

Ecology

The Brown Hairstreak is an elusive butterfly of hedgerows and woodland edges. It breeds on blackthorn. Colonies occur at low densities over a wide area of farmland centred on a wood, but egg laying extends over several square miles of the surrounding countryside.

Eggs are laid on young blackthorn twigs, at base of thorns, on leading shoots growing proud of the hedge or suckering or young seeded blackthorn at the base of the hedge often in sheltered sunny positions. The eggs hatch at the same time as the leaf buds of the Blackthorn are bursting and the larvae feed on these fresh growths.

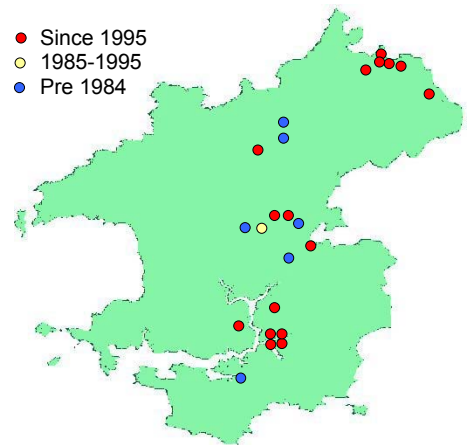
Adults emerge in late July to early August with egg laying starting soon after. They have a long flight season and may still be on the wing into October. They spend most of their time in the tops of trees or along woodland edges. They tend to congregate around specific groups of trees ('master trees'), particularly when looking for mates. Master trees can be large, bushy Ash or Oak trees growing on sheltered valley sides, or along wood edges and rides.



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Outline Distribution Map (1985 – 2004)

Data source: WTSWW



Where in Pembrokeshire?

A butterfly of the tree canopy, most records are of females searching for suitable egg laying sites (July to September), of the eggs (autumn to winter) themselves or a small number of larvae records (April to June). It is therefore difficult to locate and maybe under recorded.

Records show that it maybe found anywhere in the eastern part of Pembrokeshire from the upper reaches of the Cleddau Estuary north to the Gwaun Valley. In this area of Pembrokeshire, blackthorn is a major component of hedges and forms a widespread habitat, which could support a large population. The many sheltered wooded valleys provide the vital tree top habitat.

Why are they in trouble?

Historically the Brown Hairstreak may have suffered from hedge removal, but other facts now effect it's survival including:

- The major threat is the intensive annual flailing of hedges.
- Lack of traditional management of cutting and laying hedges.
- Elimination or neglect of scrub edges and pockets.
- Damage of young blackthorn growth from browsing animals.

The conservation of the Brown Hairstreak presents a great challenge because a single colony typically breeds over wide areas of land and cannot be conserved by site-based measures alone. It requires the conservation of whole landscapes and sympathetic farm/land management encompassing woods, hedges and field margins.

What can you do to help?

- If you are a land manager, you should maintain your hedges on a five-year rotation. Ideally allow hedges to encroach into fields or wide verges to allow blackthorn suckers to develop.
- Encourage your neighbours to manage hedges sympathetically within your community.
- You can carry out an egg survey along hedgerows in your local area.

For more information on survey methods, where to send records or how you can get involved with existing surveys contact the Biodiversity Officer.

What's being done?

There is no legal protection for brown hairstreaks in the UK. Local Planning Authorities and land owners are legally obliged to have due regard to the importance of brown hairstreaks for biodiversity, through the Welsh Assembly's Section 74 list.

There is currently no general guidance available in Pembrokeshire for the management of hedges. None of the agri-environment schemes currently offer grant aid to manage hedgerows sympathetically for the brown hairstreak.

Annual egg counts are carried out at the Wildlife Trust Reserves at West Williamston in south Pembrokeshire and the Welsh Wildlife Centre, Cilgerran.

FREEPOST

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BROWN HAIRSTREAK ● BRITHRIBIN FROWN ● THECLA BETULAE



The actions listed below aim to

- Establish the current abundance of brown hairstreak in Pembrokeshire
- Maintain the current geographical range of brown hairstreak in Pembrokeshire, thought to occupy 13 10 km squares.
- Achieve favourable condition of the habitats associated with brown hairstreak

	ACTION	PARTNERS	DATE	DETAILS	LINK TO
1	Raise awareness of the brown hairstreak, its habitats, and conservation. Raise awareness of the economic and conservation benefits of low-intensity hedge management practices.	PLANED ,FUW, NFU, PCC, WTSWW, PCNPA	Nov 05	Launch event	PBP AWG
				Set-up community-based projects, hold training days for local authority staff, contractors and communities Promote via Western Telegraph/ Pembs Radio / Wildlife Trust	PBP AWG
2	Designate a 'Brown Hairstreak Area' covering eastern Pembrokeshire from a line joining the upper Cleddau Estuary north to the coast, east to the Carmarthenshire boundary to include all land below 200m. Within this area ensure that the brown hairstreak is considered in :-	PCNPA, PCC	Sept 05 on going	all relevant strategic plans	PBP DAG
		CCW, WAG, PCNPA	Sept 05 on going	agri-environment schemes	PBP FAG
		CCW, PCNPA	Sept 05 on going	land management agreements	PBP FAG
		PCNPA, PCC, CCW, WW, EA, Utilities	Sept 05 on going	management of public land (road verges, schools, housing areas, carparks, agricultural tenancy or similar agreements).	PBP DAG
3	Ensure that brown hairstreak is fully considered in any development that may impact upon the species the 'Brown Hairstreak Area'. (At least three large construction projects (at a landscape scale) are planned for the area:- Bluestone, and the alterations to the A40 West of St Clears, including the provision of by-passes for Robeston Wathen and Llanddewi Velfrey)	PCC, PCNPA, CCW	Sept 05 on going	Ensure any large construction project provides extensive blackthorn rich hedges and blackthorn scrub features, and that they are manage appropriately. Linear schemes such as pipelines and cycle ways also lend themselves to providing blackthorn rich features. All development landscape advice/requirements to contain such conditions.	PBP DAG

	ACTION	PARTNERS	DATE	DETAILS	LINK TO
4	Carry out a systematic survey of the 'Brown Hairstreak Area' to establish the butterflies present status. The basic requirements for this species are probably met of a wide area of eastern Pembrokeshire, the only factor limiting its success being the annual flailing of hedges. Existing records of the species (apart from the two sites whose eggs are counted annually, and work in the north of the county) have resulted from casual observation. In Carmarthenshire a more systematic survey has revealed its presence over a wide area.	CCW, WTSWW, PAVS, BC	Nov 05 – Jan 05	Habitat extent - map the existence of blackthorn rich hedges and their suitability for the brown hairstreak (how sheltered and exposure to the sun). The surveying of woods to assess extent of 'master tree' vegetation	PEVN
		CCW, BC	Nov 05 – Jan 05	Population – search likely hedges, field margins and scrub for eggs potential species challenge fund. search likely woods for active 'master trees'	Funding PEVN
5	Monitor existing sites	WTSWW	Dec / Jan 05 on-going	Continue monitoring numbers of eggs at both West Williamston and Teifi Marshes	PEVN
6	Ensure agri-environment schemes are sensitive to the needs of the Brown Hairstreak within the 'Brown Hairstreak Area'	CCW, PCNPA	Jan 2005	Develop and implement local versions of schemes (all of which, even today, promote farm management that results in the extinction of the Brown Hairstreak)	Tir Gofal
		CCW, PCNPA	Jan 2005	Develop and promote with partners, a Code of Best Practice on the management of 'Brown Hairstreak hedges'. Ensure that the Code of Best Practice is promoted and implemented by all partners.	PBP AWG
7	Promote and encourage the uptake of agri-environment schemes	Farming Connect, CCW, PCNPA, FUW	Sept 05 on-going	Visit targeted farms to discuss opportunities with managers and assist in scheme applications	PBP FAG
8	Education – Adults and children Workshops, school visits, discussion groups (churches, WI etc, community forum)	PLANED	Sept 05 on-going	Ensure the people of Pembrokeshire are aware that a suite of plants and animals are particularly reliant on Pembrokeshire and that with little effort much can be done for them.	PBP AWG
9	Designate colony sites as LNR/SSSI and ensure existing LNR/SSSI/NNR in the 'area' take consideration of the Brown Hairstreak's requirements	CCW, PCNPA, PCC	Sept 05 on-going	Review existing management plans to include scrub/hedge management proposals when appropriate.	CCW PCNPA
10	Research the justification / psychology for current hedge maintenance practices.	FUW, NFUW	When resources permit	Study to understand economic/psychological pressures on land managers so that more sane methods may prevail. (possible PhD)	SPEEL

This plan contains all known information on February 2005, future schemes will be updated on the website plans. The whole plan will be reviewed in 2010.

INTERACTION WITH OTHER HAPs AND SAPs

Management for many species and habitats is compatible with that for the brown hairstreak, eg. Traditional field boundaries, bats, reed bunting, yellowhammer, tree sparrow, bullfinch.

A glossary for the abbreviations used in this plan can be found in the full Local Biodiversity Action Plan available from the website or the biodiversity officer.

Website: www.biodiversitypembrokeshire.gov.uk

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