Adastra Report 2019

One of the butterfly highlights for many recorders in 2019 was the influx of Painted Ladies (Vanessa cardui). The press described this phenomenon as a "once in a decade" experience. Indeed, the last time there was a major influx was ten years ago, although that invasion, when millions of butterflies flew into Sussex on 24 May 2009, was on a much more impressive scale. Throughout the summer, this beautiful migrant species, which originates in the mountains of North Africa and travels north through Europe in a series of successive generations, became a regular sighting in Sussex gardens or throughout the countryside. During the "Big Butterfly Count," Butterfly Conservation's annual citizen science survey, the Painted Lady was the most commonly recorded species of 2019 (showing an increase of 2,498% on 2018's totals). The survey also highlighted that all three "whites" (Large White Pieris brassicae, Green-veined White Pieris napi, and Small White Pieris rapae) had a bad year and were, weirdly, each down by 42% on 2018 totals. Holly Blue (Celastrina argiolus) and Common Blue (Polyommatus icarus) numbers were also down in 2019. Our Sussex transect surveyors reported a 60% drop in Common Blues at Mill Hill and a 75% drop at Anchor Bottom. 2019 "winners" included Marbled White (Melanargia galathea), Small Heath (Coenonympha pamphilus), Peacock (Aglais io), and Small Tortoiseshell (Aglais urticae), although numbers of the latter remain pitifully low when compared to historic levels.

2019 will also be remembered for the influx of **Long-tailed Blues** (*Lampides boeticus*). The butterfly was seen for the first time in Britain in Brighton in 1859, and over the next 80 years, only 30 adults were recorded in the country. This century, it has been typical to see a handful of these exotic migrants from the Mediterranean reach the UK each summer, with significant influxes occurring in 2013 and 2015. However, 2019 marks the third time in six years that the butterfly has arrived in vastly increased numbers and surpassed all previous invasion events.

Long-tailed Blues cross the Channel and can be seen laying eggs in gardens, allotments, and anywhere you can find their food plants, particularly Broad-leaved Everlasting-pea (Lathyrus latifolius). It is one of the world's most successful butterfly species. Though small, it is a powerful flyer capable of crossing mountain ranges and seas. In hot weather, it can go through its entire life cycle in just over a month, which is half the time of many other species. The caterpillar grows up inside the flowers and pods, hidden away from predators. Although it has the full toolkit for world domination, the Long-tailed Blue is still a long way from conquering the British Isles, as it cannot survive the winter. However, what we are seeing confirms that it is extending its geographical range northward in response to climate change.

The Black Hairstreak (Satyrium pruni) colony at Ditchling Common continued to attract admirers in June. This butterfly, reintroduced to the site many decades ago, has recently been rediscovered. Another Sussex hairstreak, the elm-loving White-letter Hairstreak (Satyrium w-album), benefited in 2019 from tree planting projects using disease-resistant cultivars across the county. Many of these projects were devised and delivered by young Brighton naturalist Jamie Burston, who received the first David Streeter Award for his work at the Sussex Wildlife Trust AGM in November.

In total, 51 butterfly species were recorded in Sussex in 2019. That includes the 45 resident breeding species, plus the introduced **Black Hairstreak**, a **Large Tortoiseshell** (*Nymphalis polychloros* on 2 May), and a handful of migrants including **Long-tailed Blue** (many sightings), **Queen of Spain**

Fritillary (*Issoria lathonia* on 15 August), **Camberwell Beauty** (*Nymphalis antiopa* with 3 sightings), and **Swallowtail** (*Papilio machaon* with 2 sightings).

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