## **Butterfly Conservation Upper Thames Branch**

## Black Hairstreak Report 2021

## Stuart Hodges

The 2021 flight period started late on June 12<sup>th</sup>. Autumn 2020 was wetter than average, the winter that followed was the usual mild type that we have become used to, no long cold spells or severe frosts, and little snow. April was extremely dry, frosts nearly every night, that was followed by a wet May. The weather during April and May will have delayed the start of the flight season.

By the start of June the weather had improved a little, but remained fairly unsettled through the 28 day flight period. There were only about 156 hours of suitable weather for butterfly activity (in 2018 it was 278). This resulted in the time spent looking for them and site visits being down on recent years, but despite this the number seen per hour of observation was up from 4.56 in 2020 to 6.44 in 2021.

Two eggs were found in egg searches, but our planned pupa search had to be cancelled because of HS2 road closures. Elsewhere a total of 3 hours and 20 minutes was spent searching and only one pupa was found.

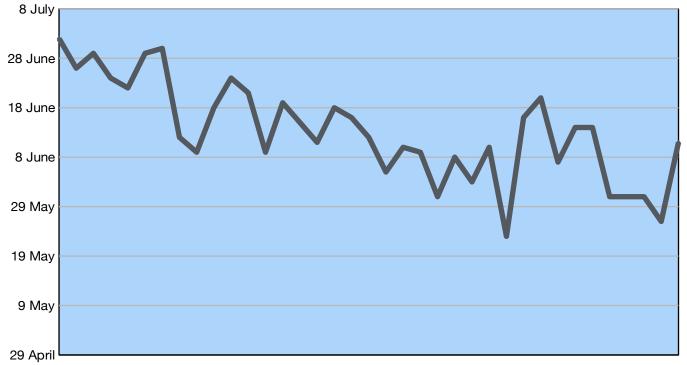
HS2, East-West Rail and cutting and embankment work on the London to Bicester line has resulted in even more suitable Blackthorn being destroyed in the last twelve months. Of the 134 known sites in the Bucks and Oxon region, 15 have been adversely impacted. However I have noticed that where the East-West Rail work has progressed furthest, some line side planting has already taken place, but this will not happen with HS2 because they plan to have an apron either side of their line clear of all vegetation.



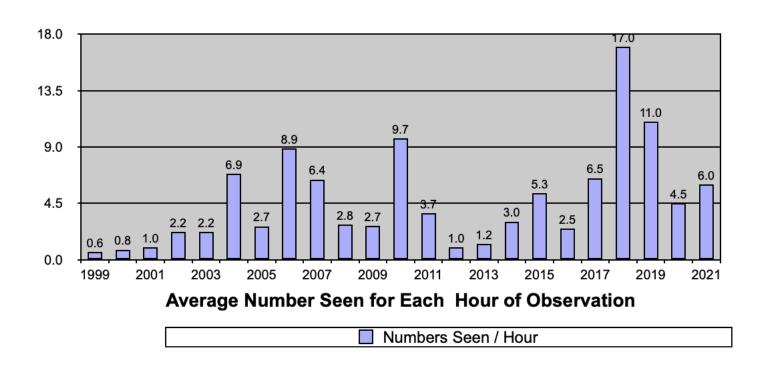
Thanks to Nick Bowles for this photograph of the only Black Hairstreak pupa found in 2021 on June 4<sup>th</sup>.

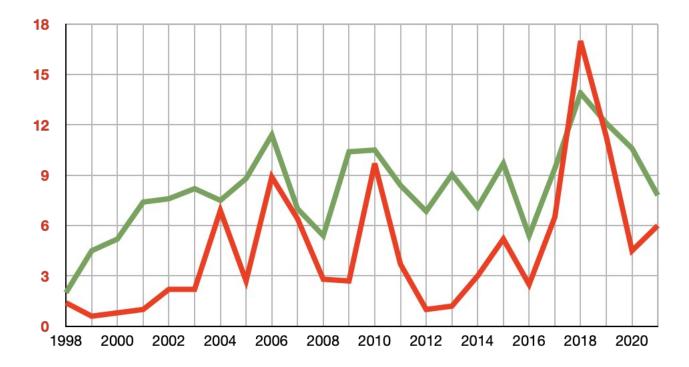
## Yearly Comparisons for the last 24 Years.

Year	98	99	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Total
All Time Total of Bucks and Oxon Colonies/ Sites.																									
Some are now Extinct.																									106
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	42	40	30	
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	38	32	27	
Colonies/Sites Extant 1990-2021.																									83
New Colonies/Sites Found since 1997.	2		1			2	2	1	6	4	3	1	4			1	1		2	2	6	1	1		38
Colonies Re-discovered Seen pre 1990.	1	5	2	4	1	1	2	1		2			2							1	3		1		26
Individual Butterflies Seen.	19	28	73	90	12 3	10 9	52 5	25 8	99 5	65 5	26 1	32 6	109 5	58 6	11 8	13 2	26 3	41 8	18 2	43 5	178 9	617	34 1	31 1	97 49
Hours Spent Looking for the Black Hairstreak.				91	53	49	76	99	11 2	10 2	91	11 8	112	15 8	10 9	10 6	87	78	73	66	104	54. 3	74. 5	51	18 63. 8
People Helping with the Recording.	4	9	12	13	15	16	17	24	21	20	27	30	32	39	34	33	35	42	31	34	35	30	27	25	
Days with suitable Weather for Black Hairstreak activity.			16	18	18	21	22	28	28	25	18	30	26	31	27	24	22	25	20	23	33	34	35	25	
Hours of suitable Weather for Black Hairstreak activity.	40	90	10 5	14 9	15 1	16 7	15 0	17 6	23 4	14 0	11 5	20 5	210	16 8	13 7	18 1	14 2	19 4	10 8	18 8	278	241	21 3	15 6	
Average Hours Suitable for Activity per Day												6. 8	8.4	5	4. 6	6. 9	6.4	7. 6	5.1 4	7.2 3	8.4	6.1	5.7 5	5. 5	
Average no Seen per Hours Observation	1. 4	0. 6	0. 8	1	2. 2	2. 2	6. 9	2. 7	8. 9	6. 4	2. 8	2. 7	9.7	3. 7	1	1. 2	3.0 2	5. 3	2.4 9	6.5	17. 24	11. 36	4.5 6	6	4.61
Annual Site Visits that Make up this Information	7	12	25	99	54	77	12 9	15 7	15 7	18 6	16 7	21 0	383	28 6	14 3	11 2	11 2	13 6	11 5	12 0	262	119	12 2	85	
Kilometre Squares where the Butterfly was Seen													60	52	18	21	40	41	41	43	64	51	40	41	
New Kilometre Squares													8	2		2	2	2	2	3	12	1	3	1	38
Total Kilometre Squares with Butterfly Records																									137



First sighting dates 1985 to 2021

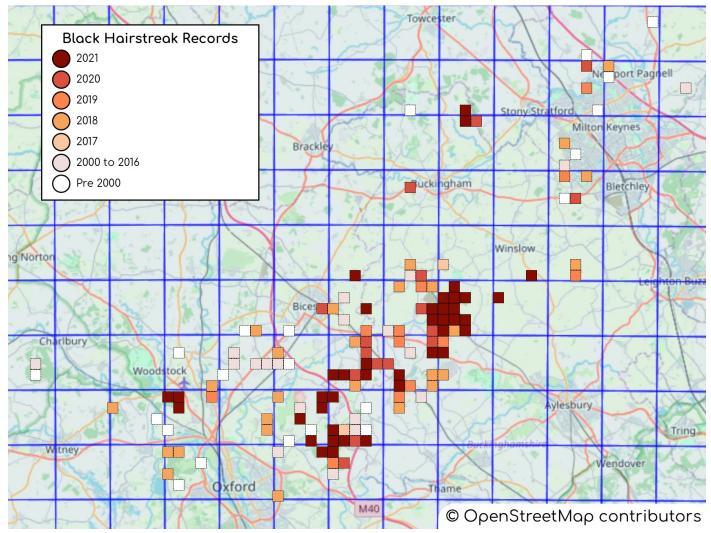




The Red line on the chart above is the average number seen for each hour of observation. The Green line is my own weather observations of the number of hours suitable for Butterfly activity during the flight period, but divided by 20 enabling it to fit on the graph, originally started to find out if there was any correlation between the weather conditions in year one and the numbers seen the following year.

Looking back over the long period and extent of our recording has proved that what was thought to be the boundaries of a colony back in 1998, is now shown to be a far larger area than we thought then. This is because we have more people recording and more sites visited each year. Up until 1998 everyone was mainly motivated on just seeing the butterfly at a known site, not exploring over a wider area. There are areas where they are more concentrated, but beyond that it can be found along hedgerows wherever there are good Blackthorn thickets. Thanks to your help we have learned a great deal.

The current number of known colonies in Bucks and Oxon.*	66
Colonies within Woodland.	8
Colonies in Woodland edge sites.	26
Colonies at Hedgerow Thicket and Copse Sites.	38
Some of the features of these colonies.	
Hedgerow Colonies at Roadside sites.	11
Colonies Associated with Bridleways and Footpaths.	14
Colonies alongside Railways both Used and Disused.	10
Colonies with Private Landowners.	32
*With the more extensive searching over recent years it has been found that the colonies are more dispersed than originally thought, so this can only be an estimate.	



Distribution Map 1985 to 2021

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 sites visited whether or not the butterfly was actually seen.

Stuart Hodges. Black Hairstreak Champion. Butterfly Conservation, Upper Thames Branch. (swhodges2@gmail.com)