. Female *valezina* variants were noted at Bassett, Axmansford, Pondhead Inclosure and Selborne Common.

The season finished relatively early with the last mainland record from the Bentley Wood (East) transect on 26 August and just a single September record from the Island.



Helen Pinchen



BC Priority status	High		
No of 2022 records	617		
No of 2022 individuals	2,838		
No of 2022 tetrads	108		
No of post 2005 tetrads	360		
Earliest on Database: 28 May 2010 & 2020			
Earliest 2022	02 June Broughton Down		
Latest 2022	11 August Old Winchester Hill		
Latest on Database: 08 Sep 2012 & 2021			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	29	7	16

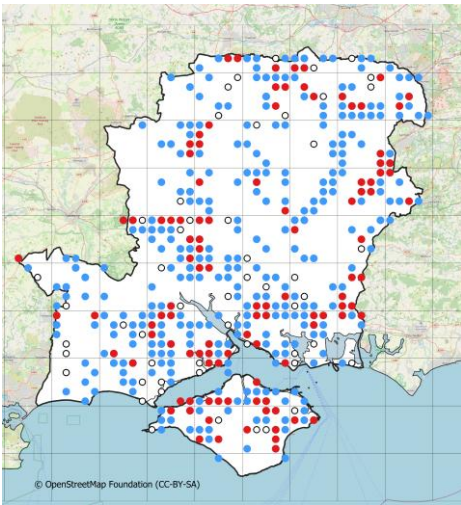
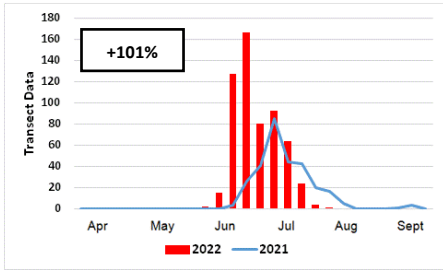
Compared with 2021, Dark Green Fritillary got off to a flying start. The highest weekly total, and seemingly peak season, being recorded in early June. There were no sightings at all in May with the first Isle of Wight specimen being reported from Mottistone Down on 11 June, ten days after the first mainland sighting.

The total number of butterflies recorded was down 24% on the previous year, with significantly fewer being recorded during their normal peak period of early July.

Despite the low overall totals, some sites had significant single day counts including 302 at Brook Down on the Isle of Wight on 05 July 2022 and 100 at Butser Hill on 15 June. The excessive heat through July seems to have ended the season prematurely, with very low numbers recorded during the first week of August. The latest was on the mainland at Old Winchester Hill on the 11 August and a singleton in Freshwater on the Isle of Wight on 06 August.

After last year's boom, the Dark Green Fritillary is on a rollercoaster ride. Transect data shows a downward trend with an overall decrease of 25%.

It remains to be seen how the heatwave may have challenged this butterfly.



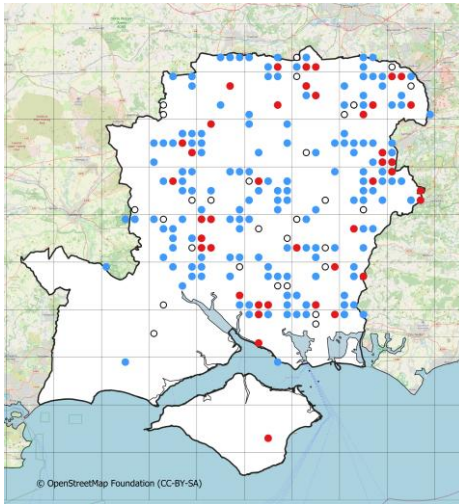
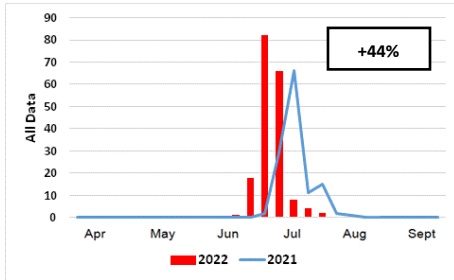
BC Priority status	Medium
No of 2022 records	529
No of 2022 individuals	1,089
No of 2022 tetrads	107
No of post 2005 tetrads	426

Earliest on Database: Late May 1893			
Earliest 2022	09 June The Holt		
Latest 2022	26 August Baddesley Common		
Latest on Database: 04 Oct 2003			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	9	6	24

Having chronicled this beautiful insect’s decline for so many years, it brings joy illimited to relate a major reversal in fortunes: a 60% increase in records attesting to more than double the number of butterflies reported in 2021, mirrored by a 101% increase in the combined transect trend.

The flight season began fairly early, on 09 June, and by 22 June high counts were already being reported, with 22 at Pamber Forest and 16 at Kings Copse in the New Forest. Numbers peaked shortly thereafter, no more so than at Briddlesford Copse with 35 on 27 June. This strictly private wood is one of a bountiful nucleus between Ryde and Newport, also comprising Kempshill Moor (20, on 26 June), Firestone, and Fattingspark Copses.

Meanwhile, the Forestry England woodlands in the east of Hampshire approached their former eminence, with 30 at the Straits Inclosure on 27 June, and another 30 at neighbouring Abbots Wood the following day. In the New Forest, 14 were seen on 02 July at Churchplace Inclosure near Ashurst. Numbers everywhere had dwindled by late July, and only four were seen in August, including the season’s last on the 26th.



BC Priority status	High
No of 2022 records	72
No of 2022 individuals	181
No of 2022 tetrads	41
No of post 2005 tetrads	210

Earliest on Database: 17 Jun 2017			
Earliest 2022	22 June Bentley Station Meadow		
Latest 2022	01 August Ampfield		
Latest on Database: 23 Aug 2013			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	2	3	3

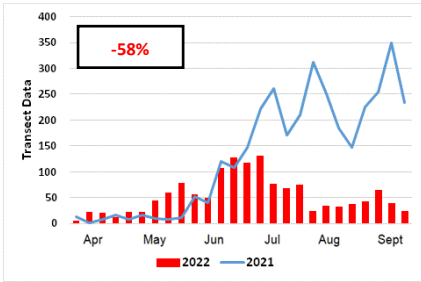
The middle of June hailed the first sighting of the Purple Emperor in Hampshire and with perfect conditions for the butterfly the counts in many sites were to be very impressive after a good egg-lay in 2021.

The weather was hot and dry throughout its flight period and consequently the butterfly again conked out by midday, hiding in the hazel thickets when temperatures reached into the upper 30°C on several occasions.

The butterfly was noted at several 'new' sites, as females started to wander looking for shady areas in which to lay their eggs. They were seen on golf courses, trying to get moisture from watered grassy areas and local nature reserves. They were also noted in gardens and outbuildings. Highlights in this spectacular year were Whiteley Pastures, West Wood and Abbots Wood, which all had excellent counts.

There was a surprise record from Arretton on the Isle of Wight, the first sighting of this species recorded on our database for Vice County 10.

It may well be that 2023 will be a poor year as there was a high failure rate of infant larvae; this can happen in heatwaves coupled with hatched egg cases falling off the leaves.



BC Priority status	Low
No of 2022 records	3,883
No of 2022 individuals	5,216
No of 2022 tetrads	680
No of post 2005 tetrads	1,166

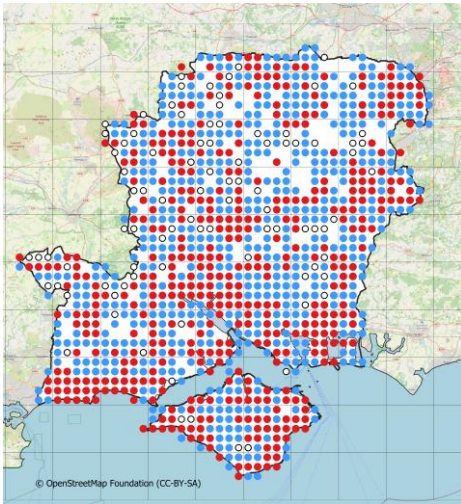
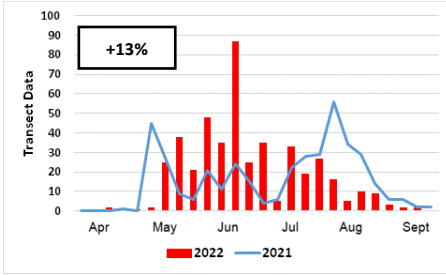
Earliest on Database: 01 Jan, various			
Earliest 2022	01 January North End, Hilsea		
Latest 2022	27 December Shoreburs Greenway		
Latest on Database: 31 Dec, various			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	100	10	5

Red Admiral had a poor year in Hampshire and the Isle of Wight. The transect counts saw nearly a 60% decrease as compared to 2021 and a reduction in numbers greater than 20% in 100 out of 115 transects with the lowest total in Hampshire alone since 2013.

The first half of the year up to early July saw normal numbers of Red Admiral but it was clear that something went wrong after this time because there was no higher autumn peak; numbers in September to November were only 20% of those in the same months in 2021. It is likely that there was a large mortality of larvae on dry and shrivelled nettles. The highest count of 27 was at Godshill on 10 July where 25 were seen in one single section of the transect.

The highest count on the Isle of Wight was 11 at Niton on 14 July.

There were two larval records: at Peartree Green (Southampton) on 29 May and at Northney (Hayling Island) on 13 June.



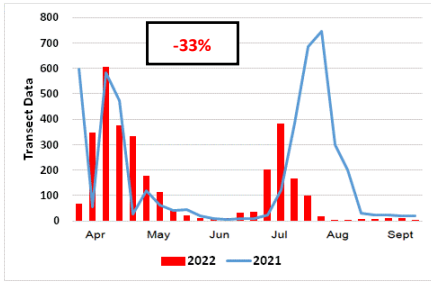
BC Priority status	Low
No of 2022 records	1,179
No of 2022 individuals	1,563
No of 2022 tetrads	436
No of post 2005 tetrads	1,044

Earliest on Database: 01 Jan 2013			
Earliest 2022	05 January Brading		
Latest 2022	02 December Bonchurch		
Latest on Database: 31 Dec 1987			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	28	28	45

A total of 1,563 individuals were counted including 338 from the Isle of Wight. Of these, 449 individuals were seen on transect, 63 of which were from the Island. The first significant weekly count on transect began as early as 15 April with two sightings in Tadburn Meadows Local Nature Reserve however it was not until 16 May that counts increased substantially during a period of south easterly winds. Subsequent observations showed an almost inverse pattern to 2021. Where there had been peaks there were now lows and *vice versa*. The population peaked between 17-21 June and then fell away until late September. Two distinct lows, 08-14 July and 12-18 August, coincided with unusually high temperatures of over 29°C.

As in 2021, total numbers on transect in Hampshire fell between the high of 2019 and the 2020 minimum but were higher than all other counts since 2010. This is reflected in the fact that only 28 out of 101 transects recorded a decrease in numbers in 2022.

The largest single counts were 15 individuals at Titchfield Haven on 18 August and 14 at North Ripley on 18 May. As in 2021, the largest count (seven) on transect was at Morn Hill, Winchester on 15 July.

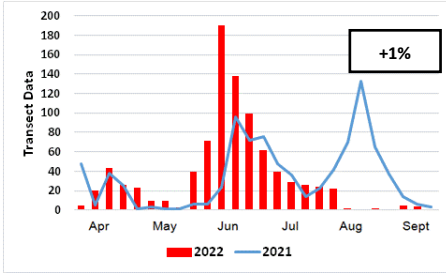


BC Priority status	Low
No of 2022 records	4,338
No of 2022 individuals	7,608
No of 2022 tetrads	676
No of post 2005 tetrads	1,160

Earliest on Database: 01 Jan, various			
Earliest 2022	01 January Brading & Petersfield		
Latest 2022	17 December Cranmore		
Latest on Database: 31 Dec, various			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	74	21	16

After an encouraging spring, the annual brood of Peacock was largely non-existent as one of the driest summers on record took its toll. In the end total sightings were down nearly 40% and transect sightings down 33%. Only 318 were sighted across Hampshire & the Isle of Wight from August onwards. In comparison, in 2021, 45% of the annual total was recorded in August.

For the first time in a number of years there were two recorded on the first day of the year, one at Brading and one at Petersfield, but few were then seen until March with greater numbers emerging in April (2,567) culminating in a peak in the week commencing 15 April, when nearly a thousand were recorded. With 2,818 recorded in July it looked like it was going to be a good year but then the dry weather intervened. Unlike 2021 there were no counts of over 100, the best being a count of 51 at Peartree Green on 31 May and an estimated 50 at Aldershot on 17 May. The highest count on transect was 15 at Selborne Common and there were only nine counts of over ten on transect in total. Breamore recorded the most on transect with 144, and Deacon Hill with 119 was the only other transect to record over 100.

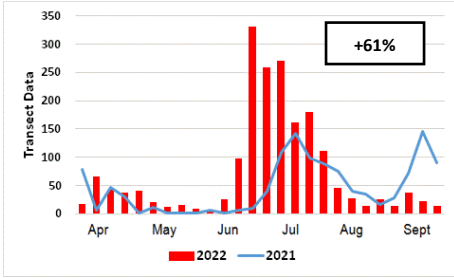


BC Priority status	Low
No of 2022 records	2,008
No of 2022 individuals	3,130
No of 2022 tetrads	530
No of post 2005 tetrads	1,095

Earliest on Database: 05 Jan 1999 & 2018			
Earliest 2022	11 February Burgate		
Latest 2022	05 December Cove		
Latest on Database: 25 Dec 2013			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	35	16	31

A return to business as usual, with a moderate first brood and an apparently non-existent second. Compared with 2021, the total numbers of records and butterflies fell by 8% and 15% respectively, somewhat at odds with the combined transect trend which rose by 1%. The year started well, with a substantial proportion of the previous year's insects surviving hibernation and spawning some respectable first brood tallies, notably 32 at Goodworth Clatford on 11 June. On the Isle of Wight, 12 were seen at Godshill on 12 June and 15 at Sandown on 16 June.

Numbers fell steadily during July, and scarcely 200 were reported throughout August, compared with nearly 1,500 the year before, falling to just 14 in September. Clearly, the prolonged drought didn't help matters, hardly encouraging a flush of young nettle to nurture a second brood, but there must have been other factors. At Great Fontley, a swathe of young nettles was cultivated, soon hosting hundreds of larvae in late July, most of which appeared to reach final instar with no evidence of parasitisation, yet not a single adult was observed on the proximate buddlejas during the ensuing weeks.

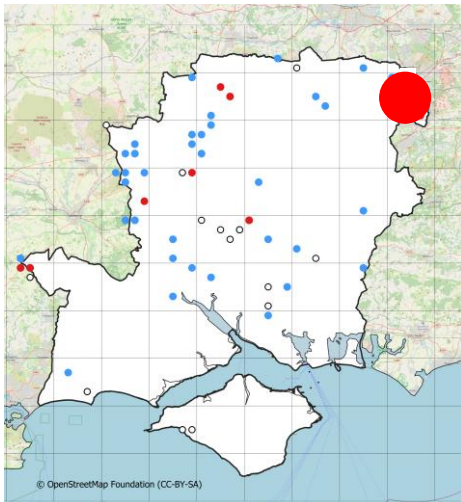
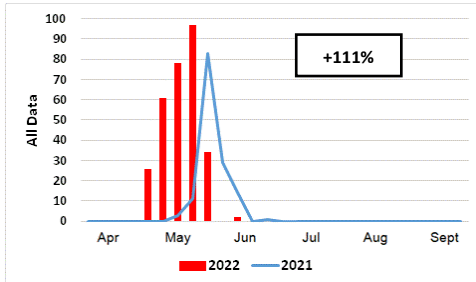


BC Priority status	Low
No of 2022 records	4,110
No of 2022 individuals	6,749
No of 2022 tetrads	652
No of post 2005 tetrads	1,110

Earliest on Database: 09 Jan 1998			
Earliest 2022	09 February Monks Walk, Gosport		
Latest 2022	10 December Southampton		
Latest on Database: 22 Dec 2013			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	18	23	59

A positive 61% increase in transect individuals recorded compared to 2021 indicates the species enjoyed an excellent year. The bulk of the records came from a summer peak that was three weeks earlier than that of 2021. The overall number of records and individuals recorded also saw pleasing increases of 50% and 60% plus respectively. With such a well recorded species showing such an upturn in fortune, whilst others show a significant downturn over the same period, interpreting annual data is difficult. This clearly illustrates the necessity to build long term data sets to provide vital background for species requirements and climate impacts.

Pamber Forest recorded the highest transect count of 18 on 25 June 2022. Other notable transect counts came from Crabtree, with 17 on 04 July and Wick Wood, Hartley Mauditt, recording 17 on 11 July. The majority of field records were the vitally important low single figure counts with exceptions being 41 from West Harting Down on 13 July, 33 recorded at Southampton Municipal Golf Course on 29 July and 30 at Harewood Forest on 05 July. West Wood, Burrow Copse section is also worthy of note, recording consistently high numbers of double figure counts throughout the summer.



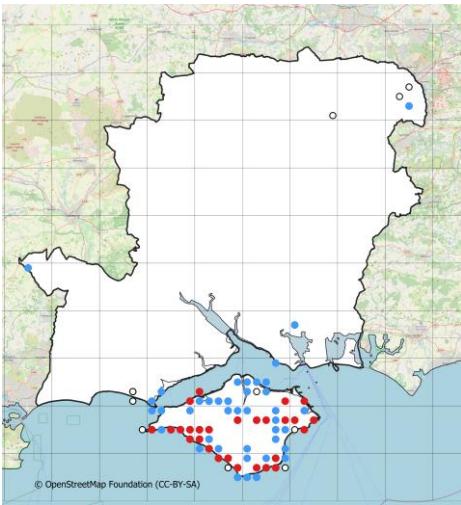
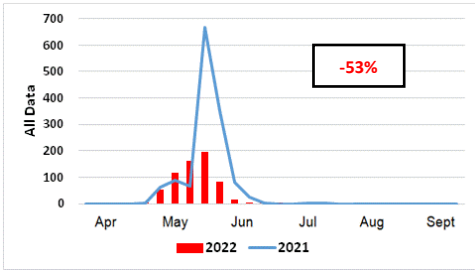
BC Priority status	Top
No of 2022 records	82
No of 2022 individuals	298
No of 2022 tetrads	11
No of post 2005 tetrads	50

Earliest on Database: 27 Apr 2007			
Earliest 2022	30 April Magdalen Hill Down		
Latest 2022	12 June Broughton Down		
Latest on Database: 20 Jun 2004			
Transect Site Trends	Down >20%	Within ±20%	Up >20%
	3	-	2

Marsh Fritillary are found in three main areas in Hampshire, Martin Down, Magdalen Hill Down (including the Extension) and the officially introduced colony in northern Hampshire. There seem to be sightings annually of ones and twos well away from these areas which are usually put down to releases but could be wanderers.

Marsh Fritillary enjoyed a renaissance in 2022 partly due to the warm settled weather during its flight period. It emerged on 30 April at Magdalen Hill Down, with peak counts of 21 recorded on both 06 and 07 May and numbers tailing off by early June. A maximum of 12 were seen at Martin Down on 14 May.

There was a good count of larval webs at the north Hampshire colony with 350 larvae counted on 21 February and a maximum count of 20 adults on 22 May. Outlying records were received from Aldershot, Farnborough and Thorn Down with four seen at Beacon Hill on 02 June which surprised the observer. The final record was on a mid Hampshire transect on 12 June.

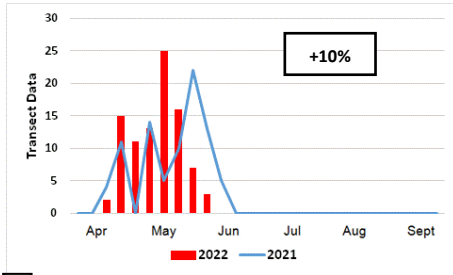


BC Priority status	Top
No of 2022 records	129
No of 2022 individuals	638
No of 2022 tetrads	26
No of post 2005 tetrads	70

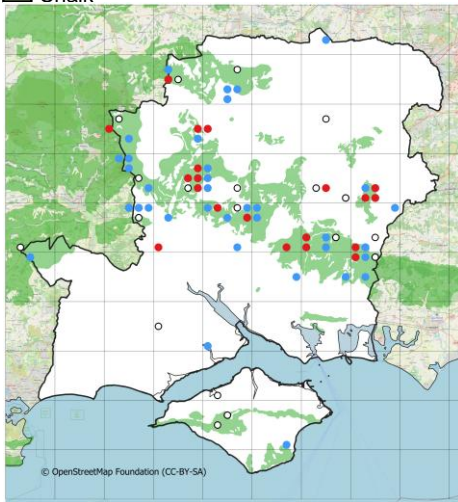
Earliest on Database: 08 Apr 2007			
Earliest 2022	21 April Whealers Bay		
Latest 2022	04 July Compton Chine		
Latest on Database: 09 Jul 2010			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	4	1	-

The annual spring web survey this year recorded a total of only 129 webs from the ten usual designated sites, a very poor result. This marked variation in numbers is quite normal for this butterfly and it seems to have the ability to recover from what would be for some species a serious slump in the size of the population and to do it remarkably quickly. Unfortunately there is evidence this year of people collecting larvae from traditional sites. This was once a widespread practice, mostly for the breeding through of the larvae to adults in the hope of producing aberrant specimens to display in cabinets; nowadays it is more likely to be for starting a new colony somewhere on the mainland. Inevitably these releases last for just a few years then die out which makes the exercise quite pointless. Needless to say this is not helpful in a poor year such as this one has proved to be.

As has been the trend in recent years, there have been reports of adult Glanville from sites all over the Island, from Hampstead in the north-west to Brading in the east and other inland locations but only in very low numbers. Many of these colonies are on downland and it is becoming obvious that this particular habitat is increasingly important to this species. Overall there has been a 53% decline in numbers which is not unexpected given the low web counts.



Chalk



BC Priority status	Top
No of 2022 records	150
No of 2022 individuals	553
No of 2022 tetrads	20
No of post 2005 tetrads	60

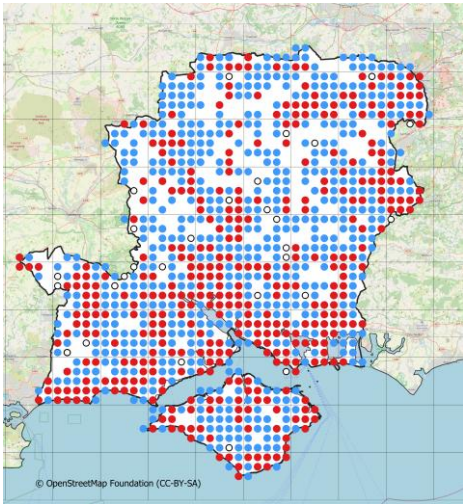
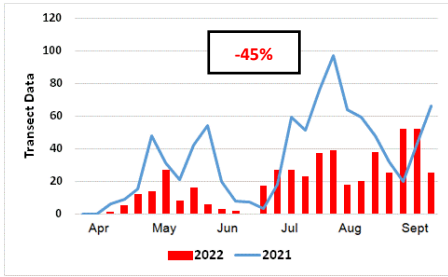
Earliest on Database: 01 Apr 2019			
Earliest 2022	16 April Butser Hill & Noar Hill		
Latest 2022	12 June Pickett Twenty		
Latest on Database: 02 Oct 2011			
Transect Site	Down >20%	Within ± 20%	Up >20%
Trends	4	1	3

Duke of Burgundy was first recorded in mid April but cooler conditions in the later part of April stalled any good sightings at the main sites in and around the Meon Valley. Butser Hill had a token number by the end of the month but by the start of May the weather became hot and sunny and counts at most sites in the Meon Valley were up into double figures. The highest count of the year (43) was at Butser Hill on 14 May. Butser Hill also had the second highest count (35) with the third highest (28) at Noar Hill.

In the Winchester area in a woodland complex the Duke had an excellent year. Twenty were seen at West Wood with reasonable numbers at Deacon Hill and good numbers recorded at Stockbridge Down. Stockbridge Down had the highest transect count with eight recorded on 14 May.

Records also came from the Wiltshire/Hampshire border close to Shipton Bellinger and in the north-west of the county. It was also seen on more than one occasions in and around Andover.

The hot, dry weather conditions in June and July failed to produce a second brood.



BC Priority status	Low
No of 2022 records	1,179
No of 2022 individuals	1,832
No of 2022 tetrads	382
No of post 2005 tetrads	955

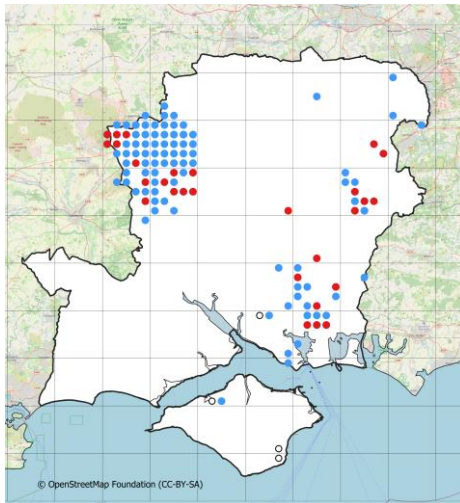
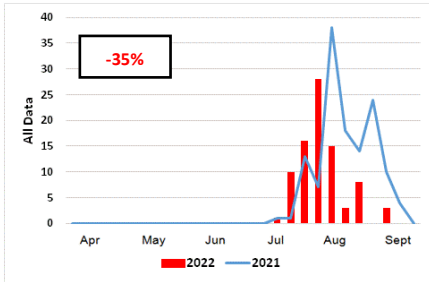
Earliest on Database: 05 Mar 2009			
Earliest 2022	05 April Southbourne		
Latest 2022	28 October Petersfield		
Latest on Database: 27 Nov 2003			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	60	13	20

The second year in succession has seen a further dramatic decline in numbers. Following the 43% drop in transect records between 2020 and 2021, this year has seen a further massive 45% decline. Whilst the Covid restrictions may have contributed to the poor number of records in 2021, the hoped for return to more representative numbers failed to materialise in 2022. The overall number of combined transect and field records in 2022 also declined by 45% giving rise to an even greater decline of 51% in individuals recorded.

The duration of the emergence remained similar to that of recent seasons yet the peaks never achieved the numbers of previous years. The only double figure count achieved in 2022 across the entire transect records was Hyden Hill that recorded 11 on 06 July.

Field records only fared marginally better with the highest daily total from Southwood Country Park, recording 20 on the 24 July. Alum Bay on the Isle of Wight, recorded eight on the 23 July the highest from the Island.

Atypical climatic conditions experienced in recent years, cold wet springs and record summer temperatures, potentially fail to meet the needs of the developing larvae, contributing to the decline. A return to less extreme, more typical weather patterns, will hopefully see numbers increase and the long term trend recover.



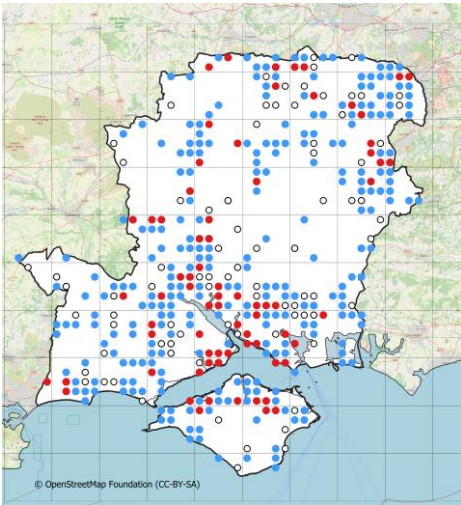
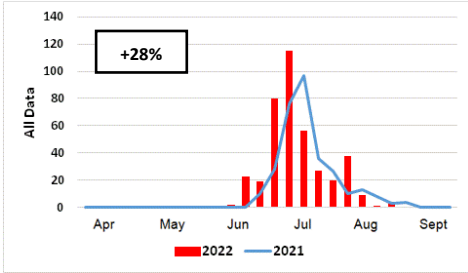
BC Priority status	High
No of 2022 records	76
No of 2022 individuals	91
No of 2022 tetrads	28
No of post 2005 tetrads	112

Earliest on Database: 18 Jul 2017 & 2018							
Earliest 2022	21 July Shipton Bellinger						
Latest 2022	12 September Noar Hill						
Latest on Database: 16 Oct 1986							
Transect Site	<table border="1"> <tr> <td>Down >20%</td> <td>Within ± 20%</td> <td>Up >20%</td> </tr> <tr> <td>4</td> <td>1</td> <td>1</td> </tr> </table>	Down >20%	Within ± 20%	Up >20%	4	1	1
Down >20%	Within ± 20%	Up >20%					
4	1	1					
Trends							

The year saw a continued improvement in the known distribution of this late season butterfly despite a 35% decline in the number of recorded adults. Successful egg searches took place in the relative strongholds of Shipton Bellinger, Selborne and Noar Hill, and at various sites along the Test Valley between Stockbridge and south of Andover. Nine eggs were recorded at Stockbridge Common Marsh in January which is a short distance from the newly established breeding colony on Stockbridge Down. Three eggs were also recorded at a new site between Stockbridge and Winchester, a very encouraging find.

Successful egg searches on our Bentley Station Meadow reserve in 2021 were backed up by an adult observed on transect this year. A further adult was reported near Lower Froyle just 3.5km north-west of Bentley Station Meadow. Small numbers but perhaps these are the first signs of a new colony in the area? Adult sightings continue to be reported in a broad arc between West Meon and Portsdown Hill bordered by the Meon Valley to the west and by the A3 to the east.

Singletons were also recorded at Broughton Down and, surprisingly, near New Alresford east of Winchester.



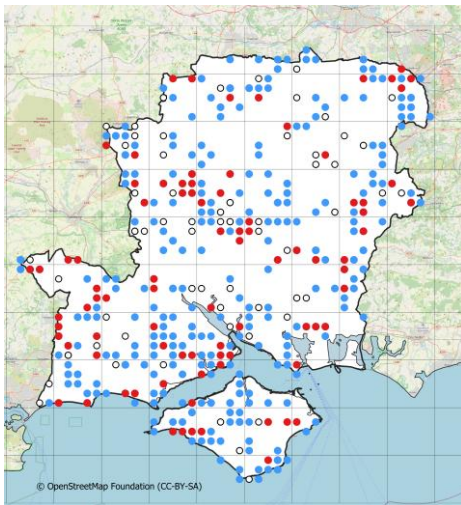
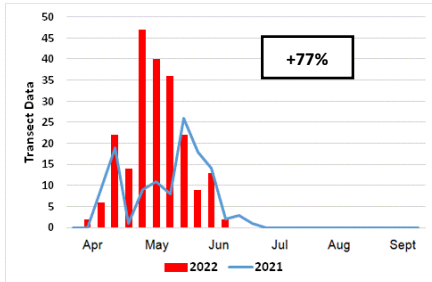
BC Priority status	Low
No of 2022 records	171
No of 2022 individuals	394
No of 2022 tetrads	72
No of post 2005 tetrads	371

Earliest on Database: 31 May 2010			
Earliest 2022	15 June Christchurch		
Latest 2022	27 August Kemphill Moor Copse		
Latest on Database: 25 Sep 2003			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	9	3	10

The season began ten days earlier than 2021 and ended eight days sooner, unsurprising in a drought summer that saw record high temperatures. The flight period graph shows a 28% gain in individuals recorded compared to 2021, thereby regaining some of the ground lost during the previous summer. Distribution also held up, with gains and losses balanced across the range of sites. The flight period was close to last year's, at 74 days.

It was not a year of abundance with few double figure counts. On the mainland the highest counts were these casual sightings: 25 at Pamber Forest on 10 July, 15 and 12 at Abbots Wood on 01 and 04 July respectively and ten at Herbert Plantation on 09 July. The Island saw seven at Briddlesford Woods on 23 July, six at Cranmore on 21 June and four at Kemphill Moor Copse (several occasions).

Ecological footnote: in the late spring of 2021 there were observations of a boom in some moth caterpillars, leading to substantial defoliation of oak trees and some caterpillars forced onto hazel rather than starve, with the hazel then becoming noticeably defoliated! It seems likely this 'overgrazing' affecting oak would have reduced Purple Hairstreak numbers during 2021, this however is unlikely to have had much effect in 2022.



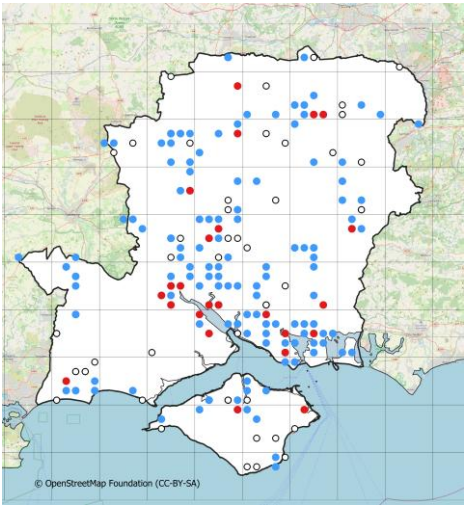
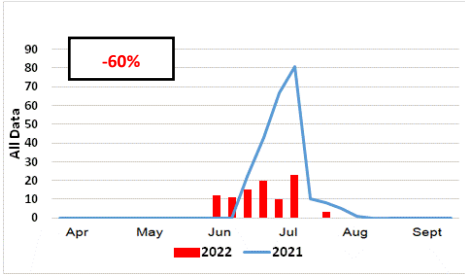
BC Priority status	Low
No of 2022 records	275
No of 2022 individuals	519
No of 2022 tetrads	86
No of post 2005 tetrads	355

Earliest on Database: 29 Mar 2012			
Earliest 2022	14 April Magdalen Hill Down		
Latest 2022	21 June Magdalen Hill Down		
Latest on Database: 30 Jul 2007			
Transect Site	Down >20%	Within ± 20%	Up >20%
Trends	8	11	28

Total individuals in 2022 (519) equalled the average of the previous ten years and was an increase of 62% from 2021. In the previous ten years the lowest count was 222 (2012) and the highest was 1,331 (2014). The species was recorded in 86 tetrads this year, while the previous ten years averaged 78 tetrads. The spring weather was warm and settled, which for this early species was beneficial.

Total Isle of Wight individuals were 30, down 32% from 2021 (44). The flight period for transect and field records combined spanned eight weeks. Three transects reported sightings and numbers peaked in late May. Most individuals were from casual sightings (21) and these peaked mid-May. Brading Down LNR 2 had the highest seasonal number of five. The highest individual sighting was a field record of five at Arreton Down on 18 May 2022.

Total individuals on the mainland were 489 an increase of 77% from 2021. The 2022 transect flight period spanned 11 weeks peaking mid-May with strong numbers for a further two weeks. Magdalen Hill Down Original had the highest seasonal number of individuals (33), double that of 2021. The highest individual sighting was a field record of 19 at Magdalen Hill Down on 06 May 2022.



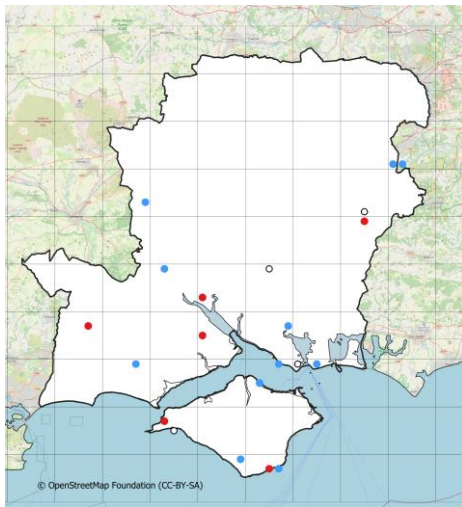
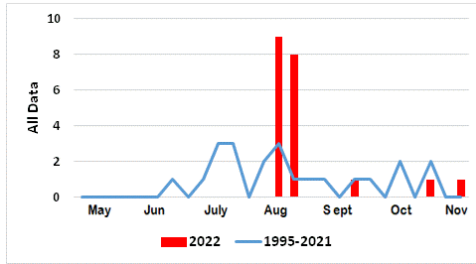
BC Priority status	High
No of 2022 records	43
No of 2022 individuals	94
No of 2022 tetrads	24
No of post 2005 tetrads	168

Earliest on Database: 25 May 2011			
Earliest 2022	11 June Gosport		
Latest 2022	04 August Stockbridge Down		
Latest on Database: 23 Aug 2004			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	2	1	2

The number of butterflies reported was down by 60% on 2021's total, suggesting all was not well with this elusive species. Reports still came from far and wide across Hampshire, with the usual exception of the Great (elm) Emptiness, aka the New Forest. Most sightings were made in the south Hampshire conurbation, with its concentration of mature elm cultivars planted as ornamentals. Reports from the Isle of Wight were typically muted.

Tallies were typically low; the year's very modest zenith of ten was attained at Grange Farm, Gosport, on 03 July, while counts of six were made at Lakeside Country Park Portsmouth, Ashford Hangers NNR, and at Defence Munitions Gosport, where surveys resumed after a long hiatus thanks to a more enlightened management. Perhaps the biggest disappointment was at the elm trials plantation at Great Fontley, where numbers plummeted. Nevertheless, a few new habitats were reported, including Holdenhurst near Christchurch, Holbury, How Lakes at Kings Somborne, Shalden, and St Helens on the Isle of Wight.

Lastly, mention must be made of the launch of Butterfly Conservation's long-overdue website detailing resistant elm cultivars and their UK suppliers, see www.disease-resistant-elms.org.

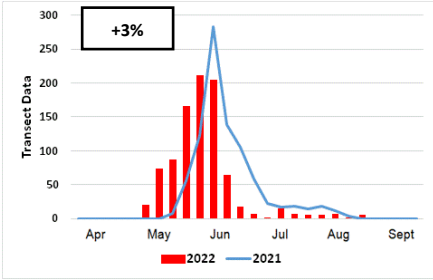


BC Priority status	Low
No of 2022 records	15
No of 2022 individuals	18
No of 2022 tetrads	6
No of post 2005 tetrads	19

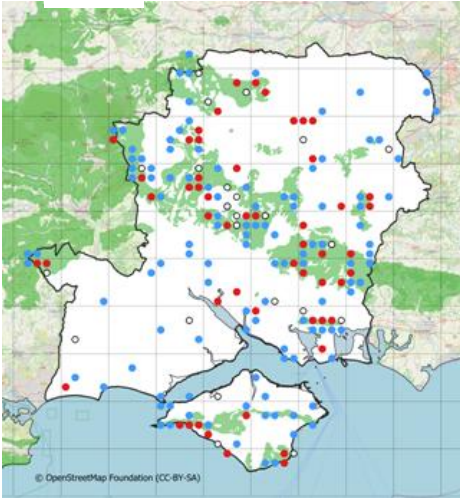
Earliest on Database: 10 Mar 2018			
Earliest 2022	19 August Southampton Old Cemetery		
Latest 2022	13 November Poulner		
Latest on Database: 13 Nov 2022			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	-	-	1

It's not often this rare immigrant turns up in Hampshire and the Isle of Wight, but 2022 proved exceptional. Twelve separate adult records were received and quite likely other sightings were made. The first was seen in Southampton on 19 August and this particular site was watched daily thereafter. At least four different individuals (two males and two females) were seen and photographed. The last of these was on 30 August, but additional sightings were also made on 20 August at Totland, and on 30 and 31 August at Dibden Purlieu. Egg-laying on Broad-leaved everlasting Pea (*Lathyrus latifolius*) was observed from 20-29 August at the Southampton site, with a peak count of 113 eggs on 23 August. A single first instar larva was photographed on 31 August.

In recent years Sussex has recorded a final brood from late September to early November. Although the Southampton site did not produce any final brood records, sightings were made elsewhere on 25 September at Ventnor, 28 October at Hawley and 13 November at Poulner. Given the increasing occurrence of Long-tailed Blues in southern England over recent years it's well worth taking an extra look at any unusual blues you see late in the season, especially if they're in the vicinity of *Lathyrus latifolius*.



Chalk



BC Priority status	High
No of 2022 records	417
No of 2022 individuals	1,758
No of 2022 tetrads	53
No of post 2005 tetrads	175

Earliest on Database: 30 Mar 2012			
Earliest 2022	24 April Brook Down		
Latest 2022	12 September Martin Down		
Latest on Database: 21 Sep 1991			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	11	5	10

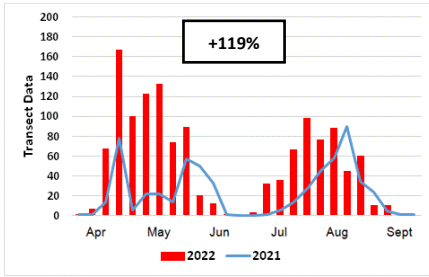
Our smallest butterfly enjoyed a reasonable year with a 3% increase in transect numbers and some notable non-transect records. This is despite the breeding challenges posed by the very poor spring weather last year.

Old Down, Basingstoke remains the largest colony in the county with 268 recorded on transect. This does, however, mark a 35% fall on the 2021 count. Magdalen Hill Down saw a similar fall in the transect count, down to 141. This is almost two-thirds lower than the 2020 count. However, Morn Hill near Winchester (+68%), Portsdown Hill (+46%), Martin Down (+42%) and Noar Hill (+14%) all recorded good increases over 2021. The Sparsholt College transect near Winchester recorded 47 adults, an excellent result for some newly created habitat.

Notable non-transect counts during the year included Old Burghclere Lime Quarry on 21 June (100), Brook Down on 28 May (72), Middle Wallop on 19 May (60+) and Martin Down on 26 May (50).

A total of 236 Small Blue were recorded on the Isle of Wight, slightly down on the 2021 count. Most were seen on Brook Down and Compton Chine in the south-west of the Island.

The second brood count was particularly weak.



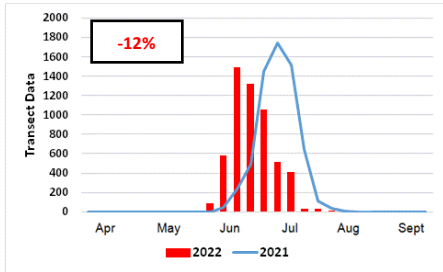
BC Priority status	Low
No of 2022 records	3,078
No of 2022 individuals	4,649
No of 2022 tetrads	514
No of post 2005 tetrads	1,027

Earliest on Database: 08 Jan 2019			
Earliest 2022	30 January	Wheeler's Bay	
Latest 2022	14 November	Poulner	
Latest on Database: 27 Dec 2020			
Transect Site Trends	Down >20%	Within ±20%	Up >20%
	13	21	74

Holly Blue enjoyed something of a recovery in 2022 following a modest 2021. The overall number of records nearly doubled, with counts of individuals not far behind. On the Isle of Wight it was reported from January through to November. Transect records showed a 119% increase in overall quantities recorded on monitored sites.

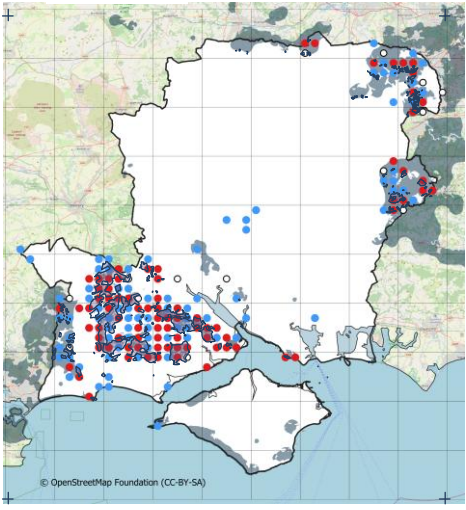
Following a single January record at Wheeler’s Bay, there were 22 sightings in March from various sites. Transect data indicates a strong spring emergence with an early peak around the end of April. The highest spring count was of 20 at Stockbridge Down on 06 May.

As usual, records tailed off through June and started to pick up in July as the summer brood emergence commenced, peaking from the end of the month to mid-August. The highest single count of 33 came from Dumbleton’s Copse in Southampton on 24 July. Other noteworthy records were of 25 on Tennyson Down on 20 July, 24 at Brading the following day and 24 from Martin on 05 August, these latter three being reported from the Big Butterfly Count where confusion with similar species by inexperienced observers can be a risk. The season ended with seven records in October and a further five in November.



Helen Pinchen

Heathland

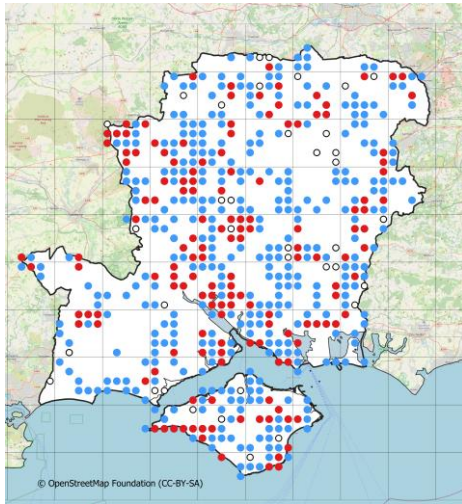
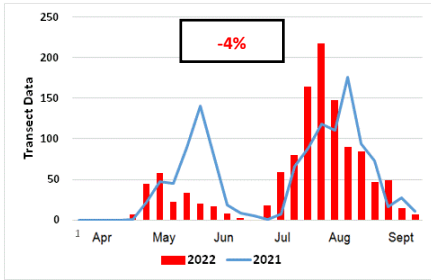


BC Priority status	High
No of 2022 records	758
No of 2022 individuals	7,724
No of 2022 tetrads	82
No of post 2005 tetrads	174

Earliest on Database: 09 May 2011			
Earliest 2022	01 June Broxhead Common		
Latest 2022	18 August Roydon Common		
Latest on Database: 30 Oct 1921			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	17	6	9

This year saw a significant fall in Silver-studded Blue numbers for the second consecutive year, with the annual total dropping by 20%, and the number of records down by nearly 11%. The transect data shows a 12% reduction, with 17 transects recording a significant decrease, although the picture was not entirely negative, with nine transects showing a significant increase. Emergence was nearly two weeks earlier than last year's exceptionally late start, and peak counts were in the last week of June and the first week of July, with 161 in one section of the Broxhead Common transect on 25 June being the highest total. As the hot, dry summer continued, numbers fell rapidly from mid-July, with only 17 records in August, and the latest sighting over three weeks earlier than last year.

The New Forest remains the stronghold for this species, but over 25% of records (and nearly 30% of all individuals) came from the northern half of Hampshire, with Broxhead, Bramshott and Yateley Commons all consistent sites. As usual, there were no sightings from the Isle of Wight, despite large populations in the south of the New Forest, including three-figure day totals at Dibden Bottom, Black Down and Lyndhurst.



BC Priority status	Low
No of 2022 records	797
No of 2022 individuals	1,955
No of 2022 tetrads	149
No of post 2005 tetrads	527

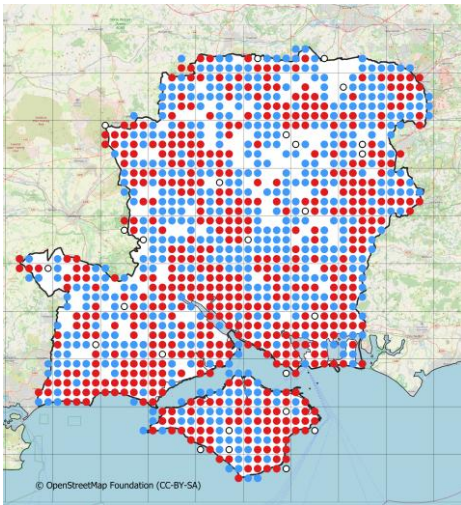
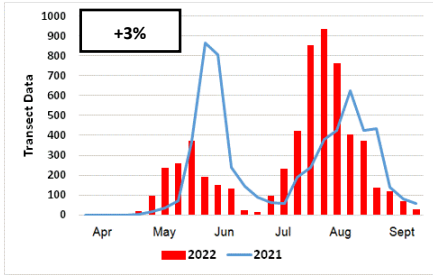
Earliest on Database: 08 Apr 2002			
Earliest 2022	27 April	Freshwater Bay	
Latest 2022	28 September	Coombe Bottom	
Latest on Database: 31 Oct 2005			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	21	9	21

Brown Argus had a similar, 'average' year to 2021 based on transect data covering both Hampshire and the Isle of Wight but the Annual Index showed that 2022 was the poorest year for the species since 2016 in Hampshire alone.

There were differences in the broods in 2022 as compared to 2021. Both broods peaked about three weeks earlier in 2022 as compared to 2021 although numbers were around a third lower. The hot, dry summer of 2022 saw higher numbers for the second brood, 20% higher than in 2021 but numbers dropped off much quicker from the peak. Numbers levelled out in September with reasonable counts continuing past mid-September.

The highest count was an impressive 78 at Rakes Bottom in eastern Hampshire on 15 August whereas the highest for the first brood was 22 at Magdalen Hill Down on 06 May. Magdalen Hill Down is still one of the strongest Hampshire sites with 77 on transect on 05 August.

The highest count on the Isle of Wight was 41 at Brading Down on 01 August.



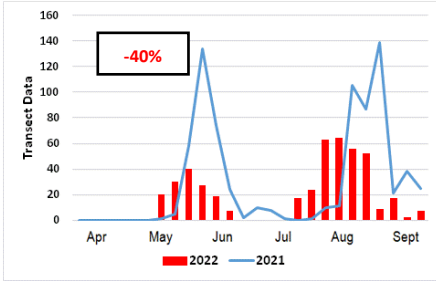
BC Priority status	Low
No of 2022 records	4,363
No of 2022 individuals	13,156
No of 2022 tetrads	526
No of post 2005 tetrads	1,044

Earliest on Database: 04 Apr 2019							
Earliest 2022	15 April Wheeler's Bay						
Latest 2022	22 October Millers Pond						
Latest on Database: 12 Nov 1990							
Transect Site Trends	<table border="1"> <thead> <tr> <th>Down >20%</th> <th>Within ± 20%</th> <th>Up >20%</th> </tr> </thead> <tbody> <tr> <td>26</td> <td>20</td> <td>58</td> </tr> </tbody> </table>	Down >20%	Within ± 20%	Up >20%	26	20	58
Down >20%	Within ± 20%	Up >20%					
26	20	58					

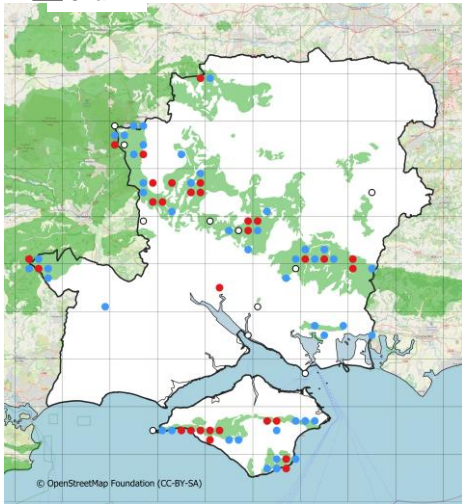
One of our favourite butterflies had a relatively good year in 2022, with an overall positive increase of 3% across all the transects where the butterfly was recorded, compared with -27% in 2021. The first brood was smaller than in 2021, with a spectacular second brood that far exceeded the first, and bettered the numbers seen in 2021, the butterfly obviously benefitting from the long hot summer of 2022 despite concerns that the primary larval foodplant of Common Bird's-foot-trefoil would desiccate in the prolonged heat.

As in 2021, Stockbridge Down came up trumps by recording the highest counts for both the first and second broods, with a total of 85 adults seen on 22 May and 205 adults seen on 20 August. Good numbers were also seen on the Isle of Wight, with 68 recorded on 14 May at Bonchurch Down and 55 recorded on 10 September at Shepherd's Chine.

All in all, the Common Blue had a good year in 2022 and showed that, given the opportunity, this gem of a butterfly can quickly bounce back from any setbacks and is benefitting from the quality of habitat found in the Branch area.



Chalk



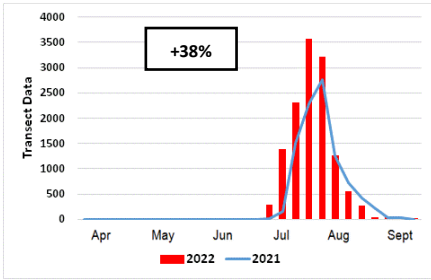
BC Priority status	High
No of 2022 records	296
No of 2022 individuals	987
No of 2022 tetrads	30
No of post 2005 tetrads	81

Earliest on Database: 26 Apr 2011			
Earliest 2022	06 May Brook Down		
Latest 2022	24 September St Catherine's Hill		
Latest on Database: 15 Oct 2011			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	13	-	5

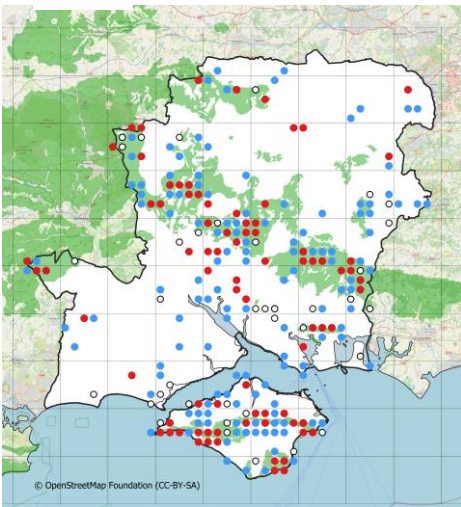
The increase in 2021 proved to be short-lived with a combined transect trend decrease of 40% in 2022. With the majority of transects showing a decrease of more than 20%, the population trend has dropped back to the 2020 level. Peak counts at Old Winchester Hill in Hampshire showed a 55% decrease in comparison to 2021. On the Isle of Wight, the best counts were at Bonchurch Down although the second brood peak was 42% lower than in 2021. On the plus side, Magdalen Hill Down produced an exceptional Annual Index of 129, up from 36 in 2021.

The first brood peaked towards the end of May in Hampshire and 12 days earlier on the Isle of Wight. The count of 29 at Martin Down on 26 May was 29% lower than 2021, while 26 at Bonchurch Down on 14 May was similar to the site's 2021 maxima. Both counties first brood flight period finished in the third week of June, three weeks earlier than in 2021.

For most sites, the second brood started in the last week of July, two weeks earlier than in 2021. Peak counts were in early August and late August/early September in Hampshire with 32 at Magdalen Hill on 05 August and Old Winchester Hill on 01 September. The Isle of Wight peak was 15 at Bonchurch Down on 07 August.



Chalk



BC Priority status	Medium
No of 2022 records	1,182
No of 2022 individuals	54,842
No of 2022 tetrads	80
No of post 2005 tetrads	229

Earliest on Database: 17 Jun 1990			
Earliest 2022	29 June Magdalen Hill Down		
Latest 2022	25 September The Dongas		
Latest on Database: 31 Oct 2011			
Transect Site Trends	Down >20%	Within ± 20%	Up >20%
	8	9	15

2022 was the sixth successive year that the combined transect trend has been generally positive for this species, with 15 transects showing a significant increase and eight with marked decline. Unfortunately, as in 2021, the transect at the principal site for this species, Arreton Down, Isle of Wight received little coverage. Thankfully, there was an increase in the number of casual records for the site.

The Isle of Wight produced most of the highest counts recorded; 20,000 at Arreton Down on 16 July would have been an amazing sight. Other notable counts were 1,421 at Brook Down on 23 July, 1,020 at Brading Down on 01 August, 500 at Culver Down on 06 August and 420 at Mottistone Down on 29 July.

Stockbridge Down recorded the highest ever day-total for Hampshire for this species with 3,348 on 05 August. Conversely, Magdalen Down's count of 527 on 01 August was a 28% decline in comparison to 2021. Dispersal was evident as usual for this species, both on and off the chalk, in both counties.

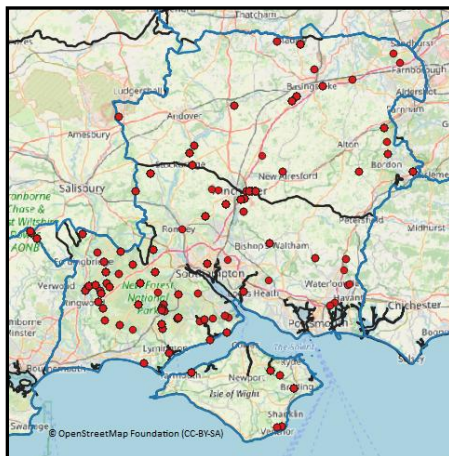
The season tailed off quickly from 26 August, with 218 at Stockbridge Down on that day the only notable late count. Subsequently, there were no counts above 30.

Moths recorded on transect

Bob Annell

Species	Records	Individuals	Transects
Brown Silver-line	168	296	38
Six-spot Burnet	140	509	31
Small Purple & Gold	102	268	15
Burnet Companion	96	140	30
Common Heath	92	188	25
Silver Y	85	103	32
Common Carpet	81	139	21
Speckled Yellow	78	140	18
Rush Veneer	58	134	25
Humming-bird Hawk-moth	54	61	25
Mother Shipton	48	60	27
Five-spot Burnet*	38	65	14
Cinnabar	32	61	20
Yellow Shell	25	30	14
Satin Grass-veneer	23	51	1
Common Purple & Gold	22	26	11
Drab Looper	18	43	1
Shaded Broad-bar	18	21	6
Scarlet Tiger	17	46	8
Garden Grass-veneer	16	21	2
Totals - 2022	1,408	2,989	104
Totals - 2021	1,397	2,318	100
Totals - 2020	957	1,427	94
Totals - 2019	1,214	2,209	99
Totals - 2015	684	1,186	40

*Includes Narrow-bordered Five-spot Burnet



The map represents transects where moths were recorded in 2022.

The above table contains statistics for the top twenty recorded species on transect during 2022. These comprised 102 different species which is a 30% increase compared to 2021.

Vice County	Records	Individuals	Species	Transects
South Wiltshire*	64	131	15	3
Isle of Wight	104	425	23	6
South Hampshire	711	1,436	79	68
North Hampshire	529	997	47	27

* From our Martin Down transects which are within the current Hampshire Administration Boundary.

Notably there was a significant increase in both the number of records and individuals recorded on the Isle of Wight (only nine records and nine individuals in 2021).

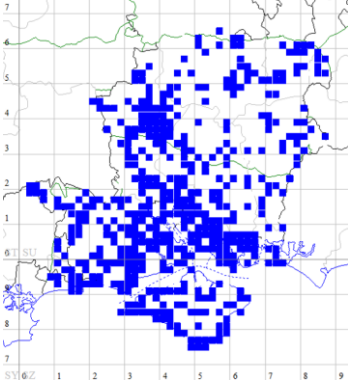
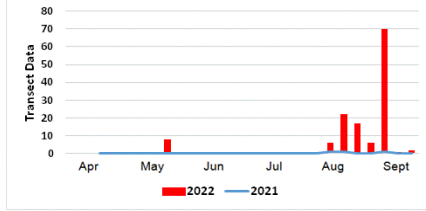
Once again, over 75% of individuals in south Hampshire were recorded on New Forest transects.

A total of 61 Humming-bird Hawk-moths were recorded on 25 transects this year, significantly more than in 2021 when a mere three records of three individuals on three transects were received.

Visit the HantsMoths website www.hantsmoths.org.uk to find out more about Hampshire and Isle of Wight moths.

63.052 Rush Veneer *Nomophila noctuella*

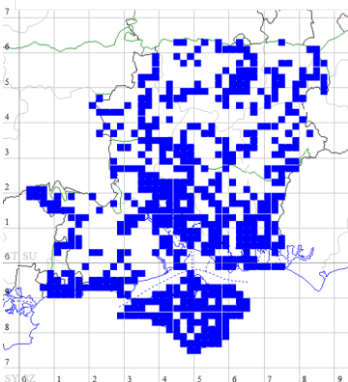
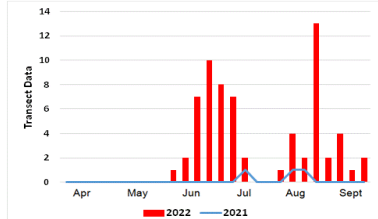
Andy Barker



Although small, and perhaps rather dull at first glance, the patterning, resting position and elongate wings (forewing length 12-15mm) make this micro-moth fairly distinctive. The background colour varies from grey-brown to red-brown, but in worn individuals there's not much to go on. It is an immigrant species of the family Crambidae, which includes many of the so-called "grass moths" that are readily disturbed by day from lawns and other grassland. After a run of poor years, it appeared in good numbers in late summer and early autumn 2022, especially in coastal areas and on chalk downland.

69.010 Humming-bird Hawk-moth *Macroglossum stellatarum*

Andy Barker



This is without doubt one of the most popular and dramatic of our day flying moths. Its hovering flight when taking nectar, or moving from flower to flower, make it look just like a humming-bird. Remarkably, its wingspan of c.50mm is actually bigger than the world's smallest hummingbird, the Bee Hummingbird, which has a wingspan of just 30mm!

After a rather poor showing in 2021, 2022 proved to be an exceptionally good year for this double brooded species. As well as being seen on many transects, it was also a frequent garden visitor, nectaring on plants such as Buddleia and Red Valerian.

Please interpret these all-time Earliest/Latest dates with caution as our records for earlier years are far from complete.

Species	Earliest on Database	Earliest 2022	Latest 2022	Latest on Database
Dingy Skipper	12 Apr 2011	16 Apr	15 Aug	03 Sep 1993
Grizzled Skipper	02 Apr 2009	11 Apr	22 Jun	07 Sep 2004
Essex Skipper	26 May 2007	14 Jun	17 Aug	21 Sep 1996
Small Skipper	16 May 2011	07 Jun	05 Sep	19 Sep 1991
Silver-spotted Skipper	11 Jul 2018	23 Jul	24 Sep	11 Oct 1986
Large Skipper	28 Apr 2007	17 May	15 Aug	22 Sep 2013
Orange-tip	10 Mar 1990	17 Mar	20 Jun	22 Sep 2011
Large White	20 Jan 2020	17 Mar	19 Nov	07 Dec 2012
Small White	09 Jan 1991	17 Mar	04 Nov	08 Dec 2007
Green-veined White	03 Mar 1989	20 Mar	11 Oct	05 Nov 2017
Clouded Yellow	08 Feb 2005	22 Feb	20 Dec	30 Dec 2007
Brimstone	01 Jan 2001/2022	01 Jan	13 Nov	29 Dec 1999
Wall	14 Apr 2002	17 Apr	13 Oct	10 Nov 2020
Speckled Wood	11 Jan 2013	25 Feb	04 Nov	15 Dec 2011
Small Heath	08 Apr 1997	23 Apr	11 Oct	29 Oct 2011
Ringlet	24 May 2016	09 Jun	30 Aug	11 Oct 2011
Meadow Brown	30 Apr 2011	16 May	13 Nov	13 Nov 2022
Gatekeeper	24 Mar 1999	09 Jun	25 Sep	19 Oct 1995
Marbled White	22 May 2022	22 May	14 Aug	25 Sep 2003
Grayling	03 Jun 2002	29 Jun	15 Oct	15 Oct 2022
Pearl-bordered Fritillary	17 Apr 2003	25 Apr	11 Jun	09 Jul 1950
Small Pearl-bordered Fritillary	03 May 2007	-	-	29 Aug 2009
Silver-washed Fritillary	Late May 1893	10 Jun	01 Sep	27 Sep 2021
Dark Green Fritillary	28 May 2010/2020	02 Jun	11 Aug	08 Sep 2012/2021
White Admiral	Late May 1893	09 Jun	26 Aug	04 Oct 2003
Purple Emperor	17 Jun 2017	22 Jun	01 Aug	23 Aug 2013
Red Admiral	01 Jan*	01 Jan	27 Dec	31 Dec*
Painted Lady	01 Jan 2013	05 Jan	02 Dec	31 Dec 1987
Peacock	01 Jan*	01 Jan	17 Dec	31 Dec*
Small Tortoiseshell	05 Jan 1999/2018	11 Feb	05 Dec	25 Dec 2013
Comma	09 Jan 1998	09 Feb	10 Dec	22 Dec 2013
Marsh Fritillary	27 Apr 2007	30 Apr	12 Jun	20 Jun 2004
Glanville Fritillary	08 Apr 2007	21 Apr	04 Jul	09 Jul 2010
Duke of Burgundy	01 Apr 2019	16 Apr	12 Jun	02 Oct 2011
Small Copper	05 Mar 2009	05 Apr	28 Oct	27 Nov 2003
Brown Hairstreak	18 Jul 2017/2018	21 Jul	12 Sep	16 Oct 1986
Purple Hairstreak	31 May 2010	15 Jun	27 Aug	25 Sep 2003
Green Hairstreak	29 Mar 2012	14 Apr	21 Jun	30 Jul 2007
White-letter Hairstreak	25 May 2011	11 Jun	04 Aug	23 Aug 2004
Long-tailed Blue	10 Mar 2018	18 Aug	13 Nov	13 Nov 2022
Small Blue	30 Mar 2012	24 Apr	12 Sep	21 Sep 1991
Holly Blue	08 Jan 2019	30 Jan	14 Nov	27 Dec 2020
Silver-studded Blue	09 May 2011	01 Jun	18 Aug	30 Oct 1921
Brown Argus	08 Apr 2002	27 Apr	28 Sep	31 Oct 2005
Common Blue	04 Apr 2019	15 Apr	22 Oct	12 Nov 1990
Adonis Blue	26 Apr 2011	06 May	24 Sep	15 Oct 2011
Chalk Hill Blue	17 Jun 1990	29 Jun	25 Sep	31 Oct 2011

* Recorded on this date in several years

This table is based on 160 Hampshire & Isle of Wight transects with data for both 2021 and 2022.

Species	Combined Transect Trend	>20% Decrease 2022	Within ±20% No Change	>20% Increase 2022	0 /22 1+/21 Loss	1+/22 0/21 Gain
Dingy Skipper	+4%	14	8	20	6	8
Grizzled Skipper	-34%	16	8	7	7	2
Small/Essex Skipper	+35%	41	34	63	2	8
Silver-spotted Skipper	-1%	3	-	2	1	-
Large Skipper	+33%	37	22	61	9	13
Orange-tip	+4%	38	30	38	7	11
Large White	+15%	40	26	48	-	-
Small White	-18%	74	21	19	-	-
Green-veined White	+98%	21	30	54	4	17
Clouded Yellow	+432%	3	5	43	3	33
Brimstone	+8%	31	26	44	-	1
Wall	+257%	2	-	8	1	2
Speckled Wood	+43%	22	23	65	4	4
Small Heath	-37%	42	20	18	12	7
Ringlet	+88%	15	24	80	4	5
Meadow Brown	-13%	43	41	38	1	-
Gatekeeper	+31%	23	44	65	-	-
Marbled White	-24%	61	30	22	10	4
Grayling	+28%	14	5	14	7	6
Pearl-bordered Fritillary	+24%	2	-	3	-	-
Small Pearl-bordered Frit.*	-100%	1	-	-	1	-
Silver-washed Fritillary	+28%	26	19	38	5	8
Dark Green Fritillary	-25%	29	7	16	14	9
White Admiral	+101%	9	6	24	7	9
Purple Emperor*	+44%	2	3	3	2	3
Red Admiral	-58%	100	10	5	6	1
Painted Lady	+13%	28	28	45	14	27
Peacock	-33%	74	21	16	1	1
Small Tortoiseshell	+1%	35	16	31	12	16
Comma	+61%	18	23	59	2	14
Marsh Fritillary*	+111%	3	-	2	1	1
Glanville Fritillary*	-53%	4	1	-	1	-
Duke of Burgundy	+10%	4	1	3	4	1
Small Copper	-45%	60	13	20	19	11
Brown Hairstreak*	-35%	4	1	1	3	1
Purple Hairstreak*	+28%	9	3	10	8	7
Green Hairstreak	+77%	8	11	28	7	16
White-letter Hairstreak*	-60%	2	1	2	2	2
Small Blue	+3%	11	5	10	5	3
Holly Blue	+119%	13	21	74	7	27
Silver-studded Blue	-12%	17	6	9	3	1
Brown Argus	-4%	21	9	21	8	12
Common Blue	+3%	26	20	58	3	17
Adonis Blue	-40%	13	-	5	4	1
Chalk Hill Blue	+38%	8	9	15	2	7

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

2022 rank position of BC Reserves (based on transect) for particular species in top 20 compared with 160+ other Hampshire and loW sites with butterfly transects, (bracketed) values are 2021 positions, "p" if present on site but not ranked in top 20.

Species	Magdalen Hill Down					Yew Hill	BSM
	Original	Ext	North	Allot.	N(T&S)		
Dingy Skipper	2(12)	14(13)	20(p)	p(-)	15(15)	10(3)	-
Grizzled Skipper	1(1)	11(p)	16(p)	20(-)	15(p)	14(6)	-
Small/Essex Skipper	15(p)	p(p)	p(p)	p(p)	19(p)	p(p)	p(p)
Silver-spotted Skipper	-	-	-	-	-	-	-
Large Skipper	p(15)	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)
Orange-tip	p(16)	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)
Large White	19(20)	p(6)	p(p)	p(p)	p(p)	20=(13)	20=(19)
Small White	7(3)	p(7)	p(18)	p(p)	p(16)	18(20)	p(p)
Green-veined White	14(p)	p(p)	p(p)	p(p)	p(p)	p(18)	p(p)
Clouded Yellow	1(5=)	p(8=)	14(16)	- (-)	18=(-)	18=(8=)	-
Brimstone	3(4)	17(p)	17(20)	p(p)	p(p)	16(13)	p(p)
Wall	-	-	-	-	-	-	-
Speckled Wood	p(p)	p(p)	- (p)	-	- (p)	p(p)	p(p)
Small Heath	6(13)	18=(p)	p(15)	p(19)	p(18)	10(16)	p(p)
Ringlet	p(16)	p(p)	p(p)	p(p)	p(p)	p(p)	20(14)
Meadow Brown	7(3)	p(16)	p(p)	p(p)	p(p)	19(18)	p(p)
Gatekeeper	p(p)	p(p)	p(p)	p(p)	p(p)	15(8)	p(p)
Marbled White	3(3)	11(2)	15=(14)	8(p)	p(p)	18(5)	p(p)
Grayling	-	-	-	-	-	-	-
Pearl-bordered Fritillary	-	-	-	-	-	-	-
Small Pearl-bordered Frit.	-	-	-	-	-	-	-
Silver-washed Fritillary	-	-	-	-	-	-	p(p)
Dark Green Fritillary	19(p)	p(p)	-	20=(-)	-	p(14)	-
White Admiral	-	-	-	-	-	-	p(p)
Purple Emperor	-	-	-	-	-	-	p(-)
Red Admiral	p(p)	p(9)	p(p)	p(p)	p(p)	p(p)	p(p)
Painted Lady	8=(p)	20=(p)	8=(p)	p(p)	8=(8)	18=(p)	p(p)
Peacock	p(9)	p(15)	p(p)	p(p)	p(17)	p(p)	16(p)
Small Tortoiseshell	19=(14)	16=(18)	p(p)	p(11)	p(p)	p(p)	-
Comma	p(p)	p(19)	p(p)	p(p)	p(p)	p(p)	9=(16)
Marsh Fritillary	-	2(3)	- (4)	-	-	-	-
Glanville Fritillary	-	-	-	-	-	-	-
Duke of Burgundy	-	-	-	-	-	-	-
Small Copper	3(4)	p(p)	p(p)	p(p)	p(p)	p(p)	p(p)
Brown Hairstreak	-	-	-	-	-	-	3(p)
Purple Hairstreak	-	-	-	-	-	-	p(9)
Green Hairstreak	1(2)	11=(p)	p(12)	-	4(4)	9=(13)	-
White-letter Hairstreak	-	-	-	-	-	2=(p)	-
Small Blue	12(9)	4(4)	11(13)	15(12)	16=(20)	16=(14)	-
Holly Blue	6(10)	15=(p)	p(p)	p(p)	p(p)	18=(13)	p(p)
Silver-studded Blue	-	-	-	-	-	-	-
Brown Argus	1(1)	p(18)	p(p)	p(9)	14(15)	17=(14)	p(p)
Common Blue	1(1)	16(15)	p(p)	p(p)	17(16)	3(17)	p(p)
Adonis Blue	2(7)	-	12(16=)	13(16)	-	-	-
Chalk Hill Blue	3(3)	15(p)	12(12)	14(12)	20(p)	7(7)	-

Yew Hill (Hill Top): Grizzled Skipper 20=(16=), Clouded Yellow 18=(p), Small Blue -(15), Common Blue 18(14), Marbled White p(18), Meadow Brown 15(11), Small Heath 7(5).

Note: 38 butterfly species were recorded on BC Hampshire reserves in 2022.

Hampshire & Isle of Wight Butterfly Report 2022



Butterfly
Conservation

