

Butterflies at Stocker's Lake 2021

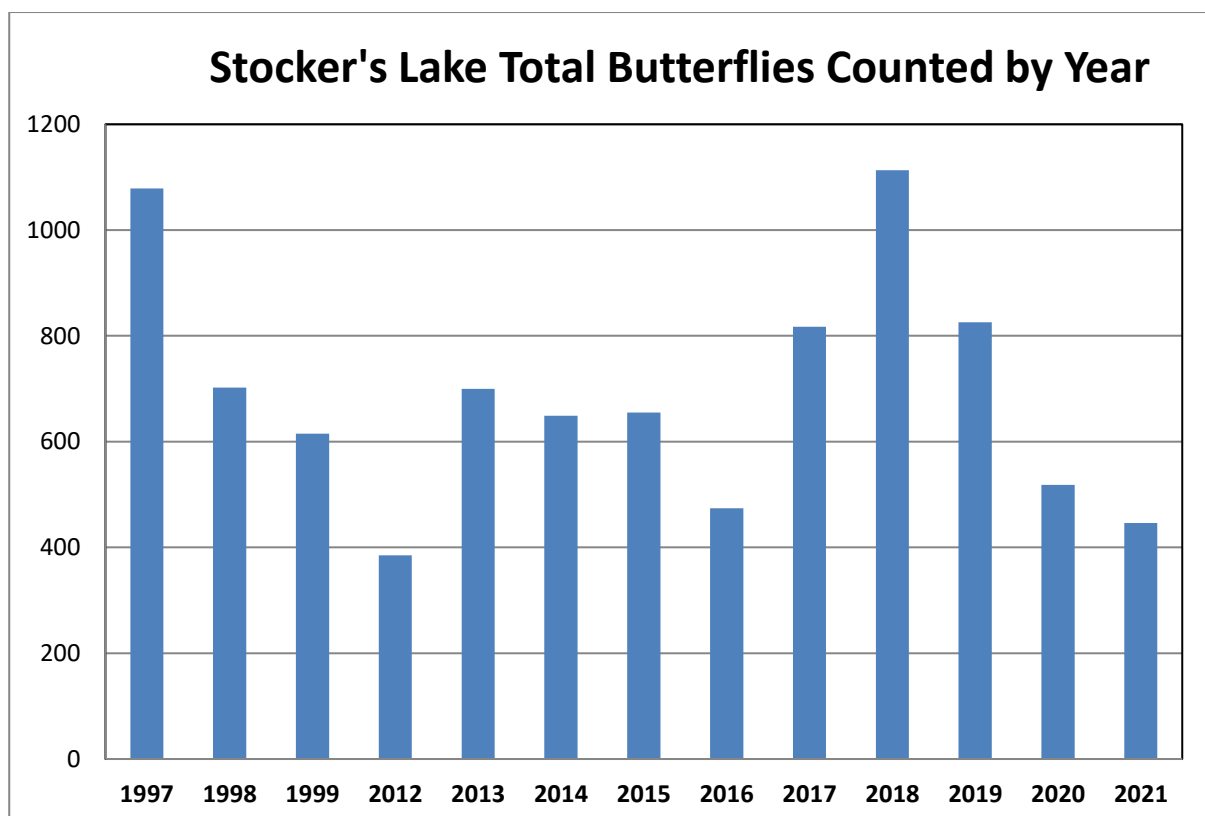
The recording scheme

Once again, the small dedicated band of enthusiasts (Carrol Scott, Cliff & Jacky Buckton, and Barbara James) again carried out counts of butterflies seen in 12 transects around the lake each week entering their results directly onto the UK Butterfly Monitoring Scheme. Despite covid restrictions, a full programme of surveys was possible this year.

Total butterflies counted by year

2021 was another very disappointing year for butterflies with the second lowest count recorded since our surveys began. Many butterflies have more than one generation per year which produces peak periods for numbers in spring, and particularly in summer. This year, heavy rain in May hampered butterfly feeding and breeding. This reduced the spring generation which then impacted the second generation in the summer, combined with further periods of heavy rain in July and August.

Bearing in mind that the count for 2020 was artificially low due to covid restrictions preventing surveys for several weeks, the last four years show a steep and steady decline.



The national picture

The report on Butterfly Conservation's Big Butterfly Count held each summer notes an even more concerning situation with the worrying decline in the number of butterflies and moths

across the UK continuing, with the overall number of butterflies recorded per count at its lowest level since the Count began 12 years ago.

This is also explained by changes in weather patterns, with sustained periods of heavy rain being the main problem.

Butterfly species counted by year

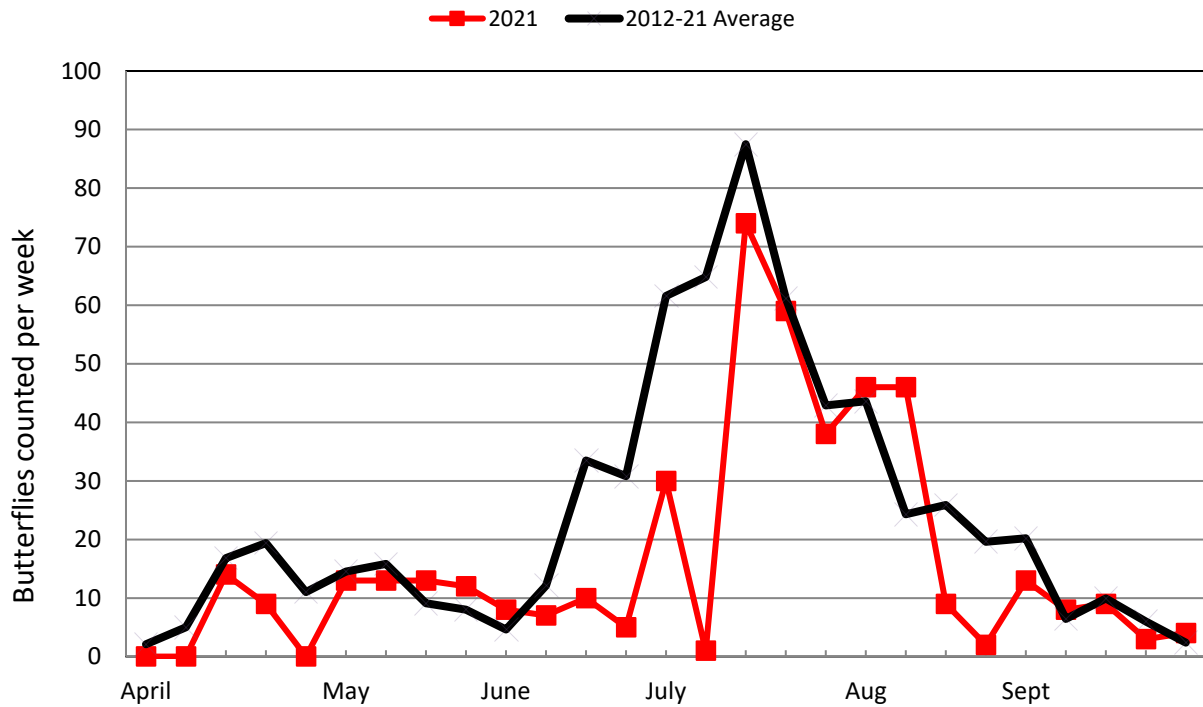
The only species to show a significant improvement in numbers since 2020 are Speckled Wood, Orange Tip and Brimstone, but this is entirely due to last year's covid restrictions preventing surveys in the early part of the season. Apart from these, the breakdown by species presents a depressing picture of decline.

	1997	1998	1999	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Small White	286	168	104	52	218	118	94	86	109	358	170	115	81
Meadow Brown	96	88	64	141	48	113	137	49	235	154	126	115	66
Large White	85	60	25	30	111	48	67	58	60	136	103	50	49
Speckled Wood	9	34	46	25	41	66	49	55	64	123	68	29	43
Orange Tip	18	30	11	8	52	28	24	38	38	47	58	6	33
Gatekeeper	152	142	166	14	41	46	92	27	66	39	57	30	33
Green-veined White	102	24	20	10	25	29	47	34	21	69	13	43	25
Red Admiral	10	5	7	44	0	15	8	17	50	16	35	30	22
Peacock	36	19	24	7	70	76	37	19	13	23	16	25	22
Brimstone	0	3	2	6	4	19	22	9	10	18	35	2	17
Small Skipper	67	37	90	2	0	6	3	7	7	5	22	10	13
Marbled white	0	0	0	1	0	0	5	2	12	5	2	19	13
Comma	13	8	6	26	23	10	14	17	52	24	28	19	12
Small Tortoiseshell	139	51	14	5	49	57	31	20	15	5	4	5	6
Ringlet	0	1	0	5	7	4	4	18	49	36	19	7	4
Common Blue	13	4	4	3	2	2	9	1	4	18	17	5	3
Holly Blue	6	3	5	1	7	0	8	12	8	27	22	5	2
Painted Lady	6	0	0	0	0	0	1	0	2	0	10	0	2
Essex Skipper	31	17	5	0	0	3	0	0	0	4	11	0	0
Large Skipper	5	8	16	0	0	2	2	3	0	1	7	2	0
Clouded Yellow	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Copper	3	0	2	0	1	2	1	2	2	1	0	1	0
Small Heath	2	0	3	4	1	5	0	0	0	4	3	0	0

2012-21 weekly data

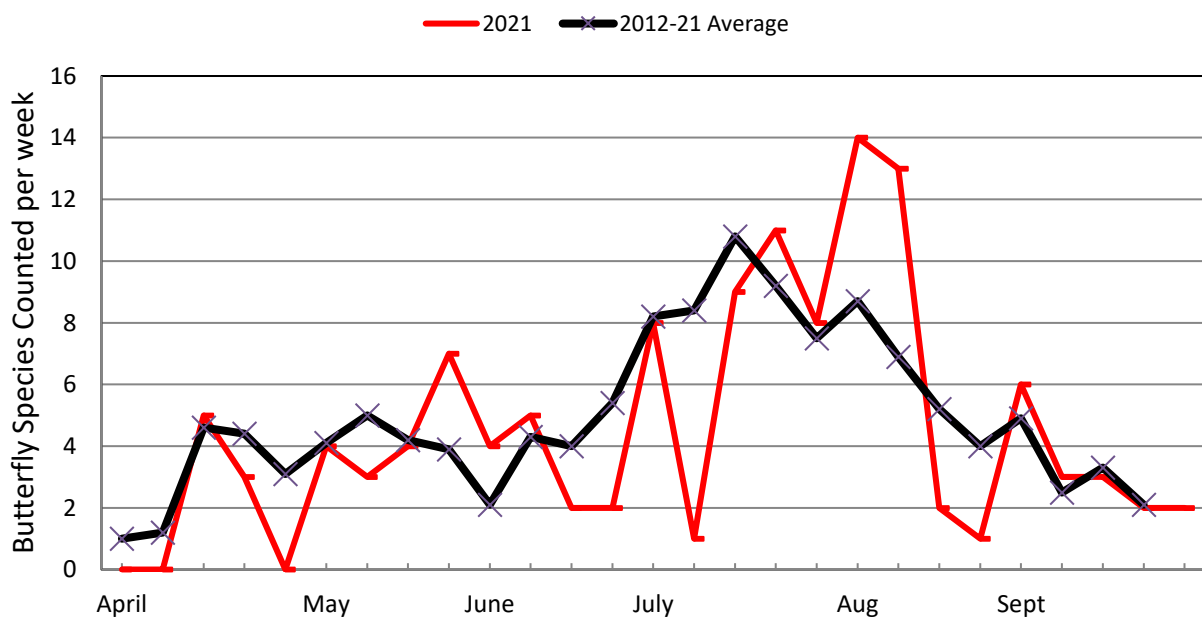
The chart below shows the total number of butterflies counted each week between April and September in 2021 and the average for 2012-21. This demonstrates the large shortfalls in May and July as described above. The weeks with very low counts all coincided with periods of heavy rain.

Stocker's Lake Total Butterflies Counted by Week

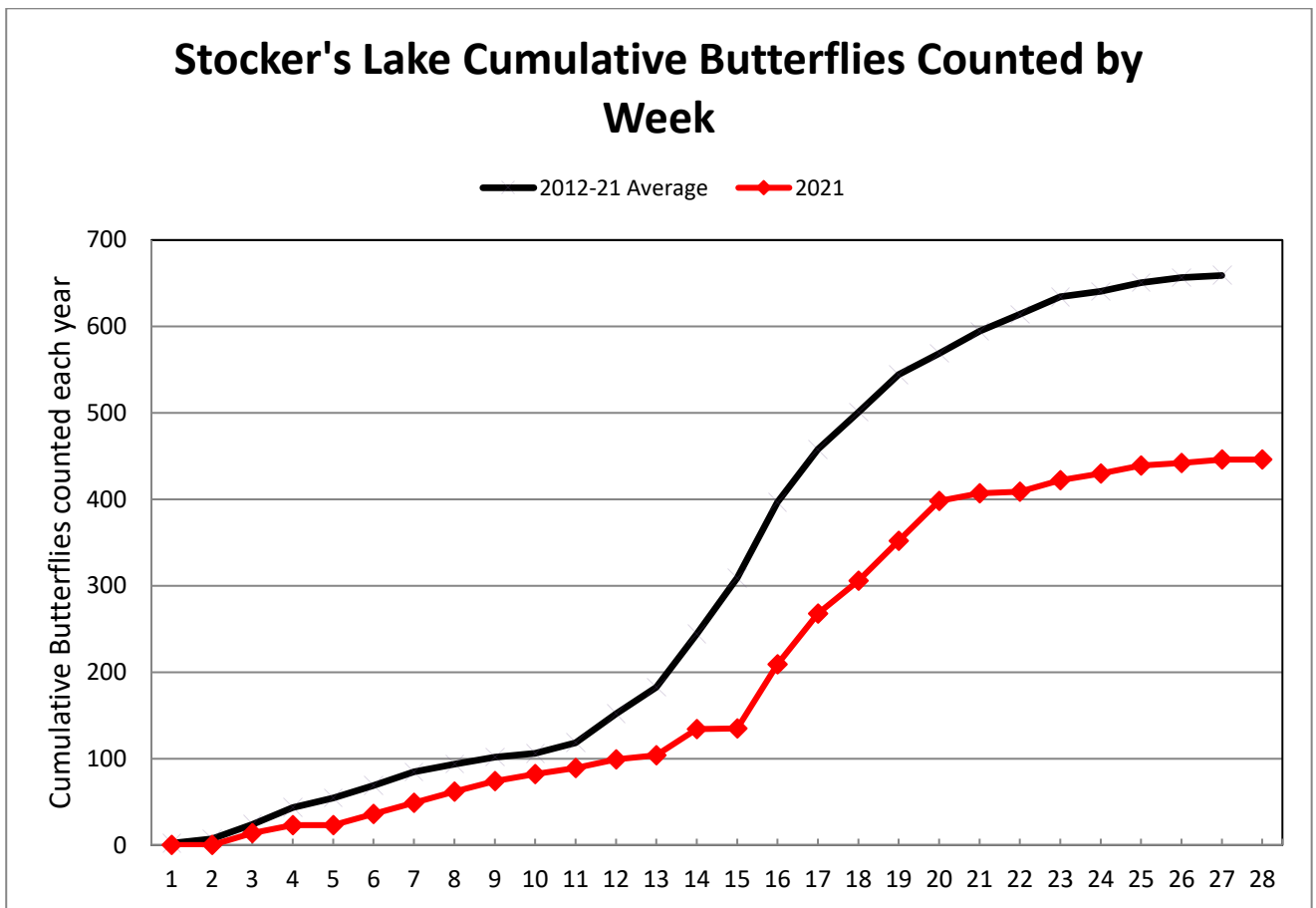


Given the fall in overall numbers recorded, it is perhaps encouraging that diversity was generally maintained as demonstrated by the number of different species recorded each week, indicating a general decline rather than in any particular species.

Stocker's Lake Butterfly Species Counted by Week



As would be expected, the chart for cumulative butterflies counted confirms the trend described above with divergences from average in May and early summer which can then never be recovered later in the season.



We will be continuing our weekly counts again in 2022.

A couple of photographs taken at Stocker's Lake in 2021:



Orange Tip



Painted Lady