Hedgerow trees: answers to 18 common questions

NATURAL ENGLAND

www.naturalengland.org.uk

A mixed age Hertfordshire hedge with many ages of hedgerow tree. © Tree Council Image Bank

Hedgerow trees:

answers to 18 common questions

Prepared by The Tree Council on behalf of the Steering Group for the UK Biodiversity Action Plan for Hedgerows.

This document will help land managers to make decisions about how to encourage and look after hedgerow trees. In particular it offers advice on how to plant and look after young trees so there are younger generations to take over from the old veterans that currently grace our countryside.

THE TREE COUNCIL

Q 1. Why are hedgerow trees valuable?

Hedgerow trees are important for several reasons. In the past they were highly valued for timber and with changing emphasis on renewable energy may once more come to be useful for fuel. In livestock areas they are significant for shelter and shade, especially so as the climate changes and our summers become hotter, our winters wetter and we have more storms and gales. They are of great importance for wildlife and in some parts of the country they are notable as a source for fruit for food and drink. Trees in hedgerows often also screen eyesores and unsightly developments, and can protect privacy. Many of our most valued landscapes are dependent on hedgerow trees – without them, huge tracts of countryside would be bleak indeed.

Brown Hairstreak butterfly . © Butterfly Conservation

Q 2. Why are hedgerow trees important for wildlife?

Hedgerow trees provide a whole range of habitats in one small area. Together with the hedgerow, they provide shelter, food, nesting sites, song posts and hiding places, as well as stepping stones between woodland habitats. Many farmland birds use hedgerows trees: buzzards build their nests in the canopy, while woodpeckers and tree sparrows breed in holes. Bats, including rarities like the barbastelle and Bechstein's, roost in crevices and tree holes. The trunks of veteran trees can support rich lichen communities. Butterflies like hairstreaks may be seen foraging for honey dew from aphids and laying their eggs high up in oaks and elms.

Q 3. How many hedgerow trees are there?

The intensification of agriculture towards the latter half of the 20th century resulted in the loss of thousands of miles of hedgerows, along with millions of hedgerow trees. The Dutch Elm disease outbreak of the late 1960s onwards removed some 20 million elms from our countryside, mostly from hedgerows.

In 1998 there were an estimated 1.8 million hedgerow trees in Great Britain, 98% of which were found in England and Wales. However, this figure applies only to isolated trees, ones with canopies that do not touch. There are many more trees in hedgerows which are not isolated, but we do not know how many.

Q 4. What are the commonest hedgerow trees?

In the past, elm was a common hedgerow tree, encouraged because of its valuable timber. Sadly nowadays, because of Dutch Elm disease, mature elms are very rare. Oak and ash are now our commonest trees, but many other species can be seen, from willows to birches to holly. There's much variation between different parts of the UK, and this contributes to local distinctiveness. In some places beech has become a widespread hedgerow tree: Exmoor is famous for its 19th century beech hedgerows. Along with the timber species, fruit and nut trees such as crab apple, wild cherry, hazel, elder, damson and pear have been encouraged. Flowers and fruits are still used for creating or flavouring alcohol. Blackberry wine, elderberry wine, sloe gin and vodka, cider, perry and verjuice (a kind of cider made from crab apples) are all made from hedgerow products.

Oak, the most common hedge tree species. © Tree Council Image Bank

Q 5. What is the future for hedgerow trees?

We do not know as much about hedgerow tree survival and recruitment as we would like, but we do know that there are far too few young trees to replace existing mature hedgerow trees when these reach the end of their lives. A survey in 1998 showed that less than 1% of hedgerow trees were in the youngest age class (1 to 4 years old). If we do not do take action now to plant new hedgerow trees or to conserve the young trees already growing in hedgerows, our countryside will look very different in the future.

Northumbrian landscape dominated by mature hedge trees. © Tree Council Image Bank

Q 6. How can I establish new hedgerow trees?

There are several ways of establishing new hedgerow trees. You can select existing saplings (or promising coppice re-growth) already in the hedgerow; plant trees in existing gaps; create new gaps in which to plant by cutting notches in the hedgerow; plant trees beside the hedgerow rather than within it; or earmark saplings in a new hedgerow to become full-grown trees. Do think carefully about overhead services such as power lines which may cause future problems, and the risk of obstructing roads, tracks and rights of way.

Hedgerow trees selected during hedge laying. © Tree Council Image Bank

When looking for existing saplings, select ones that are growing straight up all the way from the base. This should produce a good strong trunk if protected from cutting. Trees grown from stems that have been flailed, laid or coppiced may be so badly damaged that they are weak and unstable when mature. It's often easiest to select and protect suitable saplings at the same time as laying or coppicing a hedgerow.

Many hedgerows will not contain suitable saplings, particularly dense single-species hawthorn and blackthorn ones. Here it may be better to plant trees in gaps. Use existing gaps if possible because there will be less competition from existing plants. Otherwise, plant into a notch cut into the hedgerow.

Planting trees beside hedgerows may take up more space, but has the benefit of increasing the hedgerow width and its wildlife value. It may also be easier to cut the hedgerow in the future. There will be less root competition for nutrients and water, so the trees will probably grow faster. However, try and avoid planting trees on valuable habitats such as herb-rich grassland.

Planting trees when creating a new hedgerow is a very effective way of producing new hedgerow trees. Ideally, use species which are already growing in the locality, and invest in sturdy plants. Stakes or other supports are now only considered necessary for trees which are more than 1m tall and only for their first year. Once planted, use a marker stake and tree tag if necessary, to help prevent the trees being cut along with the rest of the hedgerow.

Q 7. How close should my new hedgerow trees be?

Young trees should be far enough apart to allow them to develop full crowns without competing or producing too much shade. Many farmers will want them to be further apart as mechanical cutters find it hard to work between trees that are close together. Do try and keep trees at irregular spacings to create a more natural landscape. Take cues from the local surroundings as to what is most appropriate.

Q 8. What size of trees should be planted?

Whips (trees 1-1.5 metres tall) are cheap, easy to move and usually establish better than larger trees. However, in a new hedgerow, remember that initially there may be little visible difference between the trees and the rest of the plants. The trees should be marked on hedgerow plans or tagged and protected from cutting. When planting into a gap in a pre-existing hedgerow, larger trees are recommended, either feathered trees (about 2 metres tall) or 'standard' trees (around 3 metres tall), depending on the height of the hedgerow.

Young tree in hedgerow with shelter. Natural England/ Emily Ledder

Q 9. When should I plant hedge trees?

Plant bare-rooted trees at any time between October and March, but avoid days when the ground is frozen. Although container-grown trees can be planted at any time of year, if planting is done in late spring or summer they should be watered during dry spells throughout the first growing season.

Q 10. Should I use a tree shelter?

Tree shelters encourage faster growth, make saplings more visible and so easier to look after, provide protection from grazing animals, and make weed control easier. On the other hand, they can be unsightly and need to be removed from the trees when they have served their purpose – usually after 3 to 5 years. On balance it's generally better to use them, but be sure to visit the shelters from time to time to pull out any grass and weeds growing inside.

Q 11. Will I need to undertake any weed control?

Pull up or hoe any grass and weeds within 0.5 metres of the planted tree. Cover the cleared area with a mulch mat, bark or brushwood chippings, or an old piece of carpet. This helps to retain moisture near the roots and to reduce competition from weeds. Alternatively apply a herbicide to remove any grass and weeds.

Tree tagging. © Tree Council Image Bank

Q 12. How do I protect a young hedgerow tree?

Brightly coloured tags are a simple way to help hedgerow cutters avoid young hedgerow trees. But tags will only work if machine operators are warned to look out for and avoid marked trees. Young trees need to be looked after for several years until they are big enough to be clearly visible. Protecting young trees is a long-term commitment.

The Tree Council's Tree Warden Scheme, in partnership with National Grid, has provided Britain's 8,000 volunteer Tree Wardens with Hedgerow Tree Tagging Kits.

For further information contact your local Tree Warden or The Tree Council www.treecouncil.org.uk.

When tagging a tree hand-trim the hedgerow for about 1 metre on each side to make the sapling more visible. Then either place the tag on the tree if you can reach it, or alternatively put it on a cane opposite the sapling. For best results consider putting a strong, clearly visible, stake into the hedgerow on either side or adjacent to the chosen tree. Finally, do keep a note of which trees you tag, and revisit them annually to replace any missing tags and to record survival rates.

Q 13. Would cutting hedgerows differently produce more hedgerow trees?

The shape in which a hedgerow is cut may have a significant effect on trees. An 'A' shape hedgerow may be better than the more normal square one because trees can grow up through the middle of the hedgerow for longer, with less risk of being cut down. However, if the top of the hedgerow is cut, the young trees will still be damaged whatever the shape. So try and spot promising young saplings and tag them, to ensure that they are not damaged when the hedgerow is cut.

Q 14. Is pollarding a good idea?

Pollarding, cutting the crown off a tree at a height of 1.8-4.5 metres at regular intervals throughout its life,

Hedge cutting . © Natural England/ Rob Wolton

has been a popular way of managing hedgerow trees throughout history. After pollarding, the trunk produces shoots at a height that keeps them away from grazing animals including deer. Old pollards often have immense character, and in some parts of the countryside are age-old markers of parish boundaries. The effect of pollarding on a tree is curious, as it often allows the tree to reach a much greater age. Pollarding keeps the tree vital by interrupting the normal aging process and, since the crown is smaller, reduces the likelihood of storm damage. So, it is often a good idea! However, take advice before attempting to pollard an older tree and check if it is subject to a Tree Preservation Order.

Q 15. Why are there stag-headed trees in hedgerows?

When a tree becomes old it may be unable to provide water to the highest branches and as these die back the tree becomes stag-headed. This is a natural part of the tree's life cycle: it does not mean that the whole tree is about to die. Stag-headed trees can carry on living for many decades or even centuries, and are often very beautiful. In younger trees, stag-heading results from drought, disease, insect damage, root disturbance, sunburn (in beech) or pollution, and is a natural response to stress. Try and find out what the cause is, to see if there is anything you can do to alleviate the problem. Pruning may help to keep the tree alive.

Q 16. What's the best way of managing an elm hedgerow?

Elm trees in hedgerows will grow until they reach a size that makes them a suitable food source for the bark beetle that carries the Dutch elm disease. This usually takes 20 to 30 years. Although the main stems will die, the root system will usually survive allowing the trees to re-grow again from suckers in time. To keep an elm hedgerow looking healthy consider coppicing the larger stems every 20-30 years, before the beetles re-infect the trees. Unfortunately at present we know of no way to permanently eradicate the disease from a hedgerow.

Ancient Ash pollards in an old hedge line . © Tree Council Image Bank

Q 17. Is the shading caused by hedgerow trees a problem?

Large hedgerow trees can shade out crops and grass, causing some economic loss. This effect will be less in hedgerows running north-south, and in those where the field margins are left uncultivated. The shade can also create gaps in the hedgerow beneath – a problem which can be reduced by removing the lower limbs and planting shade-tolerant shrubs like holly. On the positive side, shade is beneficial for grazing animals, farm buildings and for us, particularly on hot summer days – and we may expect more of these as the climate changes.

Q 18. Is there funding for hedgerow trees?

Some local authorities provide funding for the establishment of hedgerow trees, and grants are available to some farmers through green farming schemes (like Environmental Stewardship in England) both for looking after existing trees and for planting new hedgerows and hedgerow trees.

The Tree Council is the lead tree campaigning charity, an umbrella body for over 150 UK organisations working to promote the importance of trees within the changing environment. Through its 8,000 volunteer Tree Wardens, it is promoting the importance of hedge trees.

A Stag Headed Oak, near Perth, Scotland . © Tree Council Image Bank

Front cover photograph: A Devon hedge bank with mature trees. © The Tree Council/Jon Stokes

Natural England works for people, places and nature to conserve and enhance biodiversity, landscapes and wildlife in rural, urban, coastal and marine areas.

ISBN 978-1-84754-051-5

Catalogue code NE69

www.naturalengland.org.uk

Natural England publications are available as accessible pdfs from: www.naturalengland.co.uk/publications

Should an alternative format of this publication be required, please contact our enquiries line for more information: 0845 600 3078 or email enquiries@naturalengland.org.uk

Printed on Defra Silk comprising 75% recycled fibre.