

DORSET BRANCH BUTTERFLY CONSERVATION AGM. 23th Feb. 2019

REPORT FROM RECORDS OFFICER ON 2018

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At the time of writing this report only the Transect Walk data has been completely analysed. We still await large sections of data including Garden, Wider Countryside & i'Record, so I can't say much about the 2015-18 Dorset Atlas & the numbers of 'white squares' awaiting to acquire butterflies ready for our next 2015-2019 5 year report. However I have analysed the data from the Fontmell Magna weather station & it suggests that 2018 **should** have been a very good year for butterflies. For possibly the first time ever, sunshine hours were above the 23 year average for every month from the start of April to the end of September; the 39 year mean temperature was average for March, above average from April to July & back to average in August but fell below average for September. Even better the 39 year average for rainfall was below average from May right through to the end of September. So this unusually sunny, dry & warm weather ought in theory to have produced an excellent summer for our 64 Transect Walks. The total numbers of butterflies counted was certainly above average but fell below 2017 & reached only 5th place overall since 2006. There were 11 butterfly species which increased by over 50% both on 2017 & their annual averages on over 50% of walks. This was a good result but below the 12 species of 2017 & only 5th best since 2006. The top achiever on this criterion was 2013 with 23 high achieving species. With such excellent weather it would be expected that there should be very few species which fell over 50% below the previous year 2017 & their annual averages on over 50% of walks. This was true with only 6 species in this criterion, much improved on the 11 species of 2017. However this was still only the 3rd lowest with only 3 species in 2011 & 5 in 2006. Of course it could be that the winter from October 2017 to March 2018 might have been in some way responsible for undermining what could have been expected to have been a much higher butterfly count. We have had a problem with the Fontmell data for October & November caused by the breakdown of the maximum thermometer & had to replace this missing data by feeding in the averages of the 5 earlier years. Even so the results put the winter weather as just 0.5 degrees below average & recent research shows that cold winter weather is better for most species. Sunshine was 0.3 below average but the winter rain with over 158mm above average might have played a part in making the butterfly count less than might have been anticipated by the summer weather. It should also be kept in mind that the low rainfall throughout the summer might very well have reduced feeding opportunities for both butterflies & caterpillars which could have both a short term & longer term [into 2020] result on butterfly numbers.

Those of you who will be able to come to the regional recorder meetings will be able to find out much more about the 2018 'winners' & 'losers'. The **Purple Hairstreak** emerged as the clear winner as it was the only species which attained the status of increasing by over 50% on 2017, annual averages & of the walks which recorded it. Four further species, **Essex Skipper, Brown Argus, Silver-studded Blue & Silver-washed Fritillary** hit the target of increasing by over 50% on their annual average counts on over half the walks. Another 5 species, **Small, Large & Green-veined Whites, Common Blues & Small Heaths** hit the easier target of gaining over 50% on 2017 on over half their walks. One further species, the **Chalkhill Blue**, squeezed into the winner division with 60% of its sites achieving gains of over 50% on 2017 **but** with all its sites over 50% below annual averages.

The 11 'losers' were led by the **Small Tortoiseshell** ['loser' for the last 4 years] & **Red Admiral** [a new member of the 'losers' with the 2 previous years as a winner]. Both were well down on 2017 & their annual averages. Four further species qualified through being in over 50% declines on their annual averages on over half their sites. Our two 'regular' migrants [**Painted Lady & Clouded Yellow**] have been in this category for 5 & 4 years respectively as a result of a failure to build up another good migration year. The **Marsh Fritillary & Wall** are newcomers. The Wall has been statistically unlucky as in the south its sites had record numbers which were dragged down by its alarming decline in the other regions.

It was not a good year for rare migrants. **Large Tortoiseshells** made their first appearance in Dorset since 2013. Two of them were seen in late April, one around Knitson in Purbeck & the other at Warmwell Gravel pits. The 3rd was noted by several recorders on 1st July in Bottomcombe Quarries on Portland. All sightings were backed up by photos. It remains a mystery where these occasional Large Tortoiseshells come from as the species is not known as a regular migrant. On 26th July a **Queen of Spain Fritillary**, a very unusual species for Dorset, was watched through binoculars along Cogden Beach near Burton Mere. This species breeds on the sand dunes in Belgium & the Netherlands & is more usually seen in Eastern England. On 2nd August a **Monarch** was reported near West Moors but the date was too early for it to have been a genuine trans Atlantic migrant & the location makes a release of some sort more likely. Another very battered Monarch [with a photo] came on September 24th-25th from the Portland Bird Observatory. It is just possible that this was a genuine migrant but its poor condition lends nothing to this theory as most trans Atlantic migrants come across on high wind currents & arrive in good condition. A previous Monarch for 7th – 9th September 2012 which was much admired & photographed on buddleias in Easton, Portland, turned out later to have been a release so nothing is certain. This is also the case with the **Swallowtail** seen in the first week of August near Redhill Common. Breeders who release specimens are very active in the Poole/Bournemouth conurbation & this was its most likely origin. Unfortunately there were no more sightings to follow on from last year's first ever Dorset **Geranium Bronze**. Probably more of us should buy geranium stock from southern France, Spain or Portugal if we are to find more of this species!

There were several records of Dorset resident species in unusual places worthy of note. **White-letter Hairstreaks** were found in Dorset gardens near Buckhorn Weston in the north & Highcliffe in the East. First ever sightings came from Duncliffe Wood. A very tired female **Purple Emperor** was seen & photographed both as an upper & as an underside, at a new site near Alderholt. Although **Marsh Fritillaries** generally had a poor year there were two reports from very unusual places. One was photographed on the Downs above Ulwell on the 22nd May – this was only the 4th ever Marsh Fritillary to be recorded on Purbeck since 1970. Another turned up on 10th June near Chickerell many miles away from any known past or present colony. Blandford Forest was the location for a **White Admiral** on 6th July. The only previous record here was back in 1999!

Finally my thanks to all who took part in the various recording schemes last year. Special thanks to Robin George & her team of tutors who ran a very successful ID day for new recorders at Cerne Abbas. They were blessed with sunshine which enabled the work done indoors on identification & recording skills to be put into practice on the Cerne Giant slopes. Special appreciation also to those who worked hard on original sites for Chalkhill Blue colonies & very often had to suffer the disappointment of a zero return. Sadly evidence is

mounting that we are losing Chalkhills on the chalk downs to the south-west of the river Stour. Hopefully more people will volunteer to check other sites this year to ascertain whether these gloomy conclusions are really correct. My appreciation to the large team of people who work hard to make sure all our records are verified & transferred into the huge data flow that makes its way annually to Butterfly Conservation, the Dorset Environmental Recording centre & the National Biodiversity Network. Special thanks to Robin George, Deputy Records Officer, Martin Raper, in charge of the computing areas of the Transect Walks & the new recording schemes, Adrian Neil, co-ordinating the Wider Countryside & Garden Recording projects & Nick Urch, with help from Stephen Brown, verifying the Website records. This year my general hearing, memory & speaking problems have meant that I needed to retire from my work with the Regional recorder meetings. I shall miss meeting Dorset recorders but plan to continue with other aspects of the Recording Officer duties for a while longer. Finally my thanks to Robin George & Arthur Bryant for taking on the job of preparing Power Points for the recorder meetings & to Stephen Brown, Jon Bellamy & Peter Cooper for volunteering to manage the regional meetings.