



Mixed species mature hedgerow, Herefordshire © Tree Council Image Bank

## Hedgerows

Hedgerows are among the most important remaining areas of semi-natural habitat on lowland farmland. Many of our hedgerows are ancient and of historical interest, and all hedgerows are able to provide a host of resources for wildlife: food, shelter, nesting sites, refuge from farm operations and corridors across the landscape. A whole range of wildlife species, common as well as rare and declining, depend on hedgerows for their survival.

### Key points

- Hedgerows are of huge value to farmland wildlife
- Trim not more than every three years in January/February and aim for a variety of hedge heights
- Hedge-laying or coppicing can rejuvenate hedges
- Protect hedgerow trees

# Hedgerows



Hedgerows are important for the declining yellowhammer © Malene Thyssen GNU



Hawthorn flowers provide nectar and pollen, and the berries provide food over winter © Dave Key, Hedgelink

Hedgerows are the most important wildlife habitat over large stretches of lowland farmland and are essential for a great variety of plants and animals. They are especially important for farmland birds, butterflies and moths, bats and dormice, with at least 47 species of conservation concern using hedgerows as their main habitat. The Hedgerow Biodiversity Action Plan concludes that over 600 plant species, 1500 insects, 65 birds and 20 mammal species have been recorded at some time living or feeding in hedgerows.

Many different aspects of hedgerows are important for wildlife. Species-rich hedges will provide a variety of foods at different times of year, with flowers supplying nectar and pollen for insects in the spring and summer, and fruits and berries sustaining birds and mammals over the winter months. Hedges are used as nesting sites, while bats will use tall hedgerows to commute between feeding and roosting areas. Hedgerow trees provide shelter for insects such as moths, and may act as stepping stones across farmed landscapes. Hedges and hedge base vegetation provide many species with cover from predators and refuge from farming operations such as ploughing and harvest.

## Hedgerows and dormice

Dormouse occurrence in hedgerows has declined by 64% since the late 1970s. Dormice need species-rich hedgerows that can provide different foods at different times of year, such as hawthorn flowers in spring, insects in summer, and hazelnuts in autumn to build fat reserves for the winter. Hedgerows can support breeding populations of dormice and are also used as dispersal corridors, linking copses that are too small to support viable populations on their own. However, even small gaps in a hedgerow can prevent dormouse dispersal, so sympathetic management is crucial.



Dormice leave tooth marks on the outside of hazelnut holes, while neat gnaw marks follow its circumference, smooth to the touch © PTES



Gappy hedge, probably due to flailing at same height for many years © Rob Wolton, Hedgelink



If hedges need to be cut, aim for different heights around the farm © Rob Wolton, Hedgelink



Brown hairstreak caterpillar on blackthorn © Rob Wolton, Hedgelink



Trim hedges not more than once every three years to increase fruit supplies © Rob Wolton, Hedgelink

## Hedgerow management

Hedgerows are still being lost from the English countryside but, over recent years, this has been due more to neglect or harmful management, particularly repeated annual cutting to the same height for many years, rather than grubbing out. Many remaining hedgerows are in poor condition. The main problems are excessive gaps, a structure that is too short or too thin (especially at the hedge base), or low fruit (e.g. berry) production. Hedges need to be rejuvenated through laying or coppicing,

as well as cut on a rotation that allows growth and flowering, both of which will have benefits for the health and vigour of the hedge as well as for the wildlife that use it.

### Cutting

Recent studies show hedges should be cut on a minimum of a three year cycle to deliver more benefits for biodiversity. Hedge shrubs produce few flowers in the second year and, since many hedges are cut early in the autumn, any berries that are produced are removed before they can be taken by birds and other wildlife. Cutting not more than once every three years will result in much better flowering and fruit production, and will help birds, and insects such as the brown hairstreak butterfly, whose eggs need to safely overwinter on young blackthorn stems. Trimming in January or February rather than the autumn will allow berries to be used by wintering birds, and will avoid the destruction of birds' nests during the spring and summer.

Rather than trimming all hedges to the same height, it is important to aim for a variety of hedge heights and widths to provide a range of habitats for wildlife. Yellowhammers and partridges, for example, prefer short hedgerows with grass margins, while bullfinches prefer wide hedgerows over 4m tall. Dormice and many species of bat benefit from tall hedgerows, especially if they link patches of woodland.



# Hedgerows



Laying a hedge in the Midland style © Rob Wolton, Hedgelink



A hedge one year after laying

© Durham Hedgerow Partnership, Hedgelink



Newly coppiced hedgerow

© Durham Hedgerow Partnership, Hedgelink

## Hedge laying

Hedge laying was once common practice on nearly all farms and its decline has resulted in a decrease in the value of hedges for wildlife. Hedge laying is another form of hedge management. Each stem is partially cut through, then the stems are laid over and woven together to produce a thick living barrier which re-grows from the base. There are over 30 styles in the UK, each developed over many years to suit different climates, farming practices and tree and shrub types. Laying the hedge rejuvenates it, encourages new shrub growth and keeps it bushy and healthy. Once laid, trimming should keep the hedge in good order for up to 50 years when it may be laid again.

## Coppicing

Coppicing involves cutting stems to ground level and allowing the stools to re-grow. It is particularly useful if a hedgerow is ready for rejuvenation but has too few stems for hedge-laying, or if the hedgerow is very wide. If the re-growth is protected from grazing by deer and livestock, a thick dense hedgerow can be recreated in this way in just a few years. It also gives the opportunity to plant up any gaps.

## Hedge base vegetation

The value of a hedge for wildlife can be greatly enhanced by managing the hedge base to encourage plenty of vegetation. Hedge bases may have remnant populations of woodland flowers such as primroses, or plants such as cow parsley and hedge garlic, all of which provide important sources of nectar for a range of pollinator species. Tussocky grasses at the hedge base provide safe places for invertebrates, amphibians, reptiles and small mammals. Roots and woody stumps provide additional wildlife habitat.



A mature oak hedgerow tree  
© Tree Council Image Bank, Hedgelink

## Hedgerow trees

Hedgerow trees are traditionally part of the UK landscape and havens for wildlife (Box 3), but their numbers have declined dramatically because there are not enough young trees to replace specimens that die or are felled, mainly because saplings are prevented from growing by hedge cutting. Mature or dead hedgerow trees should be replaced by avoiding some saplings of native species during hedge trimming, or by planting new trees. If they are not a hazard, some old or dead trees can be retained, as they support important insect communities and may be used by hole-nesting birds. In 2010, Entry Level Scheme (ELS) options

were introduced to support the tagging of young hedgerow trees and to protect the root systems of mature hedgerow trees by creating buffer strips.



Hedgerow tree with protective tree shelter  
© Emily Ledder, Hedgelink

## New hedgerows

A good hedgerow, planted in the right place, can provide shelter, make a stock-proof barrier, enhance the landscape and benefit wildlife. New hedgerows that link with existing ones or with other habitats will be particularly valuable (Box 4), and hedgerows in combination with other features, such as ditches or field margins, may be especially valuable.

Planting hedgerow species that have a diversity of flowering and fruiting times will help wildlife. In general, native plants, such as blackthorn, hawthorn, and hazel, will support more species than non-native plants, and hedge plants that are characteristic of the local area will fit best into the landscape and be most likely to establish well and flourish. The best time to plant hedges is in the winter, and they may need protection from livestock and wildlife for the first few years. Detailed information on how to plant hedgerows can be found on the Hedgelink website.



Recently planted hedge  
© Durham Hedgerow Partnership, Hedgelink

## Hedgerows and the Single Payment Scheme

To meet the conditions of the Single Payment Scheme, hedge trimming between 1 March and 31 July must be avoided, and hedgerows must have at least a 2m wide uncultivated strip from the middle of the hedge.





Swallowtail moth © Rob Wolton, Hedgelink

### Hedgerow trees for moths

The importance of two key farmland elements - field margins and hedgerow trees - was assessed for moths, by light trapping over four summers across Upper Thames farmland. We recorded a total of 311 larger moth species, many of them spectacularly beautiful.

Our findings highlighted the importance of hedgerow trees, and wide field margins, in the conservation of wider-countryside moths. Wide field margins were beneficial for moths, but hedgerow trees had an even greater impact. Why did hedgerow trees increase moth numbers? When we looked at the types of moths found, we discovered that even those species whose caterpillars did not feed on the trees were in greater numbers. This suggested that hedgerow trees do not merely act as food resources, but provide important shelter for many moths in exposed agricultural landscapes.

Hedgerow trees may act as 'stepping stones' for some moths, especially less mobile ones, helping them to cross open agricultural landscapes in search of resources. They could become increasingly important, since they may help species to move northwards in response to climate change. Since 2010, options for tagging and buffering hedgerow trees are included in Environmental Stewardship.

### Key results

- Hedgerow trees are even more important for many moths than wide field margins
- They provide shelter in open agricultural landscapes
- Support for hedgerow trees is now available through Environmental Stewardship



Hedgerow trees provide shelter for moths

© Ruth Feber



Bank vole © Michael J. Amphlett

### Hedgerows and small mammals

We wanted to find out which features of hedgerows were most important for small mammals. Using live-trapping methods (the animals are released after capture), we surveyed 180 hedgerows in four pastoral farmland locations throughout England and south Wales for five different mammal species (wood mice, bank voles, field voles, common shrews and yellow-necked mice). We also recorded information about each of the hedges we surveyed.

The results showed that the wider the hedgerows, the more small mammals they supported. Another important feature was how well linked the hedgerows were to each other and to woodland patches: higher levels of connectivity of a hedgerow increased the numbers of wood mice found. Conversely, the more gaps there were in hedgerows, the fewer bank voles were found. Where hedgerows had other habitats associated with them, such as ditches and conservation headlands, we also found increased numbers of small mammals.

The ages of animals captured indicated they were resident and breeding in the hedgerows, rather than using them as migration routes alone. These results further highlight the importance of hedgerow habitats on farmland.

### Key results

- **Wider hedgerows support more small mammals**
- **Hedgerows that are connected to other hedgerows and woodland are especially valuable**
- **Hedgerows next to other habitats such as margins and ditches had more small mammals**



Hedgerows well linked to others have more wood mice ©Tree council Image Bank, Hedgelink