

Contents

Weather	4
Total butterfly count	
Transect walk results	10
Winners of 2022	19
Losers of 2022	25
Rare and migrant species	30
Big Butterfly Count	32
White holes	33
Wider Countryside Survey	36
Who's Who	

Editor's Introduction

elcome to the report on Dorset's butterflies in 2022.

Reports like these are the result of a lot of work by a lot of people. They start with our wonderful volunteers who go out and look for butterflies and then report them to us, whether by doing transect walks, reporting to the website, using iRecord and whatever: see page eight for how many were reported via each method. We are not able to show the garden records separately this year: they are included in the iRecord total; the garden results are becoming difficult to report on, as the national website for reporting them gains more users, but we are sad to be losing our more personal contact with Dorset's gardeners.

The next stage is the verification of the records, and we owe many thanks to those who verify the website data, oversee the data from

Front Cover: Lulworth Skipper at Durdle Door.

Photo: Scott Willcocks

Editor's Introduction

transect walks entered into the national database, and keep an eye on the records within national schemes such as iRecord and Living Record.

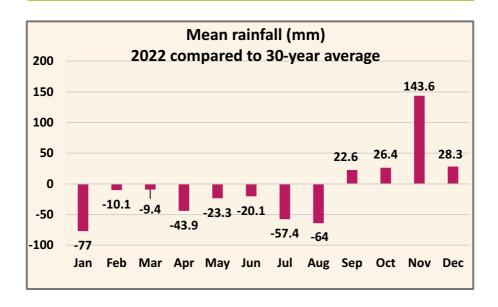
Then our County Butterfly Recorder, Robin George, pulls it all into our database and tries to make sense of it, giving an initial report to the AGM and area Butterfly Trends meetings, then working with me to create this written report. Behind the scenes we also have Dom Greves working on keeping our website going, ensuring we didn't lose any of the 66,775 butterfly sightings gained through it.

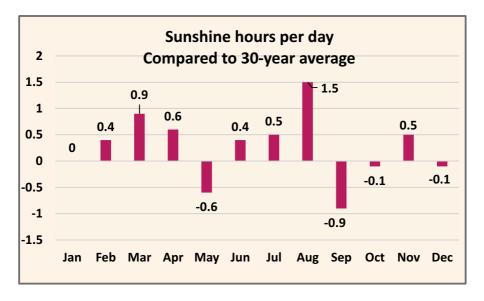
You might be interested to know that Robin and I have also produced an extensive update of the Counting Dorset's Butterflies booklet, which pulls together all the ways you can look for butterflies and in particular covers the details of transect walking. This is available on our website - www.dorsetbutterflies.com - go to Recording, then Become a Recorder and on that page you will find a link to the pdf document in the right-hand column.

Finally, if you want to pursue butterfly statistics for the UK, there are two good sources:

- I. The State of Britain's Butterflies. Go to www.butterfly-conservation.org and then Butterflies and you will find a link in the left-hand column.
- 2. The UK Butterfly Monitoring site has three documents covering 2022. www.ukbms.org/official-statistics, including a good summary of the drivers of change in butterfly numbers.

Enjoy your butterfly (and moth) recording, and we look forward to receiving your records for the 2023 Report.

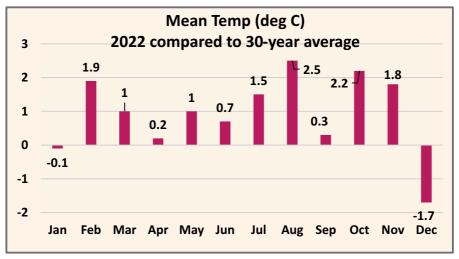




t was the warmest year on record for Dorset and for most of the UK. Every month except January and to a much greater extent December was warmer than the average.

.

The summer saw spells of near record-breaking heat in both July and August, peaking at 34 degrees centigrade in both months. This was a new 60-year high for July and the figure in August was just I degree



below the all time record set in 1990. There was an unprecedented period of 48 successive days with the temperature above 21C.

Regarding rainfall (see opposite page), the first eight months of 2022 were exceptionally dry with the rainfall up to the end of August just 49% of the 30-year average. Some rainfall stations in Dorset recorded no rain at all during the month of July and the first half of August.

For sunshine hours (see opposite page), it is August which stands out, with an average of 1.5 hours of sunshine per day above the 30-year figure.

The effect of weather on butterflies is complex and varies between species, but a few points of interest:

- Short-term high temperatures and lots of sunshine can be good for butterflies: they can visit flowers, mate, lay eggs and disperse.
- However, when drought occurs, plants wither, so there are no flowers for the adults and no fresh leaves for the caterpillars. This would have hit later broods more than early ones, given the timing of the heatwaves and where it caused problems, these are likely to



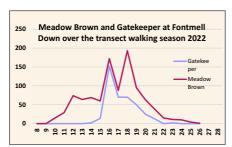
Mullein Moth caterpillars at the end of their food. Photo: Diana Clark

- show in 2023 when there are less survivors to go through the life cycle again.
- Research (2017) by the University of York showed the 1976
 heatwave and drought had a very heavy toll on butterfly numbers
 not only in 1976, but also in 1977, and some species took years
 to recover or did not recover at all, though this may also have
 been due to habitat degradation.
- This is a Butterfly Report, but we can expect some effect on moths, too. A lot of them may only fly at night, but they still need plants for their caterpillars.

There will be more mention of the effects of the weather on butterflies in the Transect Walk section of this Report, but it is interesting to look at its effect on a couple of specific species.

Looking at website records for the last few years, Gatekeepers were on the wing for a shorter period than in the previous two years: only 2 months and 11 days (from June to August), compared to over 3 months in the previous two years, when they were on the wing throughout September. However, going back a bit further, they were only reported for a period of 2 months and 5 days in 2018, finishing on 23 August, which is even earlier than the 31 August recorded in 2022.

Comparing this data with the weather records for 2018 (see our Newsletter No 92, which you can access on our website), April to July had been above average temperature, though not quite as extreme as 2022, but it was also a very dry year, with May to Sep all having considerably less than the average rainfall.



For further evidence, if we take the transect results for the Gatekeeper and Meadow Brown, the effect of each heatwave can be clearly seen in the graph.



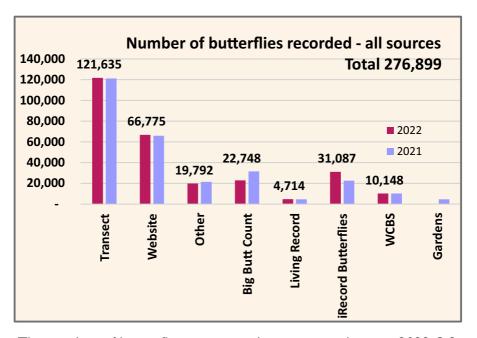
Female & male Gatekeepers. Photo: James Gould



Female & male Meadow Browns. Photo: Ken Dolbear

Total Butterfly Count 2022

s can be seen in the graph, the totals were fairly similar compared to 2021. The increase in iRecord Butterfly records is likely due to this method of recording being used more as people discover the app*, as well as including the garden records previously recorded separately.



The number of butterflies per record sent in was down in 2022: 3.8 butterflies per record compared with 4.1 in 2021 – this reduction is similar in the Big Butterfly Count (see page 32).

^{*}To clarify: iRecord is software to allow you to record your sightings of all sorts of wildlife: butterflies, moths, bats, ladybirds, earthworms etc. iRecord Butterflies is an app specifically for butterflies and enables you to enter your records via your smartphone as you go, as well as giving you help with identification.

Total Butterfly Count 2022

Our County Butterfly Recorder, Robin George, raises an interesting point about the effect recording techniques can have on the number of butterflies per record:

"As methods of recording change, the numbers of butterflies per record may change too. Remember that a "record" means a number of one species recorded at one grid reference on a particular date. E.g. three Brimstone in ST8026 on 4 April 2023 is one record.

Twenty years ago, I walked round with a notebook and recorded the butterflies I saw together with details of where I saw them. When I was back home, I used a map to assign each sighting to a km square, added up the totals and submitted them that way. Now I have the iRecord app, I can just press "Record" and it finds my exact location to a 6- or 8-figure grid reference accuracy, recording each individual butterfly separately. So three Brimstone in ST8026 might now appear as 3 separate records with grid references: ST801264, ST804269, ST80542638. So in this case we've moved from one record of three butterflies, to three records of one butterfly."

Butterfly Conservation is a national organisation with 32 branches and a European Butterflies Group. The headquarters is in Dorset, but separate from the Dorset Branch, who are all volunteers.

The national website is www.butterfly-conservation.org and holds a wealth of information on butterflies and moths, as well as news of the "Wild Spaces" initiative in which you can get involved.



Transect walk results 2022

ransect walks are butterfly monitoring walks. They are walked within a set of rules around weather, the time of day and how far off a butterfly can be seen, to ensure results across different walks and different years are comparable. Each site is walked once in each of the 26 weeks between April and September, usually by a team of people sharing the work. Results are entered onto the UK Butterfly Monitoring Scheme (UKBMS) national website.

Dorset had 74 transect walks return results for most weeks in 2022 Transect walks may die out for lack of walkers, or new ones may be created at suitable sites, but they need several years of results before we can use them for comparing trends. Inevitably, not every walk is successfully walked every week: weather can make the walk not viable. In cases where walks are missed, the UKBMS software calculates likely figures for the missed weeks.

We are always in need of more walkers and there are transect walk sites all over Dorset, so please contact Robin George (see page 39) if you can help.

There is a map of transect walks on pages 20 & 21.

Transect walks completed						
	Number of walks	Possible number of weeks walked (walks x 26 weeks)	Weeks walked	Percentage of walks completed		
North	16	416	384	92%		
South	20	520	437	84%		
East	18	468	396	85%		
West	20	520	443	85%		
Total	74	1924	1660	86%		

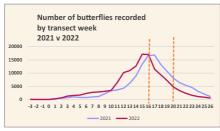
Transect walk results 2022

Number of butterflies on all transect walks					
			2022 compared to 2021 as		
	2022	2021	percentage		
North	35,114	39,884	88%		
South	31,247	35,101	89%		
East	13,691	12,418	110%		
West	27,642	32,118	86%		
Total	107,694	119,521	90%		

In the chart above, of the total butterflies counted on all transect walks, the 2021 totals are not necessarily the same as those given last year, as the totals only include walks for which full results are available for both years.



The figures for the total butterfly count have gone down every year since 2019.



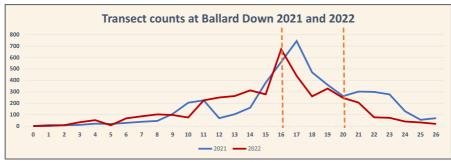
The pattern of the counts on all transects showed the effect of the heatwaves (shown as orange dotted lines) compared to the previous year. The numbers along the bottom of the graph refer to the walking week: the weeks from I April to the end of September

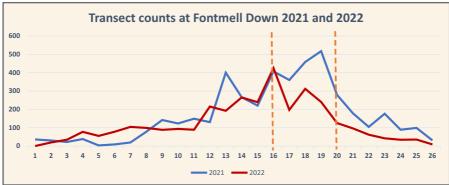
are numbered I to 26. It was very noticeable everywhere that even those species you normally expect to be on the wing until late summer disappeared quite abruptly.

It is even easier to see the effect of the heatwaves when looking at the figures for individual transect walks. Both Ballard Down and

Transect walk results 2022

Fontmell Down had their numbers fall dramatically, especially after the first heatwave.





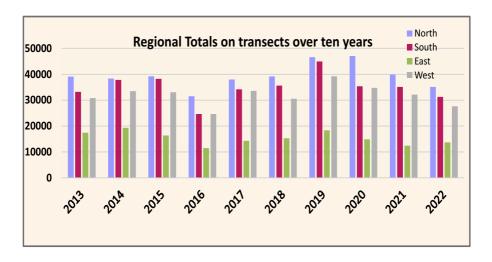
Photos of Fontmell at around the same time in 2014 and 2022 tell their own tale.





Fontmell Down, Photos: Diana Hall

ooking at the regional totals across ten years (see the chart below) the East region recorded more butterflies in 2022 than in 2021, but numbers were still down on 2019 and 2020. Totals for all the other regions were down.

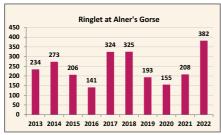


Rather than bombard you with a lot of statistics and charts, we thought we'd now highlight some of the good news from all four regions.



In the north of Dorset, one of the highlights was the impressive numbers of Marsh Fritillary on Lydlinch Common. Dorset is a nationally important county for the Marsh Fritillary, so an increase from an average of 122 in the previous nine years to 423 in 2022 was superb. Lots of work is

being undertaken on Lydlinch Common to help this species, and it's good to see it being successful.





Ringlet. Photo: Mark Pike.

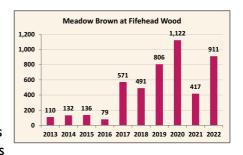
Our fantastic butterfly reserve at Alner's Gorse in north Dorset also gave us some good news, with the highest count of Ringlets in the last ten years.

The Hairstreaks at Alners did not show up well on the transects, but we think at least nine Brown Hairstreaks and five White-letter Hairstreaks were seen, possibly more: it is difficult to identify individual butterflies.

Also in the north, Fifehead
Magdalen Wood had a good year,
with its second-highest overall
count in the last ten years. It was
a good year for Brimstones here,

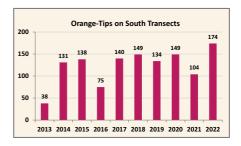
with 43 recorded, when the average over the last ten years is just 17.

The ten-year count of Meadow Brown at Fifehead is interesting (see chart): numbers increased radically in 2017 and are still high, despite a drop on 2021. The reason for this is probably that a lot of coppicing and clearance was undertaken on the site a few years



ago, after which the brambles grew back better than ever, providing a lot of nectar for both the Meadow Brown and other butterflies.

In the south, we see the Orange Tip having its best year in the last ten when looking at the figure for all transects. The 2020 numbers are not representative, as Covid lockdown affected recording of early species

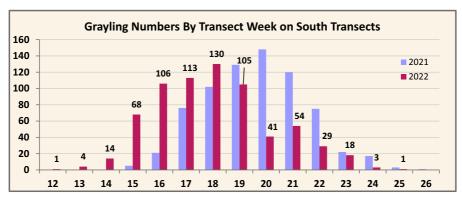


One site in the south which had a successful year was Townsend Quarry (Swanage). It had the first Lulworth Skippers recorded since 2007, with a whopping 50 being recorded. One suggestion for this is that the Dorset Wildlife Trust have increased their cattle grazing regime since 2012 and this tends to be beneficial to butterflies like the Lulworth Skipper as the cattle wrap their tongues around vegetation when they graze, pulling some grass out and leaving a mosaic of heights behind. This could be beneficial to the growth of Tor-grass, the Lulworth Skipper's food plant which needs to be quite mature and tall for the Lulworth Skipper to use. This species seemed to do well generally, with the total on transects going up from 524 to 1271.

Townsend also saw other increases:

- Common Blues: 250 compared to an average 117.
- Ringlets: 34 compared to an average of four.
- Six species seen in 2022 not recorded at all in 2021: the Lulworth Skipper as above, plus the Essex Skipper, Brimstone, Green-veined White, Small Copper and Painted Lady.

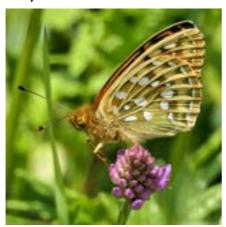
Other positive news in the south shows Graylings doing well: Studland Heath and Ferry Road West are their strongholds. Both had lower numbers than 2021, but the overall picture is that they are on the increase. The emergence of this species was two weeks earlier in 2022 than 2021; see the chart overleaf.



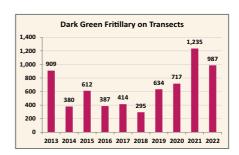
In the East, the very hot summer favoured woodland sites, such as Garston Wood (near Sixpenny Handley). The average number of species recorded here since 2013 is 18, but 2022 saw 23 being sighted. Gatekeepers and Meadow Browns did particularly well.

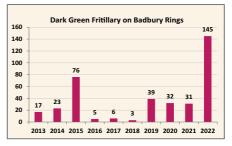
Badbury Rings, a much visited Iron age hillfort managed by the National Trust, saw the Dark Green Fritillary have an astonishingly good year. It was overall not as numerous on transects in 2022 as

2021, but it still managed the second-highest figure in the last ten years.



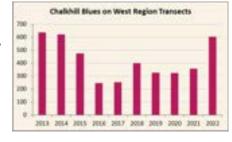
Dark Green Fritillary. Photo: Mel Bray.





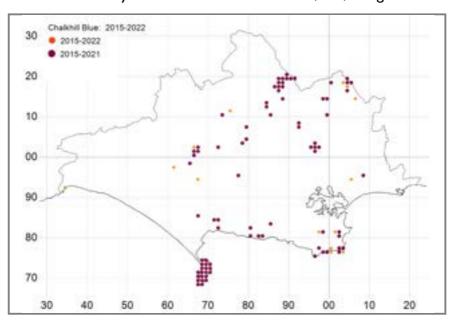
Turning our attention to the west of Dorset.

The Chalkhill Blue, about which we have been very concerned in the west of the county, did better, especially on Portland, though their numbers are always higher there:



- On Cerne Abbas Giant Hill six were recorded, compared to only two per year since 2013.
- On Portland, Perryfields, Broadcroft and Tout all recorded their highest numbers since 2014.
- Five were recorded on the Weymouth Relief Road: the first sightings here since 2019.

Across the county the Chalkhill Blue did better, too, being recorded



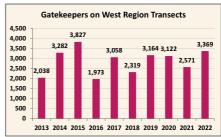


Chalkhill Blue. Photo: Donald Simcock

in more kilometre squares in 2022 than the previous year. Also, looking at the range (number of km squares) from 2015 to 2021 compared to 2015 to 2022, the number went up from 82 to 96. In the map on the previous page, the orange dots show gains in the 2012-2022 map compared with the 2015 to 2021 map: it does not mean that they were only seen in the orange dot squares in 2022.

The **Green Hairstreak** also showed higher numbers on some transects: Cerne Abbas Black Hill, Lankham Bottom, and Southfield Hog Cliff all had more than 10.

Gatekeepers did well across the west, though their numbers faded early due to the drought. They were the top species in the national Big Butterfly Count.



e now go on to look at how individual species fared in Dorset during 2022, using transect walk records

For each walk we look at the numbers of a species recorded this year, last year, and the average for that species:

- Is the number recorded this year more than 50% higher than the average of the previous years?
- Is the number recorded this year more than 50% higher than last year's total?

"Winners" are the species that achieve both these levels on the highest proportion of the walks on which they occur.

,The Dorset Winners for 2022 using these criteria are:

- Clouded Yellow
- Lulworth Skipper
- White Admiral
- Holly Blue
- Dingy Skipper

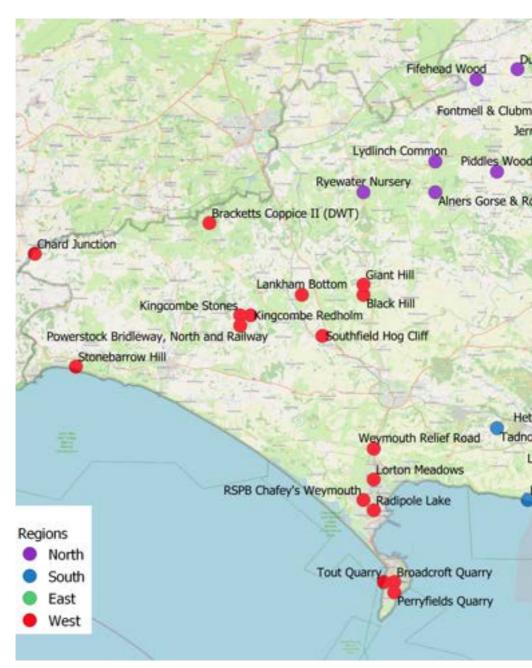
The **Clouded Yellow** is a migrant species, so largely beyond our ability to influence its numbers, which are more dependent on the weather in southern Europe and north Africa and wind direction, but interesting to look at.



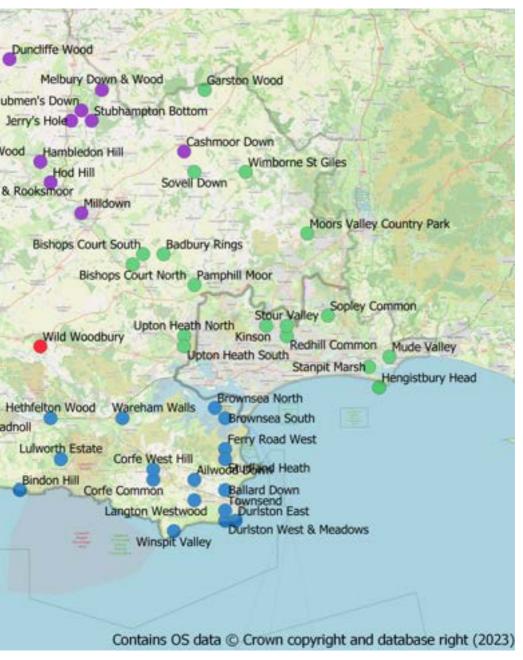
Clouded Yellow in Bournemouth Sep 2022. Photo: Gary Holderness.

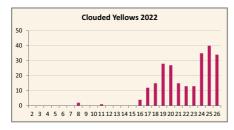
This species was recorded on 44 different transects (out of 74). 34 individuals were seen at Ryewater Nursery, and 15 were recorded at both Cerne Abbas Giant Hill and the Weymouth relief road.

Transect walks in Dorset 2022 (see pag



age 9 onwards for transect information)





The chart on the left shows the numbers recorded by transect week. You can see the different broods. The transect season ended too early for us to have a complete record, but reports to the website totalled 184 in

October (the highest species for the month, though this figure will be influenced by more people recording this less-usual species), and even 11 in November, the latest being on 15th; they were gone by December.

Professor Jeremy Thomas describes the Clouded Yellow as "The only species of butterfly in the British Isles capable of breeding on modern improved grasslands, in which sown clover is often an important component"

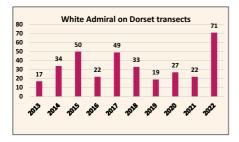




Lulworth Skipper in the Bindon area May 2022. Photo: James LeRouge

The **Lulworth Skipper** had a total count on all transects of 1,271, compared to 524 in 2021. Particularly large increases were recorded on Ballard Down, Bindon Hill and Townsend, all in the Purbeck area. Townsend only started recording the Lulworth Skipper in 2013 and had a count of 50. It is known as a very sedentary species, so its spread to Townsend is interesting. The sites liked by the butterfly are those with tall, dense clumps of Torgrass, on which it lays its eggs.

The **White Admiral** is only seen on transects that include its habitat, which is woodland. they did particularly well on some north Dorset walks: Alner's Gorse, Duncliffe Wood, Lydlinch Common and Piddles Wood.

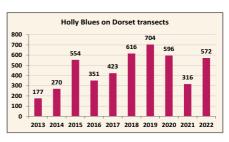




White Admiral taken at Alners Gorse in July 2022. Photo: Brian Edge.

Our thanks to Brian Edge, who not only took the photo, but said: "Stupefying number of butterflies here today. Don't know what Butterfly Conservation do, but it's spot on."

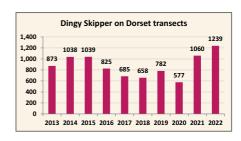
Holly Blue numbers fluctuate in a 4-6 year cycle due to the parasitic wasp *Listrodomus* nycthemerus, whose numbers also fluctuate widely. Some years nearly every caterpillar may be parasitised, so Holly Blue numbers fall drastically. The wasp numbers then also plummet for lack of food. Holly Blue numbers can then grow again, until the wasp population re-establishes itself. It looks like the the next upward cycle has begun

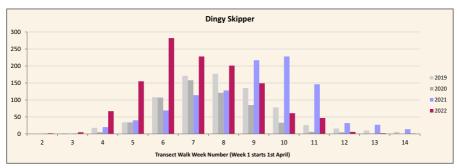




Holly Blue on Hod Hill in July 2022. Photo: Shona Refoy.

The **Dingy Skipper** had its highest recent count since 2013. The graph below shows the number recorded against each of the first 14 transect weeks. They emerged much earlier than in 2021, which had a very cold spring.







Dingy Skipper at Badbury Rings on 17 April 2022. Photo: Mark Pike.

s with the winners, we look at the number of a species recorded this year, last year and the average for that species, but here we report on those species which managed fewer than 50% of the average over the previous ten years and less that 50% of 2021's year's total.

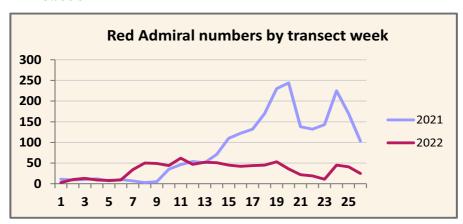
Losers are the species which meet these criteria on the highest proportion of the walks on which they occur.

The Dorset losers of 2022 using these criteria are:-

- Red Admiral
- Adonis Blue
- · Small Copper
- Peacock

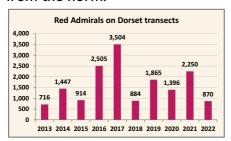


A view of a Red Admiral we don't often see: the underside: what great camouflage! Photo: Brian Arnold.



The graph above shows the numbers of **Red Admiral** recorded each transect week in 2021 compared to 2022. The numbers in 2022 never built up. Although the Red Admiral does now overwinter in

the south of the UK, the majority of the butterflies we see in the UK have migrated in from North Africa and continental Europe. The immigrant females lay eggs, usually leading to an emergence of fresh butterflies from July onwards, but in 2022 this would have been when the first heatwave hit, which together with lack of rainfall made it difficult for successful breeding. The further heatwave in August with the continued drought would have made things even worse - see pages 4 and 5 for the substantial changes in temperature and rainfall from the norm.



Having said that, it was a bad year but not unprecedented, as shown in the graph to the left. Hopefully, the butterflies in North Africa and Europe will have survived well enough to send more our way in 2023

For the **Adonis Blue**, the numbers were lower than 2021 on nearly every walk. The Weymouth Relief road, however, had its numbers

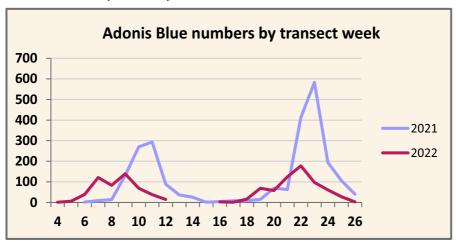
increase from 45 to 103. The height of the sward will be important to maintain good numbers: the Adonis needs turf of I to 4cm for most of the year.



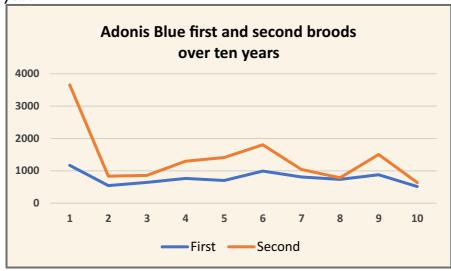


Adonis Blue. Photo: Derek Fowler

Looking at how the two broods of the Adonis Blue compared in 2022 to 2021, we can see that both first and second broods were lower than the previous year.



As can be seen in the chart below, the second brood is usually higher than the first, presumably reflecting the weather conditions of that year.



Drawing on the website records for the Adonis, the pattern of numbers over the double brood is interesting. The higher figures in 2021 for the second brood would presumably have given the 2022 butterflies a good start, accounting for the much higher numbers in May, though the numbers dropped substantially in June, possibly in reaction to the hotter, drier weather bringing an early end to the first brood.

The **Small Copper** is a triple-brooded butterfly, which had its lowest count since 2016, doing particularly badly in the south of Dorset.

It overwinters as a caterpillar, with the first, smaller, brood emerging in April, usually leading to larger broods later in the year, but we can surmise that the weather made it hard for the caterpillars to find their foodplants (Common and Sheep's Sorrel) in good condition.



Small Coppers. Photo: Ann Barlow

This is a species which has been declining in the UK for some time. Figures for England for 1975-2019 show a drop in abundance of 35% and a drop in distribution of 45%.



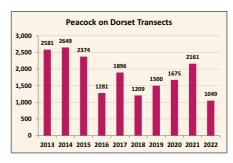
The **Peacock** is often seen on our buddleias; it is a single-brooded species, overwintering as an adult.

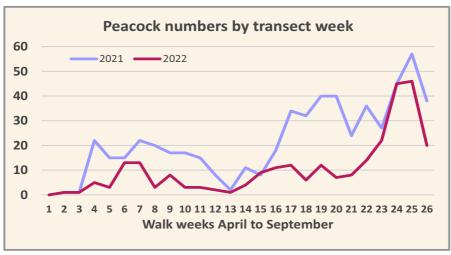
In Dorset, its numbers in 2022 were the lowest seen in the last ten years and the graph to the right shows an overall slow downward trend. UK-wide figures show it slightly decreasing in abundance, but increasing its distribution.

Although there were good numbers in later 2021 to produce overwintering adults, fewer adults seem to have survived the winter: many fewer were seen in spring 2022 than 2021, as shown in the graph below.



Peacock. Photo: John Van Crugten





Rare and migrant species

e report on Large
Tortoiseshell most
years these days, as
there is a small colony which we
suspect has been artificially
released on Portland and is so far
managing to survive there.



Large Tortoiseshell on Portland in April 2022. Photo: Andy Martin

- They were seen again in 2022:
- One seen at Ulwell (near Swanage, on 17 April.
- One in Bournemouth on 28 May.
- Two at Church Ope Cove (Portland) on 18 July.
- One on the Winspit Valley transect walk on 14 July.

Two **Swallowtails** were recorded:

- One in Wimborne on 22 May
- One in Shitterton (Bere Regis) on 20 July

Queen of Spain Fritillary was recorded at Milborne St. Andrew on 16 September 2022. Fortunately, it was seen by someone with contacts at Butterfly Conservation who confirmed it.

The Small Pearl-bordered Fritillary is only just hanging on in Dorset - just single figures were seen again in 2022. The Pearl-bordered Fritillary is thought to



Queen of Spain Fritillary. Photo: Ian Livingston

Rare and migrant species

We have reports of **Long-tailed Blues** most years, sometimes
thought to have travelled here as
caterpillars in imported food. In
2022 they were reported at:-

- I. Portland on 7 August.
- 3. Worth Matravers on 10 September.
- 2. Bridport on 28 September.



Long-tailed Blue. Photo: lain Leach

The last sighting was in a member's garden - Colin Nunn had planted

Everlasting Pea (Lathyrus latifolius) in the hope of attracting this species and not only succeeded, but saw the butterfly. You have to wonder how many other rare butterflies could be out there which are not noticed by most people.

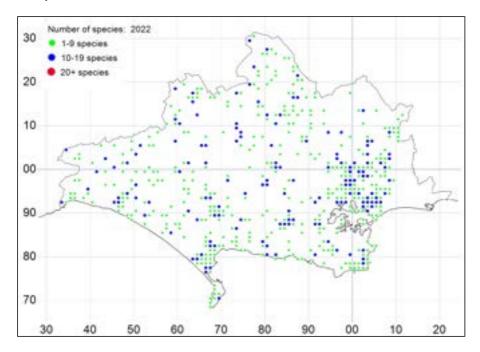
Please take care when photographing butterflies

When you encounter the rarer species of butterfly, like the Small Pearl-bordered Fritillary, you understandably like to take photographs of it, and we love to see them. However, it is very important that you take care not to trample the habitat the butterfly is inhabiting: those plants you tread on may be the food on which its caterpillar lives, or be providing cover to protect the butterfly or caterpillar from predation.

It is better that you miss a photograph than you help a rare butterfly on its way to extinction.

Big Butterfly Count 2022

he Big Butterfly Count covers the whole of the UK and asks people to spend 15 minutes watching a patch and then reporting which butterflies they see. The map shows the places where Big Butterfly Counts were done in Dorset: it's great to see a lot of participation in the conurbation. The blank area to the far east is because, for historic reasons, these results are added to Hampshire's records, not Dorset's.



A total of 22,748 butterflies were counted, which was a lower count than the previous two years, though fewer people took part in Dorset. The Red Admiral lost its place in the top five to the Speckled Wood, the top five (from one to five) were Gatekeeper, Meadow Brown, Large White, Small White and Speckled Wood.

For information on the count in 2023, search for "Big Butterfly Count 2023" online. There is an app you can download to help you.

White Holes

hite Holes are a Dorset term describing kilometre squares in Dorset where no butterflies have been recorded in the current five-year recording cycle. The current cycle is from 2020 to 2024, so 2022 was half way through.

The White Holes map is on our website. Go to www.dorsetbutterflies.com and then Recording, followed by White Holes, where there is some information and a link to the map itself.



More than 75% of our squares have at least one butterfly reported in them (see the map above), which is excellent, but we still need help to fill all the gaps and to increase the number of species reported in any one square.

The map shows differently coloured squares: green are our "white holes" (named back in the days when we used paper!), light red shows up to nine species have been reported, whilst red shows ten or more species. Click in any coloured square to see the actual

White Holes

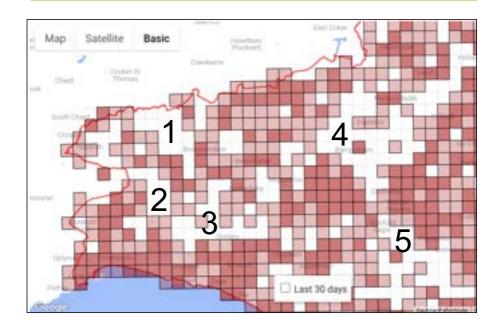


species recorded there (you need to enlarge the map at least one click to do this): see the map above for an example.

The colour of the squares is updated monthly, but you can see what has been reported to the website in the meantime by clicking on the "Last 30 days" button (see map below). The squares on the map are updated for sightings sent in to the website monthly, but other records from transect walks, iRecord etc, go in at the end of the year.



White Holes



We are always most short of records in the west of the county, presumably because fewer people live close by to go out recording. The map above has the "Map" view turned off and is in "Basic" mode. We have highlighted the areas where there are big gaps and, as the place names are not easy to make out, to give you an idea:

- 1. West of Broadwindsor
- 2. South of Bettiscombe
- 3.A number of squares around Broadoak
- 4.A large number of squares in the Rampisham/Evershot area
- 5. West of Grimstone

Exploring White Holes can be fun - they lead you into all sorts of bits of Dorset you haven't previously explored, and there is some lovely countryside in west Dorset (as well as some good pubs) - get out there and record!

Wider Countryside Survey

ur transect walks tend to be chosen specifically for the richness of their butterflies. The Wider Countryside Butterfly Survey (WCBS) was started so that we could monitor what is happening outside these favoured areas, in the countryside at large. The survey was launched in 2009 so there is now a run of 14 years' worth of data, which enables the scientists to analyse trends in butterfly numbers.

Kilometre squares from the Ordnance Survey maps are chosen at random, a route designed for each square, and the squares are walked at least twice a year, once in July and once in August. If you are "lucky", you will be assigned a square with some butterfly interest in it, some less lucky folk will find they are walking through an agricultural desert, or near a busy road. It is important that all the squares are surveyed, not just the interesting ones, to reach a true picture of the state of the butterflies.

Dorset, led by its enthusiastic WCBS champion, Adrian Neil, has always been one of the best counties for the number of WCBS squares surveyed, and again led in 2022, with 75 squares surveyed, 67 by Butterfly Conservation volunteers, and 8 by BTO (British Trust for Ornithology) surveyors.

Meadow Brown	3,062
Gatekeeper	2,103
Small White	748
Ringlet	595
Marbled White	580
Large White	467
Speckled Wood	410
Lulworth Skipper	283
Common Blue	244
Green-veined White	240

The results for Dorset for 2022 had the leading species shown in the box.

The top four are fairly constant from year to year, as you might expect, but it's unusual not to have at least one of Red Admiral and Small Tortoiseshell in the top ten.

Wider Countryside Survey

It is extraordinary that Lulworth Skipper should appear in the top ten, as they are obviously not recorded in many of our squares (four of the 75 surveyed). They did have a good year in 2022, and we were fortunate that one of our WCBS squares is SZ0176 which includes the coast path near Durlston. This square alone recorded 922 butterflies in all on the July survey and 976 in total for the year compared with an average total of 107 butterflies per square overall.

.

The WCBS newsletter talks about the importance of their "zero heroes" – people who record their results despite seeing no butterflies at all. We didn't have any of these in Dorset but would still like to thank those who walk what may be a fairly thankless route butterfly-wise.

The work of the Dorset Branch of Butterfly Conservation is undertaken by volunteers, and encompasses both direct conservation work and efforts to educate and enthuse people about butterflies and moths.

We need more funds: our expenses are exceeding our income at present. We are therefore looking to identify income sources, and one we have agreed on is to facilitate people giving donations if they attend our walks or talks. You will not have a tin rattled under your nose, but we are giving out small cards requesting a donation via our website. We appreciate not everybody will be able to give anything, but hope that those who can give will do so.

If you use the donate button on our website at the moment you will be taken to a Just Giving page; this does not specify your money will come to Dorset, but the fact that you have approached it via the Dorset Branch website will direct the money to us.

Terminology & statistics

Consistency. Please note that the figures given in this report will not always agree exactly with figures given in the initial report at our AGM, or to last year's figures. We use the data we have available at any given time, and late records will keep coming in.

"Number of records" and "Number of Butterflies" have different meanings. A record consists of a date, a grid reference, one species, and a number – eg 3 Brimstone at ST8026 on 5/5/2023. This is one record, but 3 butterflies.

Abundance is the quantity of a species. **Range** is how widespread the species is. Both can be used as a measure of how species fare.

Monitoring is regular recording of the same area following a specific method. It generates the best data that we have for assessing the changing fortunes of UK butterflies. Recording is when we collect records of any butterflies seen anywhere — this gives us an idea of the range of our butterflies, but does not attempt to measure population sizes. More records doesn't necessarily mean more butterflies — it might mean more recorders, greater effort by recorders (e.g. to fill white holes at the end of a five-year cycle) or warmer weather. In the other direction, there may be half a million Large Whites in Dorset, but if nobody records them, the apparent number will be zero. The more sightings we receive, the better our records represent reality.

Zero results when you are searching a certain site or looking for a certain species can be frustrating, but they are very important to know. We can't tell if the a species has disappeared from a site unless we know somebody has gone to look for it; preferably several somebodies or several visits to give better coverage.

Back Cover: Clouded Yellow. Photo: Geoff Pring

Dorset Branch Who's Who

Chair & Reserves Manager

Nigel Spring* Sherborne. 07981 776767 nigelspring@yahoo.co.uk

Secretary, Garden Records & Wider Committee Member **Countryside Survey**

Adrian Neil* Preston, Weymouth. 01305 832937 raneil418@gmail.com

Treasurer

Georgie Laing* Weymouth. 01305 766712 georgie laing@yahoo.co.uk

County Butterfly Recorder

Robin George* Gillingham. 01747 824215 rab.george@btinternet.com

Membership & Branch Liaison

Andy Martin* Poole andrewmartin802@gmail.com

Newsletter

Jane Smith* Sherborne, 01935 814029 jane mary@btinternet.com

Website & Social Media

Lyn Pullen* Winfrith Newburgh. dorsetbutterflies@btinternet.com

Committee Member

Richard Norman* Sturminster Newton, 01258 472887 richard@bagber.co.uk

Committee Member

Stephen Brown* Dorchester estherandsteve@btinternet.com

Iohn East* Sturminster Newton, 01258 472193 iohneast813@gmail.com

Meetings

Arthur Bryant Shaftesbury, 01747 228252

Conservation

Richard Belding, Dorchester. 01305 264868 rbelding601@gmail.com

Sales Stall

Colin Burningham. 01935 873219 07849 921594 colinburningham@hotmail.com

* denotes Committee Member

Butterfly Conservation, Company limited by guarantee, registered in England (2206468). Registered Office: Manor Yard, East Lulworth, Wareham, Dorset BH20 5QP. Charity registered in England and Wales (1254937) and in Scotland (SCO 39268)

All material in this magazine copyright **Butterfly Conservation Dorset Branch.The** opinions expressed in this newsletter are not necessarily those of the society or Branch.

