

SPECIES RICH HEDGEROWS

DEFINITION

The characteristic hedge banks that occur in North Devon's Biosphere Reserve are an integral element of the farmed landscape and over large areas of the region are the main refuge for a wide range of plants and animals.

North Devon has many types of hedge, but commonly they comprise of a bank with vegetation growing on the top. These banks may be faced by stone or turf, and their construction reflects local soils, rocks, trees and land-use practices.

Species rich hedges are not easy to define, but normally such a hedge should:

- Have, on average, 5 or more native woody species in a 30 metre length; or
- support, in whole or in part, the life cycle of one or more key species; or
- contain species which are specially protected; or
- have at least 6 non-woody flowering plants or ferns which are typical of woodland e.g. primroses or bluebells.

Hedge networks are increasingly recognised to be of great importance for nature conservation as well as defining our landscape. Hedges are often the most significant wildlife habitat remaining, and are an essential refuge for a great many woodland and farmland plants and animals. The number of species they support can be very high – over 600 flowering plants, 1500 insects, 65 birds and 20 mammals have been recorded at some time living or feeding in hedgerows. Although very few of these species are only found in hedges, the sheer extent of the habitat means that it is of great importance for the survival of many species, including BAP species such as greater horseshoe bat.

Generations of farmers have been responsible for creating and managing these hedges as stock-proof barriers and shelter for livestock and crops. The hedges may mark changes in soil type and most are still valued by farmers as field boundaries and for shelter despite the introduction of stock fencing. New research has demonstrated the value of hedges as a source of beneficial insects that control agricultural pests such as aphids and others pollinate crops. Recently, the public has come to value hedges for their landscape, historical and wildlife interest.

Hedges are tremendously important historically. They preserve for us human decisions about the use of the landscape, which often go back hundreds or even thousands of years. Most of our hedges are a medieval antiquity; with at least a quarter of them being more than 800 years old. Reflecting their age, many hedges are archaeological sites in their own right, containing artefacts contemporary with their construction, or preserving pollen, plant fossils and other information beneath their bases.

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Hedgerow trees are an essential part of the wildlife and landscape interest of hedges. Recent research has revealed that the number of hedgerow trees is falling rapidly, across the country, including within Devon. Too few young trees are growing in Devon's hedgerows to replace those that are being lost due to old age or disease, or because they are being felled for agricultural or safety reasons. The research shows that we have less than half the number of young trees we need to keep the population stable.

DISTRIBUTION

It is estimated that there are around 20,000 miles (32,000 km) of hedges in the Biosphere Reserve. They vary from dense, well-trimmed lines of blackthorn, hawthorn and hazel shrubs on small banks, to large overgrown hedgebanks containing mature ash and oak.

Devon probably has more species-rich hedges than any other county in the UK, reflecting its large size, its pastoral landscape and the favourable management adopted by farmers. Recent surveys by FWAG in 10 Devon parishes found that 72% were species-rich which was substantially higher than the national average (54%) though there were variations between parishes. 132 hedges in Monkleigh parish were surveyed and 81% were found to be species-rich. In Brayford, 159 hedges were surveyed but only 36% were species-rich due to the greater prevalence of typical Exmoor beech hedges.

It has been estimated that there are 120,000 miles (190,000 km) of species rich hedge in the UK. It is thought that around 75% of the Biosphere Reserves hedges are species rich, which would amount to 15,000 miles (24,000 km) of BAP habitat. The hedges of the Biosphere Reserve could therefore contain one eighth of the national BAP habitat, making them potentially the most important habitat of the reserve.

CHARACTERISTIC WILDLIFE

- Plants: Primroses, campions, bluebell, cranesbill, vetches, bramble, dog-rose, foxglove, hawthorn, blackthorn, hazel, holly.
- Insects: Brown hairstreak butterfly, gatekeeper, great green bush cricket, moths, beetles.
- Birds: Yellow hammer, whitethroat, chaffinch, song thrush and dunnock.
- Mammals: Dormice, badgers, hedgehogs, bats (especially greater horseshoe bats)
- Reptiles: Slow worms, grass snakes, common lizards.
- Lichens: Beard lichens (*Usnea* spp) and lungworts (*Lobaria* species) on mature hedgerow trees.
- Amphibians: Common toad

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THREATS

Changes in agricultural practice, combined with expansion of towns and villages and development of the road network, have resulted in significant removal of hedges and deterioration in their management.

Little data is available to quantify changes in this resource within the Biosphere Reserve. Hedges are, however, thought to be declining both in quantity and quality, through hedge removal (before 1997 Hedgerow Regulations), through lack of replacement of hedgerow trees and through neglect or inappropriate management. A 1977 study of hedges within Exmoor National Park estimated that 320km (200 miles) were lost through removal in the preceding 20 years, leaving 5,600km (3,500 miles).

Cutting hedges to the top of the bank (i.e. no shrubby material left on top) and erosion from heavy vehicles in narrow Devon lanes are both damaging to hedges and happen to some hedges across the Biosphere Reserve.

This action plan seeks to influence the management of hedges by farmers, developers and others, to reverse the decline in biodiversity. The plan recognises that persuasion and encouragement are usually more effective tools than legislation, and that farmers must be fully involved in any decisions that are made.

CURRENT ACTION

Much positive action is already being taken by a wide range of bodies to maintain or enhance hedges.

Local authorities implement the Hedgerow Regulations 1997 which protect 'important' hedges. These regulations were drawn up independently from the UK Biodiversity Action Plan and do not cover many species e.g. birds known to be in serious decline.

Local authorities have a statutory duty to have policies which encourage the management of linear features essential for the migration, dispersal and genetic exchange of species. Both district authorities have Tree and Conservation Officers to advise and enforce on hedgerow legislation issues. North Devon Local Plan (2006) includes a bat sustenance zone for 4 kilometres around Caen Valley Bats SSSI to protect the foraging areas and commuting routes, including river valleys, hedgerows and scrub land and access to these foraging habitats.

Cross compliance requirements for hedgerow protection include having unploughed and unsprayed zones extending 2 metres from the centre of the hedgerow.

Agri-environment Schemes, funded by Natural England, offer financial incentives to landowners to manage hedges sympathetically, although the money for laying and new planting has substantially reduced (from £11M nationally in 2004 to £2M in 2010). Farmers entered in to the Single Payment Scheme (SPS) with the Rural Payments Agency (RPA), generally must not cut or trim any hedgerow on their farm between 1 March and 31 July, which is the main breeding season for birds.

Replacement or new hedges are required by the Highways Agency in new road schemes. Awareness raising events and training courses especially during Devon Hedge Week, coordinated by the Devon Hedge Group. Hedgerow advice is offered by FWAG, Devon Wildlife Trust and NDABS

Many farmers and other land managers spend much time and money managing hedges



LINKS TO OTHER BIODIVERSITY ACTION PLANS

	UK BAP	SW BAP	Devon BAP	Exmoor BAP
Habitat Action Plans	Hedgerows	Species rich hedges	Species-rich hedges	
Species Action Plans	Dormouse	Dormouse	Primrose, greater horseshoe bat , dormouse, barn owl Devonian whitebeam	

OBJECTIVES

- 1 To safeguard existing hedges against removal or loss to development, and that any loss is compensated for by new planting.
- 2 To develop greater public understanding, involvement and enjoyment of hedges and their management.
- 3 To extend and improve knowledge of the services delivered by hedges, including their biodiversity, landscape, cultural, water management wood fuel, carbon storage and agricultural values.
- 4 To promote sustainable management of hedges and their trees, in particular to encourage rejuvenation through laying, appropriate cutting management and recruitment of new trees.

	ACTION	TARGET	LEAD DELIVERER	PARTNERS	Obj. No.
A	Policy and Legislation				
1	Ensure that planning policies and development plans protect hedgerows from development, removal or inappropriate management and seek to minimise adverse affects on hedges from planning proposals.	No net loss of species-rich hedgerows	NDC, TDC	DCC, PCs.	1
2	Ensure that BAP feed into the Local Strategic Planning Process with particular reference to Strategic Nature Areas and Landscape Character Appraisals to influence the Local Development Plan.	BAP are considered as part of the Strategic Planning process.	NDC, TDC	DCC	1
3	Ensure the Hedgerow Regulations 1997 legislation is maintained and enforced.	No net loss of species-rich hedgerows	NDC, TDC		1
B	Research and Monitoring				
1	Collate records of species rich hedgerows in order to have accurate information for planning decision-making process.	Ongoing	DBRC	NDC, TDC, DWT	1,3
2	Investigate criteria for County Wildlife Site status for species rich hedges	Criteria drawn up	DBRC	DHG	1,3
C	Site Safeguard and Management				

ACTION		TARGET	LEAD DELIVERER	PARTNERS	Obj. No.
1	Maintain list of contractors able to carry out good quality traditional hedge management.	List circulated to all interested parties	NE	DHG	2,4
2	Promote and encourage good quality hedge laying	Two hedge laying training courses to be run each year	NDABS, DRST	FWAG, DWT, NT	3,4
D Advisory					
1	Offer advice on hedgerow maintenance, management and funding sources, with the emphasis on hedgerow benefits and long term management techniques.	10 farm visits offering hedge advice each year	NDABS, FWAG	DWT, NDC, TDC	4
E Communication and Publicity					
1	Promote and support the involvement of local communities in the study and conservation of their local hedgerows within North Devon.	One event organised to involve the public	NDABS	NDC, TDC	2,3
2	Raise awareness of the value of ancient hedges now in gardens and the importance of sympathetic management.	One event organised	RHS	NDABS	2,4
3	Carry out hedgerows surveys with schools/ community groups	Two hedgerow surveys carried out	DWT	Parish councils	2,3