Newsletter No.79
Summer 2015

# Butterfly Report For the Year 2014



www.dorsetbutterflies.com



#### Chairman's Letter

#### From Nigel Spring, Dorset Branch Chair

We apologise that this report is a little late getting to you - Lyn Pullen, who pulls it together, has been rather over-committed this year. We hope you will find it worth waiting for.



As a Branch of Butterfly Conservation, one of our most important roles is to count butterflies. The volunteer input recording butterflies could never be paid for, and it is the data it creates which allows us to assess how species are doing and formulate plans to help those in trouble.

There are several butterfly recording schemes in Dorset and we are very grateful to everyone involved:

- a) the main transect walking scheme which has been running since the 1980's, overseen by the inexhaustible Bill Shreeves, which involves over 60 sites all over the county and a large number of volunteers;
  - b) the Wider Countryside Scheme and
- c) the Garden Butterfly Scheme both organised by Adrian Neill, and
- d) the casual recording system operated through our website where thanks must go to Martin Raper and Nick Urch for verifying all the records as they come in.

We don't forget moths, either, but we have such a good sister organisation in the Dorset Moth Group that there would be no sense in duplicating their work. Rest assured, however, that all our management plans for habitats take moths into consideration as well as butterflies.

#### 2014 - How we count butterflies

Counting butterflies sounds very simple: go out and note down how many you see.
There are, however, two aspects which make this less straightforward.

Firstly, you need to encourage people to do the counting: virtually all our records are from unpaid volunteers. What suits one person does not suit another: one needs to keep it simple and just jot down what they see while going about their daily business, another is housebound but can get out into their garden, and another likes to go out on targeted hunts for certain species.

Secondly, how comparable are all these figures from a multitude of sources? There is no certain answer to that, but, statistically, the more records we get, the better the overall accuracy. However, there is a method called transect walking which calls



for a certain place to be walked every week from April to September, and only walked as long as the weather is good enough (and this is specified in terms of temperature, wind speed and time of day).

Even how people like to send in their counts varies. Some like to type them into a computer, and some prefer to stick to paper and leave the typing to someone else.

We try to have a number of counting scenarios and different ways to send in the records, so there is something for everyone.

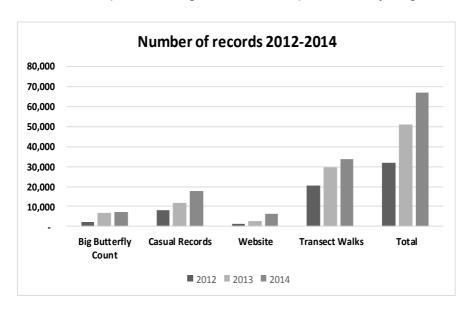
#### 2014 - The number of results

Dorset puts a huge amount of effort into transect walks, which always form the biggest number of records each year, but a sizeable number also come in via other means.

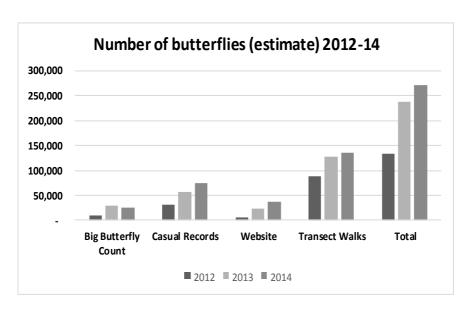
All records are looked at by "verifiers", who check that the records sounds credible - if you want to claim to have seen a Silver-spotted Skipper in Bere Regis, you will need good photographic proof! They also check the map reference given agrees with the place name: it's so easy to switch a couple of digits or get the letters wrong.

We are delighted to say that the number of records received is going up: see the chart below. The grand total for 2012 was 31,729, while 2014 reached 66,794: more than double.

A "record" is a report from one place of all the butterflies seen there, with a "place" being a kilometre square. So if you go for



#### 2014 - The number of results



a walk and cross through three squares, your butterfly sightings would form three records.

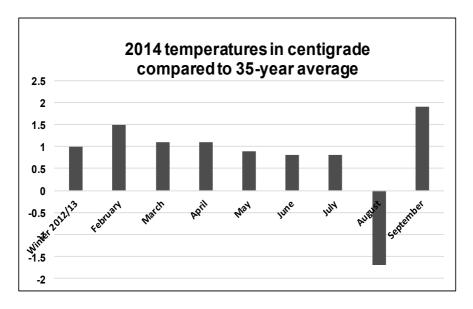
When it comes to totalling the actual number of butterflies represented by these records, it is not a precise science. If there are a lot of butterflies of the same species on the wing, it can be difficult to count them accurately, plus some of the recording forms we use can be completed by giving a letter indicating seeing one, between two and nine, between 10 and 29 and so on. Any estimates we make tend to the lower end of each range, so the numbers here are probably less than the number actually represented.

We record in five-year cycles, at the end of which we start again. This allows us to have periods of data which we can analyse and compare with each other.

#### 2014 - Weather

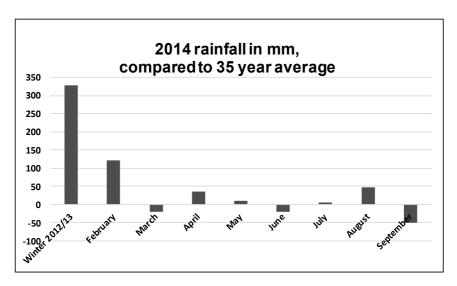
As butterfly numbers are very dependant on the weather (and not just for the current year) we need to check what 2014's weather was like. Thanks to Judy Westgate for providing meterological figures from Fontmell (North Dorset).

**Temperature** The mean average temperatures for 2014 were outstanding with only August dropping below the 35 year average. In 2013 only the month of July was above average! Definitely a very good year from this perspective.

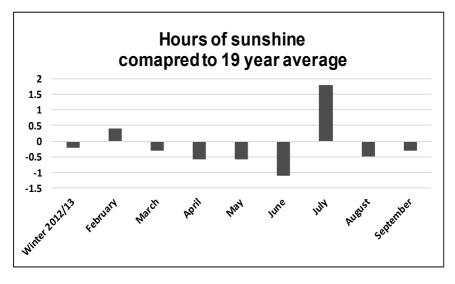


**Rainfall** However, 2014 was far wetter than 2013 with five months above average, compared to only two in 2013. Only March, June & September were drier than average. This il likely to diminish the effects of the warmer weather.

#### 2014 - Weather



**Sunshine** 2014 was narrowly better than 2013 on hours of sunshine with July especially having more than average. However April, May, June & September did badly. This leaves the overall weather situation unclear.



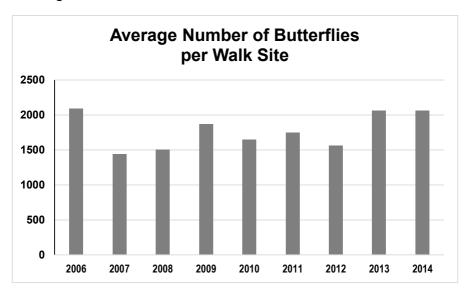
#### 2014 - How good a year was it?

In 2014, a record number of 65 sites were walked.
Together with fewer weeks being impossible to walk due to poor weather, the amount of data collected was excellent, with a total of 133,918 butterflies recorded.

The number of transect walks we are able to record each year varies a little from year to year, which is not desirable, but inevitable when all the walking is undertaken by volunteers. Looking at the average number of butterflies

per walk which have been counted suggests that 2014 was on a par with 2013, but both years were a little below 2006

In Dorset, we have developed certain criteria for deciding to label a species as doing well or not. These criteria look at how a species has fared in a given year compared to (a) the previous year and (b) the average number of the species counted across all the years a site has been walked: this



#### 2014 - How good a year was it?

obviously changes from year to year and is thus called the "moving average".

We end up with three categories:

i) "Winners". Those species which increased by more than 50% on over half of

- sites, judged by comparison to both or either the previous year' figure or their annual averages
- ii) Losers. As above, but species which declined rather than increased
- iii) those that did not change.

#### 2014 - Winners

Applying the criteria above to transect walk data, 2014 did not perform as well as 2013, with only eight species in the winner's category compared to 26. 2014 also had more 'losers' (12 species) than winners (8). Many other previous years had more 'winners' than losers: 2006,2009, and 2010.

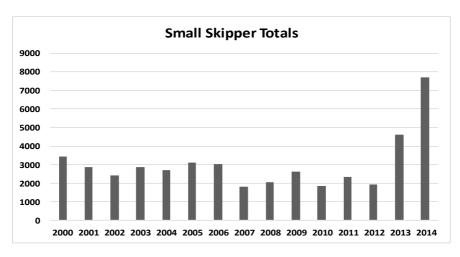
We had four winners in 2014. Butterfly of the year was the Small Skipper with the highest percentage increases, followed by Small Tortoiseshell, Brown Argus and Brimstone.

The **Small Skipper** reached a new record count on transect walks, beating its high figure in 2013 very conclusively. See the chart overleaf.



Small Skipper. Photo: Richard Lambert

#### 2014 - Winners



This seems particularly surprising against a national report in 2013 which showed a downward trend in Small Skipper numbers over a 37-year period.

So what might the reasons be for the Dorset success?

Looking at the life cycle of the butterfly in relation to the weather in 2013, the eggs are laid in July-August; this period in 2013 was sunnier and drier than average. The caterpillar emerges in August and spends the winter in a silk cocoon within the sheath

of Yorkshire fog grass; winter 2013-14 to April was warmer and wetter than average. We then had a spring and early summer with enough rain to promote the growth of the caterpillar's foodplant, and thus the caterpillar.

The **Small Tortoiseshell** continued the recovery we had seen in 2013, with the best count seen since 2003. After a 2003 figure of 6,229, its numbers had plummeted to a low of 386 in 2006; in 2013 it went up to 2,459 and in 2014 it reached 3,864. It is

#### 2014 - Winners

difficult to find a reason for this welcome increase, especially as peak period for the species varied from place to place.

The **Brown Argus** reached a record 1,008 and was seen on the highest number of transect walks ever: 35. This seemed to be driven by the warm summer enabling a much larger second brood to be built up, though the figures are not completely clear.

The **Brimstone** reached a record count of 3,294, again building on a good 2013. It is probable that in good spring and summer weather the count is artificially boosted by double-counting as the males patrol endlessly in search of females. The highest single count was 370 at Badbury Rings, made up of 233 first brood and 137 second brood. At first glance, this seems odd, as you would expect fewer in the spring, as they

are the butterflies which have survived over the winter. It seems likely that in a good summer the hardy winter survivors have a very long flight period, whereas the freshly emerged butterflies in late summer fly less and soon go into hibernation.

The **Ringlet** missed premier league status as it just failed to make the necessary over 50% increase on over half of



Ringlet. Photo: Ken Dolbear

the sites. Nevertheless, its achievement was possibly more spectacular. Looking at the last 15 years, we see all

#### 2014 - Winners

of 2000 to 2008 were below average, but 2009 to 2014 have all been above except for the bad weather year of 2012. 2014 hit a record 8,950. Their distribution has also increased greatly from 455 km squares (2000-04) to 737 (2012-13). Interestingly, there does also appear to be a growth in Ringlets with no rings or with unusual shaped ones, though this cannot be statistically confirmed.

The Large Skipper also missed premier league status, but still did very well. From the depths of the awful 2012 season when they totalled 710, they went to 1,251 in 2013, then 2,584 in 2014.

Essex Skippers also seem to be maintaining their recovery, though identification of these butterflies is difficult.

#### A note on Skipper identification

It seems that many transect walkers are having problems with telling Large and Small Skippers apart. The Large always come out a few weeks before the Small, then they are both on the wing. All "golden" Skippers should be looked at really closely to determine whether they are blotched and dappled (Large) or pure gold (Small).

The photos show the Large above and the Small below. Thanks to Mark Pike and Chris Rowland respectively for the pictures.





#### 2014 - Losers

Large Whites and Small Whites plunged from being top performers in 2013 to bottom league losers in 2014, with a speed which was remarkable and difficult to explain. The summer was warmer than the previous year, though wetter, but it is hard to see how this could make the difference.

Large Whites went from 5,693 to 1,966 and Small went from 19,143 to 3,434.

Small Coppers were a winner in 2013 by our criteria; in 2014 they improved again but not enough to be termed a winner: 85% of the 46 sites were over 50% below their annual averages. 422 were counted; the highest figure in the last 15 years was 864 (2011), the lowest was 204 (2012)

The **Silver-spotted Skipper** was a loser for the second year in succession. They are



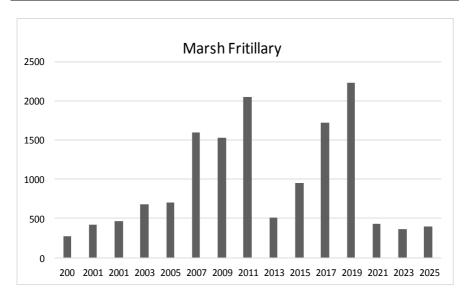
Silver-spotted Skipper. Photo: Ken Dolbear

only seen on a transect walk at Fontmell Down, where the annual average is 15. The 2014 transect count was three, but counts off the walk route were up to 50.

The **Duke of Burgundy** also became a loser for the second year running. They are hanging on in Dorset, but only seen on two transects (near Cerne Abbas and near Wimborne St Giles, the latter being private land) and five other sites of which we know.

Marsh Fritillaries also

#### 2014 - Losers



spent their second consecutive year as losers. Despite this, there were good signs that new small colonies were appearing on some of the chalk down areas. Larval webs were found on Fontmell Down for the first time since the early 1980s.

The **Holly Blue** was a loser for the third consecutive year. They are a species which tends to go through a boom and bust cycle, but the boom of 2010-2011 was rather muted, at its highest 471,

while the last three years have gone: 202; 192 and 265. Lonely male Holly Blues patrolling desperately along hedgerows were a common feature of the year.



Holly Blue. Photo: Terence Cheeseman

#### 2014 - Losers

The **Chalkhill Blue** has been well down for three consecutive years, but dividing the figures into the separate areas of Purbeck, North Dorset. Portland and the West Dorset shows that a catastrophe is building up. There was a crash on North Dorset walks such as Fontmell and Melbury Downs in the 1990s from which they have not really recovered. In Purbeck only Bindon Hill has been keeping up the numbers. In West Dorset. walks at Cerne Giant. Cerne Black Hill, Lankham Bottom and Southfield Down (near Maiden Newton), no Chalkhills have been counted at all since 2011. Portland's three walks now contribute about two thirds of the total. A species-specific pathogen has been found for the Adonis Blue. It is possible that one for the Chalkhill is getting the upper hand.

The Small Pearl-bordered
Fritillary has been lost from our transect walks, and beyond that the only site where it is still known is Studland Golf Course, so it seems this butterfly is headed for extinction in Dorset. This is a species which as recently as the 1950s was considered very common in the County.

An even gloomier story belongs to the Wood White The last ones on a walk were counted at Powerstock in



Wood White. Powerstock 2013. Photo: Mark Pike.

2012, and this photo is of one off the walk route in 2013, which may have been the last

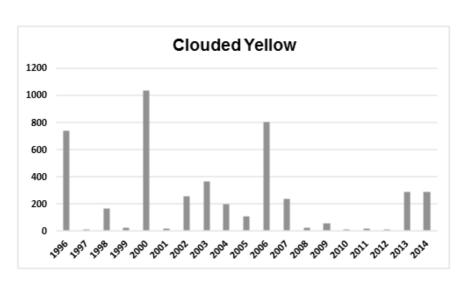
#### 2014 - Migrants

The **Red Admiral** was a migrant in the past, and though some now survive our winters, their numbers are increased by ones coming in. After a disastrous year in 2013, there has been recovery on Dorset's walks which is echoed by the numbers counted on the Web site. Top walk result was 120 at Radipole (Weymouth). The website reports went up from 600 to 930.

The **Painted Lady** had a quiet year, with a top walk count at

Durlston East (Swanage) of 14. The website count was down from 104 to 97.

2014 was the second consecutive year to see a real migration of **Clouded Yellows**, and for once, they did better than Painted Ladies, though the total walk counts only increased by two on 2013. The website count was much higher largely due to three-figure counts in a meadow near Langton Herring where butterflies were watched emerging and



#### 2014 - Migrants

mating in late September and into October. One Berger's Clouded Yellow was seen at Rawlsbury Camp by Nick Butt & there were numerous Helice forms recorded.

Between 28 June and 12 July, visitors to the coast near St Alban's Head had the delight of watching Continental Swallowtails. Thanks to careful work with the photos by Steve Smith, it was discovered that there were at least five different individuals of various ages. There were certainly no butterfly weddings at the Chapel and any other sort of release seemed unlikely. It is just possible that Swallowtails mentioned in 2013's report may have succeeded in breeding, but we have no evidence to support this. There were sightings in other counties so it is just possible these were new immigrants.

Between 7 and 17 August

Map butterflies of the second brood 'White Admiral' lookalike were observed flying, feeding, lekking and egg-laying near Swanage on the Purbeck Ridge. After their discovery by Brian Arnold and others, large crowds of butterfly watchers and photographers descended on the site. Again Steve Smith co-ordinated large numbers of photos which suggested an estimate of at least 20 individuals. There were high hopes that the colony might represent genuine migrants, since the species has recently spread through the Netherlands and reached the Channel Islands, However news was released that they had escaped from a vehicle containing pupae which were being bred for research purposes. As eggs had been laid there was just a hope that they might survive the winter to emerge as the first brood 'Fritillary' lookalike.

#### **North Dorset**

For full details of any of the areas, please see the website.

The North area of Dorset has 16 transect walks and has had 40 species recorded over them. Of the regularly recorded butterflies, in 2014:

- 39% were below their 2013 totals
- 58% were below their annual averages
- Butterfly species which were down to zero on one of the walks the previous year popped up again in 35 instances
- Butterflies species
   which had been seen
   previously on a walk,
   but which were not seen
   on that walk in 2014
   totalled 34

The butterfly winners in the North were the Small Tortoiseshell and the Essex Skipper. Small Tortoiseshells

were seen on 16 sites, and three-quarters had over 50% increases on 2013, while 69% were over 50% above their annual averages.; the top site was Cashmoor with 256. The Essex Skipper was counted on seven sites and was well up on the previous year and the average; top site was Fontmell with 12.

The loser in the North was the Large White, where 94% of sites were down over 50% compared to 2013.

Fontmell Down is our longest -running transect walk, going since 1980. It also has the highest number of species for any single walk, with 33 having been recorded. 2013 was a very good year for Brimstones, which reached a record of 209, having been at 99 the previous year. The Green Hairstreak was down from five to one, against an annual average of 12.

#### **North Dorset**

Hod Hill gains notice for having the highest number of butterflies counted, with 4,658. The Ringlet reached a record 105, against 51 the previous year and an annual average of 19. Piddles Wood has the dubious distinction of having the highest number of species below 2013. The Marbled White was not recorded for the first time since 2007; its record count was 140 in 1998. However. the Small Tortoiseshell managed a record count of 9 against an average of three.

Sovell Down (north of Wimborne) and recorded for 29 years had the most species below their annual averages, with the Small Heath down to one. This butterfly managed three in 2013, and had an annual average of 22; the record in 1985 was 112!

Stubhampton Bottom had the highest number of species re-



Marbled White. Photo: Brian Dicker

appearing after having been absent. It had the first ever White-letter Hairstreak counted on 29 July. Conversely, the Brown Argus managed the first zero count since 2006, despite an annual average of 10 and a record in 1990 of 100.

On the subject of White-letter Hairstreaks, which are rare in Dorset, a new site has been discovered, near Field Grove Woods at Winterborne Stickland.

#### **East Dorset**

East Dorset has 14 transect walks, and has recorded 36 species on them.

Of the regularly recorded species:

- 39% were below 2013
- 55% were below annual averages
- Butterfly species which were down to zero on one of the walks the previous year popped up again in 20 instances
- Butterflies species
   which had been seen
   previously on a walk,
   but which were not seen
   on that walk in 2014
   totalled 30.

Butterfly winners in the east were the Ringlet and Small Skipper. The Ringlet was seen on nine sites and saw a good increase against the previous year and annual averages. Top site was Wimborne St Giles with 608.

the Small skipper was found on 13 sites.

The loser was again the Large White, only making 133 at Stour Valley - how amazing to have the Ringlet out-perform a White.

A new walk targeting the Silver-studded Blue took place at Avon Heath North. It achieved a good first count of 307, with a peak of 93. 17 other species were also found. Further walks just for the Silver-studded have been taking place since 2003 at Mannington Heath and Slop Bog. There was a record count at Mannington in 2014 and the second highest ever for Slop Bog: 616!

Badbury Rings, which has been walked for 23 years, had the highest number of species in the East, with 26, but also the largest number of species seen before but not in 2014 (5). The Small

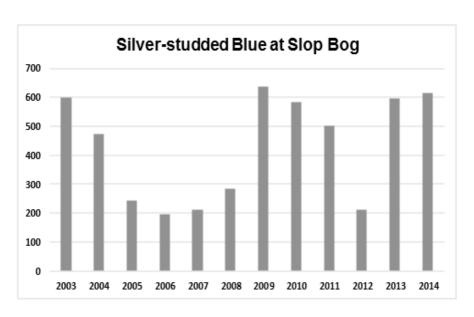
#### **East Dorset**

Blue had a record count of 16 from 6 in 2013 and an annual average of 2.

Walks at Sovell Down, North of Wimborne, have been taking place for 29 years, but we badly need some new walkers, so contact Bill Shreeves if you can help. The site scored one record number: of Common Blues, up to 181 from 72 and an average of 49; the previous record of 100 was scored in 1985. Small Heaths did

poorly, though, with a count of only one against an average of 22.

There have been some species found where not known before. A new site for the White-letter Hairstreak was identified near the Lamb's Green pub in Corfe Mullen. New records for the White Admiral came in from three sites north of Wimborne and one in Poole.



#### **South Dorset**

South Dorset maintains16 transect walks across a good variety of habitats: three on chalk downland; five on limestone; two on heath; two on wood/heath three on rough grass and one in wood.

Five of the transects are on National Trust land: Corfe West Hill (Langton Westwood; Winspit Valley; Studland Heath and Ferry Road West. The winners and losers on these sites were:

#### Winners (NT sites)

- Common Blue 362 in 2014; 137 in 2013.
- Small Heath. Up to 205 from 36.
- Peacock, 120 from 16.
- Orange Tip. 23 from 3.
- Holly Blue. 19 from zero

#### Losers (NT sites)

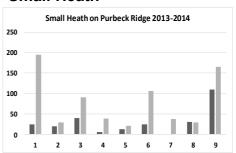
- Large White 150, down from 265.
- Small White 107/211

Lulworth Skipper 33/100

We have a series of nine walks designed to cover the chalk Purbeck Ridge, aimed at keeping an eye on certain species; not all are 26-times a year walks: some are walked at the right time for the key species.

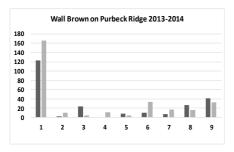
Numbers below the bars on the graphs denote sites: 1 - Bindon Hill; 2 - Grange Arch; 3 - Ridgeway Hill; 4 - Knowle Hill Two; 5 - Knowle Hill One; 6 - Corfe West Hill; 7 - Ailwood Down; 8 - Nine Barrow Down; 9 - Ballard Down. There are a few recording gaps, shown as zeros. On all graphs, 2013 is to the left, 2014 to the right.

#### **Small Heath**

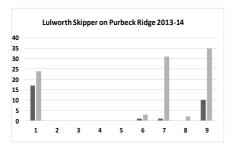


#### **South Dorset**

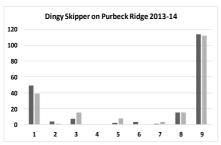
#### Wall Brown



#### **Lulworth Skipper**

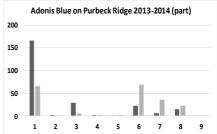


#### **Dingy Skipper**



#### **Adonis Blue**

The graph for this species is a problem, as there was a huge number seen at Ballard Down in 2013, which means on the graph that the small figures for the previous years



are almost invisible. The chart therefore shows the first eight walks only. The 2013 figure for Ballard was 3,036 (!) followed by 394 in 2014.

The Chalkhill Blue did very poorly indeed, with only two of these sites recording it: 93 on Bindon and one on Ballard. Graylings were only on two sites, Small Blues on one and no Grizzled Skippers were counted.

Over the South Area, Whiteletter Hairstreaks were reported from Harman's cross, Bindon Hill and Wareham Common.

#### **West Dorset**

West Dorset boasts 18 walks where 38 species have been recorded. Of the regularly recorded species:

- 42% were below 2013
- 51% were below their annual averages
- Butterfly species which were down to zero on one of the walks the previous year popped up again in 40 instances
- Butterflies species
   which had been seen
   previously on a walk,
   but which were not seen
   on that walk in 2014
   totalled 28.

There were five western winners: the Brown Argus; Brimstone; Small Tortoiseshell; Small Skipper and Orange Tip.

There were no losers by our criteria, but five species fell more than 50% below their annual averages on over half

their walks: Wood White; Small Pearl-bordered Fritillary; Marsh Fritillary, Green Hairstreak and Silverstudded Blue.

Brackett's Coppice saw its transect walk route re-routed; this is avoided wherever possible because it makes comparisons with earlier years difficult, but became necessary. The new route is close to where the Marsh Fritillaries are breeding, and a 213% increase was seen in the new walk count on the old annual average.

The West covers three of our four Butterfly Reserves, which we will look at next.

Lankham Bottom Reserve, near Cattistock, saw a record number of Brown Argus: 111 against an annual average of 39 and 62 in 2013. The Adonis Blue, however, fell to 4 from an average of 8 and a count of 19 the previous year.

#### **West Dorset**

Broadcroft Quarry Reserve on Portland saw a record count of Gatekeepers: 653, up from 246 and an average of 58. There was a single count of 218 in one week. No Small Coppers were seen: the third time they have been totally absent since 2003; the average is only two.

Perryfields Quarry Reserve, also on Portland, had seven species reaching a record number, most particularly the Grayling, with 14 seen, from two in 2013 and an average



Silver-studded Blue, Photo: Ken Dolbear,

of 2. 12 were seen in a single week. The Silver-studded Blue, however was not seen at all - average three.

Giant Hill, Cerne Abbas, scored the highest number of species in the west: 31. the record went to the Ringlet, with 322 counted, including 133 in a singe week, when the average is 50. Not seen was the Holly Blue.

Lorton Meadows, on the edge of Weymouth, bucked the trend by having the generally poorly— performing Chalkhill blue spotted for the first time. Its record species was the Small Tortoiseshell— 37 against an average of 14, while the biggest fall was the Meadow Brown down to 178 against an average of 382.

White-letter Hairstreaks were reported from Fleetwood, Chickerell, and Frampton Farm, Leigh.

The Wider Countryside
Recording Scheme (WCS) is
a national scheme aimed at
monitoring how butterflies are
doing generally. A lot of
recording, like transect walks,
is done where the butterflies
are known to be good but this
can give a false impression of
the wider picture. The
kilometre squares involved in
the WCS are selected
randomly so they give a more
accurate picture.

The down-side of random squares is that not all of them have many butterflies to be seen, but it is very important that this lack of butterflies is recorded, so we give particular thanks to the people who walk these squares.

Dorset continues to make a valuable contribution to the scheme, covering 53 squares this year. We were pipped to first place nationally by

Sussex, who use a lot of British Trust for Ornithology volunteers.

The total number of butterflies recorded in 2014 was 7,522, compared to 8,134 the previous year. The number of species was three less at 34.

Species missing in 2014 compared to 2013 were Dark Green Fritillary, Purple Hairstreak, Marsh Fritillary and Silver-studded Blue. There was, however a gain of Green Hairstreak. Lulworth Skippers, peculiar to Dorset, had an excellent year in the two squares where they occur, with an amazing number of 186 being counted, compared to 31 the previous year and 46 the year before that.

We saw 79% of the national total of species in 2014 (down from 82%).

The WCS provides measures

of both distribution (in how many squares butterflies are seen) and abundance; the two measures give somewhat different results.

#### **Distribution**

It is pleasing to see that this scheme, like the garden recording, showed the Small Tortoiseshell continuing its

Top Ten Butterflies in the WCS by Distribution

2014				2013			
	Species	%			Species	%	
1	Meadow Brown	100%		1	Meadow Brown	98%	
2	Small Tortoiseshell	95%		2	Small White	98%	
3	Small White	93%		3	Large White	98%	
4	Gatekeeper	93%		4	Small Tortoiseshell	90%	
5	Large White	86%		5	Gatekeeper	85%	
6	Speckled Wood	83%		6	Speckled Wood	80%	
7	Red Admiral	81%		7	Green-veined White	70%	
8	Peacock	81%		8	Red Admiral	68%	
9	Green-veined White	67%		9	Ringlet	62%	
10	Ringlet	60%		10	Peacock	58%	

improvement in Dorset, where it occurred in over 90% of squares, well above the national total of 77%. Large and Small White dropped in percentage terms, the former more than the latter. Gatekeeper improved markedly, as did Red Admiral and Peacock. Green-veined White and Ringlet both dropped a little.

Outside the Top10, Common Blue continued the rise noted in 2013 though on a more modest scale and was seen in 45.2% of squares (nationally it also showed an upward trend). Large Skipper showed a big increase from 30% occupancy in 2013 to 42.9% in 2014, well above the national figure of 30% although that itself was also an improvement. Small Skipper rose to a lesser degree, but caught up with the Large variety and was

seen in the same number of squares. Brimstone maintained a rising trend, up to 38% occupancy where it was joined by Marbled White that dropped significantly from 47.5% in 2013. They were both recorded in about double the percentage of squares that they occurred in nationally.



Small Copper. Photo: Mark Pike

Rises and falls amongst the less recorded species included Small Copper, up to 16.7% (10% in 2013), and Grayling, seen in 7.1% of squares compared to 2.5% in the previous year. Wall had a rather disappointing year, dropping a little to 14.3% of

the squares surveyed. The national results showed a rather different picture with Small Copper declining by 10%, Grayling staying much the same at 3% and Wall actually increasing to 9.3% although this is still below the

Dorset figure.

#### **Abundance**

The overall total of butterflies was down from 8,134 in 2013 to 7,522, a decrease of 7.5%. Against this trend, both Gatekeeper and Small

**Top Ten Butterflies by Abundance** 

2014			2013			
	Species	No.		Species	No.	
1	Meadow Brown	1262	1	Meadow Brown	1736	
2	Gatekeeper	952	2	Small White	1240	
3	Small Tortoiseshell	491	3	Large White	846	
4	Small White	446	4	Gatekeeper	513	
5	Ringlet	414	5	Small Tortoiseshell	435	
6	Speckled Wood	365	6	Ringlet	433	
7	Marbled White	311	7	Green-veined White	384	
8	Green-veined White	270	8	Speckled Wood	264	
9	Large White	202	9	Peacock	163	
10	Lulworth Skipper	186	10	Marbled White	150	



Small Tortoiseshell. Photo: Brian Arnold

Tortoiseshell did very well to increase in both abundance and distribution. Marbled White doubled in number, although they were not so widespread as in the previous year. Speckled Wood showed another sizeable numerical increase and were also seen in slightly more squares than in 2013

On the other hand Greenveined White was lower in abundance as well as distribution and Small and Large White both showed a considerable decline in number. The remarkable rise in Lulworth Skipper numbers just squeezed Small Skipper out of the top 10 although numerically the latter had a more than four-fold increase on 2013 confirming the improvement in its distribution ranking.

Red Admiral, a widespread butterfly that occupied 81% of squares, was only in 14<sup>th</sup> position. On the national scale it showed a very large increase of 26% in occupancy although at 62% this was still considerably below its level in Dorset.

Amongst the least abundant species were Painted Lady with only two seen (6 in 2013), Adonis Blue with just one compared to 13 in 2013 and White Admiral also with one (3 in 2013).

Only Small Blue showed an increase at this end of the list with three records whereas there had been none in the previous year.

#### Garden Recording in 2014

# Adrian Neil analyses the results from 2014

The overall results of the 110 gardens whose owners sent in records suggest 2014 was quite a good year but not exceptional.

The number of species recorded in gardens varied from five to 26. 17 species were recorded in 18 gardens, up from 14 in the previous two years. Only 12 gardens, however, recorded more than 20 species, down from last

year's 14. Top spots were held by Dot Emblen at Sutton Poyntz (26 species); Colin Nunn in Worth Matravers (25) and John Bellamy in Studland and the Boys at Broadstone, both with 24.



Red Admiral. Photo: Lyn Pullen

#### **Top Five Garden Butterflies**

	2014	% of gardens		2013	% of gardens
1	Red Admiral	100%	1	Small White	99%
2	Peacock	97%	2	Red Admiral	96%
3=	Small Tort	96%	3	Large White	95%
	Brimstone	96%	4=	Small Tort	93%
5=	Large & Small White	95%		Peacock	93%

#### Garden Recording in 2014

Nobody recorded an Essex Skipper or Purple Hairstreak this year, but we did have a Small Blue (last recorded in 2012). No exotic migrants were recorded.

It is pleasing that the Small Tortoiseshell has recovered from its decline, again becoming widespread and seen in 95% of gardens.

Another way of looking at what the garden figures tell us is by looking at the percentage occupancy figures, which for most species were up. For instance, although the Orange Tip and Common Blue were in much the same rank position as in 2013 (the first 11-12th and the second 14-15th), Orange Tips were seen in 82% of gardens in 2014 compared to 68% in the previous year and common Blues were in 59% compared to 45%.

53 gardens recorded Painted Ladies, but only 36 saw the Clouded Yellow. Both were declines from the previous year, from 59% of gardens reporting them previously to 48% in 2014 and from 40% to 32%. We did not have any garden reports of exotics such as Swallowtails.

At the bottom of the rankings come the butterflies that are, understandably, seen in very few gardens. Lulworth Skipper increased from two to four gardens, Dark Green Fritillaries were reported from three gardens and both Adonis and White Admiral from two.



Green Hairstreak. Photo: Nigel Tooth

#### Garden Recording in 2014

Dingy Skipper and Green Hairstreak were each seen in just one garden. These are species with specialist habitat requirements and will only be seen in gardens with suitable habitat nearby.

The recording of garden butterflies is a national scheme, and you may have heard that the co-ordinator for many years, Margaret Vickery, is no longer going to be entering data but will only be undertaking the analysis of the records. The scheme will be run from Butterfly Conservation headquarters in Lulworth. The forms that went out with the national magazine say to return them to HQ, but Adrian is happy for Dorset records to continue to be sent to him, which allows him to analyse the Dorset data. It is likely that he'll be very involved in the data entry anyway, as he goes into HQ as a volunteer.

# How to encourage butterflies into your garden

- Grow old-fashioned, single- (not double-) flowered varieties
- Grow nectar-bearing flowers in full sun
- Provide nectar-bearing flowers for as long a season as possible
- Caterpillars need food too! Nettles may be going too far, but holly and ivy help the Holly Blue and Sweet Rocket is good for the Greenveined White and Orange Tip.
- Try: Buddleia, Verbena bonariensis, marjoram, ice plant (Sedum) and perennial wallflower.
- More information on our website:
   www.dorsetbutterflies.com

#### **Butterfly Records**

As you will have gathered from this Report, we need a lot of records of butterfly sightings to work out how various species are doing and why. Nigel mentioned several of our recording types in his introduction - the full range is on our website www.dorsetbutterflies.com

We are part of a national organisation - Butterfly Conservation - which pulls together all the butterfly records and analyses them every five years. This means we record on a five-year cycle, and at the end of it, the slate is wiped clean and we start collecting records all over again. The last cycle was 2010-14, so by the time you read this in 2015, we shall have started a new cycle.

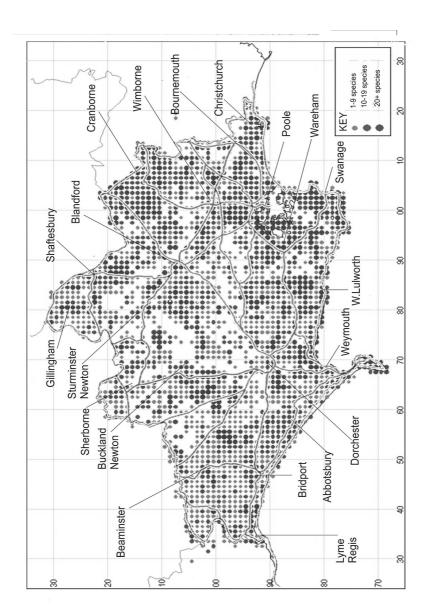
We record butterflies in kilometre squares, and at the

end of each year, we plot which butterflies have been seen in which square, also amalgamating the records to see where nothing has been recorded at all. The map opposite is the final result of all the records received in the 2010-2014 recording period. As you can see, there are some white areas, where no butterflies records were received, and we are particularly keen that these do not remain gaps in the next five years, so please visit them if you can and send us the records. More detail. can be seen on the website.

#### **Transect Walkers needed**

We are very reliant on records from transect walks, and we need more walkers. You do not have to walk every week - you can do just a few each year, but it all helps. Contact Bill Shreeves if you feel you can help.

### **Butterfly Records**



Map showing butterfly records 2010-2014.

#### **Dorset Branch Who's Who**

#### www.dorsetbutterflies.com

#### President Brian Dicker\*

Wincanton 01963 32453 b dicker@btinternet.com

#### Chair & Reserves Manager Nigel Spring\*

Sherborne 01963 23559 or 07981 776767 nigelspring@yahoo.co.uk

# Secretary, Garden Records & Wider Countryside Survey Adrian Neil\*

Preston, Weymouth 01305 832937 adrian.neil@madasafish.com

#### Treasurer Georgie Laing\*

Weymouth 01305 766712 georgie laing@yahoo.co.uk

## Membership & Branch Liaison

Mrs Robin George\*
Gillingham 01747 824215
rab.george@which.net

#### Records Bill Shreeves\*

Shaftesbury 01747 852587 w.shreeves@btinternet.com

# Moth Co-ordinator Bob Steedman\*

Wimborne 01202 884671 sopwith23@tiscali.co.uk

#### Website Lyn Pullen\*

Winfrith Newburgh 01305 853946 dorsetbutterflies@btinternet.com

#### Health & Safety Keith Howland\*

Pimperne

keithhowland1@hotmail.co.uk

### Committee Member Richard Norman\*

Sturminster Newton 01258 472887 <a href="mailto:richard@bagber.co.uk">richard@bagber.co.uk</a>

#### Meetings Arthur Bryant

West Moors 01202 892816 arthurbryant@onetel.com

# Conservation Richard Belding

Dorchester 01305 264868 rbelding601@gmail.com

# Display Co-ordination Bridget de Whalley

Winterborne Stickland 01258 880524

BandL.deWhalley@btinternet.com

#### Newsletter Guy Freeman

freeman g@hotmail.co.uk

#### Sales Stall Kathie & Richard Clarke

Shaftesbury 01747 853236

<sup>\*</sup>denotes Committee Member