

HEDGEROWS FOR HAIRSTREAKS?

A Farm Hedgerow Survey Report



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Butterfly Conservation July 2008



Butterfly
Conservation



Introduction

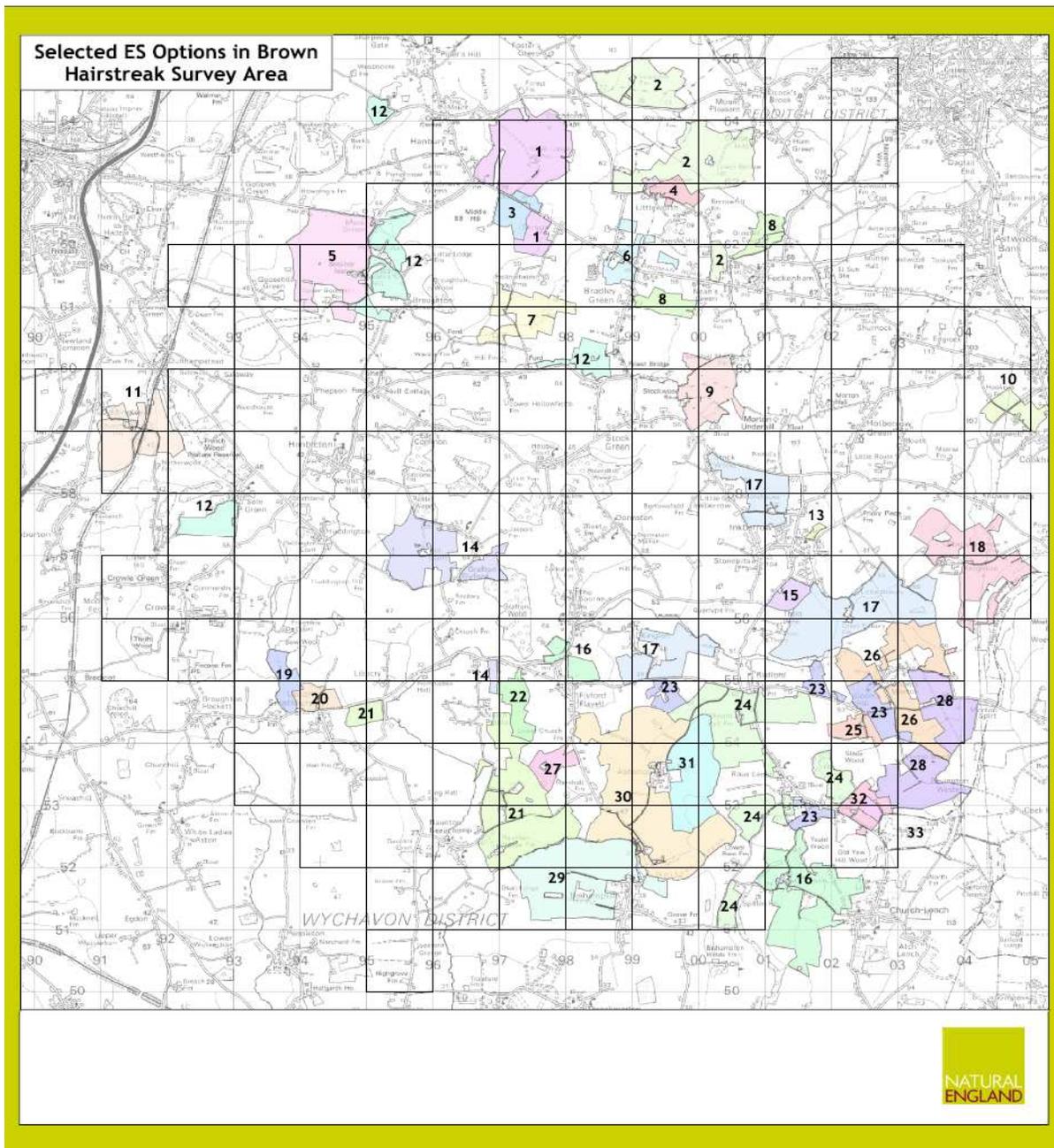
The Brown Hairstreak butterfly (*Thecla betulae*) is a national Biodiversity Action Plan species which depends on hedgerows and woodland edges for its survival. It breeds principally on blackthorn (*Prunus spinosa*) and occurs at low densities over a wide area. Nationally, the butterfly has undergone a substantial decline and has died out completely in some areas (Asher et al, 2001). In the Midlands, it is confined to a small area of east Worcestershire where it is centred on remaining woodland fragments within the former Forest of Feckenham (Mabbett & Williams, 1994). It is one of the region's rarest and most vulnerable butterfly species. Once believed to be extinct in the county, since its rediscovery in 1970 it has been the subject of considerable conservation effort led by the West Midlands branch of Butterfly Conservation but involving many conservation partners and the wider community (Williams, 2006). Because of its dependence on hedgerows, the butterfly is very affected by hedge removal and the frequency of cutting. Annual hedge trimming removes perhaps up to 80% of eggs laid (Thomas, 1974) and Butterfly Conservation locally has worked closely with DEFRA and now Natural England to target farmers in an effort to persuade them to cut hedgerows on longer rotations of 2-3 years. With the introduction of incentive schemes to encourage more sympathetic hedgerow management from the mid-nineties onwards, efforts have been particularly directed at encouraging farmers to take up these opportunities (Barker, 1995). At the same time, survey effort has continued, mainly through winter searches for ova, which has provided new information on the butterfly's distribution and ecology. Currently, the butterfly has been recorded in 147 1km squares within Worcestershire.

Background to this Report

In 2005, significant changes were introduced to the system of farm payments which offered considerable potential benefits to the Brown Hairstreak (Taylor, 2005). Production subsidies to farmers have been replaced by a Single Farm Payment based on area which also requires minimum environmental standards to be achieved. Beyond this, a new Entry Level Stewardship (ELS) scheme was introduced to address landscape scale environmental problems and provide payments to farmers to protect and enhance important environmental features. This included a hedgerow option where hedges would be managed on a rotation of 2-3 years. The ELS scheme works on a points basis with points being earned where hedges are maintained at a height of at least 1.5 metres and where cutting is no more than once in two years. Additional points are awarded for the maintenance of slightly taller hedges or where the rotation is three years rather than two. For situations where the needs for wildlife conservation were of prime importance, a Higher Level Stewardship (HLS) scheme was available which required the completion of a detailed Farm Environment Plan and demanded more specific management prescriptions. The hope was that together these schemes would lead to changes in the way that hedgerows are being managed and to bring benefits to wildlife including the Brown Hairstreak.

Take-up of the scheme in Worcestershire has been very good (Natural England, pers. comm.) Apparently around 50% agricultural land is now in the Entry Level Stewardship (ELS) scheme rising to as high as 70% if Higher Level Stewardship and the old Countryside Stewardship Scheme are taken into account, yet a superficial glance across the Worcestershire countryside demonstrates very clearly that most hedges still appear to be cut annually. Hedgerow flailing, always a problem for the Brown Hairstreak, seems to have been particularly widespread this past winter and once again some of the key breeding hedgerows particularly around Grafton Wood have been cut with the loss of many hundreds of eggs. This despite the fact that some of the farms in question are subject to various stewardship schemes.

In February 2008, a meeting was held between representatives of West Midlands Butterfly Conservation and local Natural England staff at their Worcester office to try to ascertain what appears to be going wrong. In order to try to obtain more of an overview, as a consequence of the meeting, Natural England provided us with a map showing which farms had taken up the hedgerow option within ELS (see below). The boundaries and numbers on the map relate to the farm agreement number, the differing colours are of no significance as far this current study is concerned. The solid squares represent 1km squares where Brown Hairstreak eggs have been recorded. Branch volunteers, supported by some of our Brown Hairstreak local champions, agreed to visit some of the farms concerned that fell within the current distribution of the butterfly. No personal approaches were made to landowners at this stage and all observations and photographs were confined to roads and public footpaths. This report sets out the findings of this survey and makes some recommendations as to the future.



Results

Farm 1. Great Lodge Farm viewed from the Saltway. Photo taken from SO97173/62792 looking northwards. A very large farm but all hedgerows appeared to have been cut (MJW).



Farm 2. Leasowes Farm viewed from Wallhouse Lane. Photos taken from SO98813/64305 and SO99384/64229. All the hedgerows had been flailed as far as I could tell (MJW).



Farm 3. 75-90% hedgerows cut. Photo taken at SO970627 looking SE (AC).



Farm 4. 75-90% hedgerows cut. Two photos taken from S0995627 both looking NE (AC).



Farm 5. Broughton Court. Photo taken at S094798/62474 looking south opposite Mere Green Cottages. A mix of hedgerows, some flailed some uncut. Limited amount of blackthorn present, most hedgerows appear to be hawthorn dominated (MJW).



Farm 6. 90% hedgerows cut all very severely flailed. Two photos taken, one from S0990616 looking SW and the other from S0988618 looking NE (AC).



Farm 7. 75-90% hedgerows flailed. Two photos taken from S0973607 looking E (AC).



Farm 9. Less than 50% flailed. Photos taken from S0998593 (AC).



Farm 10. Mainly 75-90% flailed, 90%+ in some areas. Two photos taken from SP045594 one looking SW and the other NE (AC).





Farm 12. In three sections: a) N. section adjacent to Hanbury park and close to Hanbury Church. Three photos taken: two at S095307/64335 looking SW and S and one at S095202/63940 looking NE. Relatively small area but all hedgerows appeared uncut.



Limited amount of blackthorn but short stretch at second location (see photo below) that would benefit from the removal of other hedgerow trees and scrub.



b) Middle section to the east of Mere Green. Photo taken looking WSW from S095542/62496. Roadside hedge on northern side of road had been cut only part of its length and looking south of the road there were other areas of uncut hedges visible.



c) Southern section around Broughton Green not looked at (MJW).

Farm 15. Springfield Farm. Roadside hedge cut but some other hedgerows uncut. Photo taken from SP012563 looking east. The uncut hedges had clearly not been cut for some years and I suspect that the cutting regime is the same every year. If this is the case, the stewardship agreement has not led to any change in hedgerow management but is merely funding existing practices (MJW).



Farms 19 and 20 seen from main A422 - no pictures - no easy access - only about 25% flailed. Encouraging given proximity to Grafton (PS).

Farm 21. The large section E of Naunton was 75% flailed - the photo is illustrative of the general situation. Taken at SO969526 looking NE. There appeared to be isolated fragments not flailed. The second photo taken at SO9745527 looking north gives an example -quality poor through use of zoom. The small section of Farm 21 adjacent to A422 was 50% flailed (PS).



Farm 23. Most hedges had been cut (80%+) but limited examples of hedges only cut one side. Photo taken from SP02688/54526 looking N (MJW).



Farm 25. As far as I could see all hedgerows had been cut. Photo taken at SP02501/54281 looking E (MJW).



Farm 26. A large farm either side of the village of Abbots Morton. The southern half appeared to have been all flailed (photo taken at SP03150/54544 looking N) but the northern half was much better (no photo) with some good stretches of uncut hedges with high blackthorn content. Eggs searched for at SP034553 but none found (MJW).



Farm 27. 50% or less flailed - tending to flail the roadside and leave field side unflailed. Photos taken at S0982537 looking northwards will illustrate this (PS).



Farm 28. Lower Barn Farm. Hedges had been left to grow tall and it appeared that not all had been cut over the winter. Photo taken at SP03841/54729 looking W (MJW)



Farm 29. Heavily flailed - it appeared up to 100%. In the photo taken from SO991519 looking WNW I've attempted to capture a more extensive view which shows this (PS)



Farm 32. Photo taken from SP023526 looking NE. Roadside hedge flailed in part but some other hedges uncut (MJW).



Farm 33. All hedges appear to have been flailed although roadside hedge verging on woodland left very tall. Photo taken from SP028524 looking SE (MJW).



Summary Table:

Extent of flailing	Over 90%	Between 75-90%	Between 50-75%	Less than 50%
Number of Farms	7	6	6	3

Discussion

The Entry Level scheme has been designed in a way that puts the onus on farmers to determine what are the important environmental or historical features on their farm and they are given a free choice from a menu of options as to which to include. There is no advisory role played by Natural England so unless the farmer accesses help and advice from FWAG or elsewhere, there are no assurances that what is included in the agreement in any way overcomes the landscape scale environmental problems the scheme was intended to address. As far as hedgerows are concerned, the hedgerow option has proved popular but, because of the way the points system works, only a small proportion of farm hedges need to be entered in the scheme in order to reach the required target for payment and it is farmers that select which hedgerows to include and which to exclude.

Another problem is that the general lack of resources and staffing available to Natural England as a result of the recent reorganisation and government cutbacks also applies to compliance. There has been no proper system of monitoring in place to ensure that the various prescriptions in the agreement are being followed. Evidence suggests that there may be confusion in the minds of some landowners regarding what is meant by rotational cutting and that this has led to an "on year off year" approach to flailing with all the hedges being cut the same year rather than some of the hedges being cut in rotation every year. One farmer, for example, who has three parcels of land under an old stewardship agreement believed that cutting on rotation meant that he could cut all his hedges on each block of land in turn! (Natural England, pers. comm.). The scheme has been devised in a way that requires "low technical input" to use the jargon and this has been exacerbated by cuts in Natural England's budget which have seriously limited the number of "care and maintenance" visits that have been possible. There is an urgent need to address this problem. It is only where things appear to have gone seriously wrong, such as was the case with hedgerows adjacent to Grafton Wood, that actual visits by Natural England staff have taken place.

Despite these serious problems, there were some examples of good practice. Farms 5/12/19/20/26 and 28 all had evidence of at least some hedgerows that had not been cut, while Farms 23 and 27 had hedges that had only been flailed on one side which provides some continuity of habitat. Farms 9 and 15 also had examples of uncut hedges but these had generally not been cut for some years and were overgrown and straggly providing little if any suitable Brown Hairstreak habitat. With other farms, however, it was difficult to spot any hedges that had not been flailed.

Despite relatively high take-up of the various schemes on offer, DEFRA's own figures nationally (DEFRA, 2007) show that only 22% hedgerows are in favourable condition. As far as this present survey is concerned although, without copies of the farm agreements, it is impossible to say whether the particular cutting regimes were compliant or not, what was abundantly clear was how little impact overall the scheme was having on the scale of annual hedge trimming. On most farms visited in excess of 75% hedgerows had been flailed this winter and on many farms this figure was well over 90%. Indeed, in the majority of cases, it was impossible to distinguish any difference between the hedgerow management practices of a farm within ELS and an adjacent farm outside the scheme. This seems a pretty powerful indictment of a scheme designed to address landscape-scale environmental problems and costing annually thousands of pounds of taxpayer's money.

Conclusion

A proposed way forward:

1. In any future review of ELS, consideration needs to be given to revising the points system so that payment requires a greater proportion of hedgerows to come into rotational hedgerow management and ideally hedges to be cut on a three year rotation rather than two.
2. The role of Natural England in respect of ELS needs to be extended so that advisors are more involved in the process of drawing up of farm agreements and that automatic annual visits are made to every farm in the scheme. This implies further resources being made available to Natural England to undertake this work and higher priority being given to this.
3. More resources should be made available by Government for the Higher Level Stewardship Scheme which requires the completion of a detailed Farm Environment Plan and allows for site-specific tailored prescriptions. Locally, available resources should be directed towards the Forest of Feckenham which should be viewed as a priority area for HLS agreements alongside those areas of the county already identified.
4. A much more coordinated overview in our approach is required to ensure clear conservation benefits for the Brown Hairstreak. At the moment, while there is useful uncut blackthorn on some farms, these areas are isolated from one another and there is no continuity of available habitat. The Brown Hairstreak requires a landscape scale approach to its conservation and there is a clear opportunity to develop a specific project which would target farms and hedgerows in key areas in an attempt to provide continuous lines of hedges to be left uncut each year to act as wildlife corridors. The scope of such a project would require further thought and discussions between key partners as it would involve a much more "on the ground approach" than what presently occurs in order to designate individual hedges for rotational management and communicate directly with farmers and their contractors. A dedicated project officer would be required to fulfil this role and this would necessitate the identification of additional resources in order for this to happen.
5. It has to be recognised that culture and tradition regarding annual hedge flailing is strongly ingrained amongst farmers to such an extent that neatly trimmed hedges are often seen as an outward sign of good husbandry of the land. The announcement at the Royal Show in July of a new initiative Hedgelink aimed at encouraging better hedgerow management is to be welcomed as is the fact that Butterfly Conservation nationally has signed up as a founding member (www.hedgelink.org.uk). There is clearly a long way to go in order to win over hearts and minds but effective communication would be a good start. One positive to come out of our meeting with Natural England, providing they can find some money to support it, is a farm visit planned for the autumn which would be open to farmers and their contractors to attend. This would provide the opportunity to discuss hedge cutting regimes at first hand and hopefully offer follow up visits.

With butterflies and moths continuing to decline, it is really important that agri-environment schemes deliver the wildlife benefits for which they were intended. Our experience in Worcs this past winter in particular shows just how far we have still to go.

Acknowledgements

This report could not have been produced without the support of two of our local Brown Hairstreak champions Andrew Curran (AC) and Peter Seal (PS) who, along with myself, carried out the farm hedgerow surveys on which this report is based. Thanks are also due to Wendy Jones and Danny Smith at the Natural England Worcester office who have consistently supported efforts to improve hedgerow management for the Brown Hairstreak and provided the locations of farms within the Forest of Feckenham who had signed up to the hedgerow option within Entry Level Stewardship. I would also thank Trevor Bucknall, Mike Southall and John Tilt for attending the meeting with Natural England from which this report originates and their continuing major contribution to ensuring the survival of the Brown Hairstreak in the Worcestershire countryside. Special thanks to Jenny Joy for her comments on an earlier version of this report.

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July 2008