

Adastra Report 2022

There was sufficient sunshine and winter-warmth, in January, to entice a few butterflies into short bursts of languid activity. On New Year's Day both Peacock and Red Admiral were recorded, followed by a Small Tortoiseshell on the 2nd and a Brimstone on the 13th. We expect to see the occasional hibernating butterfly undertake a short fly-around in the early months of the year but in 2022 it was over-wintering Red Admiral caterpillars that "stole the early show". Vince Massimo has been studying over-wintering, early-stages of Red Admiral, on a patch of nettles at Ifield Meadows, Crawley since 2015, and in mid-January this year he found 19 eggs, several first and second instar larvae, and 15 larval tents. A follow-up post a few weeks later confirmed that some of these eggs were continuing to a hatch. These observations were accompanied by some remarkable photographs, including a caterpillar in the process of emerging from its egg-shell. All this was happening in the coldest months of the year!

February was fairly quiet until the very last day of the month when there were several records for Small Tortoiseshell. Given the torrid time this species has had in the past few years, this was very welcome news. On February 28th, there was also a 3 butterfly-species day on the Cuckoo Trail, Hailsham, when Peacock, Brimstone and Comma were all seen; and in a garden at Shoreham-by-sea there was a very early Small White.

A persistent cold easterly breeze in early March curtailed butterfly activity for a few days, but eventually warmer southerly winds prevailed and on the 10th there were six species in the North Lancing area, including 7 Small Tortoiseshells and a fresh female Holly Blue; and at Rowland Wood all five of the "regular" over-wintering species were seen. Very soon, if I am not there already, I will need to stop referring to the five over-wintering species and increase that to six, as Large Tortoiseshells become ever-more established in the Sussex countryside. The first-of-the-year of this magnificent butterfly was seen on the 12th, in Flatropers Wood (in the far east of the county). The 17th was warm and sunny and encouraged the early emergence of an Orange-tip, at Burgess Hill, 21 Small Tortoiseshells at North Lancing, and a Humming-bird Hawk-moth at Crawley Down, and given the very early date, this hawk-moth probably over-wintered in Sussex. On the 18th there was a Green-veined White (national first) at North Stoke and on the 19th, at Burpham and North Stoke, butterflies were plentiful with Peacock (30-35), Brimstone (25-30), Small Tortoiseshell (15) and Comma (3). On the same day, there was another Large Tortoiseshell in East Sussex, this one at Friston Forest. The good news for Small Tortoiseshells continued with 18 seen on the banks of Ferring Rife on the 19th and 42 recorded in the North Lancing area on the 20th. There was an early Clouded Yellow at Brighton on the 21st, which was another "national first". On the 22nd there were Speckled Woods at Felpham, Billingshurst, and Haywards Heath, and at St Leonards Forest, there was an abundance of early spring butterflies, with 27 Commas (a notable number), 24 Peacocks, 2 Brimstones but just a single Red Admiral (and it would appear from these early reports, that very few adult Red Admirals survived the winter). Another Large Tortoiseshell was seen on the 23rd, this one at Rowland Wood. On the 24th there was a Large White (national first) on the Cuckoo Trail, Hailsham and there was also a further sighting of a Large Tortoiseshell at Friston Forest. On the 25th there was a note from Dave Harris: "a mint overwintering helice Clouded Yellow at Newhaven Fort moat and also two Clouded Yellows spotted at Castle Hill. Later on, a female was egging all over Crown Vetch in the garden, a brief wing flap from that location. Could be a re-run of the 2019 overwintering". It proved to be an exciting month for butterfly enthusiasts, and probably the best March since 2012.

Early April was mostly too cold for butterflies but milder weather on the 9th and 10th saw a flurry of activity with many reports of Peacocks, Brimstones, Commas and Small Tortoiseshells. Mill Hill was the place to be on the 10th with records for Dingy Skipper (national first), Grizzled Skipper, Small

Copper, and Painted Lady. On the same day there was also a Small Copper at Whitebread Hole, Eastbourne, and two Clouded Yellows and a Painted Lady at Castle Hill. The second Humming-bird Hawk-moth of the year was seen at West Worthing on the 11th and the first Green Hairstreak near High and Over on the 13th. Lindsay Morris reported a Wall Brown in the Lancing Ring area on the 14th and also a “magnificent fresh Grizzled Skipper” in his garden, increasing his garden “cumulative total” to an amazing 33 species. On the 14th there was a pre-roosting Small Heath (national first) at Mill Hill, and that record took the season’s total to twenty species, a remarkable number for mid-April. On the 15th there were at least five Holly Blues in a Storrington garden, raising hopes that this species might have a good season. At Abbot’s Wood, East Sussex there was a Pearl-bordered Fritillary on the 20th and at Rewell Wood, West Sussex on the same date there was both Pearl-bordered Fritillary and Duke of Burgundy. An early Brown Argus was present at Malling Down on the 21st and there was another Large Tortoiseshell on the 23rd, this one in a garden in Peacehaven. Some 19 Green Hairstreaks were counted at Chantry Hill on the 24th and the first Common Blue was seen at Mill Hill on the same day. Bob Eade found an aberrant Wall Brown, a female *ab. anticrassipuncta*, on the 26th, and this ID was confirmed by Colin Pratt (County Recorder) who noted that this was only the second county record for this aberrant (the first record was in 1967). There was a Small Blue at Castle Hill on the 26th (an early date), a creditable count of 310 Pearl-bordered Fritillaries at Rewell Wood on the 30th and also on the last day of the month, 2 first-of-the-season Adonis Blues at Cow Wish Bottom.

In early May there were good counts of Pearl-bordered Fritillaries at Abbot’s Wood, Rowland Wood, and Stansted Forest. In the Lancing Ring/Cissbury area there was a very high count of 50 Brimstones (including 14 females) on the 6th and on the same day there was an equally remarkable record of 50+ Dingy Skippers “mud puddling” at Ashcombe Bottom. On the 8th there were 15 species seen at Horseshoe Plantation followed by a report the following day (by the same observer) of a very attractive aberrant Grizzled Skipper (*ab. taras*) at Marline Valley LNR (near Hastings). Meanwhile, at High and Over nr Seaford, Bob Eade had a record count of 66 first-brood Wall Browns. The eagerly-anticipated emergence of Small Pearl-bordered Fritillaries at Park Corner Heath began on the 11th. Duke of Burgundy was having a good season with excellent counts in its West Sussex strongholds, and it was gratifying that the management work at Fairmile Bottom was producing many dividends, including a count of 47 “Dukes” on the 12th. There were no early records for Wood White, which was slightly surprising, but there was a courting pair at an undisclosed site on the 14th. On the 15th at High Salvington there were 20+ Red Admirals and 20+ Painted Ladies, providing good evidence of a recent influx of immigrants. On the 16th there was a very early Meadow Brown (national first) at Thorney Island and on the 17th there was a very early male Large Skipper (national first) in a Storrington garden. Painted Ladies were recorded in small numbers from all parts of the county with just one large congregation of 22 at Rye Hbr NR, on the 19th. On the 21st there were 12 Small Pearl-bordered Fritillaries in the Vert Wood complex (which includes Park Corner Heath and Rowland Wood). There were two Humming-bird Hawk-moths in a North Lancing garden on the 28th and an early Dark Green Fritillary at Cow Wish Bottom on the 30th.

The first day of June began well with a report of 18 Small Tortoiseshells in the Adur Valley, and on the 2nd there was a high count of 162 Small Blues at Clapham and 28 Holly Blues at Lancing Ring. On the 3rd a Black Hairstreak emerged at Ditchling Common and on the same day there was a small number of Silver-studded Blues at Iping Common. On the 6th there was a larger count of 25+ Silver-studded Blues at Chapel Common and also 77 Small Tortoiseshells near Upper Beeding. On the 9th there were 83 Small Tortoiseshells and a staggering 234 Dark Green Fritillaries on downland, near South Heighton. Marbled Whites were at High and Over, Seaford and the Steyning Downs on the 9th, and also at High and Over there was a Small Skipper on the following day. Both Silver-washed Fritillary and White Admiral appeared at Abbot’s Wood on the 11th, with Ringlets seen at Fairmile Bottom and Park Corner Heath on the 13th. On the same date there was some exciting news when

two larval webs of Large Tortoiseshells were found (at an undisclosed location in East Sussex). The over-wintering Clouded Yellows previously mentioned had clearly been successful as a female Clouded Yellow emerged in a Newhaven garden on the 14th and “a male in mint condition” was seen at Newhaven Cliffs on the 15th. White-letter Hairstreaks were recorded in Brighton on the 15th, and on the same day there were 15 White Admirals at Southwater Woods. There was a Purple Emperor (national first) at Knepp on the 17th and 2 Purple Hairstreaks at Hailsham Country Park, on the 19th. Humming-bird Hawk-moths were having an excellent year and at Chantry Hill, on the 20th, there were 3 males patrolling a fairly small area of 35 metres by 15 metres, and they were clearly searching for females. Around 80 metres away from this activity, there was a hawk-moth laying an egg on Heath Bedstraw and then back in my Storrington garden there was yet another one laying eggs on Lady’s Bedstraw. On the 21st there were 3 Gatekeepers at High and Over, 100+ Dark Green Fritillaries and another Gatekeeper at Malling Down, and 18 butterfly species around Lancing Ring. The first-of-the-season Essex Skippers appeared at North Lancing on the 22nd and the first male Chalk Hill Blue was at High and Over, on the 24th. On the 26th there were 10 Humming-bird Hawk-moths at Lullington Heath, and to complete a month of fascinating records there were at least 15 males and 2 female Silver-studded Blues at Ellison’s Pond, Ashdown Forest.

On the first day of July there was a peak daily count of 69 Purple Emperors at Knepp and on the 2nd there was a very early Brown Hairstreak (national first) at Ditchling Common. On the 3rd there were 3 Humming-bird Hawk-moths in a North Lancing garden, with egg-laying on both Lady’s Bedstraw and Hedge Bedstraw (egg-laying on the latter appears to be unusual, in Sussex). In the same garden, on the 5th, there were 17 butterfly species, including the first record for a second-brood Wall Brown. Also, on the 5th a male Large Tortoiseshell was seen at Knepp and on the 6th and 7th there were 2 female Large Tortoiseshells. On the 9th there were 24 species in the Cissbury Ring area, as well as 6 Humming-bird Hawk-moths. The Grayling season began at Deep Dean on 10th and on the same day at Poundgate, Ashdown Forest, there were 43+ Silver-studded Blues. On the 13th there were 25 species at Lancing Ring (Lindsay Morris was keeping very busy) and at Cradle Valley, Beachy Head there was a five-skipper-species day, which included the first record for a second-brood Dingy Skipper. At Castle Hill, there were 1000s of Chalk Hill Blues on the 16th and on the same date there was a second-brood Orange-tip at West Firle. The indefatigable Patrick Moore (with the help of others) monitored the Graylings during the heatwave of high summer and gained a very satisfying site record of 158 on the 16th. On the 17th there was an exceptional record of a mating-pair of second-brood Dingy Skippers (most years we are limited to just a handful of records of second-brood Dingy Skippers, and therefore to find a mating pair, is a once-in-a-decade type record!) . On the 19th a Continental Swallowtail (*Papilio gorganus*) was seen and photographed on Eastbourne seafront and on the same day there were 100s of Purple Hairstreaks on low vegetation in Knowlands Wood, nr Barcombe, apparently seeking shelter from the suffocating heat. On the 20th there were 9 Clouded Yellows at Anchor Bottom. On the 22nd there was a very fresh White-letter Hairstreak feeding on Marjoram at Beachy Head and on the same day dozens of very fresh Small Tortoiseshells were found in the grounds of Herstmonceux Castle. On the 27th there was a report “of many eggs of Long-tailed Blue on garden Everlasting Pea today”. On the 29th Bob Eade had another record for Wall Brown with a second-brood count of 131. At Chantry Hill on the same day there were 23 species, including a minimum of 6 Clouded Yellows and 2 Valezina-type Silver-washed Fritillaries, and at Castle Hill there was a second-brood male Adonis Blue.

August began well with a Swallowtail at Lewes on the 4th and another one at Plumpton Green on the 5th. Silver-spotted Skippers were found at Perry Hill nr Burpham on the 4th, pushing the geographical range of this species, a few miles further west. On the 6th there was “an all-male pod of 5 very-worn male Long-tailed Blues” at Whitehawk Hill and on the 7th in a North Lancing garden there was an unusual record of a Wasp Spider “taking an egg-laying Humming-bird Hawk-moth”. On the 8th a wildlife-garden in Felpham was duly rewarded with both the presence of a male Long-tailed Blue and

two eggs on the Everlasting Pea, confirming the recent presence of a female. On the 8th at Lancing Ring there were 2 male Long-tailed Blues in a prolonged dogfight. Also on the 8th, at Knowlands Farm, nr Barcombe, there was a wandering male Chalk Hill Blue, approximately 3 miles from the nearest chalk downland. On the same day, a Silver-spotted Skipper briefly visited a Storrington garden and since it was a new species for the garden, it increased the “cumulative total” to 37 butterfly species. On the 9th, another wandering Silver-spotted Skipper was the first record for Barcombe Parish and several miles from any suitable chalk habitat. On the 12th a Queen of Spain Fritillary was at Green Ridge, Hove, but unfortunately it only hung around for a few hours and was not seen again. The year, 2022, was clearly the year that Silver-spotted Skippers were becoming ever more adventurous with one feeding on Verbena Bonariensis, at allotments, in Haywards Heath, around 11 kilometres from the South Downs. Neither Common Blue nor Brown Argus had good numbers in their first broods, so the following post on the 17th, from the Lewes area, was comforting, “after a disappointing first brood of Common Blues & hardly any Brown Argus, they have bounced back & I counted 70 of the former & 15 of the latter in our meadow”. On the 21st at Mill Hill, there were around half a dozen Humming-bird Hawk-moths. On the 22nd, at an undisclosed site in East Sussex, Long-tailed Blues emerged! On the 24th there was a very fresh Wall Brown at High and Over and it was clear that the third brood had emerged, a full week earlier than any previous third-brood record. Also, on the 24th, there were 2 Clouded Yellows over the Beachy Head headland, and another dozen over a field of Lucerne (one of their favourite larval foodplants). On the 26th there were 20 Holly Blues in the North Lancing area and at Anchor Bottom it was noted that second-brood Adonis Blue numbers were low, presumably because of the lack of green vegetation, which was caused by the prolonged heatwave and drought. On the 28th on Thorney Island there were 18 Clouded Yellows but just 1 Painted Lady. On the 29th in a West Worthing garden there was a female Brown Hairstreak on a plum-cherry hedge, where it was probably egg-laying. Another male Chalk Hill Blue was found in the Barcombe area, this one near Spithurst, and was around 5 miles from the nearest downland. On the last day of the month there was a magnificent Camberwell Beauty resting on Elms at Selmeston.

On the first day of September there were 16 species in the Lancing Ring/Steep Down area, including 88 Common Blues and 15 Clouded Yellows. On the 2nd in a North lancing garden, there was a Humming-bird Hawk-moth caterpillar feeding on Lady’s Bedstraw, which I would imagine is a very unusual record/photograph for the UK. A Brown Hairstreak in Polegate, East Sussex, on the 8th was very interesting, for although Blackthorn is widespread throughout the county, very few Brown Hairstreaks are seen anywhere to the east of Lewes. On the 12th, Bob Eade went on his regular 4 mile circuit and counted a record 51 third-brood Wall Browns and also a third-brood Small Blue. On the 15th there was a fresh Long-tailed Blue at Horsham (unusual, as there are very few records for this species, north of the South Downs). A Long-tailed Blue sighting on a Tamarisk hedge at Worthing seafront on the 16th began a LTB fest that lasted for 2-3 weeks. By the 18th there were at least 15 Long-tailed Blues at Worthing seafront and at least a dozen Clouded Yellows. On the 20th there were approximately 20 fresh Clouded Yellows at Hope Gap, Seaford and on the 21st there were 8 Clouded Yellows and 10 Speckled Woods on Thorney Island. Also, on the 21st there was a very early third-brood Holly Blue at Lancing Ring.

On October 3rd there were still Long-tailed Blues to be seen at Worthing seafront, including a mating pair. On the same day, third-brood Wall Browns were showing well in the grounds of Herstmonceux Castle, where there was a very fresh female and at least 4 males. There was also a single Wall Brown, in the built-up area of West Worthing, on the 8th. The mild weather continued and on the 11th at Beachy Head there were 7 species, including 2 Small Heaths (which is a late record for this species). Cissbury Ring is another Sussex location that may be very productive in the autumn and also on the 11th “There was plenty to see including 11 Small Copper, 9 Meadow Brown, 7 Clouded Yellow, 7 Wall Brown, 3 Speckled Wood, 3 Common Blue, 2 Red Admiral, 2 Small White and a

single Comma. At one stage there was a melee of 5 Clouded Yellow". On the 18th in the Seaford area there were 10 species, including a minimum of 20 Clouded Yellows. The last of the Wall Browns was recorded on the 23rd which meant "the third-brood season went on for exactly 2 months". On the 27th there was a male Long-tailed Blue in a garden at Hollingdean, Brighton.

The very mild weather continued into November and there was still plenty of butterfly activity. On the 7th there was a reminder from one of our members: "For anyone who fancies a bit of late autumn butterflying, offspring of the `Third Wave` of Long -tailed Blues are now emerging. Temperatures will have to be at least 13 degrees for flight, though. All the usual haunts are worth prospecting". On the 9th there was a late record for a Humming-bird Hawk-moth at Polegate. On the 13th it was 16°C in North Lancing with good spells of sunshine , and "there were 7 Red Admiral, 2 Brimstone, 1 Comma, 1 Peacock, 1 Small Tortoiseshell, 1 Speckled Wood and 1 Holly Blue". On the 18th there was a late record for Painted Lady at Pulborough Brooks, and on the 22nd there was a Comma at Crawley. A "pristine Peacock" was found at North Lancing on the 23rd and in the same area on the 25th there was Red Admiral, Small White, Comma, Brimstone and Speckled Wood. There was a Clouded Yellow at Amberley Mount on the 25th, and Red Admiral and Painted Lady on Buddleia at Crawley Down on the 28th. The very mild weather continued into December and on the 1st there were 3 Red Admirals and a Small White at North Lancing. A prolonged spell of very cold weather followed, but December 20th was sunny and warm, and this produced a male Brimstone at Lancing and a Red Admiral at Fishbourne.

The narrative above is a brief synopsis of the butterfly records in 2022. Reflecting on the butterfly season as a whole, how did it compare to recent years? So much depends on spring weather and in 2022 it was mostly warm and settled, from around March 9th onwards. There was a cold spell in early April but otherwise it could not have been better. More-or-less all the spring species emerged 7-14 days earlier than an average year. This great start to the year had a knock-on effect with many species that emerge in the summer months also appearing early. The sustained settled weather allowed plenty of time for many species to complete a second or even a third brood, and once again, it was noticeable that the emergence dates were invariably earlier than usual. As for the summer, we experienced 3 months of drought and a prolonged heatwave. High temperatures have both positive and negative effects on butterflies. The positive is that breeding cycles are unhindered and completed very quickly, the negative is that the adults live a much shorter life and if vegetation is desiccated the larvae may not have enough to eat!

In brief, many species such as Pearl-bordered Fritillary, Small Pearl-bordered Fritillary, Dark Green Fritillary, Duke of Burgundy, Wall Brown, and Small Blue had a good season in 2022, most species had an average season, and several species including Brown Argus, Small Copper and Small Heath, a poor/very poor season. It will always be thus, with winners and losers.

There were some interesting records regarding Clouded Yellow, Large Tortoiseshell and Long-tailed Blue, all of which bred in Sussex in 2022. At one location in East Sussex, Clouded Yellows over-wintered and the winter survivors clearly went on to breed. Large Tortoiseshells bred in both West Sussex and East Sussex. Over an area of around eight square miles at an undisclosed location in East Sussex there were two definite breeding sites and two suspected breeding sites. Altogether, there were nine adults seen in the spring, two larval webs and at least five adults in the summer. As for Long-tailed Blues they came across the English Channel in three distinct waves. At an undisclosed site in East Sussex, fresh eggs were first found on July 26th, but it was soon apparent that there were older eggs present and the suspected date of laying was between July 19th and July 21st. Sussex-born adults appeared on August 22nd and the peak emergence was on the 26th. The second wave was between August 6th and mid-August, but these adults were mostly seen in the Brighton – Worthing area. The third wave immigrant adults were seen at the East Sussex location between September 4th

and 13th (and by the 11th there were around 200 eggs at one location). Despite the very large number of eggs there were just five adults recorded from this third wave immigration, the first emerging on November 6th with the last male seen on the 13th.

It is likely that 2022 will be remembered fondly by butterfly enthusiasts in Sussex. There was a very nice variety of butterflies with 51 species recorded, compared to the 49 species seen in 2021.

On the subject of “gardening for butterflies”, it is gratifying to learn that an increasing number of Sussex BC members are creating fantastic insect-friendly gardens and in 2022 there were four Sussex gardens that had counts of 30+ butterfly species. That’s amazing progress and a nice, positive note to end this report.

Martin Kalaher

