

Adastra Report 2015

A TALE OF TWO TORTOISESHELLS

The Scarce Tortoiseshell *Nymphalis xanthomelas*: The butterfly that was a first for Sussex, twice.

Over the five-year period 2010-2014, Sussex Butterfly Conservation organized a survey of the status and distribution of the butterflies in our county to inform the forthcoming book 'The Butterflies of Sussex'. And it was certainly an interesting five years. Among the highlights were the arrival of **Continental Swallowtails** and **Long-tailed Blues** from Europe, and our recorders were excited to watch as both species attempted to establish themselves as Sussex residents. It made me wonder what butterfly species would be next to make that leap across The Channel. Each time I visit Beachy Head I stare forlornly at the horizon and imagine the amassing ranks of Bath Whites, Mazarine Blues, Southern Small Whites, Black-veined Whites, and Provencal Short-tailed Blues all preparing to invade.

In April 2015, four months after our survey finished, we were in for an unexpected surprise. Unexpected because, instead of moving north into Sussex from France and Spain, an invading species appeared to have 'snuck in 'round the back' and arrived from the north. And unexpected because, until a few months before, I wasn't aware that this species even existed: the **Scarce Tortoiseshell**.

The **Scarce Tortoiseshell** is a butterfly of damp woodland edges where its eggs are laid on willow, sallow, and poplar. They are superficially similar to **Large Tortoiseshells**, an extremely rare migrant and (until the 1980's) a resident in Sussex. Adults emerge in July and August, and during this summer period are known to disperse over long distances. In late autumn, the butterfly enters hibernation, emerging the following spring; it's then that you have your best chance of an encounter, when the butterfly can be active at low levels nectaring or defending a territory on the woodland floor.

Until recently, Poland was the western edge of the Scarce Tortoiseshell's range, although the butterfly's distribution stretches east all the way across the Himalayas and into Korea and Japan. In 2004, the Scarce Tortoiseshell started to increase its range in Europe. Spreading north and northwest, the butterfly had crossed the Baltic Sea by 2012, and by 2014 it had reached Norway and Denmark. In mid-July 2014, Scarce Tortoiseshells started to be reported in The Netherlands. The butterfly had only been recorded once before in The Netherlands but now it was being reported at over 90 locations.

In Britain, we had only had one previous record of Scarce Tortoiseshell, on 7 July 1953 in Sevenoaks, Kent. This sighting coincided with a temporary range expansion by the butterfly across Europe in the early 1950s, so it is considered a genuine immigrant.

Now, sixty-one years (and five days) later, Britain's second Scarce Tortoiseshell was recorded in Weybourne, Norfolk, on 12 July 2014. By the end of the month, there were 18 more reports from Britain's eastern counties although these sightings must have been a small percentage of the actual number of Scarce Tortoiseshells that arrived undetected on our shores.

It was hoped that these butterflies would successfully enter hibernation in the UK in the autumn (indeed, one was found attempting to hibernate under the television in a house in Norfolk in September). Then, in the spring of 2015, lucky naturalists on the east coast reported five sightings of emerging Scarce Tortoiseshells between 12 March and 2 April 2015.

Sussex, it seemed, was missing out on all this excitement; but not for long. On 7 April, Jan Charteris spotted a butterfly at Pulborough Brooks that looked “similar to Small Tortoiseshell in coloration, but with flight more reminiscent of a Peacock, being slower and with plenty of gliding compared to a Small Tortoiseshell”.

Jan chased the butterfly for a while as it actively and aggressively defended its territory against other butterflies but it wasn't until it landed on his girlfriend's leg that the butterfly's straw-colored legs (a key identification feature) could clearly be seen. Jan was now confident that, sat on his girlfriend's leg, was a Scarce Tortoiseshell—a first for Sussex.

I thought the story of the Scarce Tortoiseshell in Sussex had ended there—for now—but in the autumn of 2015, while sitting at my computer, I was in for a shock. I was looking through the sightings pages of Sussex Butterfly Conservation's website, while working on 'The Butterflies of Sussex', when I scrolled past a photograph of a butterfly taken in Beckley Woods near Rye on 12 March 2014.

This butterfly had been seen and photographed by Stuart Cooper and originally identified by everybody as a Large Tortoiseshell. Now, with the luxury of hindsight, I recognized it as a Scarce Tortoiseshell. This March 2014 sighting predated the Pulborough sighting by a whole year. Not only did this make it the first for Sussex, but it even preceded those east coast sightings in summer 2014 by three months, making it the second British record. (All I have to do now is try and discredit Kent's 1953 Scarce Tortoiseshell so we can claim ours as the first for Britain. I'm working on it!).

For me, the best news about Stuart's 2014 record was that it occurred during the 2010-14 survey period for 'The Butterflies of Sussex'—so we now had another new species to write about in the book! However, my excitement was short-lived when my wife pointed out the Beckley Woods butterfly had been, until it was re-identified, the only Scarce Tortoiseshell seen between 2010 and 2014. So we gained Scarce—but lost Large.

Luckily, eagle-eyed lepidopterist Tim Freed was on hand to save the day. After reading my Scarce Tortoiseshell update on our website, Tim's memory was jogged back to an image of a hibernated 'Small Tortoiseshell' among leaf litter in Stansted Forest, photographed by the late Peter Gardner on 17 March 2010. Tim wrote: “To my mind, it looked like a Large Tortoiseshell. With the current interest in reviewing photos of Tortoiseshells, I contacted Lars Andersen, the Danish expert (who hosts a superb website www.danske-natur.dk/indexfire.html) and is very familiar with all three species (Small, Large, and Scarce Tortoiseshells). Lars confirmed my suspicions: **Large Tortoiseshell.**”

As Peter's Stansted Forest sighting was in March 2010, it qualifies for inclusion in 'The Butterflies of Sussex'. Result—Scarce and Large are both in the book!

'The Butterflies of Sussex' is due to be published in early 2017.

Michael Blencowe, Sussex Butterfly Conservation

References:

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