

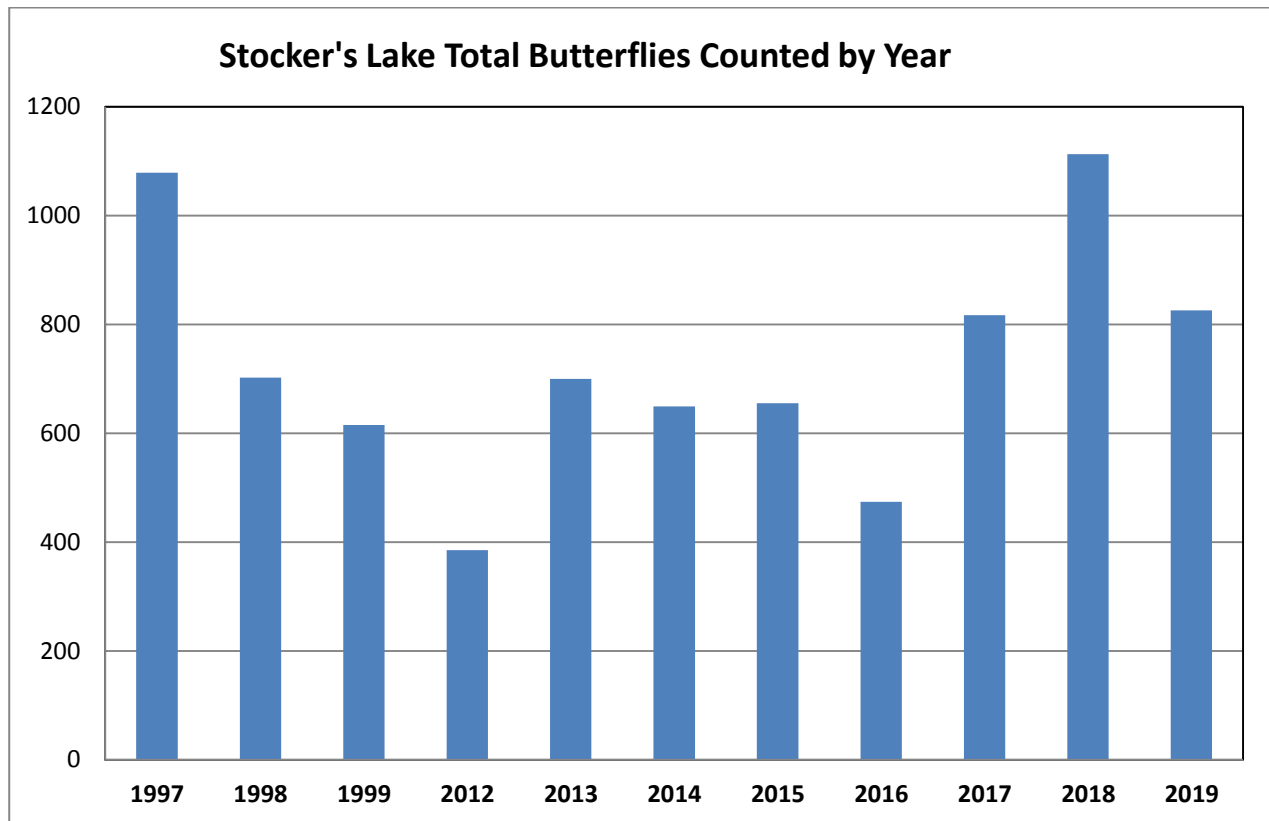
Butterflies at Stocker's Lake 2019

The recording scheme

Once again 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, entering their results directly onto the UK Butterfly Monitoring Scheme.

Total butterflies counted by year

Butterfly counts at Stocker's Lake are now available for 11 years in 2 periods, 1997-1999 and 2012-2019, so we are increasingly able to compare numbers counted and ascertain trends. 2019 was a good year around the lake with 826 butterflies counted, the second highest since the current surveys started in 2012 and comparable to 2017. The count was 26% down on 2018, but that was an exceptional year. The number and distribution of sightings over the recording period and from year to year is heavily influenced by the weather, and the summer of 2019 was generally hot and dry as for 2018 but with more periods of heavy rain.



The national picture

The report on Butterfly Conservation's Big Butterfly Count held each summer notes a huge influx of Painted Ladies, combined with a bumper year for Peacock, Marbled White, Small Tortoiseshell, Red Admiral and Gatekeeper but a large reduction in the usual common whites and blues. It speculates that the latter may be due to predation by parasitic wasps, whose numbers were boosted following last summer's huge increase in those species.

Butterfly species counted by year

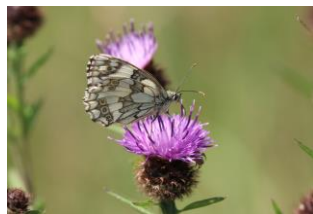
This trend is partly reflected at Stocker's Lake where counts for the common whites were well down on last year, but there were mixed fortunes for other species. Small white numbers more than halved, and Green-veined white crashed hugely along with significant reductions in Ringlet and Speckled Wood. To counter this, Red Admiral, Brimstone and the Skippers all did well, and we recorded easily our highest number of Painted Lady but nothing like the numbers reported in the Big Butterfly Count. We had one new species this year, Brown Argus. The table below demonstrates just how wildly numbers of individual species can vary by year due to the many factors influencing them.

	2012	2013	2014	2015	2016	2017	2018	2019
Small Skipper	2	0	6	3	7	7	5	22
Essex Skipper	0	0	3	0	0	0	4	11
Large Skipper	0	0	2	2	3	0	1	7
Clouded Yellow	0	0	0	0	0	0	0	0
Brimstone	8	4	19	22	9	10	18	35
Large White	30	111	48	67	58	60	136	103
Small White	54	218	118	94	86	109	358	170
Green-veined White	10	25	29	47	34	21	69	13
Orange Tip	10	52	28	24	38	38	47	58
Green Hairstreak	1	0	0	0	0	0	0	0
Small Copper	0	1	2	1	2	2	1	0
Common Blue	3	2	2	9	1	4	18	16
Holly Blue	1	7	0	8	12	8	27	22
Red Admiral	44	0	15	8	17	50	16	35
Painted Lady	0	0	0	1	0	2	0	10
Small Tortoiseshell	6	49	57	31	20	15	5	4
Peacock	7	70	76	37	19	13	23	16
Comma	26	23	10	14	17	52	24	28
Speckled Wood	25	41	66	49	55	64	123	68
Wall	0	0	0	0	0	0	0	0
Gatekeeper	14	41	46	92	27	66	39	57
Meadow Brown	141	48	113	137	49	235	154	126
Small Heath	4	1	5	0	0	0	4	3
Ringlet	5	7	4	4	18	49	36	19
Marbled white	1	0	0	5	2	12	5	2
Brown Argus	0	0	0	0	0	0	0	1
Total	392	700	649	655	474	817	1113	826

A few photos taken at Stocker's Lake in 2019



Painted Lady



Marbled White



Large Skipper

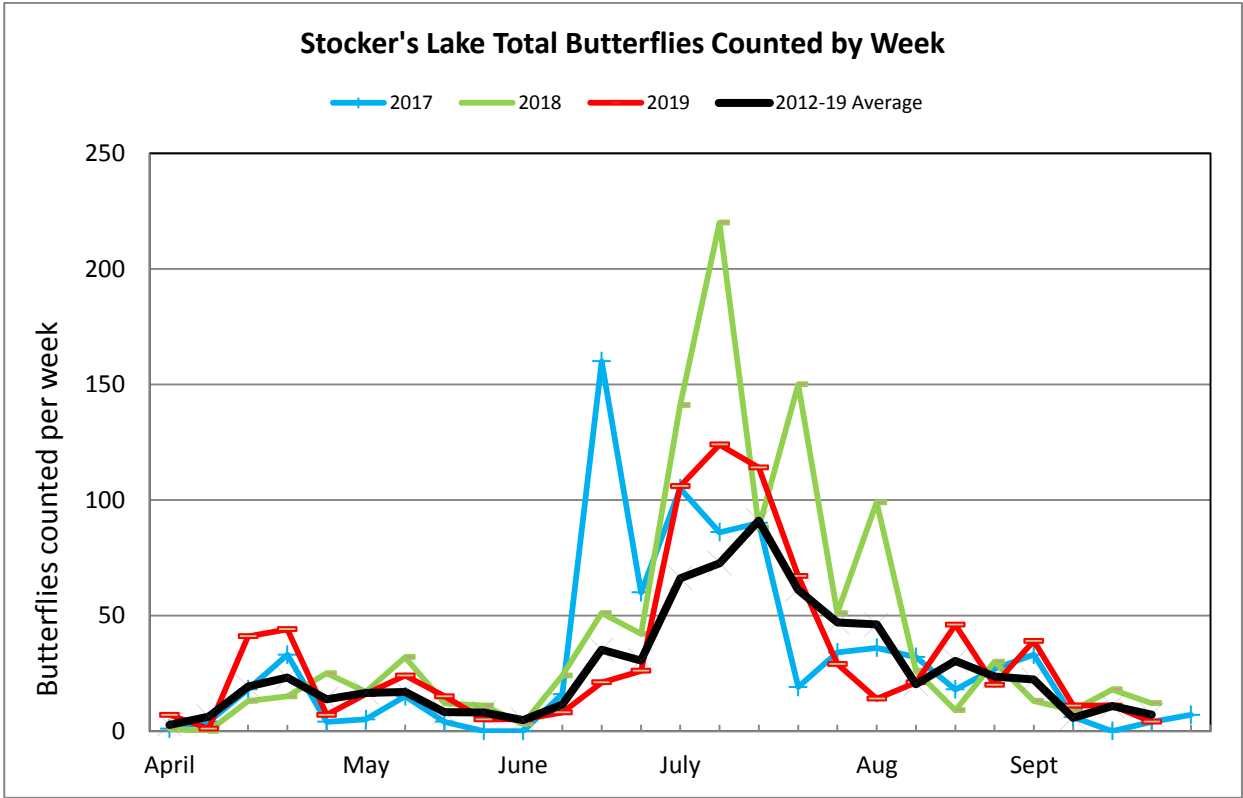


Essex Skipper

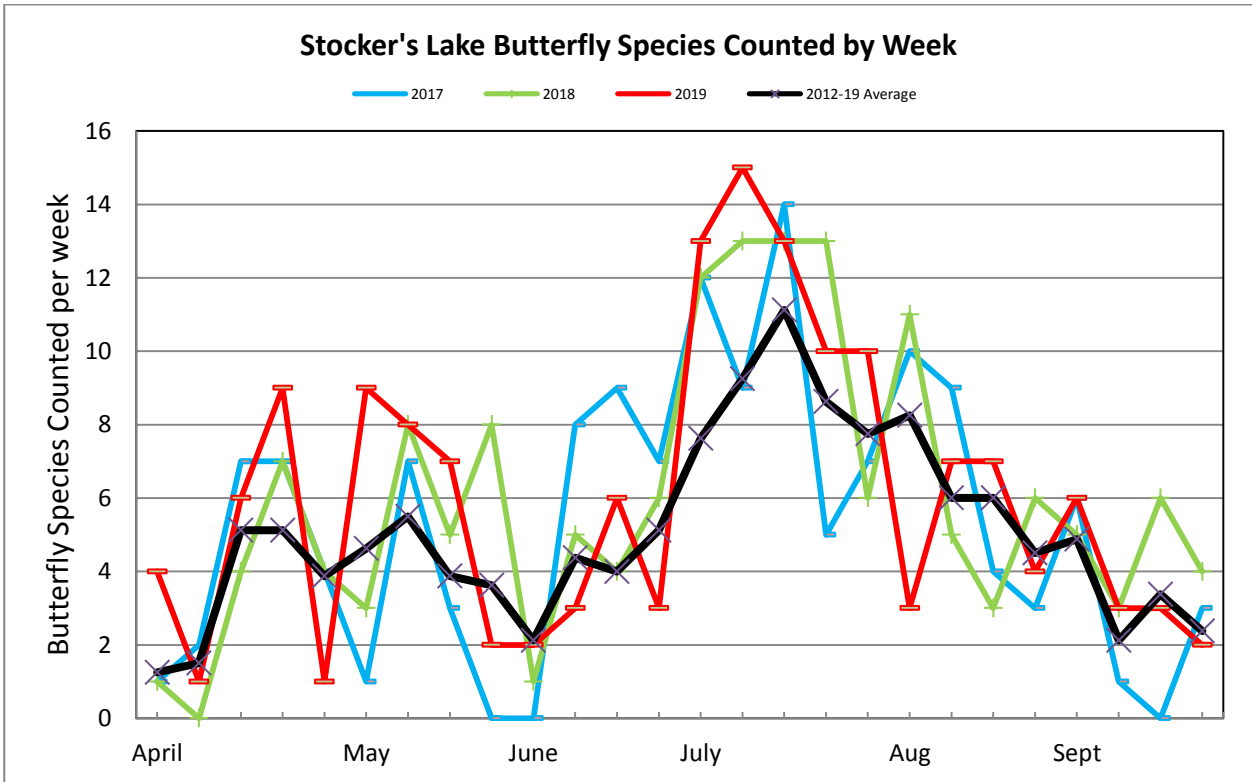
2012-19 weekly data

As organised weekly counts have now been ongoing for 8 years, our data bank is steadily improving. The chart below shows the total number of butterflies counted each week between April and September for 2017-19 as well as the average for the whole period.

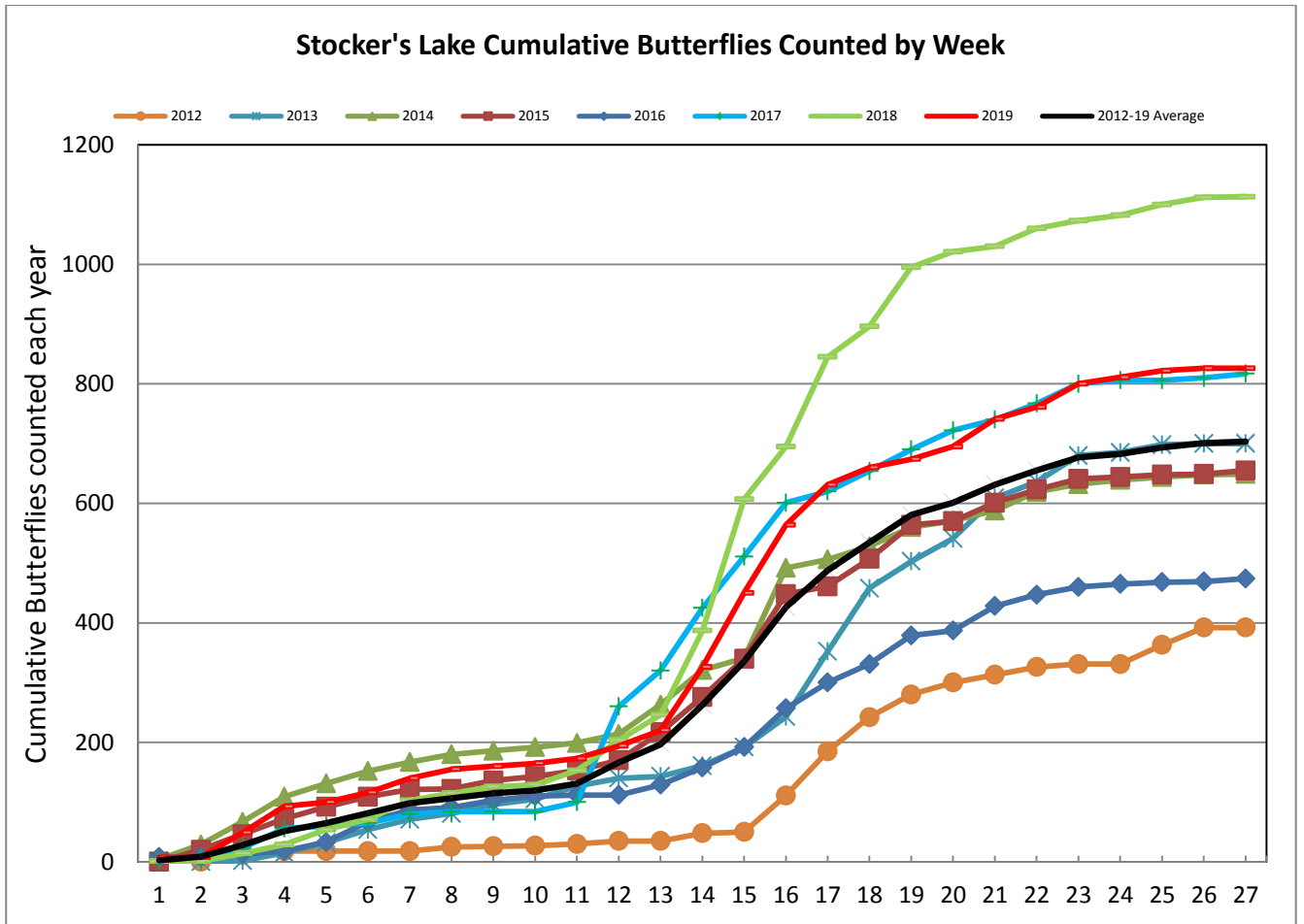
This confirms that although the totals were well below 2018, they were still above average.



The number of different species recorded each week was also above average for most of the period, with a new record high of 15 species in one week.



The cumulative sightings chart below shows a very similar trend to 2017. The first half of July regularly provides a peak in numbers when almost half the annual total is counted over 3 weeks. It is encouraging to note that the last 3 years have all been well above average but it is likely that this is due to weather rather than management of the reserve.



We will be continuing our weekly counts again in 2020. It will be interesting to see if the introduction of cattle on the meadows has a positive effect on numbers counted.