The Black Hairstreak is one of our most elusive butterflies, found only in thickets of Blackthorn in woodlands on heavy clay soils between Oxford and Peterborough in the East Midlands of England. The adults spend nearly all their time in the canopies of trees or dense scrub where they feed on honeydew secreted by aphids. At certain times they make short looping flights in and out of the tree tops. Butterflies can be seen from early morning to early evening with a peak of activity around midday. The adults are easy to confuse with those of the White-letter Hairstreak and Purple Hairstreak which fly at the same time of year, so care is needed to confirm identification of the underside marking, which has a row of black spots in the outer orange margin and may have a white ‘W’. The Black Hairstreak declined steadily during the twentieth century, with the majority of the remaining 50 or so sites in Oxfordshire and Buckinghamshire, where several recently discovered colonies suggests something of a recovery.

Lifecycle
The butterfly is single-brooded with adults flying in a short period from early June to mid-July. The adults often congregate on Field Maple (Acer campestre) or Ash (Fraxinus excelsior), possibly because these trees contain large aphid populations that produce abundant honeydew. They are rarely seen at ground level but sometimes come down to feed on flowers of Wild Privet (Ligustrum vulgare), Dog-rose (Rosa canina) or bramble (Rubus spp.). Eggs are laid singly, usually on the bark of young growth (2-3 years old) on mature Blackthorn (over 10 years old). Most eggs are laid above 1.5m from the ground though small numbers are laid lower down on Blackthorn suckers. The eggs last through the winter and hatch in the spring, just before bud-burst, when the young larvae feed on the developing flower buds. Older larvae feed on the leaves, which they resemble closely. They move to pupate on the top of Blackthorn leaves or twigs, often in exposed positions, where the conspicuous black and white pupae resemble bird droppings.

Conservation status
Regional priority in East Midlands, East of England and South East England regions.

Colony structure
The Black Hairstreak is a sedentary butterfly that often breeds in the same small, discrete part of a wood or thick hedgerow for 20 years or more. Larger woods may contain several separate breeding areas but butterflies are rarely seen outside woods, except along thick hedgerows with abundant mature Blackthorn. The Black Hairstreak has very limited powers of dispersal. One introduced colony in Surrey spread 1.5km over more or less suitable habitat in 30 years and even slower dispersal rates are recorded in its traditional East Midlands woodlands.

Foodplants
Blackthorn (Prunus spinosa) is used exclusively by most colonies, but occasionally Wild Plum (P. domestica) and other Prunus species are used.

Habitat
Most colonies breed in dense mature stands of Blackthorn growing in sunny, sheltered situations, usually along wood edges, the edges of rides or glades, or along hedgerow thickets. Smaller colonies occur in more exposed or shady situations, such as canopy gaps in mature woodland, small patches of scrub or in sheltered hedgerows.
Habitat management for the Black Hairstreak

The overall aim is to maintain dense mature 3-4m high Blackthorn stands along wood or ride edges and in hedgerow thickets.

Retention of Blackthorn
Woodland management that retains Blackthorn will benefit the Black Hairstreak. Any major clearance of Blackthorn in woods and hedges within its range should be avoided.

Blackthorn Management
Cut even-aged Blackthorn stands in small patches (10-15 sq m patches or 10-15m length of hedgerow) on long rotations (20-50 years depending upon the site) and allow to regenerate into mature stands. No more than 25 per cent of habitat should be cut at any one time and less on small sites. Irregular cutting of indentations into the Blackthorn should provide more sheltered conditions. On woodland sites, remove maturing trees where these shade Blackthorn thickets, but conversely, removing or laying tall hedges providing shelter to adjacent Blackthorn thickets should be avoided. Create new habitat nearby by allowing Blackthorn to spread by sucker growth.

Laying Blackthorn like a hedge may also be effective, especially when the cut material is laid with a south-facing aspect maximising the sunlight received by the regrowth. However if the Blackthorn is old, laying may be impractical without stems snapping. Compared to cutting, laying also has the advantage of potentially reducing the impact of management on over-wintering eggs.

Planting
Include Blackthorn stands in any new woodland plantings within the Black Hairstreak’s range. Select south-facing, sheltered locations, unshaded by trees. Only plant half the available area and create indented edges.

Deer Management
In some woods, natural regeneration of Blackthorn is limited by increasing deer populations, mostly introduced species such as Muntjac and Fallow Deer. Cutting Blackthorn at 1.5-2m height reduces grazing of regenerating shoots. Laying Blackthorn like a hedge rather than cutting it can reduce deer damage but reducing deer populations to acceptable limits is likely to be a more effective long term strategy. Fencing Blackthorn regeneration plots has been used where no deer management takes place.

Retaining Blackthorn

---

Butterfly Conservation

Saving butterflies, moths and their habitats

Head Office Manor Yard East Lulworth Wareham Dorset BH20 5QP
Telephone: 01929 400209 Email: info@butterfly-conservation.org
www.butterfly-conservation.org

Compiled by Sam Ellis, Martin Warren, Stuart Hodges and Dan Hoare. Photographs by Andy Wyldes.
Butterfly Conservation, Company limited by guarantee, registered in England (2206468)
Registered Office: Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP
Charity registered in England & Wales (254937) and in Scotland (SC039268)

Designed and produced by nectarcreative.com 01942 681648. Printed on 100% recycled stock.

Produced as part of Butterfly Conservation’s South East Woodlands project with funding from the Heritage Lottery Fund and supported by the Tubney Charitable Trust.