

Butterflies on Hartlebury Common



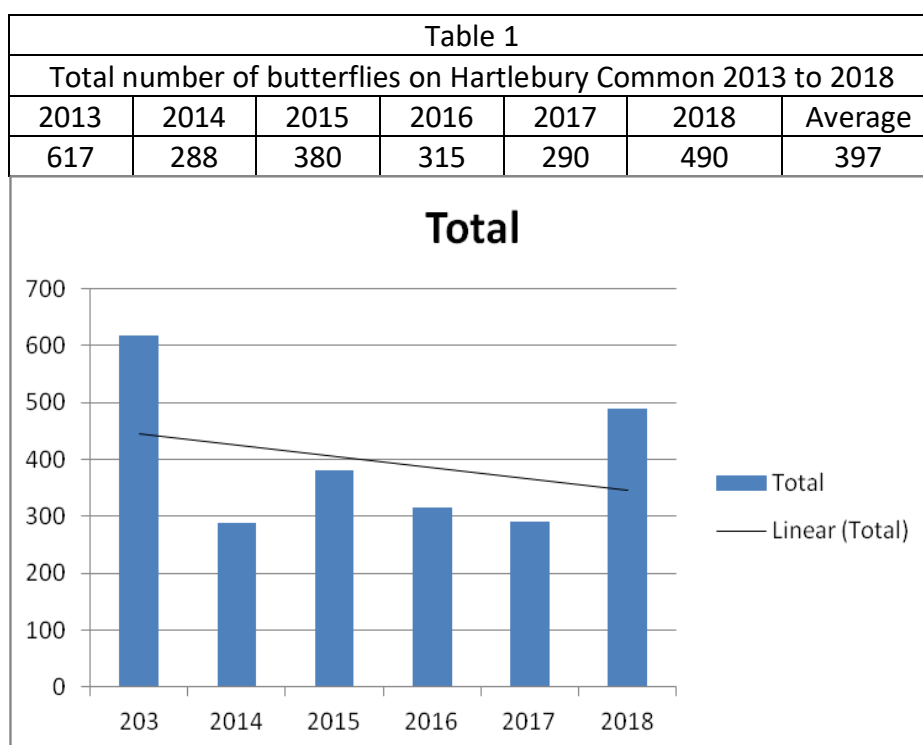
Report on Hartlebury Common Butterfly Transect 2018 by Mike Lomax

I have done the Hartlebury Common and Charlton Butterfly Transect for 6 years now, but for this report I have only used those sections of the transect on Hartlebury Common itself. Although, it should be noted that these only cover about 20% of the total common area.

Hartlebury Common is an SSSI that ten years ago Natural England deemed to be 'failing', because the rare lowland heath was in danger of reverting to woodland and shading out the underlying heath vegetation, endangering the many species (especially invertebrates) that rely on them. It was in danger of losing its SSSI status. Worcestershire County Council (the landowner) fenced the Common, introduced cattle for grazing and undertook extensive tree felling. Natural England now class the condition of the common as 'favourable' and Worcestershire County Council, supported by Hartlebury Common Local Group, organise regular volunteer work parties to help implement its 10 year plan. The objective now is to maintain the favourable condition by reducing the amount of overgrown scrub and removing self seeded trees. Because butterflies are a very good indicator of the state of the environment, the transect results are a good way of evaluating the progress of these efforts.

2018

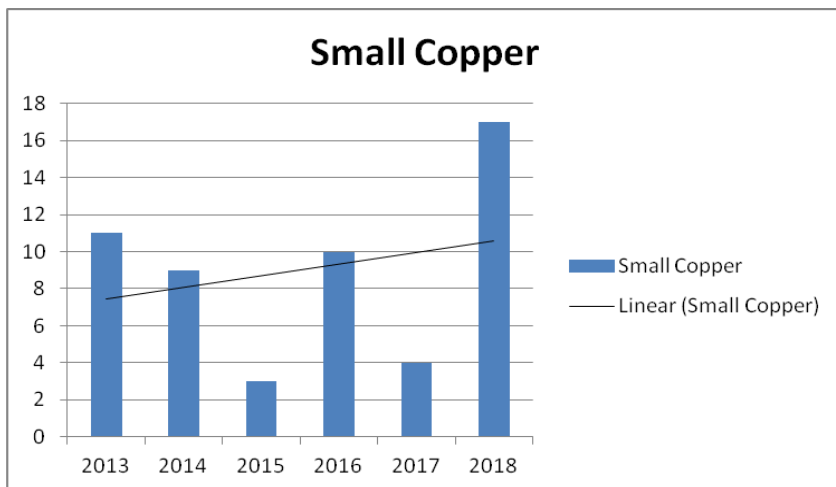
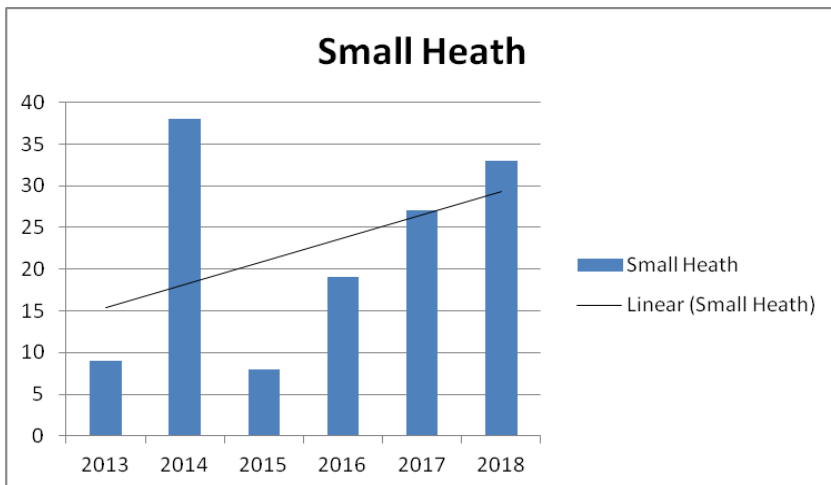
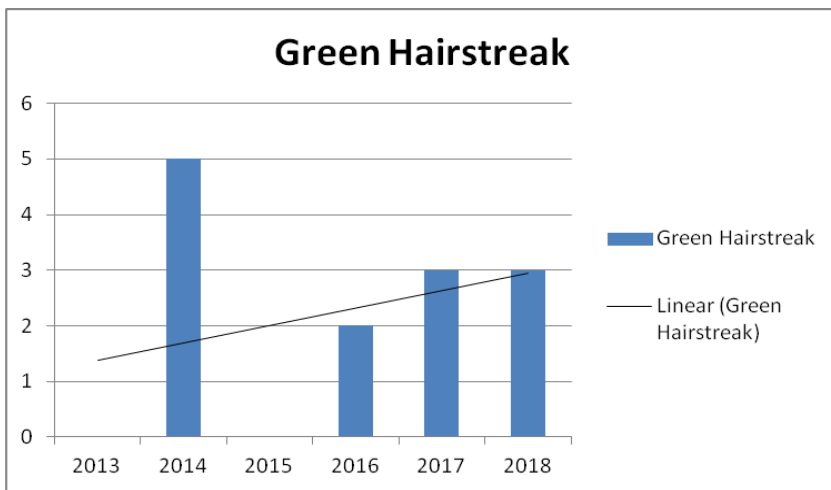
With the hot, sunny summer, 2018 was a good year for Butterflies on Hartlebury Common. The total number of butterflies recorded in 2018 was up on last year, 490 compared to 290, an increase of 69%, and above the average (397) for the 6 transects since 2013. (See the table 1). The number of species recorded on the Common over the six years went up from 23 to 24, as I was pleased to record Purple Hairstreak for the first time on the transect; 10 were recorded over 5 weeks. It seems to have been a good year the Purple hairstreak throughout the West Midlands. They have been seen on the common before, and on other parts of the common this year, but this is the first time they have been recorded on the Transect.



Winners

Some species did very well in 2018 (see table 2). Small White up from 8 in 2017 to 60 in 2018, a 650% increase, and Large White went up from 24 to 73, a 204% increase. Orange Tip went up from 2 to 6, a 200% increase, but the long-term trend is still seriously down. Small/Essex Skippers went up from 3 to 5, a 67% increase, but again the long-term trend is down. Speckled Wood continued its steady growth, up from 30 to 56, a 53% increase. The only one of the Browns that did well this year was the Gatekeeper, which increased from 67 to 104, a 55% increase. For some species, the total numbers recorded were small, but did go up. Small Tortoiseshell went from 1 in 2017 to 3 in 2018, a 200% increase, and Peacock went up from 4 to 7, a 75% increase, although the long-term trend for both is still significantly down. The butterflies that are specialists on lowland heaths are also doing well (see Table 3). Small Copper increased from 4 in 2017 to 17 in 2018, a 325% increase, Small Heath from 25 to 33 (32%) and Green Hairstreak only slightly down, from 4 to 3. The six year trend for all three is up (see Table 3). Green Hairstreaks are notoriously difficult to record on transects, when you have to keep moving, and spotting a green butterfly on green leaves is not easy! While the number of Green Hairstreaks recorded on the transect may not have gone up, there are more reports of this butterfly being recorded on other parts of the common, and I think we should be optimistic about the future of this butterfly on the common. The figures for these three butterflies gives some indication that the work done by Worcestershire County Council, supported by Hartlebury Common Local group, is having a positive effect on the biodiversity of the common.

Table 2							
	2014	2015	2016	2017	2018	Average	Trend
Small/Essex skipper	18	26	15	3	5	13	down
Large Skipper	7	10	8	3	3	7	down
Brimstone	1	0	0	0	1	1	down
Large White	7	15	22	24	73	29	up
Small White	16	16	34	8	60	44	down
G-V White	7	10	13	1	29	21	down
Orange Tip	10	0	5	2	6	7	down
Green Hairstreak	5	0	1	4	3	2	up
Purple hairstreak	0	0	0	0	10	2	
Small Copper	9	3	10	4	17	9	up
Brown Argus	1	0	0	0	2	0.5	up
Common Blue	0	2	2	2	2	2	level
Holly Blue	0	0	6	3	3	2	up
Red Admiral	1	3	1	3	0	2	down
Painted Lady	0	0	0	0	0	0	
Small Tortoiseshell	18	5	4	1	3	8	down
Peacock	41	22	3	4	7	18	down
Comma	0	3	1	7	7	6	down
Speckled Wood	10	12	20	30	56	25	up
Marbled White	0	1	1	1	0	0.3	
Gatekeeper	30	119	74	67	104	84	level
Meadow Brown	59	78	38	65	55	64	down
Ringlet	21	50	32	33	13	33	down
Small Heath	26	5	20	25	33	19	up
Total	288	380	315	290	490	396.7	down

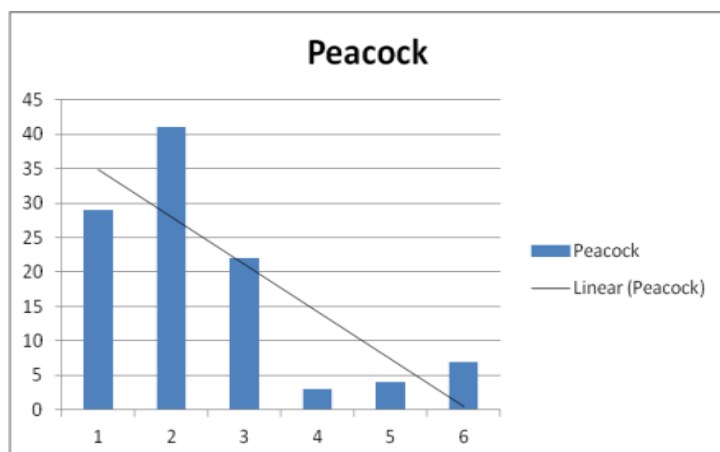
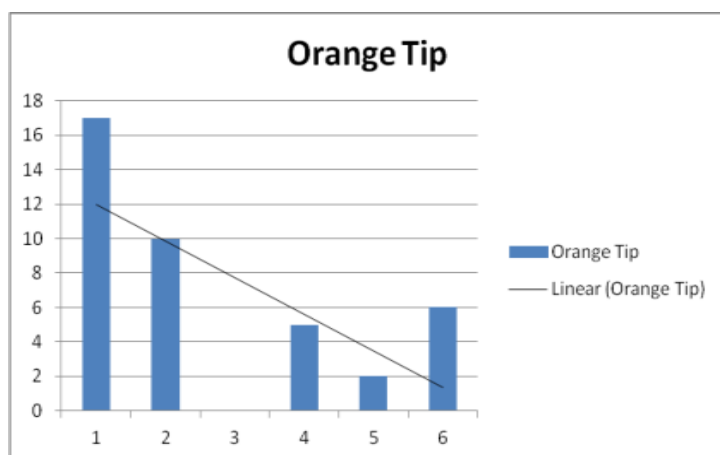


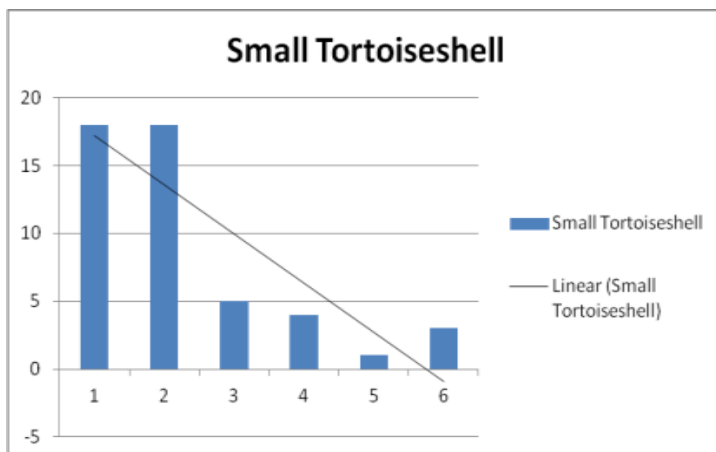
Losers

Only a few species went down from 2017. Meadow Brown, down from 65 to 55, a 15% decrease. Ringlet, down from 33 to 13, a 60% decrease. Marbled Whites went down from 1 to 0, a 100% decrease, but they have been seen on other parts of the common in 2018 and there was an increase in the number seen on the Lower Heath, which is not covered by the butterfly transect. 3 Red Admirals were recorded in 2017 and 0 in 2018, a 100% decline. As mentioned above, Green hairstreak went down from 4 to 3, a 25% decrease, but this is not considered significant. A few species recorded the same number as in 2017, Large Skipper, Common Blue, Holly Blue and Comma.

Long term Trends

The trend for all species over the 6 years was down (see Table 1), but, if 2013, an exceptionally good year for butterflies is excluded, the trend is up. Looking at the 6 year trend for the different species, seven species show positive growth: Large White, Green Hairstreak, Small Copper, Brown Argus, Holly Blue, Speckled Wood, and Small Heath. Two species are about level: Common Blue, and Gatekeeper. Thirteen species show significant declines: Small/Essex Skipper, Large Skipper, Brimstone, Small White, Green-veined White, Orange Tip, Red Admiral, Small Tortoiseshell, Peacock, Comma, Meadow Brown and Ringlet. Some of the declining trends are more serious than others, some are in line with national trends and some not. The most serious declines on Hartlebury Common were in the Orange Tip, Peacock and Small Tortoiseshell.





Most common butterflies

Gatekeeper was for the fourth year running the most frequently recorded butterfly, with Large White and Small White rising to second and third. Small Heath appeared in the top ten for the first time, going straight in at No. 6, with Meadow Brown and Ringlet going down the table, (see table 4).

Table 4						
Most frequently recorded Butterflies by year						
	2013	2014	2015	2016	2017	2018
1	Small White	Meadow Brown	Gatekeeper	Gatekeeper	Gatekeeper	Gatekeeper
2	Meadow Brown	Gatekeeper	Meadow Brown	Small White	Meadow Brown	Large White
3	Gatekeeper	Ringlet	Ringlet	Meadow Brown	Ringlet	Small White
4	Green Veined White	Peacock	Small White	Green-Veined White	Speckled Wood	Speckled Wood
5	Ringlet	Small Tortoiseshell	Peacock	Orange Tip	Large White	Meadow Brown
6	Peacock	Small/Essex Skippers	Small Tortoiseshell	Ringlet	Small Heath	Small Heath
7	Large White	Speckled Wood	Green-Veined White	Large White	Small White	Green - veined White
8	Small/Essex Skipper	Small White	Speckled Wood	Speckled Wood	Comma	Small Copper
9	Speckled Wood	Small Heath	Small/Essex Skipper	Small/Essex Skipper	Orange Tip	Ringlet
10	Comma	Orange Tip	Large White	Small Heath	Red Admiral + Small Tortoiseshell	Purple Hairstreak

Conclusions

The long-term decline in many species on the common, is worrying. But this is a national, and international, problem and the work we do on Hartlebury Common will only have a small impact. However, when it comes to the butterflies that are lowland heath specialists (Green Hairstreak, Small Heath and Small Copper), we can have a significant impact on reversing the long-term decline in these species. In this regard I think we can say that things are moving in the right direction. The figures for these three butterflies, see table 3, gives some indication that the work done by Worcestershire County Council and Hartlebury Common Local Group, is succeeding and we are having a positive impact on the environmental health of the common. In conjunction with the Field Studies Council a Bioblitz is being held on the common this summer and it will be interesting to see what effect management is having on other important invertebrates.