

Management to conserve the Brown Hairstreak

Woodland edges and rides

Broadleaved woods are essential to Brown Hairstreak colonies and can be managed for their benefit.

- Maintain all farm woods and broadleaved wood edges and retain trees identified as key mating sites and congregation points. Adults tend to congregate around specific groups of trees, particularly in mid August when they are seeking mates. The same trees, usually prominent Ashes, are used for this purpose from year to year. Where these trees can be identified they should be retained whenever woodland management occurs.
- Coppice or fell trees in rotation. Spread any clearing or coppicing work over several years and leave some belts of woodland intact to act as focal points for the colony.
- Manage woodland edges and rides in rotation as for hedges. Woodland edges and wide, sunny rides can also form important areas for egg laying. Any Blackthorn should be cut on rotations of 2-5 years, similar to that for hedgerows. Creating new east-west rides within woods can be valuable, especially where they link existing egg laying areas. When creating new woods or rides plant Blackthorn along sunny, sheltered edges.



Butterfly
Conservation

Brown Hairstreak

Thecla betulae



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Saving butterflies, moths and their habitats

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The Brown Hairstreak is a beautiful and secretive butterfly that depends upon hedgerows and woodland edges for its survival. In Wales the butterfly breeds on blackthorn with colonies usually occurring at low densities over a wide area. The butterfly is severely affected by hedge removal and frequent cutting.

The Brown Hairstreak was once very widespread in Wales but has declined severely due to the loss of woodlands and hedgerows and intensive hedgerow management. Its remaining stronghold is Carmarthenshire with scattered colonies in Pembrokeshire and Ceredigion.

Life Cycle of the Brown Hairstreak

Adults emerge from late July and may be on the wing into October. They spend much of their lives in the treetops or along woodland edges feeding on honeydew secreted by aphids, and secretions produced by Ash trees. They are most often seen with their wings closed, revealing golden brown underwings that are crossed by two thin white lines and their distinctive orange tails. Their upper surfaces are dark brown, though the female has orange patches on the forewings.

The females are more commonly seen as they fly along hedgerows or around young scrub looking for suitable egg-laying sites on young Blackthorn stems. The eggs remain here throughout the winter and do not hatch until the leaves open during the following May.

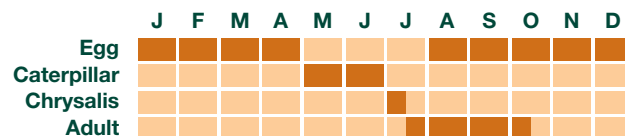
The pale green caterpillar feeds on Blackthorn leaves until it pupates in early July.

The chrysalis is formed close to the ground, amongst leaves, and is sometimes tended by ants.

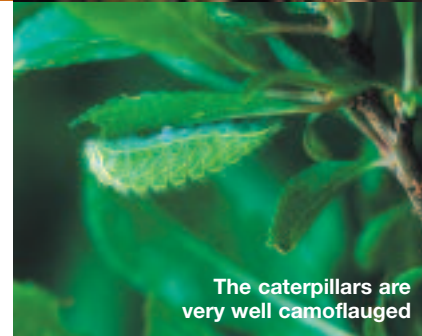
Position of eggs

The butterfly's presence is most easily confirmed by searching Blackthorn for eggs during winter. The white, pinhead-sized eggs are conspicuous against the dark bark of the young Blackthorn twigs. They are usually laid singly, between ground level and up to 1m (3ft), on protruding shoots at the hedge bottom or suckering Blackthorn at the field edge. Sunny, sheltered positions are favoured for egg laying.

Colonies are normally centred on a wood, but egg-laying usually extends over several square miles of the surrounding countryside. A complex of woodlands, scrub and hedgerows with abundant, suitably managed, Blackthorn is therefore required. Most colonies occur on heavy or clay soils where blackthorn is a dominant constituent of the hedgerows or scrub.



Brown Hairstreak eggs



The caterpillars are very well camouflaged



Brown Hairstreak underside

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Blackthorn hedges

As the Brown Hairstreak's eggs and caterpillars depend on young blackthorn twigs for much of the year, most hedge trimming will severely affect them. Annual trimming is particularly harmful and can kill whole populations. This can be avoided, and populations enhanced, by adopting appropriate cutting regimes.

- Trim hedgerows once every 3-5 years, and cut no more than a third in any one year. This can be 50% cheaper than annual cutting, as well as ensuring a healthy hedge and producing a more diverse and attractive countryside.
- Rotations over 7 years involving hedge laying or coppicing are also highly suitable. This produces young growth that is highly attractive to egg laying females. It is advisable to fence early coppice against browsing by stock.
- Avoid chemical spraying up to field edges and, ideally, leave an uncultivated margin. Spraying can damage the eggs and caterpillars as well as the hedgerow, so leaving wide unsprayed field margins is beneficial to wildlife.
- Look for opportunities to restore and create hedgerows using Blackthorn, especially if you can link up existing hedges and woodland edges. Generally, east-west hedges with a sunny, south-facing side are favoured by Brown Hairstreak.