## Butterfly Conservation Upper Thames Branch

## Black Hairstreak Report 2018

2018 was an exceptional year for the Black Hairstreak, with the numbers seen the highest we have ever recorded at over 17 per hour of searching. Looking back through the records to 1986 there is evidence of a similar peak in numbers, and many new colonies were found that year. The Butterfly register compiled by Natural England states "hundreds seen". I can only imagine that there would have been far more Blackthorn at that time. The highest we had recorded in the previous 20 years was just below 10/hour, with an average of 3.57/ hour observation.

We arranged a Brown Hairstreak egg search in November 2017, and on the day we were fortunate to have fifteen people from Natural England helping, when one person came across and said "could this egg that I have just found be a Black Hairstreak egg" and we decided yes. I thought that's great, but it happened four more times and it included a pair, in total 6 eggs were found.

The weather during the flight period in 2017 was slightly better than the average, with no excessively cold or wet spell during the winter of 2017-18, and the spring was reasonable with no late frosts, all of which will have contributed to the high numbers seen in 2018.

The first Black Hairstreak was seen on June 1st and the last on July 4th, a flight period of 34 days. The weather was fine and for the whole flight period.

As the flight period progressed I soon realised that this was going to be an important year to prove the existence of colonies not seen for many years, and a good opportunity to look for them in new areas.



The pupa above was discovered at a new site near Newport Pagnell, 6 miles from any known colony and the first evidence that the butterfly existed there. The next day the butterfly emerged and was photographed.

At two sites in public ownership where this butterfly was found after surviving unseen for many years, beneficial management of the Blackthorn is being put in place.

The scale of habitat damage that is likely to happen as a result of the developments in our area appears to be increasing with almost every communication we are having with the HS2 and East-West Rail developers. We are seeing a considerable amount of tree planting, but have to question if within this there is sufficient shrub species like Blackthorn to replace the losses that are going to take place. In many places 90% of the line side vegetation is Blackthorn.

For the Black Hairstreak which depends upon this shrub for all its life stages, initial losses are going to be considerable, and it will take fifteen to twenty years before any replacement habitat will have acquired the value of the current habitat.

We are in communication with the ecologists working on these mitigation proposals, and they are listening to our recommendations, but it is difficult to see that the future benefits will ever equal the degradation that is now underway. The majority of land adjoining these railway corridors is privately owned, so there has been little opportunity to monitor the extent to which the Butterfly is using it, and how widespread it may have become.

Many thanks to all who spent so much time looking for the Black Hairstreak. Thanks also for keeping me up-to-date with your records, including all the site visits when the butterfly wasn't seen.

Stuart Hodges Black Hairstreak Species Champion May 2019



Black Hairstreak First Sighting Dates in UTB Region



The Red line on the chart above is the average number seen for each hour of observation. The Green line is my own weather observations of the number of hours suitable for Butterfly activity during the flight period, but divided by 20 enabling it to fit on the graph. This was originally started to find out if there was any correlation between the weather conditions in the first year, and the numbers seen the following year. It can now be seen that the result is not always negative.

The current number of colonies in Bucks and Oxon*	58
Colonies within Woodland	8
Colonies in Woodland edge sites	25
Colonies at Hedgerow Thicket and Copse Sites **	27
Some of the Features of these Colonies	
Hedgerow Colonies at Roadside sites	10
Colonies Associated with Bridleways and Footpaths	10
Colonies alongside Railways	6
Colonies with Private Landowners	26
* With the Increase in numbers in 2004 it has become more difficult to define the	
boundaries between one colony and another so this can only be an esimate	
** Two of these colonies extend out from Woodland edge colonies for over 100 metres	

## **Colony Site Information**

Year	98	99	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
All-time total Colonies (some now extinct)																						104
Colonies visited by the recording group		31	22	36	28	29	40	38	51	54	55	60	67	57	28	34	34	35	42	42	73	
Colonies/Sites seen by the recording group	7	13	9	15	9	13	34	34	39	41	40	40	46	38	17	19	29	26	31	36	69	
Colonies/Sites extant 1990 - 2018																						83
Colonies found since 1997	2		1			2	2	1	6	4	3	1	4			1	1		2	2	6	36
Colonies re-discovered	1	5	2	4	1	1	2	1		2			2							1	3	25
Individual Butterflies seen	19	28	73	90	123	109	525	258	995	655	261	326	1095	586	118	132	263	418	182	435	1789	8480
Hours spent looking for BIH				91	53	49	76	99	112	102	91	118	112	158	109	106	87	78	73	66	104	
People helping with recording	4	9	12	13	15	16	17	24	21	20	27	30	32	39	34	33	35	42	31	34	35	
Days with suitable weather			16	18	18	21	22	28	28	25	18	30	26	31	27	24	22	25	20	23	33	
Hours of suitable weather for BIH activity	40	90	105	149	151	167	150	176	234	140	115	205	210	168	137	181	142	194	108	188	278	
Average hours suitable for activity per day												6.8	8.4	5	4.6	6.9	6.4	7.6	5.14	7.23	8.4	
Average no seen per hours observation	1.4	0.6	0.8	1.0	2.2	2.2	6.9	2.7	8.9	6.4	2.8	2.7	9.7	3.7	1.0	1.2	3.02	5.3	2.49	6.5	17.24	
No of records that make up this information	7	12	25	99	54	77	129	157	157	186	167	210	383	286	143	112	112	136	115	120	262	
Km Squares where BIH was seen													60	52	18	21	40	41	41	43		
New Km Squares													8	2		2	2	2	2	3		
Total Km Squares with BIH records																						124