

## Devon hedge management 3: trimming



*Hedge trimming with flail cutters is an effective way to keep hedges thick and bushy. ©Robert Wolton*

Most hedges in Devon are cut frequently, nearly always with a flail. This section suggests trimming practices that will help to keep hedges thick, bushy and stock-proof, and good for wildlife, while reducing costs to the farmer.

### The effects of trimming on hedge health and wildlife

To be stockproof, hedges need to be kept thick and bushy, and regular trimming with a flail is the best way to achieve this.

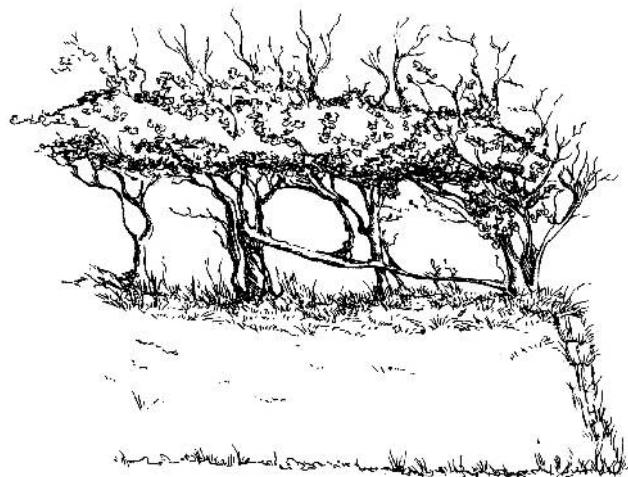
Fortunately, much of the wildlife associated with hedges, perhaps most of it, favours such dense growth. It provides safe nesting sites for finches, warblers, wrens, dunnocks (hedge sparrows) and many other birds. Thick bushy hedges also provide secure nesting places for dormice, and warm sheltered habitat for many insects like butterflies.

Furthermore, regular trimming is a good way of reducing the overall costs of hedge management since it greatly lengthens the time before hedges have to be steeped (laid) or coppiced - expensive but ultimately necessary operations.

The catch is that repeated trimming, year upon year, eventually leads to hedges developing many gaps, both between the

ground and the canopy and along their length, and becoming unhealthy. This is because most woody species found in our hedges want to grow into mature bushes and trees - if prevented from doing so, they lose their lower branches and become mop-headed, and the main stems thicken with age, losing vigour and eventually dying.

Luckily this process of gap formation and decay takes much longer in species-rich Devon hedges than in the single species hawthorn hedges which are typical of much of the Midlands. Blackthorn, hazel and willow continue to send up shoots from the base for a long time, while the side branches of holly and beech can persist for many years.



*Devon Hedges inevitably become gappy with time and need to be allowed to grow up prior to rejuvenation by steeping (laying) or coppicing. ©Heather Harley*



*The shrubs and trees in hedges only flower on growth that is at least a year old, so trimming off all the new season's growth will mean no flowers or berries next year. ©Robert Wolton*

Hedge trimming also has a big effect on the abundance of flowers and fruits in hedges. Most trees and shrubs in hedges only produce flowers, nuts and berries (such as haws and sloes) on year-old twigs, so cutting hedges every year means that they provide little food for insects, birds and mammals.

National research, some of it carried out in East Devon, has shown that hedges cut on a three year cycle produce over twice as many hawthorn and blackthorn flowers across the three years compared to hedges cut every year, and about three times the weight of berries. Bramble and dog-rose show similar trends. Hedges cut on a two year rotation and cut in winter have more fruit than those cut annually, but cutting no more frequently than once every three years is most beneficial.

For hedges that are cut every year, rather than cutting the hedge back to the same height, an alternative is to raise the trimming height by some 10-15 cm (4-6 inches) each time. Research shows that this too leads to more flowers and berries, about 1.5 times as many compared to cutting back to the same point. It also prevents dense woody knuckle-like growths developing.

Concern has often been raised that cutting on a two or three year rotation leads to gaps developing quicker at the base of the hedge than cutting every year. However, early research results suggest that this is not so: cutting frequency, timing or intensity has no effect on the total area of woody material at the base of hedges.

Concern is also often expressed that cutting a hedge with three years' growth not only leaves it looking badly damaged but may also cause long term damage to the plants. However it is surprising how fast such hedges recover, new growth obscuring the ragged ends by mid-summer, and there is no evidence that fungal rot or other diseases are more common in hedges cut at three year intervals than those cut every year. Most of our native shrubs and trees are remarkably robust and well able to withstand substantial damage from severe weather, grazing animals and even the flail. Nevertheless, regular sharpening of flails and use of correct tractor speed are essential, if stems are to be cut reasonably cleanly, and are highly recommended.

Many farmers and members of the public like to see hedges looking neat and tidy, particularly disliking the raw, often shattered, look of hedges trimmed when they have three or more years' growth. This creates a dilemma: to do what is better for wildlife or for appearance? Increasingly farmers are choosing the former option, with the backing of their local communities.



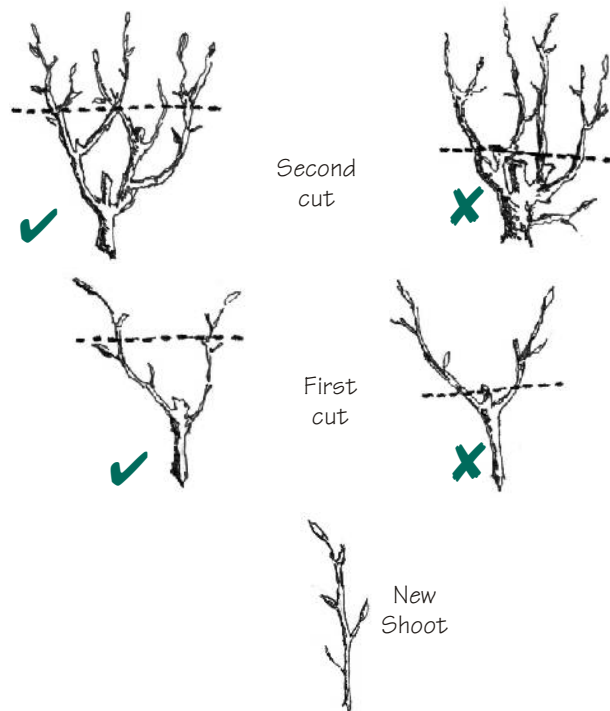
*Chaffinches, like most small birds, favour the dense growth created by trimming for nesting. ©Robert Wolton*

## Recommended methods for trimming Devon hedges

- Avoid cutting all the hedges on the farm in a single year, or large blocks at one time, since this will much reduce their wildlife capacity. Try and establish a rotation over the farm, with adjacent lengths of hedges being trimmed in different years.
- Try not to trim any hedge every year except where necessary for road safety, to maintain access along tracks and public rights of way, or in the early years after a hedge has been laid or coppiced when frequent trimming helps to promote a dense structure later on. Not cutting every year is likely to save money - see below.
- Rather, trim on a three year rotation, or longer if possible. Trimming every other year brings few advantages, but if necessary it is better to cut in the late winter (January or February) than in the autumn. An alternative is to trim the sides every year but the tops every two to three years. Some flail cutters have blowers which can be used to clear debris and thorns from roads.
- If hedges need to be cut every year, perhaps because they contain a high proportion of fast growing species like ash, willow and sycamore, then raise the cutting height a few inches each year.
- Try to trim at least some of your hedges as late as possible, preferably during January or February if ground conditions will permit. Never cut during the main bird nesting season (March-August inclusive) and in areas with cirl buntings try to avoid cutting before mid September because some birds continue to have occupied nests up to this time.
- Unless a hedge has a particularly rich bank flora which is at risk from shading or smothering by woody growth, then raise the cutting height until there is dense shrubby growth at least 1 m high above

the bank. Generally, the larger the volume of dense shrubby growth, the more wildlife will be present.

- Ideally, when trimming the sides of hedges and margins, create a gently scalloped edge, leaving some outgrowths of bramble and rose. Wavy edges increase the warm sheltered conditions favoured by much wildlife, while clumps of bramble or rose, perhaps a metre wide, are strongly favoured by many birds and dormice for nesting. However, be aware that bramble and rose can sometimes weigh down fences and entangle sheep.
- Leave (or plant) promising stems to grow into hedgerow trees at varying intervals, marking them clearly so that they can be spotted from the tractor cab (see section 12, *Devon hedge management 4: hedgerow trees* for more details).
- If you use a contractor, providing a simple plan each year showing which hedges or hedge sides you would like trimmed may make for much better results.



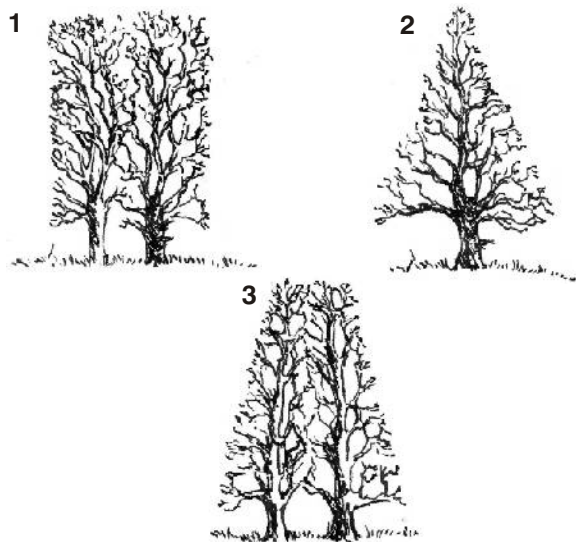
*Raising the cutting height a few inches each time a hedge is trimmed, rather than cutting back to the same point, produces a healthier hedge.*  
Heather Harley after original in first edition.

This advice applies to hedges that are reasonably stock proof. Gappy hedges should be allowed to grow up to a point where they are suitable for either steeping (laying) or coppicing, after which gaps can be replanted if necessary. Where a hedge is about 4-5 m tall and ready to lay, an alternative is to cut it back to about 2 m high using a shaping saw, although this will still not usually promote dense growth right at the base and the cut branches will have to be cleared up. Section 4, *Devon hedges and modern farming* has more information on this.

### Hedge shape

There are several possible hedge shapes, each with merits and drawbacks. Generally speaking, overall volume is more important for wildlife than the shape. The wider the hedge, the more species it will support, provided it is not shading out herb-rich bank sides, margins or ditches.

A box shape is now the predominant shape for hedges across Devon, being easily created by flail trimmers and following the shape of the bank. However, it is worthwhile considering creating 'A'- shaped hedges, since these may have thicker bases (because the bottom growth is less shaded) and it may be easier to select good stems to encourage as hedgerow trees.



*Different hedge shapes: 1 - box; 2 - 'A' shaped; 3 - Topped 'A' shaped.*  
Heather Harley after original in first edition



*A rich berry crop on a hedge that has not been trimmed for two years.* ©Robert Wolton

### The economics of hedge trimming

In 1994 the Devon Hedge Group commissioned a study by Silsoe College on the economics of different frequencies of hedge cutting on Devon hedges. The results are supported by other research carried out at a national level during the development of agri-environment schemes like Countryside Stewardship and remain valid today. The study found that:

- If labour and machinery costs alone are considered, trimming hedges by flail once every three years results in considerable economic savings for all major Devon farm types in comparison to cutting annually.



*Shaping saws can be used to cut larger growth cleanly.*  
©Robert Wolton

- If crop yield losses are also allowed for, trimming once every three years still results in savings for Devon hedges provided they contain mainly slow growing species such as hawthorn or oak.
- On arable farms, if hedges have fast growing species such as ash or willow then, with reductions in crop yields, leaving them to grow up and out for three years before trimming will increase costs by 10-30%.
- Where gross margins are large, as with arable and dairy farms, trimming the side annually but the tops on a three year cycle is the most effective option. Otherwise, cutting the whole hedge once every three years is cheaper.

### Further information

1. Natural England. 2008. *Hedge cutting: answers to 18 common questions*. Leaflet, 15pp. [www.hedgeline.org.uk](http://www.hedgeline.org.uk)
2. Semple, D., Bishop, C. & Morris, J. 1995. *The Economics of Sustainable Hedge Cutting*. Silsoe College, Cranfield University.
3. Staley, J.T., Sparks, T.H., Croxton, P.J., Baldock, K.C.R., Heard, M.S., Hulmes, S., Hulmes, L., Peyton, J., Amy, S.R. & Pywell, R.F. 2012. Long-term effects of hedgerow management policies on resource provision for wildlife. *Biological Conservation* 145, 24-29.

Further reports and publications are expected from the Centre for Ecology and Hydrology on research between 2005 and 2017 into the effects of hedge cutting on flowers, berries, hedge structure, pollinators, brown hairstreak butterflies and other invertebrates, under Defra contract BD2114.



A flowering hawthorn hedge with two years' growth.  
©Robert Wolton



A longhorn beetle *Rhagium mordax* on hawthorn blossom. ©Robert Wolton