

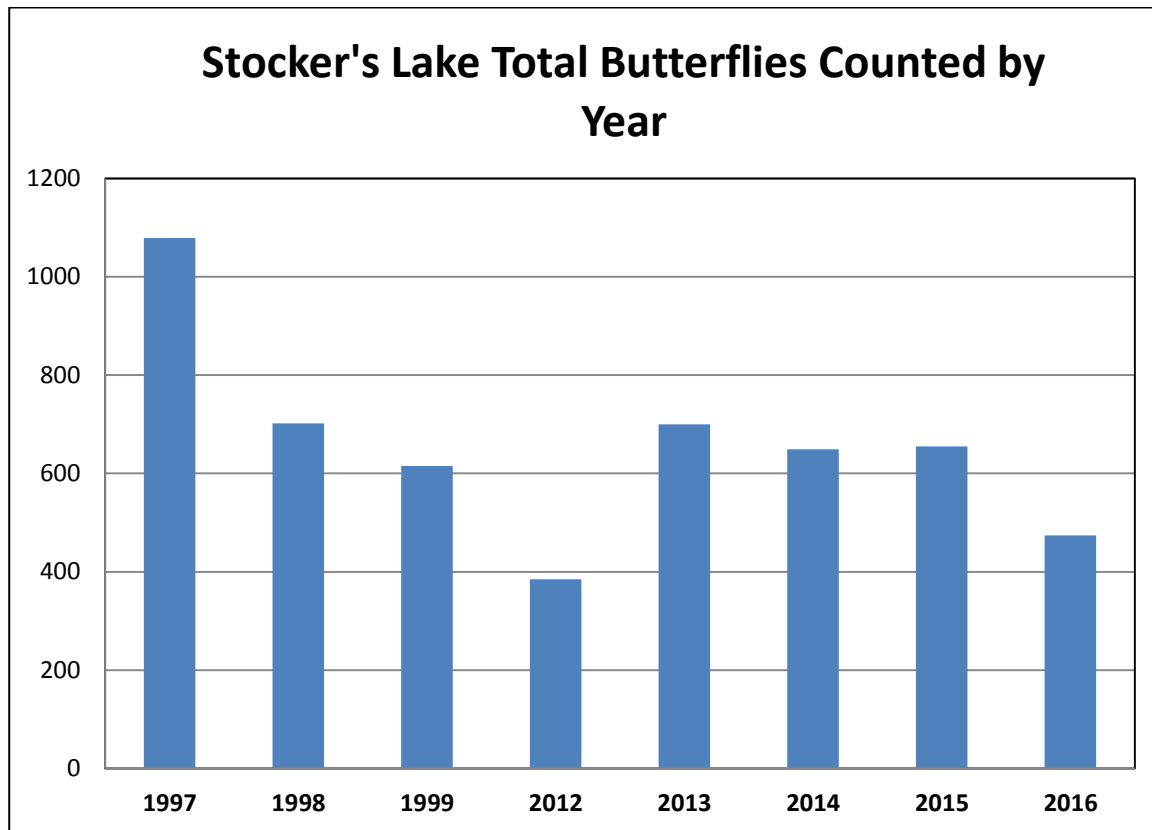
Butterflies at Stocker's Lake 2016

The recording scheme

As in previous years, a dedicated band of enthusiasts under the leadership of Barbara James recorded the number of butterflies seen in 12 transects around the lake each week between April and September. The recorders enter their results directly onto the UK Butterfly Monitoring Scheme database, one of the world's largest butterfly and moth recording schemes with records countrywide. Once again, we again have some interesting results.

Total butterflies counted by year

Butterfly counts at Stocker's Lake are now available for 8 years in 2 periods, 1997-1999 and 2012-2016. It has been widely reported in the media that 2016 was a very bad year for butterflies, and this is confirmed by our data showing that only 474 butterflies were counted around the lake, 28% down on last year, but thankfully above the disastrous count in 2012. Although bad, our results are better than for the country as a whole reported by Butterfly Conservation (see below).



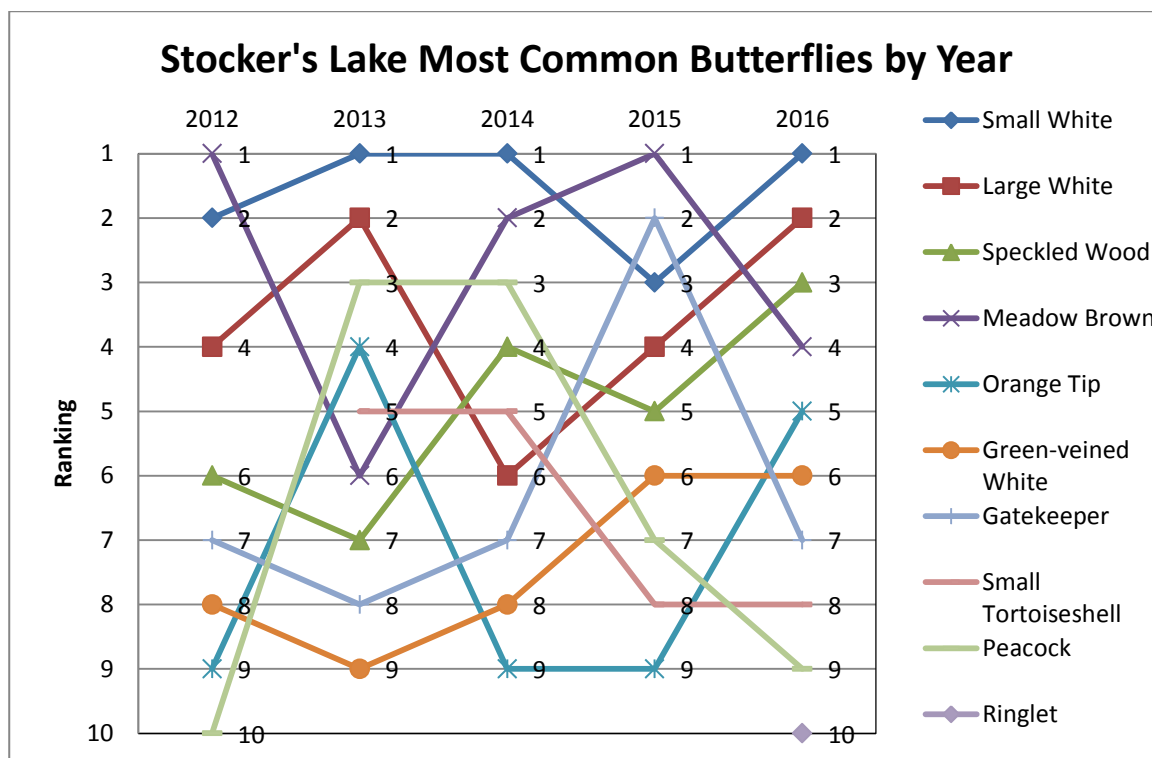
The national picture

Butterfly Conservation's Big Butterfly Count held each summer states that in 2016 "Common butterflies saw their numbers collapse over the summer despite the UK experiencing weather conditions that usually help them to thrive". "Widespread species such as Gatekeeper, Comma and Small Copper experienced their worst summers in the project's

history and were down 40%, 46% and 30% respectively compared to last year. The Small Tortoiseshell saw a 47% drop in numbers and Peacock slumped by 42% with both species recording their second worst years. Numbers of the colourful Peacock have now dropped from an average of 3.6 individuals per count in 2013 to just 0.5 per Count in 2016, a six-fold decrease over three years. Participants also saw the lowest number of butterflies per count since the scheme began with an average of just 12 butterflies spotted. These figures were even lower than those experienced during the cold and wet disaster summer of 2012 – the worst year on record for UK butterflies”.

The 4 most common butterflies counted in England by order were Large White, Small White, Meadow Brown and Gatekeeper which at Stocker’s Lake were ranked 2nd, 1st, 4th and 7th respectively.

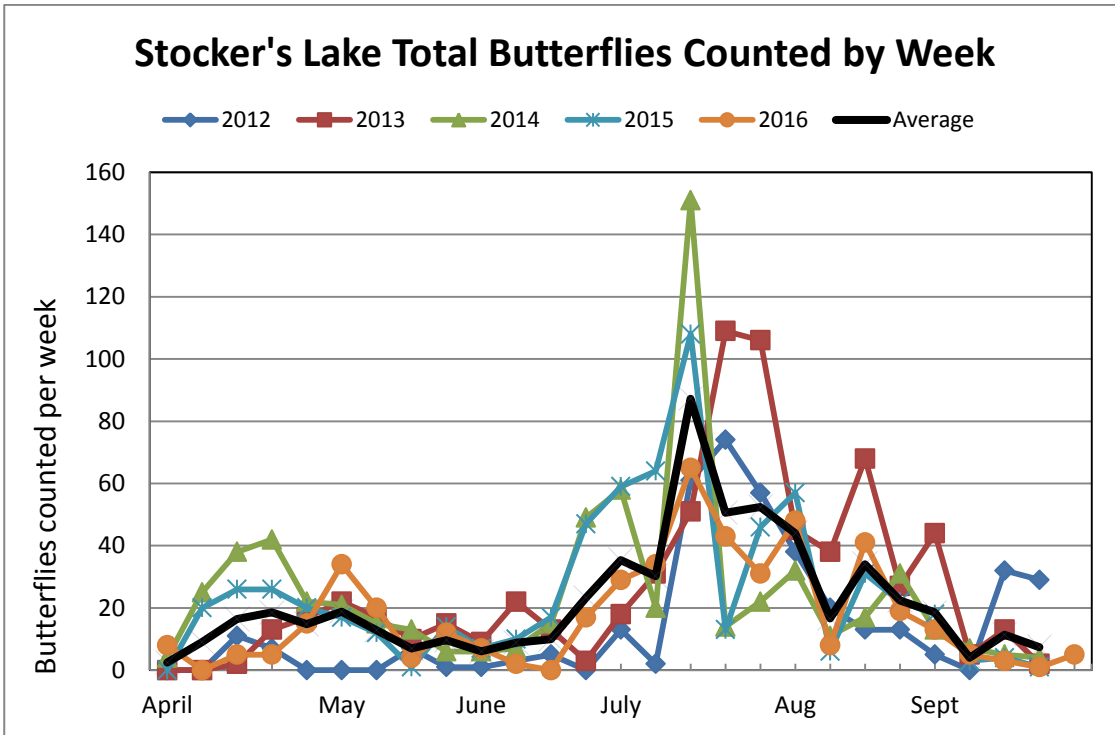
Butterfly species counted by year



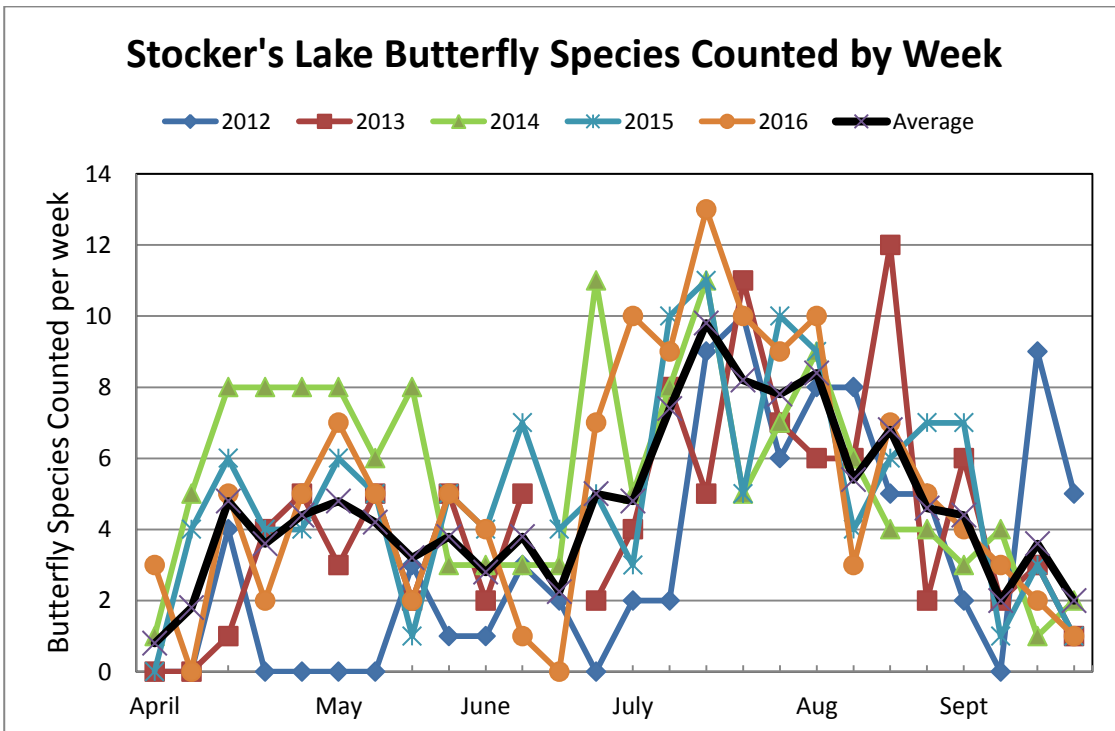
The above chart shows the top 10 butterfly species counted at Stocker’s Lake in 2016, and how their ranking has changed since 2012. Grassland species Meadow Brown and Gatekeeper both suffered large falls since last year, while Speckled Wood and Orange Tip did relatively well.

2012-16 weekly data

As organised weekly counts have now been ongoing for 5 years, we have detailed data for this period. The chart below shows the total number of butterflies counted each week between April and September for each year as well as the average for the whole period. This shows that 2016 had very low numbers in April, a recovery in May, but then below average from mid-June until the end of September.

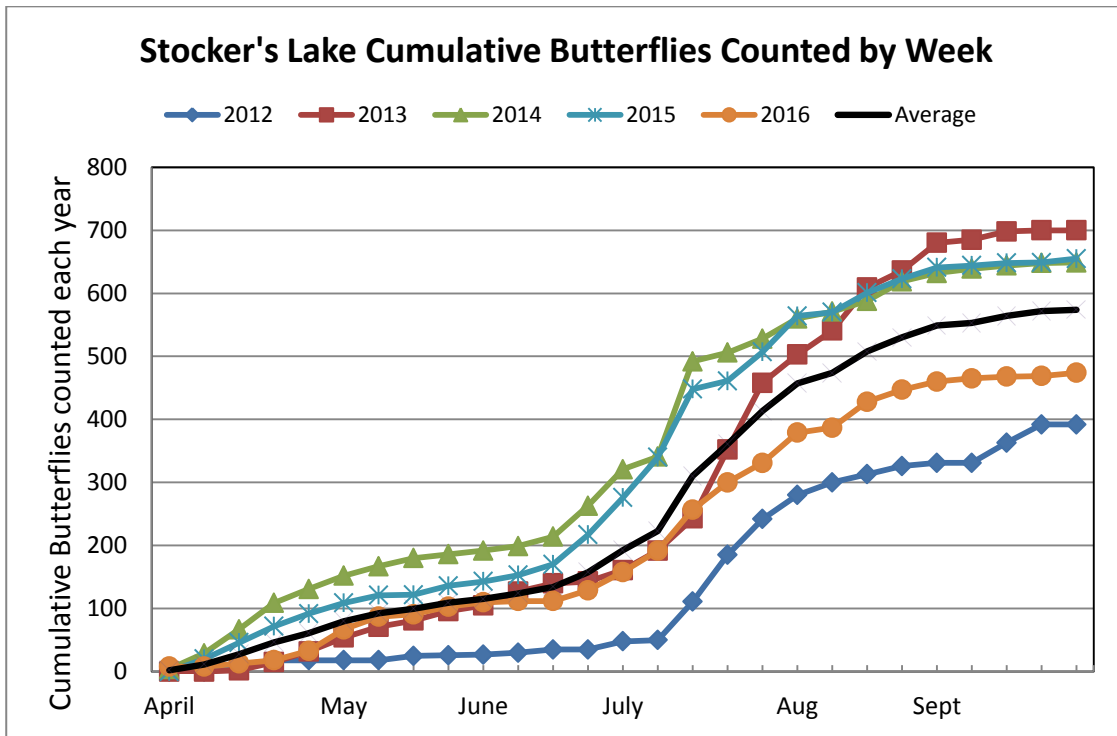


The number of different species recorded each week was surprisingly close to average so diversity was not affected by the disappointingly low total count.



It is interesting to compare cumulative sightings each year. For instance, the counts for 2013 and 2016 were very similar until mid-July but 2016 was then very disappointing in late summer. By contrast, 2012 was disastrous until mid-July but very similar to 2016 in late summer. For most years, there is a spike in the weekly count either early or late in the

season, and the size of this spike influences the final cumulative total. However, 2016 seems to be notable by the lack of any such spike, with very few weekly counts being above average.



We will be continuing our weekly counts again in 2017, and hoping for a much better year.