

Hedges and hedgerow trees

History

Hedges and hedgerow trees may be established by retaining boundary trees and shrubs when woodland is cleared, by allowing field boundaries to naturally regenerate, or by planting.

Use of hedges as boundary markers has a long history; some may even be Wildwood remnants kept when early fields were created. Hedges may have become common in the Bronze Age and in some places a basic field pattern survives from Anglo-Saxon times. Across much of lowland Britain, medieval farming created many large open fields after the Norman Conquest. The Enclosure Acts led to the planting of about 200,000 miles of hedges, dividing medieval open fields and common lands into smaller units¹. Substantial hedge-planting ceased before the First World War. After the Second World War, agricultural policy intensified food production with far-reaching consequences. Approximately 118,000 miles of hedges have disappeared since 1950¹.

Ancient hedges pre-date the Enclosure Acts passed mainly between 1720-1840 in Britain and from the mid-seventeenth century in Northern Ireland. **Species-rich hedges** contain five or more native woody species per 30 metres, or at least four in upland England and Wales, and Scotland¹.

Some 40 per cent of British hedges are ancient and/or species-rich, based on 1978 and 1990 data¹. They are concentrated in southern England and Wales and are relatively scarce in Scotland². Northern Ireland has the UK's highest density of field boundaries (13 per cent of the total resource) but it is claimed that virtually all of the estimated 78,000 miles of hedges remaining in Northern Ireland in 1991³ were planted between 1750-1850. This may underestimate the antiquity of hedges, given the unexpected number of ancient woods identified by Northern Ireland's Ancient Woodland Inventory⁴. As much as 30 per cent of Northern Ireland's hedges may be species-rich based on a 1990/91 sample survey¹. Ancient hedges only occur elsewhere in Europe in parts of France, northern Italy, the Austrian alps, Greece and the Republic of Ireland.

Importance of hedges

Hedges are a quintessential feature of the UK. Reflecting cultural history and conserving outlines of past land use, they define many rural landscapes and are locally distinctive, from Arden's holly hedges to Exmoor's beech hedge-banks⁵. They perform a variety of important functions, such as: delineating land ownership; sub-dividing land into manageable units; containing stock; sheltering animals, crops, and buildings; controlling soil erosion; acting as visual screens or deadening noise.

At least 39 crops grown for their fruit or seed are insect pollinated, and a further 32 need insects for propagative seed production⁶. The economic value to farmers of pollination by bees is estimated at £120-200 million per year⁷. Hedgerows can increase the abundance of pollinating insect by increasing shelter, acting as a food source and providing breeding areas, particularly where trees are integrated into hedges^{8,9}.

Important wildlife habitats in their own right, hedges may be an abundant source of food for wildlife, particularly in autumn and early winter¹. They are primary habitat for at least 47 species of conservation concern in the UK, including 13 globally threatened or rapidly declining. Hedges are particularly important for mobile species included in the UK Biodiversity Action Plan¹ and specifically protected in UK and EU law, such as butterflies, moths, birds, bats and other small

mammals. Where hedges are ancient or remnants of ancient woodland, they may act as refuges for characteristic woodland plants and ancient trees.

Concerns about fragmented landscapes and climate change are leading to an increasing focus on improving the resilience of wildlife habitats by increasing their size and protecting them from damaging activities on adjacent land. This may be particularly important for ancient hedges if they are to continue as refuges from which wildlife may recolonise the surrounding landscape. Species also need to move across landscapes in response to change. While the value of hedges as wildlife corridors has been debated¹⁰, they undoubtedly assist movement of some mobile species (e.g. bats¹¹), which in turn may aid dispersal of less-mobile species, such as associated with ancient woodland.

Creation of new hedges may, therefore, make a worthwhile contribution to landscape permeability. Notably, Article 10 of the EU Habitats Directive specifies all Member States should endeavour 'to encourage the management of... traditional systems for marking field boundaries... with a view to improving the ecological coherence of the Natura 2000 network'¹². This is reflected in The Conservation (Natural Habitats &c.) Regulations, 1994¹³, which for planning purposes recognises that such linear features 'are essential for the migration, dispersal and genetic exchange of wild species'.

Losses, neglect and damage

Surveys show the rate of removal of Britain's hedges accelerated after the Second World War^{14,15,16} and was most rapid between 1984-1990; their total length actually increased between 1990-1998 but declined again by 1.7% between 1998-2007¹⁷. However, 4.5 per cent (5,489km) of hedges were removed in Northern Ireland between 1991-1998¹⁸; information for 1998-2007 is not yet available¹⁹.

Table 1. Countryside Survey: length of woody linear features 1984-2007¹

	Country	1984	1990	1998	2007	Direction of significant changes		
		Length ('000s km)				1984-1990	1990-1998	1998-2007
Total woody linear features	GB	710	631	712	700	↓	↑	↓
	Scotland	38	42	49	46	↓	↑	↓
	England	565	497	555	547	↓	↑	↓
	Wales	107	91	107	106		↑	
Hedges	GB	624	506	508	477	↓		↓
	Scotland	28	21	23	21	↓		↓
	England	511	426	428	402	↓		↓
	Wales	86	58	57	54	↓		↓
Lines of trees/shrubs/relict hedge/fence	GB	32	59	99	114	↑	↑	↑
	Scotland	6	9	12	12	↑	↑	
	England	19	33	60	72	↑	↑	↑
	Wales	7	17	27	30	↑	↑	↑
Lines of trees/shrubs/relict hedge	GB	58	71	109	114		↑	↑
	Scotland	5	12	14	13	↑		
	England	43	47	76	82		↑	↑
	Wales	10	12	19	19	↑	↑	

The length of managed hedges decreased by 6.2% in Britain between 1998-2007 with a large proportion turning into lines of trees and relict hedges, due to lack of management. Managed hedges declined in Britain from 1984-2007 but with a period of stability between 1990 and 1998. Since 1990, most have become lines of trees, shrubs and relict hedges rather than being removed, and between 1998-2007 there was a significant increase in the number more than 2m high. During this latter period around 60 per cent of hedges were cut with a flail or saw.

On average there were 3.7 woody species per 30m section of hedge in Britain in 2007, unchanged since 1998. But while 48 per cent of managed hedges were judged in good structural condition, only 31 per cent also had appropriately managed margins, which fell to 10 per cent on arable land¹⁷.

Vegetation associated with hedge bottoms shows long-term deterioration. Species-richness of plants growing alongside hedges across Britain decreased significantly between 1978-1998. More competitive plant species increased at the expense of open ground species, though further change has not been detected. Plant species characteristic of shaded and/or fertile and/or less acidic conditions increased between 1978-2007¹⁷.

Today, neglect and damage have replaced direct loss as the most significant factors affecting hedges. Lack of traditional hedge management, such as coppicing or laying, has led to taller or gappy hedges. Increased stocking rates, excessive flailing of hedge height to around a metre, and use of agrochemicals adjacent to and beneath hedges has led to physical damage, loss of species, and nutrient enrichment, reducing the value of ancient hedges as refuges. These threats are now being addressed through incentives for positive management.

The number of isolated hedgerow trees (i.e., whose canopies do not touch) across Britain may have fallen from over 56 million in 1951²⁰ to around 8 million in 1980 and 5 million in 1998²¹. Different survey methodologies make accurate comparison difficult. Data for 1980 and 1998 has been manipulated to be consistent, and represent a 37% decline. In 1951, the Forestry Commission noted that 'the figures suggest that the volume of hedgerow timber is likely to diminish eventually, through insufficient recruitment of young trees, unless further planting is carried out'. Whether or not 1951 data combines hedgerow trees with other non-woodland trees, such as in parkland trees and clumps, it seems likely numbers of hedgerow trees will continue to decline unless active steps are taken.

Hedge protection

Government policy has come full circle in the last 30 years. Past grants to remove hedges have been replaced by management conditions for hedges in order to receive payments under the Common Agricultural Policy (CAP). So called 'Good Agricultural and Environmental Conditions' (GAEC), in England, require you must not:

- Cultivate or apply fertilisers, dredgings, slurry, manures or pesticides to land within 2 metres of the centre of a hedge; a similar condition applies in Scotland
- Remove a hedge unless you have met all the requirements of the Hedgerows Regulations 1997²²; similar conditions apply elsewhere in the UK
- Cut or trim any hedgerow on your farm between 1 March and 31 July each year (the main breeding season for birds); and similarly elsewhere in the UK.

Entry level and higher tier agri-environment schemes across the UK include a range of options to manage, restore, establish and buffer hedges and hedgerow trees.

The Hedgerows Regulations protect any hedge in England and Wales, more than 20m long, growing 'in, or adjacent to, any common land, protected land, or land used for agriculture, forestry, or the breeding or keeping of horses, ponies or donkeys', particularly those of archaeological, wildlife and landscape importance. Removal of hedges is generally prohibited, although in certain circumstances local authorities may issue a 'removal notice'. Hedges are not so protected in Northern Ireland and Scotland. They are integral to Northern Ireland's landscapes and their removal continued after hedges increased elsewhere in the UK. It has been noted that species-rich hedges are among the Province's 'main threatened habitats' and such 'habitats with the smallest area, greatest biodiversity quality and largest rate of decline, are key targets for protection'¹⁴.

High hedges

The Anti-social Behaviour Act 2003, Part 8 – High Hedges²³, can be used in England and Wales to enforce reduction of high hedges causing a nuisance. It is aimed primarily at fast-growing non-native conifers. A **high hedge** means 'so much of a barrier to light or access as: (a) is formed wholly or predominantly by a line of two or more evergreens; and

(b) rises to a height of more than two metres above ground level.'

Evergreen 'means an evergreen tree or shrub or a semi-evergreen tree or shrub'.

Consequently, associated guidelines apply to evergreen hedges not to individual trees, groups of trees or woodland edges²⁴. Local authorities charge a fee for determining whether a hedge is causing loss of reasonable enjoyment and can issue a notice as a Land Charge. The notice may require the owner to reduce hedge height and undertake annual trimming, taking regard of the nesting season. If ignored, the maximum fine is £1,000. If the local authority has to arrange the work, costs are recovered as a charge on the property.

The Woodland Trust View

We believe:

- Hedges and hedgerow trees should be protected and conserved as key components of our cultural landscape and wildlife heritage. Ancient hedges are irreplaceable, once lost their relict features cannot be recreated
- Hedges and hedgerow trees have an important function in supporting productive agriculture, soil conservation, managing water quality, and reducing surface water runoff and sedimentation
- Local authorities in England and Wales should use the Hedgerow Regulations where necessary to ensure protection, and similar mechanisms should be established in Northern Ireland and Scotland
- Good Agricultural and Environmental Conditions should be enforced to ensure uncultivated buffer strips are of sufficient width, and timing of hedge-cutting is adhered to. The latter should maintain hedge height and width and, wherever practicable, be left to late-winter, avoiding impacts on bird-nesting and on hedges as a vital food source in autumn
- Restoration and planting of native hedges and hedgerow trees is important to help deliver resilient landscapes for wildlife and people, particularly in productive landscapes and urban areas where scope for woodland creation may be limited.
- We restore and establish hedges and hedgerow trees on our sites and help others do so as part of woodland creation projects. We particularly support planting of hedges and hedgerow trees in schools and urban areas to inspire people to enjoy and value woods and trees.

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