

BUTTERFLY CONSERVATION UPPER THAMES BRANCH

Black Hairstreak Report 2012

Stuart Hodges

Numbers of Black Hairstreak seen in 2012 fell close to the lowest since we started our serious monitoring in 1998 (this year it was just short of 1 butterfly seen per hour of search). After a second cold winter, the year started off very dry until the middle of April then the wet weather started and continued for the rest of the year.

Clearly, the wet and colder than usual weather through the larval and pupal stages slowed the rate of progress, increasing the predation risk and delaying the emergence of the first adult (the first recorded adult was on 17th June in 2012, as compared to 24th May in 2011). Often only a few hours are spent searching for adults before the first is seen, but in 2012 it was 35 hours during which 55 site visits took place before there was eventual success.

Monitoring for some of us became a question of confirming that a colony still existed rather than waiting around to count numbers which might have indicated how successful breeding had been. Several sites were visited many times before a sighting was achieved and we could consider looking elsewhere. The number of sites checked was reduced from 61 in 2011 to 28 in 2012 and the number of sites confirmed was down from 36 in 2011 to 17 in 2012.

Breeding success is likely to have been lower so, even if we get good weather, numbers in 2013 are likely to be poor. We are almost back to the situation when we started our monitoring, trying to confirm which colonies actually still exist. However, we are told that wildlife has an amazing ability to recover and I often consider what is called the “year without a summer” when, in 1816 due to a volcanic eruption the previous year, dust in the atmosphere blocked out the sun to the extent that we had sharp frosts in June and the harvest failed. All our butterfly species today came through that, even though we have lost several of them subsequently.

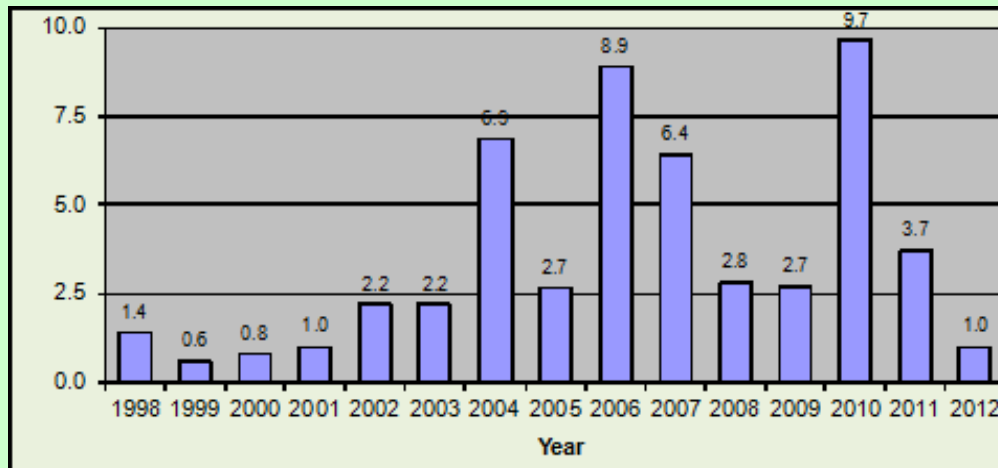


The picture above is one that I took at the Calvert Jubilee Nature Reserve, included because this colony is within 50 meters of the route of the planned HS2 high-speed rail link. Little of this area of Blackthorn will remain if the plans go ahead. The owners of the site that was once Calvert station and sidings, where a Black Hairstreak colony was first found on 13th June 2011, had cleared the lovely Blackthorn thicket there early in 2012. Yet another colony just over a mile away will be impacted by the opening of the East-West rail route.

Turning another disused rail route into an access road to an incinerator has already started and will have a considerable effect on another good site. Although housing development is not directly affecting the butterfly, transport and refuse disposal certainly are. Little can be done to prevent these plans from going ahead and we can only hope that the mitigation we are working for will reduce their impact. Perhaps the low numbers that we are already seeing will help to focus opinions more.

Due to the low numbers, several of the people who regularly look for the butterfly did not see one at all. Generally speaking, activity was seen only at the larger colonies but in vastly reduced numbers. The maximum number recorded on one visit was 11, once again at the M40 Compensation Area in Bernwood Forest was the best site to see the butterfly.

Yearly Averages of Numbers Seen Per Hour



Colony Location

| | |
|--|----|
| The current number of known colonies in Bucks and Oxon.* | 61 |
| Colonies within Woodland. | 8 |
| Colonies in Woodland edge sites. | 26 |
| Colonies at Hedgerow Thicket and Copse Sites.* | 29 |
| Some of the features of these colonies. | |
| Hedgerow Colonies at Roadside sites. | 10 |
| Colonies Associated with Bridleways and Footpaths. | 10 |
| Colonies alongside Railways both Used and Disused. | 9 |
| Colonies with Private Landowners. | 29 |
| *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. | |

Regional comparisons

| | Bernwood Area | Rushbeds Area | Whitecross Green | Finemere Area |
|------------------------------------|---------------|---------------|------------------|---------------|
| Number Of Site Records | 210 | 57 | 111 | 237 |
| Hours of Observation | 146 | 34.8 | 74.7 | 149 |
| Individual Butterflies Seen | 779 | 88 | 480 | 900 |
| Average Seen Per Hour | 5.3 | 2.5 | 6.4 | 6 |

The comparisons above are compiled from over 400 hours of recording since 2001, the Bernwood area numbers have increased dramatically due to the colonisation of the M 40 Compensation area, the Black Hairstreak was first recorded there in 1999. In 2001 just 2 were seen in 7.75 hours of searching in the Bernwood area, the overall average for that year was 1 per hour.

From the chart above it can be seen that there are considerable variations in hourly numbers seen, one probable reason would be habitat differences, the question is, how to quantify this at each of the sites.

| Year | Number of records, site visits | Hours of Observation | Butterflies seen | Average per Hour |
|---------------|--------------------------------|----------------------|------------------|------------------|
| 1998 | 7 | Estimated | 19 | 1.4 |
| 1999 | 12 | Estimated | 28 | 0.6 |
| 2000 | 25 | Estimated | 73 | 0.8 |
| 2001 | 99 | 91 | 90 | 1 |
| 2002 | 54 | 53 | 123 | 2.2 |
| 2003 | 77 | 49 | 109 | 2.2 |
| 2004 | 129 | 76 | 525 | 6.9 |
| 2005 | 157 | 99 | 258 | 2.7 |
| 2006 | 157 | 112 | 995 | 8.9 |
| 2007 | 186 | 102 | 655 | 6.4 |
| 2008 | 167 | 91 | 261 | 2.8 |
| 2009 | 210 | 118 | 326 | 2.7 |
| 2010 | 383 | 112 | 1095 | 9.7 |
| 2011 | 286 | 158 | 586 | 3.7 |
| 2012 | 143 | 109 | 108 | 0.99 |
| Totals | 2092 | 1170 | 5251 | 3.53 |

The above chart shows the extent of the monitoring carried out over the last fifteen years, how it has increased and the amazing amount of time that volunteers have put into this - we owe them a big **Thank You.**

Looking at the overall countrywide distribution, this represents quite a large proportion of Black Hairstreak that have been seen over this period of time.

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