



Hedgerow planting: answers to 18 common questions

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Prepared on behalf of the Steering Group for the UK Biodiversity Action Plan for Hedgerows.

This document will help land managers make decisions about how to plant hedgerows with good results. In particular it offers advice on some of the points to bear in mind before you start planting, on the practicalities of hedgerow planting, and on suitable follow-up management.

Q 1. What are the main benefits of planting new hedgerows?

A good hedgerow is a valuable asset: it can make a stock-proof barrier, provide shelter, enhance the

landscape and benefit wildlife. New hedgerows that link with existing ones or other habitats like woodland or scrub are likely to be particularly valuable.



It is important to have clear objectives in mind before planting a new hedgerow. Being clear on the reasons for planting will make it much easier to make the right choice of species, and to decide on the planting spacing and aftercare of the new hedgerow.

Q 2. What is the best location for a new hedgerow?

New hedgerows are usually best planted where they complement or fill the gaps in any existing hedgerow network, help to re-create former historical hedgerow patterns, or join up other woody and scrub habitats. They can also be planted to screen eyesores or to provide windbreaks.

Hedgerows planted across characteristically open landscapes may have a detrimental effect not only on the landscape but also on wildlife. For example, breeding birds like the lapwing that prefer wide open spaces may become vulnerable to predators such as crows and foxes attracted by hedgerows. Planting hedgerows alongside public rights of way needs careful thought – it might be beneficial to users through adding interest and marking the route, or it could obstruct the view and create a management burden.

Q 3. What time of year is best to plant a new hedgerow?

Bare-root stock can be planted between the end of October and the

end of March. Generally it's best to plant early in the season, before January, to allow the plants more time to establish a network of feeder roots before the onset of spring. However, if planting into clay soils it may be best to wait until the beginning of March as heavy frosts can cause frost heave and expose roots. Also, there is a risk that roots will rot in poorly-draining soil if planted early. Never plant during freezing weather or if the ground is waterlogged. Ideally plant on a still, moist day, to minimise root drying and stress to the plants.

Q 4. What species are best to plant?

The species composition of hedgerows varies greatly between different parts of the country, reflecting changes in climate, altitude and geology as well as local traditions. A good rule of thumb is to plant species that already occur in hedgerows in the area. These are more likely to thrive in the local climate and soils and to be in keeping with the character of the landscape.

Generally, the more woody species a hedgerow has, the more valuable it will be for wildlife, so it is usually best to plant a mix of different plants. Use species which are typical for the local area. These will usually include hawthorn or blackthorn on account of their stock proofing qualities, and hazel in the South-West. One or more of these three species will normally comprise at least 60% of the planting mix.



Other native shrub species can be used to make up the rest, preferably ones found in the locality and known to thrive in the local climate and soils. These less numerous shrubs are best intermixed randomly with the main species, not planted in blocks. If the landscape is characterised by single-species hedgerows, then you may wish to use only one such species in your new hedgerow, particularly if you want to reflect local tradition and historical heritage.

The way you intend to manage your newly planted hedgerow in the long-term may influence which species you plant. Hawthorn, blackthorn and hazel can withstand regular trimming. Most broadleaved trees and shrubs coppice well, with the exception of beech. Dogwood, spindle and guelder-rose are difficult to lay. Holly and beech grow well in the shade cast by mature hedgerow trees. Species like ash, oak and willow can grow very large.

You may also wish to encourage species of wildlife that have particular habitat requirements. The brown hairstreak, for example, is an uncommon butterfly that lays its eggs only on blackthorn, while the caterpillars of the brimstone butterfly feed only on buckthorn and alder buckthorn.

Q 5. Where is the best place to source hedgerow plants?

The widespread use of plants grown from foreign seed is eroding the genetic integrity of our native species. We recommend that you buy plants grown from indigenous, preferably local, seeds or root stocks. These will be adapted to local conditions and will be more likely to establish successfully. There are many specialist hedgerow plant suppliers who supply bare-root stock, transplants or container-grown plants.

Fibrous root. © Natural England/Emily Ledger





Keep plants in the bag until the moment they are to be planted. © Natural England/Emily Ledder

Q 6. What size of plant is best?

The cheapest and most easily acquired plants are those that come with bare roots, commonly known as 'whips'. Typically they are available in late autumn in three sizes: 30-45cm, 45-60cm and 60-90cm. 45-60cm whips are recommended for large-scale planting schemes since they establish most successfully. However, some species such as holly are usually only available as more expensive container-grown or cell-grown plants.

Q 7. How should I look after plants between buying and planting them?

Careful storage, handling and transportation are key to the successful establishment of a hedgerow. Bare-root plants should be supplied in polythene bags and kept in these during transportation. If planted out within four days whips can remain bagged

provided they are kept in a cool frost-free environment and watered regularly. If they are to be stored for longer periods, they will need to be 'heeled-in'. To heel-in, dig a trench to the depth of one spade, cutting one side at a 50 degree angle and casting the spoil onto the opposite side. Place whole bundles of plants tightly against the angled side. The spoil is then cast back over the plant roots and lightly firmed in and watered. Plants can be stored for several months in this way. Container or cell-grown stock can also be kept for several months, as long as the plants are kept damp and protected from frost.

Take great care of roots before planting, keeping them covered at all times especially when sunny or windy. When planting a mixed hedgerow try and avoid having more than one bag open at once. Plant the less numerous species first, one at a time, randomly spacing them along the hedgerow. Then fill in the gaps with the main species.

Q 8. Does the ground need any preparation before planting?

If you can, preparing the ground thoroughly means new plants are likely to become established much easier. Aim to provide good soil conditions and as little competition from other vegetation as you can. Ideally, plant into bare soil achieved through cultivation, herbicide use, turf stripping or by building a bank. If using a

herbicide, spray off the existing vegetation in August or September before planting, and if possible then cultivate the soil. Planting into an established sward is feasible, but the new plants will require more care and the risk of failure is increased.

Q 9. What method of planting work well?

Where the soil is deep and friable, plants can simply be slot-planted. This is the quickest method and suitable for seedlings or transplants with small roots. An alternative method is T-notch planting which makes a larger planting space. In heavy clay or other difficult soils it may be better to use pit or trench planting methods.

Q 10. How many plants do I need to use?

Hedgerows are usually formed of a double staggered row. When deciding which pattern to follow,

think about why you are planting the hedgerow and how you intend to manage it. Look around your immediate locality and assess whether existing hedgerows provide a good template. Hedgerows planted in a double staggered row tend to be better for wildlife than single rows as they are wider and provide more shelter and habitat. Indeed, the wider the hedgerow the better. As a guide, we suggest that at least 40cm is left between each row and that 4-6 plants are planted per metre.

Any plants that die in the first few years may need to be replaced to prevent gaps developing.

Q 11. Do newly planted hedgerows need any protection?

New hedgerows may be vulnerable to damage by grazing stock, rabbits, hares or deer and so need protection. Fencing and other protection like rabbit guards are, however, expensive so do spend time making sure they are necessary. Unless there is a known problem with rabbits or hares, spiral guards may prove counter-productive, encouraging spindly growth and being difficult to remove as well as unsightly. Netting is an alternative form of protection, either on its own or in conjunction with stock fencing. To be effective against rabbits the bottom 25cm must be laid out in the direction of attack and securely pegged to the ground.



A slot ready for planting. © Natural England/

Stock fencing is usually necessary where land is to be grazed by sheep, cattle or horses, but can make it more difficult to manage the hedgerows. If fencing is necessary, erect it far enough away to allow the hedgerow to grow to a width of at least 1.5m. If placed a further 1.0m out, it will be possible to reach over the fence to cut the verge and side of the hedgerow, making management easier and providing excellent wildlife habitat. Electric fencing is another option.

Q 12. I want to include trees in my hedgerow, what is the best way of doing this?

It is easier to plant hedgerow trees at

the same time as the hedgerow rather than leaving it until later. Most native species of tree are suitable, including oak, ash, beech, field maple, wild cherry, hornbeam and holly. Ideally use species already growing in the locality, and invest in sturdy plants. Whips (plants 1-1.5m tall) are cheap, easy to move and usually establish better than larger plants. Container-grown plants are more expensive but can be planted all year, and are available in a range of sizes. Stakes or other supports are now only considered necessary for trees which are more than 1m tall and only for their first year. Where there is a risk of browsing use a tree shelter to prevent



any damage. 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. 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 spacing to make for a more natural landscape. Take cues from the local surroundings as to what is most appropriate.

Q 13. How soon after planting is it best to start cutting the hedgerow?

Light, regular, trimming of the hedgerow in its early years will encourage dense, bushy growth and is recommended.

Q 14. Will I need to undertake any further weed control following planting?

Some weed control may be needed, especially if thorough ground preparation before planting was difficult. Any plant which competes with the hedgerow plants for nutrients, moisture and light, including brambles, nettles and grasses, is likely to reduce growth rates.

The most common ways of controlling weeds are mulches,

herbicides and cutting. A mulch is a layer of material laid over the surface of the ground to suppress weed growth and retain moisture. Mulches include straw, composted bark, and woodchips. Apply them immediately after planting. Black polythene and other sheet mulches are also available and can be laid either before or after planting. Herbicides are initially cheaper and easier to apply than mulches, but over time can prove more expensive. Although time consuming, cutting back competitive species such as brambles and nettles with a hand-held hook can be effective.

Newly planted hedge with hedge tree.
© Natural England/James Le Page





Q 15. Will I need to water the new plants?

Watering is usually impractical unless you invest in an expensive perforated trickle hose. The need for watering will be reduced if weeds are controlled both before and after planting. The use of mulches helps the soil to retain moisture.

Q 16. Does it matter how the land next to a new hedgerow is managed?

A strip of grassland at least 2m wide on either side of the newly planted hedgerow will greatly increase its value for wildlife, particularly if it contains a good range of herbs and other plants. Grassy margins will also help to protect the hedgerow from sprays and fertilisers. Try and avoid spreading fertilisers on the margins, and only use herbicides to spot control weeds. Ideally, try and manage each margin in two halves. Cut the half closest to the hedgerow only once every few years to encourage tussocky grass, and the

other half annually after mid-July.

Q 17. Is it possible to plant up gaps in an existing hedgerow?

Yes, but great care has to be taken to ensure the new plants are not shaded out by existing plants. Hard pruning or even coppicing adjacent shrubs may be helpful. In any case, control of competitive vegetation for the first few years is essential. If using herbicides, take great care not to damage the existing hedgerow or any interesting ground flora. If gaps have developed due to shading from mature trees use plants which are shade tolerant or consider removing the lower branches of the tree to let more light in.

Q 18. Is there any grant-aid available for planting hedgerows?

Funding is available for hedgerow planting in England through Environmental Stewardship. Some local authorities may also have grants available for small scale planting.



Front cover photograph: Newly planted hedge with spiral guards. © Natural England/Rob Wolton

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