BUTTERFLY CONSERVATION UPPER THAMES BRANCH

Black Hairstreak Report 2010

Stuart Hodges

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The Black Hairstreak flight period in 2010 started on the 11th June, a week later than last year and the last was seen on the 6th July - 26 days, which is about average. In 2009 it started on the 4th June and the last was seen on the 4th July (with one exception) - 30 Days.

We've seen larger numbers than last year and finished with a total of 1066. Taking the time observing likely blackthorn we came out with an average of nearly 10 per hour.

Why were numbers so good? Well, each year for the last 12 years we have kept a record of the number of hours suitable for butterfly activity during the flight period and, with the exception of one year, good weather during the flight period has resulted in good numbers of adults seen the following year. In 2009 we had 205 hours of suitable weather, second only to 2006 when it was 234 hours, so this is the most likely reason for the good numbers seen. We again had good weather this year, 210 hours of suitable weather and the higher numbers and good weather during the flight season should give us even higher numbers in 2011.

One other possible reason for the higher numbers comes to mind. We often hear Long Tailed Tits feeding above our heads when looking for Black Hairstreak pupae, but this year they were not to be heard. Over-wintering Long Tailed Tits have suffered due to the exceptionally cold winter. The cold weather during the winter is also the most likely reason for the slightly later start of the flight period.

We had three eggs under observation this year and they had all hatched by the beginning of April. One pupa found on the 27th of May was still there on the 11th of July, but on closer inspection the butterfly appeared to have emerged although it had left the pupal case intact (however, it did look smaller and paler in colour). The second pupa was found on the 2nd of June, but had disappeared by 19th of June.

Yearly Comparison of Records

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
All time Total no. of Bucks & Oxon Colonies														98
Sites visited by the recording group		31	22	36	28	29	40	38	51	54	55	60	60	88
Colonies seen by the recording group 1998-2010	7	13	9	15	9	13	34	34	39	41	40	40	46	62
Colonies extant 2006 - 2010														68
Colonies found since 1998	2		1			2	2	1	6	4	3	1	4	26
Colonies re-discovered (seen pre 1990)	1	5	2	4	1	1	2	1		2			2	21
Individual Butterflies seen	19	28	73	90	123	109	525	258	995	649	261	323	1066	
Hours Spent Looking for the B.H.				90.5	52.75	48.7	76	99	112.2	102	91	118	108	

No. people helping with the recording	4	9	12	13	15	16	17	24	21	20	27	30	27	
No. days with suitable weather for B.H. activity			16	18	18	21	22	28	28	25	18	30	26	
No. hours of suitable weather for B.H. activity	40	90	105	149	151	167	150	176	234	140	107	205	210	
Average no. seen per hour's observation	1.4	0.6	0.8	1	2.2	2.2	6.9	2.7	8.9	6.4	2.8	2.7	10	3.7
Kilometre Squares with B.H.													60	
New Kilometre Squares													8	
Total Kilometre Squares with B.H. records														116

Some of the Observations

Very few of the Black Hairstreak were seen nectaring from flowers, possibly an indication that there was plenty of aphid honeydew to be found on the leaves (yes I have been told there were more aphids this year but then I seem to be told that every year).

It was noticed by several recorders that the Black Hairstreak were far less active through the middle of the day; one of our recorders was finding better numbers regularly between 8.30am and 10.00am than later (11.00am to 3.00pm). This has led to a discussion about "shading up", "siesta", "aestivation". In 2009 we had seven days when the temperature was 25 degrees and over and on three days it reached 29 degrees, but in 2009 there was less comment on shading up.

One Black Hairstreak appeared in a moth trap at 11.00pm - is this a first?

We have 334 separate records, this is the most we have ever had, but we will need to consolidate these considerably to put them into the detailed 2010 report.

Once again we have found the butterfly at new locations, but these have been for the most part at sites which have never been checked before, so we have no way of knowing how long they have been there. We have found colonies along some of the railway lines. These have become corridors of good habitat which were far less suitable in the time of steam trains, so these will have been colonised in the last 50 years or so.

Blackthorn collapses and becomes moribund and unsuitable in about 40 years, so we must be seeing some new colonies at new sites established.

One observation was of a very tatty female looking to lay eggs on a Blackthorn stem that was an inch in diameter, about three feet into a bush, although it was too far in to see if it had actually laid an egg. Could eggs be laid on considerably older Blackthorn than we have searched in the past?

A few colonies at sites with only one or two previous records have not been confirmed in this exceptionally good flight season, so have they failed or is this just an indication of how difficult it is to spot individuals when there are only a few in a small colony?

It has been more obvious this year that the highest numbers have been recorded at sites where there has been management of the Blackthorn, indicating that management is of considerable benefit.

There has been some debate about identifying males and females in the field. The female has a slightly larger abdomen, slightly longer tails, is slightly larger overall, but observing this in the field would be difficult unless you saw two together or activity that would prove the gender (such as egg-laying). Some claim to be able to see a difference, unfortunately it is a skill which I have not achieved.

Looking at the distribution map all of the gains have been in the North East of the central part of the distribution area, an area where the majority of the monitoring has been, it would be wise for us to make more effort in the West of its known distribution area next year.