

State of Surrey Butterflies in 2013

Butterflies on the brink: only three Glanville Fritillaries all at Hutchinson's Bank; only six White-letter Hairstreaks recorded; and low numbers of Wood White.

Following on from the worst year on record in 2012 for butterflies with a very wet April to July, 2013 started the season off with snow and cold weather between 10 March and 10 April. Whilst a few hibernators were seen at the beginning of March, and with a few exceptions, butterflies did not start to appear until mid-April. As a result many of the spring butterflies were several weeks later than normal in appearing. The first eclosion from overwintering pupae occurred on 17th April, with Small White, Large White and Speckled Wood been recorded. The weather picked up, so with a hot dry spell between 3rd and 23rd July helped many summer butterflies.

As far as migrants were concerned, 2013 was the year for the Silver-Y and Clouded Yellow.

The 2013 abundance statistics for the UK will be published during March 2014, so we'll have to wait for this report before drawing any conclusions on 2013 on numbers.

A new checklist of British Lepidoptera has been published (Dec. 2013), taking into account the latest scientific research, and to align scientific names used in the UK and the rest of Europe. This has resulted in some revision of some scientific names, and the order of species. Butterflies are now all in one superfamily, the Papilionoidea, whereas before the Skippers were in a separate superfamily.

As we'll all have to get used to the new checklist, this report has ordered the butterflies as they appear in the new checklist.

This report is based on all the records received and validated. It is never too late to submit records from earlier years. I have just received some records from 1956! All records are most welcome.

Hesperiidae – The skippers

The first **Dingy Skippers** were seen at the end of April. However, it wasn't until the middle of May that the main emergence occurred. The last Dingy Skipper was at the beginning of July. Despite the warm summer weather, there was no second brood this year.

The first **Grizzled Skippers** were not seen until 1st May and continued on until 19 June, with a couple of stragglers seen in the first week in July. There was no second brood this year, probably because of the cold Spring had delayed the emergence of the first brood.

The **Essex Skipper** always emerges a couple of weeks or so after the Small Skipper. The cold Spring delayed the hatching of the larvae, which resulted in first adults not been seen until mid-July. The last was seen at the end of August.

The cold Spring delayed the larvae of the **Small Skipper** from leaving diapause to start feeding, which delayed the appearance of the first adults until 25 June.

The first **Silver-spotted Skippers** were seen on 28th July and continued on until the first week in September, which were seen in reasonable numbers.

Large Skippers were first seen on 17 June, and continued on until the end of August, with a couple of stragglers seen on 5th September.

Pieridea – The Whites & Yellows

Wood White eclosion from the winter pupae was delayed until 18 May. Numbers were significant down, with only a maximum of six seen in one monad. There was a small second brood in August. We'll have to see what records are submitted in 2014 to determine whether this is a temporary blip, or whether we are in danger of losing yet another butterfly from Surrey.

Orange-tips were about three weeks later in 2013 than in 2012, the first not appearing until 20 April. The last Orange-tip of the season was seen on 21 June. Numbers seemed to be down when compared with recent years.

The first **Large Whites** were seen in mid-April. They were not seen in large numbers until the end of July, when probably they were re-enforced by a migration from the Continent. Although we will have to wait another 18 months for the Immigration of Lepidoptera 2013 report to appear in the Entomologist's Record and Journal of Variation.

The picture for the **Small White** is very similar to that of the Large White. The last was seen on 23rd October.

The first **Green-veined Whites** were seen on 23rd April, with the first brood mainly over by early-June. While a few individuals were seen in June, the second brood did not begin in earnest until beginning of July, which lasted until 29th September.

The first **Clouded Yellow** of 2013 was sighted on 4th June. However it was not until the next generation that the Clouded Yellows were seen in any number in Surrey. Most sightings were in August.

The first **Brimstones** emerged from hibernation in the beginning of 5th March, and then none were seen until April, with the main emergence occurring on 14th April. The last Brimstones were seen flying on 29th Decmeber.

Nymphalidae – The Browns, Fritillaries & Aristocrats

A **Monarch** was sighted in a garden on 16th October, which is most likely an escapee or release, as no large migration of Monach's into the country have been reported.

The first **Speckled Wood** of the season was seen on 17 April, although numbers of the first brood were low. Speckled Woods were seen in greater numbers during the second brood in the summer. There was a small third brood in October.

Some early **Small Heaths** were seen at the end of April and beginning of May, although most did not appear until mid-May. The second brood started to appear by mid-July, which last until the end of September.

The first **Ringlets** appeared on 25th June, with the flight season lasting until the end of August. Large numbers were seen in July at several sites.

Meadow Browns began their flight season on 27 May and continued with the last record on 8th October of ten. Meadow Browns were seen in large numbers at a number of sites.

The **Gatekeeper** or Hedge Brown started to appear at the end of June, although it was not until mid-July that the main emergence occurred. The flight season continued on until the beginning of September. Numbers were high at a several sites.

Marbled Whites seemed to link their emergence with that of the Gatekeeper and Ringlet, with the first records on 25 June. The flight season continued until end of August. Numbers were high across the county.

Grayling numbers seemed to be down compared to 2012. The first were seen on 15th July and were flying until 26th September.

The **Silver-washed Fritillary** flight season is usually two weeks after the Dark Green Fritillary, which was evident on sites that supported both species. Misidentification is always of concern. The main flight season was from beginning of July until the end of August.

The first **Dark Green Fritillaries** were seen on 25 June and continued their flight season until mid-August.

White Admirals began their flight season on 4th July continuing until mid-August. Francis Kelly saw a rare second brood specimen on 20th September in his garden. Bookham Common was the hot spot with up to 20 individuals been seen, numbers elsewhere were lower.

The first **Purple Emperor** was 8th July, and the last for 6th August. Reasonable numbers were recorded at Bookham Common.

A few hibernating **Red Admirals** were seen in February and March. However, it was not until July and August that they were seen in any number.

There was only a small migration of **Painted Ladies** in 2013, with the first appearing on 17th June. Most had migrated south by the end of August, although one straggler was seen on 8th October. Numbers were very small, with not more than five been seen at any site.

The first hibernating **Peacocks** to emerge were reported on 5th March. As with other hibernators, the main emergence occurred after the cold Spring on 13th April. By the end of August, most Peacocks had gone into hibernation, although one was recorded as late as 29th December.

The odd hibernating **Small Tortoiseshells** were seen flying throughout the winter months. They seemed less affected by the cold Spring, starting their main emergence at the beginning of April, flying until beginning of May. A few were seen flying in mid-May and early June, but it was not until end of June that the main eclosion of the 2013 brood occurred. There was a second brood which occurred in July, with counts of 50 been recorded at Shepleas and Westfield. The last was seen flying on 23rd October.

A couple of hibernating **Commas** were seen flying at the beginning of March, although the main emergence did not occur until mid-April, and continued flying until mid-May. A few were seen in June, with the main 2013 eclosion occurring in mid-July. The 2013 brood were seen flying upto end of October, with a few being seen throughout October. Numbers were generally low, although widespread throughout the county.

2013 was disastrous for the **Glanville Fritillary** with only three sightings from end of May to mid-June at Hutchinson's Bank. No records were received from Wrecclesham, which puts into question whether it has been lost from the site. The lack of sightings suggests that the wet summer of 2012 has drastically reduced the breeding stock. Please submit records of any sightings.

Lycaenidae – The Coppers, Hairstreaks & Blues

Small Coppers were not seen until 6th May and were seen flying right up to middle of October. As usual the butterfly was seen in small numbers, but ten were seen in August at Brookwood Cemetery. There was one sighted in mid-November on Ash Ranges.

While a couple of **Brown Hairstreaks** were seen at the beginning of August, most sightings did not occur until the end of August. The last records were of 18th October.

The first **Purple Hairstreaks** were seen on 11th July, and the last on 1st September. However, they were only seen in small numbers. Hopefully numbers will bounce back in 2014.

The first **Green Hairstreaks** were seen at the end of April, with sightings continuing until 5th July.

Only six **White-letter Hairstreaks** were seen in 2013 in four monads. While a very elusive butterfly, it does seem that numbers have crashed since 2010. Please submit records of any sightings.

The first brood of **Small Blues** were seen in reasonable numbers, on the wing between 19th May and 21st July. There was a small second brood, which was on the wing from 1st to 27th August.

Holly Blues were only seen in small numbers during 2013, which is probably their low point in their cycle with the parasitic wasp. The first brood was seen flying from 20th April to 19th June, and the second brood flying from 12th July to 5th Sept.

The first **Silver-studded Blues** were seen on 19th June, although most did not emerge until the end of the month. They were seen in good numbers. The last was recorded on 9th August.

The first brood of the **Brown Argus** was small, appearing on the wing from 2nd June to beginning of July. The second brood was larger, but not abundant, appearing in mid-July and lasting until 29th September.

The two broods of the **Common Blue** seemed to merge into each other, with only the second week in July numbers being lower than normal. The flight period was between 23rd May and 6th October.

The first **Adonis Blue** was seen on 31st May, with the first brood flying until 5th July. The second brood was on the wing from 17th August to 13th September and was smaller than the first brood. Numbers seemed to be significantly down from 2012.

The first **Chalk Hill Blues** were recorded on 8th July and were seen in large numbers throughout July and August. The last were seen flying on 29th September.

As reported in the last issue of the Surrey Skipper, a single **Geranium Bronze** was seen on 2nd September. As a South African species, this has most likely emerged from imported plants by the Horticulture trade.

Acknowledgments

Thank you to everyone who submitted records during 2013. This report would not have been possible without the dedication and hard work of all those people who recorded their sightings and sent them into one of the recording schemes. All records, no matter how few or great all went in creating the overall picture of the State of Surrey Butterflies in 2013. Records were received from the following recording schemes:

- Big Butterfly Count;
- Butterflies for the New Millennium;
- Migrant Watch – Painted Lady;
- UK Butterfly Monitoring Scheme;
- Wider Countryside Butterfly Scheme.