EXMOOR
NATIONAL PARK

Exmoor Hedges
A Guide to Management

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SECTION 1
BACKGROUND TO THE HEDGES OF EXMOOR

Exmoor's hedges and hedgebanks play a key part in defining the character of the landscape of Exmoor National Park. They have an important function in the farmed landscape in providing shelter to livestock and crops and are valuable wildlife habitats and wildlife corridors. They are also a significant aspect of Exmoor's historic landscape character: historic features that are still used for their original purpose to define boundaries and manage livestock and pasture. Many date back at least 700 years.

Hedges on Exmoor are typically earth or stone-faced banks with shrubs and trees planted on top. The small, irregular fields found within Exmoor's lower valleys and lowlands are often of medieval origin and are typically bounded by banks with mixed species hedges. On higher ground, the banks have predominantly beech hedges on top and are characteristic of the larger scale, regular field patterns dating mainly from the 19th century. These are strongly associated with parts of Exmoor's upland landscape.

Traditionally, Exmoor's hedges have been managed by regular laying and banking-up (casting up) to conserve them as stock-proof features. Historically these hedges were also managed so that they contained standard trees and pollards to provide timber on the farm. Unique hedgelaying styles have developed in Devon and Somerset, with subtle differences between the structure of hedges and traditional laying techniques in the two counties.

Hedges in an upland landscape (ENPA)

Over the years, changes in agricultural practice have led to many hedges being removed, over managed by mechanical flail, managed inappropriately or left to decline. Changes in the use of the land next to them, grazing pressure from livestock, damage by deer, rabbits, pheasants and squirrels, tree diseases and the effects of climate change all add to the potential threats to Exmoor's hedges.

The Exmoor Nature Recovery Vision aims to achieve a more nature-rich landscape in the National Park and help reverse the decline in nature. Hedges play an enormous part in nature recovery, providing habitats and

connectivity at landscape scale, enabling populations of wildlife to disperse and move along corridors. They have the potential to contribute more through new hedge planting to increase connectivity, management that enhances the biodiversity of existing hedges and by blurring the edges between different habitats.

Hedges can also help reduce the impacts of climate change. They capture carbon dioxide and store it as carbon both above ground in the woody vegetation and leaf litter and below ground in the roots and soils. They can slow rainfall runoff through their roots by faster water infiltration, stabilise soil and act as a barrier to reduce soil erosion and sediment being washed into water courses. Burning the material arising from hedge management operations where it lies should be avoided, as it releases greenhouse gases directly into the atmosphere. Instead, the harvested material has value as a renewable source of energy through wood fuel or biomass, and this may have a greater influence on how hedges are managed in the future. Adopting changes in the composition and structure of hedges can be a key contributor in helping to mitigate climate change and remain resilient to it.

Hedges require management to ensure their health and function. The purpose of this guide is not a detailed 'how to' but to provide information on what to consider when choosing how to manage hedges on Exmoor that are at different stages of growth and form and to maximise the benefits. It includes traditional and recently developed techniques and describes new approaches that contribute to creating a more nature-rich Exmoor.

This guide also includes other factors to consider when managing hedges, such as historical and landscape value, the economic, environmental and functional opportunities that hedges provide and the regulatory framework around protecting hedgerows. For more information on any of the sections below, contact Exmoor National Park Authority or organisations listed at the end.

Benefits for livestock

As field boundaries, hedges enable better farmland and stock management and create barriers to the spread of disease such as bovine TB by reducing contact between animals on different farms. Hedges provide shelter, wind breaks and shade for livestock, which improves animal health and welfare. Shelter from adverse weather reduces the effects of wind chill and shade reduces heat stress. Benefits can include lower mortality, particularly among young animals, and disease amongst livestock.

Hedges providing shade and shelter (Sarah Hailstone / Sarah Eveleigh)

Browsing on hedgerow vegetation can increase gut health in livestock and boost immunity. Some species found in hedgerows have anti-parasitic and anti-inflammatory properties and there is some evidence that shows cattle will seek out plants rich in certain nutrients, if given the opportunity. Hedgerow plants that are palatable to livestock and provide sources of additional nutrients and minerals include willow (strongly associated with salicin which is rich in anti-inflammatory properties), hazel, blackthorn and oak. Access to such edible tree fodder will enable livestock to self-medicate and supplement their nutrition.

The presence of hedges can extend the grazing season by reducing exposure of the pasture to cold, drying winds and extend the grass growing season. The hedges may also contribute to better grass utilisation across smaller fields, through rotational grazing where the livestock is moved more frequently and the pasture can recover. This can reduce the amount of supplementary feeding required, especially if the livestock are able to access more varied foraging opportunities. This in turn can reduce the amount of time livestock needs to be housed in winter, which has additional savings and reduced environmental impacts.

Managing hedges for wildlife

Hedges are hugely important for wildlife, not just in themselves, but linking habitats across the Exmoor landscape. Over 2,000 species of flora, fauna and fungi may be found in a hedge and they provide a route for wildlife moving through the landscape and between habitats, food, nesting sites, song posts and cover from predators or harsh weather.

The banks and standard trees within the hedge add greatly to the wildlife value of the hedge. Flower-rich and stone-faced banks provide habitats for mammals and invertebrates including pollinators and predators of crop pests. A good hedge should also have wide herbaceous margins of tussocky grasses or flowers as these non-woody plants provide vital habitat for much hedge life and are an integral part of the habitat, along with the banks and any ditches.

In recognition of their importance, hedges are recognised as a national priority for conservation action, being listed under Section 41 of the NERC (Natural Environment Research Council) Act, 2006. The Exmoor Nature Recovery Vision states that by 2050 at least 75% (or 51,750ha) of the National Park will be in a nature-rich condition, with the remaining areas providing networks and corridors for wildlife to move through and beyond its boundaries. Hedges are an important component in achieving this connectivity.

There is often a perception that hedges should be kept neat and tidy and

that wildlife friendly hedges are not neat. Hedges that are dense and bushy and are well structured have a high wildlife and aesthetic value, but this does not mean that they have to be unkempt. It is best to avoid trimming hedges every year to maximise the food source of berrying species because most species fruit on the previous year's woody growth. This will give the hedges a looser, less manicured appearance, but will provide more abundant food sources.

Wider hedge corridors that become naturally scrubbier add to the value of the hedge as a habitat and form an expanded wildlife corridor. Additional trees could also be planted in this hedge corridor zone to increase biodiversity, protected from livestock while they establish. This may not be appropriate in all situations and is explored further in Section 2.

Hedgebank with diverse herbaceous flora (Rob Wolton)

Hedges as landscape features

The farmed landscape of Exmoor is visually richer when hedges are at various stages of their growth cycle, so there is a mix of newly laid or coppiced, young hedges, taller mid-growth cycle hedges and mature hedges. A mix of age and structure will also provide better diversity of wildlife habitats and opportunities for wildlife.

A rich texture of hedges in the landscape (ENPA)

Historically, hedgebanks were the sole means of stock-proofing field boundaries, but on Exmoor many are now frequently combined with post and wire fences, often on both sides to protect the earth and stone-faced banks from damage by grazing livestock. The fencing has often taken over the role of stock proofing field boundaries, although the hedges are increasingly valued as important landscape and historic features as well as for the livestock, wildlife and environmental benefits. Some farms on Exmoor have kept their hedges stockproof without using fences, but this is rare. Fencing is explored further in Section 3.

There are many examples of beech hedges on Exmoor that have been left for such a long time without any management that they have formed tall, mature tree lines. These distinct landscape features are characteristic of and strongly associated with Exmoor.

Environmental benefits - carbon capture

Hedges store carbon above ground in the vegetation and below ground in the soils, contributing towards climate change mitigation and net zero targets. There is potential for hedges to play a greater role in the capture and storage of carbon.

Research is ongoing to understand the current and potential carbon that can be captured and stored by hedges and hedgerow trees. It depends on factors such as height, width, structure, management practices and age. For instance, unmanaged hedges or those managed on a coppice rotation without trimming, sequester more carbon and hedgerow trees increase the carbon storage potential of the hedges, especially trees with a greater stem diameter. It also depends on what happens to the material from hedge management: if burnt in situ, the gain is lost but when used as wood fuel it can contribute to net zero. Newly planted hedges, and the establishment of wider, expanded hedge corridors have clear carbon benefits where a net gain in carbon sequestration is achieved.

The contribution hedges make towards reaching net zero targets will also depend on how many new hedges are planted. The Climate Change Committee has called for a 40% increase in the extent of hedgerows by 2050. To help achieve this and unlock the potential income generation potential from hedges, a carbon code is being developed and trialled that will calculate the potential for carbon capture of hedges and will become commercially available to use on-farm. This will attach a financial value to hedges and incentivise the creation of new hedges and carbon focussed management of existing hedges, as well as make a positive contribution to biodiversity.

SECTION 2
HEDGE MANAGEMENT

The Management of Hedgerows (England) Regulations 2024 is in force to provide a consistent approach to hedgerow management practices. This includes a ban on cutting hedgerows during the bird nesting season from 1st March to 31st August and the requirement to establish and retain a 2m buffer strip on both sides from the centre of a hedge (4m in total), in which no cultivation or the application of pesticides or fertilisers should take place.

There are exceptions, including a hedge that obstructs a public or private right of way or is a danger to users and boundaries of a private garden. If work must be carried out between 1st March and 31st August any other applicable rules or legislation, such as the Wildlife and Countryside Act 1981, must be followed. It is an offence under this act to intentionally kill, injure or take, any wild bird, its nest, eggs or young. For more details and a full list of exemptions from the hedgerow management regulations refer to Defra guidance.

The legal protection of hedgerows provided under the Hedgerows Regulations 1997 remains in place, requiring consent to be obtained for hedgerows to be removed. For further information refer to Section 4.

Managing a hedgerow is about using appropriate techniques to keep the hedge in a healthy, functional condition and maintain its integrity. There is not one technique suitable for all situations. The following pages outline key guidance and recommendations for different management techniques to maximise the benefits. To reiterate, no hedge management should be carried out between 1st March and 31st August.

Hedge Management Approaches

1 Laying (steeping)

The traditional rejuvenation technique for smaller stems

Most effective for thickening up hedges from the base. Practical, long lasting and skilled. The woven stems form a stock proof barrier and regrowth is from the laid stems and from the stumps. There are subtle differences between the structure and laying styles in Devon and Somerset.

Key guidance

Stems up to 10cm (4 inches) diameter respond best to laying.

A hedge is typically around 4-6m (13-18 ft) in height when laid.

Typically, hedges are laid on an 8-15yr rotation but may be longer depending on their growth rate or purpose.

Retain suitable hedgerow trees (those with the best chance of becoming mature trees) at frequent but irregular spaces with sufficient space between for canopies to develop.

Many species are suitable including beech, hazel, ash and hawthorn.

Regrowth needs protecting from browsing if next to pasture.

To increase wildlife value:

- The location of hedges to be laid should be varied so not all connecting hedges are laid in the same year.
- No more than 5% of the total hedges on a holding should be laid in one year and should be scattered across the holding.

Additional recommendations and limitations

For hedges that have grown out or are bigger than the recommended size, a combination of coppicing and laying could be appropriate, determined by the size of individual stems, with all suitable stems laid rather than coppiced and with a minimum of one stem per metre being laid.

Stems of over approximately 10cm (4 inches) should usually be coppiced rather than laid (see below) or retained.

Wildlife food source is reduced until rejuvenated.

If the hedge is on a slope, start work at the top of the slope and lay your steepers uphill: downward pointing steepers tend to fail because sap rises upwards. Especially appropriate for hedges of particular prominence or value because of the striking appearance of the laid hedges.

2 Coppicing

A rejuvenation technique where stems are too big or there are too few stems for laying

Effective at thickening up hedges from the base but the entire stem and volume of the hedge is removed. Regrowth is from the stumps/stools. Some species respond better than others.

Key guidance

Optimal stem size is up to 15cm (6 inches) diameter for most species.

Typically, the main stems are 6-7m (20-25ft) in height.

Mature beech with a stem over 15-20cm diameter does not respond well to coppicing and can go 'into shock', putting all of its energy into healing the wound, rather than sending up new shoots.

Felling mature beech stems over 15cm diameter is likely to be fatal to the tree.

Retain some healthy hedgerow trees at irregular spacing.

Re-plant gaps if necessary

Unless on a bank, it is likely to require fencing to form a stock proof barrier until coppice regrowth is sufficient.

The location of hedges to be coppiced should be varied so not all connecting hedges are coppiced in the same year.

The hedge takes a number of years to re-establish and there is an impact on wildlife and food sources until it does. It is best done in sections to reduce the impact on wildlife with no more than a 5% of the total hedges on a holding coppiced in one year, scattered across the holding.

Additional recommendations and limitations

Coppicing can be combined with laying, so hedges are part coppiced and part laid. The balance should be in favour of laying, with all suitable stems laid rather than coppiced. The regrowth can then form part of the hedge laying cycle.

The laid stems can give protection to the coppice stools.

Recommendations for coppicing larger beech stems:

- Always leave one growing stem on each stump. This helps keep the root alive, increasing the chance of new shoots emerging and surviving.
- Consider retaining as a hedgerow tree and landscape feature.
- Gapping up planting may be required if coppiced beech does not grow back.

Suitable for where a wood fuel crop is to be taken (refer to section on wood fuel)

A Felling Licence will be necessary if stems to be felled are 15cm or larger in diameter at 1.3m height and more than 5m3 are to be felled in any calendar quarter (reducing to 2 m3 if any of the wood is to be sold). See section on felling licences.

3 Trimming (flailing)

A low-cost option using a tractor mounted cutter

Useful for minor reduction in hedge and width and keeping the hedge dense and bushy. Regular trimming lengthens time between hedges needing laying or coppicing but if used alone, eventually leads to gappy, unhealthy hedges

Key guidance

Leave at least half the total hedgerow length uncut each year (only cut one side in any one year), to increase the amount of pollen, nectar and berries for birds and insects.

Raise the cutting height each time by 10cm or more to prevent the development of a knuckle, leaving some wood for flowers and fruit to form on the older growth, to benefit birds and insects.

Avoid annual trimming if possible as this prevents fruits and berries developing for wildlife food sources.

If annual trimming is necessary, avoid cutting back hard to where hedge was last cut and retain 10-15cm of year's growth – known as incremental growth trimming.

Trim as late as possible (Jan/Feb) so berries remain on hedge through the winter. This may only be practical where ground is firmer or hedges are beside roads.

Additional recommendations and limitations

Over-frequent and hard annual trimming will reduce vigour and hedge condition, leading to gappy hedges that are not stock proof and have little wildlife value due to the fruits/berries being removed.

Ideally hedges should be trimmed only once every 3 years as berries only appear on the second year of growth.

Single species hedges are more prone to becoming gappy that mixed species hedges.

For hedges that do get cut every year (e.g. road safety) raising the trimming height can retain some fruits and berries and prevent knuckle like growths forming.

Rotational trimming lengthens time between hedges needing laying or coppicing.

Some soil compaction within field margins may arise from frequent passes of tractor mounted flails.

Incremental trimming will allow the hedge to expand a little each time it is cut as well as enable more berries and fruits to develop.

4 Expanded hedge

Planting or encouraging natural regeneration to form a broad margin of trees and shrubs next to a hedge.

To create a wider wildlife corridor and increase connectivity between habitats

Key guidance

A wide margin on one or both sides of a hedge is created either through planting with shrubby species or allowing it to regenerate naturally. The original hedge subsequently grows into a tree line.

Young plants in the margin need protecting from browsing stock until established.

Where land is grazed by sheep, some grazing of the base and sides of the bank is desirable to encourage lower growing herbs and flowers.

The species of ground flora present will change, becoming more shrubby and will create a more diverse structure across a farm.

Additional recommendations and limitations

May be appropriate in some situations, but not all. A combination of wide fenced margins in some locations and fences close to the hedge in others may be most appropriate. Most suited to mixed species hedges.

A broad margin only on the side of a hedge facing the prevailing winds creates a wider habitat corridor on the upwind side but enables stock to benefit from being able to get close to the hedge for shelter on the downwind side.

Running a stock fence close to the hedgebank on the upwind side allows sheep to graze through the fence.

Hedge section
(by Heather Harley)

5 Two-tier hedge trimming

A recently developed trimming and rejuvenation technique that creates a hedge with trees in the centre

Key guidance

The side of the hedge are rotationally trimmed / flailed to an angle at lower levels.

Trees are left to grow up through the centre.

Around a quarter width of the hedge is left in the centre where trees are left to grow.

Additional recommendations and limitations

Trimming creates dense bushy growth at the bottom which is good for stock proofing and as a wildlife habitat.

The trees provide shade shelter, berries for wildlife and future wood fuel.

Beech doesn't rspond well to this type of management. It is better suited to mixed species hedges.

6 Hedgerow trees

Selected trees retained to grow to maturity within the hedgerow

Hedgerow trees are important landscape features, providing both age and structural diversity to hedges. They also provide shelter and shade for livestock, are a valuable wildlife habitat and can counter the effects of other tree loss through disease

Key guidance

Retain existing hedgerow trees during other management practices where safe to do so.

Preferably, trees should be irregularly spaced for a more natural appearance. They should be far enough apart for the trees to develop full crowns and not so close that they shade out the bushy part of the hedge below.

Formative pruning will help to develop a strong, healthy structure to the trees.

Canopies of retained trees can be raised (limbing up) to reduce shading out of grass.

Retain standing deadwood where safe to do so.

To establish hedgerow trees by new tree planting, it is best to plant them as small stock in gaps to reduce competition and to protect them with shelters.

Additional recommendations and limitations

In a young or newly planted hedge that is to be regularly trimmed, individual saplings can be identified and retained, using tagging or guards, rather than being trimmed with the rest of the hedge.

Newly planted trees in existing hedges are likely to need watering in dry periods and vegetation controlled around them to prevent them being swamped.

Do not carry out work on veteran trees without specialist advice. Veterans are characterful trees that have developed hollows, cracks, sap runs and deadwood. They are often old and mature but can be younger too and have high ecological value.

7 Casting up

Where soil that has slumped or eroded from a turf-faced bank is placed back on the top of the bank

Key guidance

Casting up typically forms part of rotational hedge management. Once the hedge has been laid, soil is replaced back on the top of the banks to maintain the integrity of the hedge structure.

Additional recommendations and limitations

Where the hedge is 'double combed', whereby two rows of shrubs have been planted, the process is easier for the soil to be put in the gap between. It is important not to bury the cut stems with soil as they will be smothered and not regrow. This can be an issue where machinery is used for casting up, whereas in the past it was done, sparingly, by hand..

8 Tree Shears

Hedge management incorporating use of tree shears (ENPA)

Key guidance

Typically mounted on an excavator, hydraulic tree shears are frequently being used for hedge management, particularly when coppicing stems.

Cut the stems a few feet above ground level using the shears and then cut the stems with a chainsaw to the final height, close to the ground.

A good level of competency is required to operate them safely and to understand the capacity each tree shear has in terms of stem diameter, to ensure that clean cuts can be made in one go.

Enables operators to easily manoeuvre cut stems, especially shears that can fully rotate.

Good ground conditions are required to prevent damage and compaction from tracking.

Additional recommendations and limitations

The cutting process is very efficient which can run the risk of more hedges being coppiced rather than laid. Because the process is so quick, there is a danger that more than the recommended percentage of hedges within a holding could be cut in one go.

No more than 5% of the total hedges on a holding should be coppiced (or laid) in one year and should be scattered across the holding.

The integrated grab is a valuable safety feature when hedges are in awkward locations or when cutting more dangerous trees such as brittle ash trees with ash dieback and is particularly useful when coppicing tall gappy hedges and for harvesting wood fuel.

There is a wide range of tree shears available and the operator should choose the appropriate tree shears for the job.

Retaining hedgerow trees is important, as with the other forms of management.

SECTION 3
OTHER MANAGEMENT CONSIDERATIONS

Mechanical hedge laying

A recently developed technique for laying some types of hedges is to use a powered pruning saw or chainsaw to partially cut the stem and then push down the stems using mechanical machinery such as a front loader or 360° excavator.

All the growth on the sides of the stems are left in place. With less woody material removed than traditional hedge laying, a wider and generally taller hedge is formed. It results in more dead wood in the hedge from the severed stems and the berry crop is retained, which is good for wildlife. Less brash is created.

It is likely to be more effective with young, mixed species hedges, but there is still potential for some trees or shrubs to be uprooted and killed. The technique is much faster and costs a lot less than traditional laying but comes with greater risks to the integrity of the hedge. The skill of the operator is critical to achieve a good result and it should only be done where entirely appropriate and where ground conditions are favourable

to prevent damage and compaction.

There is little (or no) evidence of it being used successfully on Exmoor. It may be less suitable for hedges on banks. It is not recommended for big, older hedges that have been laid in the past, gappy hedges or mature, large-stemmed trees. Traditional laying and/or coppicing is recommended in these cases. There is also limited evidence as yet of the long-term management implications and success.

Tree lines

On Exmoor there are many examples of beech hedges that have been left unmanaged for decades and have grown out into mature tree lines. They occur both on the moorland edges and lower pastures and in many cases have become significant landscape features, contributing to local distinctiveness and are part of the defining character of Exmoor. There are other hedge species, such as hawthorn, that have grown out to form mature tree lines but are less common on Exmoor.

Larger beech stems, over around 15cm (6 inches) diameter are too big to lay, and do not respond well to coppicing. If these large stems are coppiced, it is likely to be fatal to the tree. As trees mature, their ability to respond to coppicing reduces but beech is especially susceptible to being killed off. Other species such as oak and sycamore are more likely to recover.

The alternative is to leave the line of trees in place, retaining them as a landscape feature. This may be preferable to complete removal, especially where they make a strong contribution to the local scenery or are a prominent feature in the landscape. They also have high ecological value. They may offer an opportunity to allow wide hedge corridors to develop (the expanded hedge corridor), although shade cast by the trees may limit what can grow under their canopies.

Large, mature tree lines are not necessarily unsafe, even with fungi present. The fungi are of great value to wildlife and support a rich and

specialised fauna. Identification of the fungi will help in assessing the health and likely risk.

If a tree line is retained but some form of management is necessary, canopy raising (limbing up) to remove lower limbs and allow more light to the ground may be an option. However, the removal of spreading side branches from mature beech is very stressful to the tree. Alternatively, gradual and successive thinning and replacement with young trees may be an option, although it is very challenging to do successfully given the competition for light, nutrients and water. Beech is known to be sensitive to drought conditions so replacement trees could be mixed species rather than just beech.

Mature beech tree line (ENPA)

It is recommended that specialist advice is sought for appropriate management to prolong the life of these lines of larger tree lines or assess the risks if safety is a concern. If the trees are veterans (see following section), do not carry out work without specialist advice.

Veteran hedgerow trees

Veteran trees have distinct characteristics such as gnarly or stunted growth and are of particular ecological value, supporting a great diversity of species. They are likely to have a certain amount of decay, hollows, cracks, deadwood and sap runs, but these are not usually a sign of ill health. Even with the presence of fungi, hollows or fallen branches, they are not necessarily unsafe or at the end of their life. Veteran trees can be both mature and young in age, and include smaller growing species such

Veteran trees on a collapsed hedgebank (Nigel Stone)

as willow, rowan and crab apple, as well as the larger species of beech, ash and oak.

Where beech hedges have been laid in the past but left unmanaged for decades, they develop into the characteristic lines of mature and veteran trees, frequently on banks. These trees make a valuable contribution to local character, ecology and the historical landscape of Exmoor and where possible it would be preferable to retain and protect them from damaging activities and operations. Veteran beech does not respond well to traditional laying or coppicing and which may be fatal to the tree. It is recommended that specialist advice is sought to advise on appropriate management to prolong their life or assess the likely risk of collapse if safety is a concern.

Historic value

Many of Exmoor's hedgebanks are remnants of medieval field systems when small parcels of land were enclosed. They are typically on the foothills of the moor and lower valleys on manorial land and tend to be small fields, irregular or narrow in shape and with mixed species hedges.

During the nineteenth century, the selling of parcels of land through Parliamentary Enclosure and agricultural improvements, including the reclamation of the Royal Forest of Exmoor, led to large areas of moorland and common being enclosed. These fields are characteristically on the higher ground and tend to be large and rectilinear in shape with banks topped by single species beech hedges, which are now known to be vulnerable to climate change, including drier summers and earlier spring.

The presence of hedges with historical value should inform how they are managed, to protect the heritage and to prevent deterioration of the feature. Ordnance Survey first edition maps are a good starting point to see whether historic hedges have been removed. Where new hedges are to be created, reinstating past hedge lines will contribute to restoring lost field patterns.

Information on archaeological features that pre-date the hedgebanks or are associated with them, and their historical significance can be found on the Exmoor Historic Environment Record (HER).

Stone faced hedgebanks along ancient trackway (ENPA)

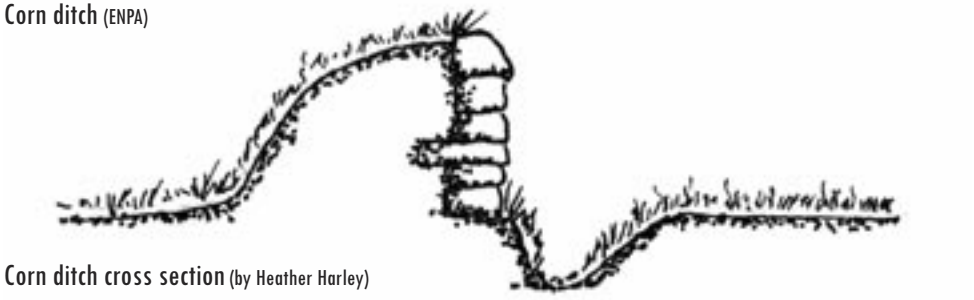
Earth and stone-faced banks

The stone faced or earth bank is an integral part of hedgebanks on Exmoor. Stone faced banks tend to be more resilient than earth banks. Over time, soil can become eroded or stones dislodged through the effects of rain or livestock climbing or rubbing against the banks, and periodic maintenance may be required to retain their integrity and function. For more information and links to organisations, go to Exmoor National Park's website and the links at the end.

Restored stone faced hedgebank (ENPA)

Historically, corn ditches are old field boundaries on Exmoor that separated common land from enclosed land. They prevented stock from entering fields from the open moor with a ditch and vertical stone face on the moorland side and a gradual slope on the field side. It is important not to alter the original historic feature and repair only what is disturbed or collapsed. Before carrying out work on corn ditches and their stone facing, contact Exmoor National Park Authority for advice.

Corn ditch (ENPA)



Corn ditch cross section (by Heather Harley)

Fencing

Post and wire fences beside hedges are commonly seen on Exmoor and whilst they protect the banks from damage by livestock, they have disadvantages. They create difficulties for ongoing management access, prevent livestock from fully benefitting from the shade and shelter the hedges can provide and can be a threat to deer by entrapment of their legs in the top strands. The fences take on the role of a stock proof barrier from the hedgebank but are often a requirement of funding streams.

Fencing hedgebanks can provide some benefitsby protecting flora and habitats on the bank from grazing or damage by livestock.

'Scare fence' is the term used for a fence which is erected just below the top of the hedge bank. Typically, two strands of wire are attached to wooden posts set at angles on the side of the bank, approximately 6m apart. Fences like this are used when the face of the hedgebank is not

vulnerable to livestock, such as a well-managed stone-faced bank. The angle of the posts and wire prevents livestock from climbing onto the hedgebank. During adverse weather, animals can tuck into the base of the bank, which provides shade and shelter.

Fencing newly planted hedgerows is usually necessary to protect the young plants, but as the hedge becomes established or where fences do not have a clear function, such as when the land is no longer used for grazing, removal of the fences may be appropriate.

Wherever wire fencing is used for stock proofing, it is advised that only a single strand of wire is used above the mesh to reduce the threat to deer and livestock from becoming entrapped.

Scare fence (ENPA)

Managing hedges for wood fuel

Hedges and hedgerow trees can be source of sustainable wood fuel, arising from the removal of the larger stems and trees taken out through coppicing and thinning as well as the smaller hedge brash. The use of arisings for wood fuel can add economic value to the practice of

managing hedges. Larger diameter wood for logs is an obvious use, but smaller branches and brash can also be processed into wood chips or small wood fuel and used in biomass boilers and wood burners.

The smaller arisings cut out of hedges has often historically been burnt on site, releasing greenhouse gasses including carbon dioxide into the atmosphere. Burning material in this way should be avoided. Creating wood fuel or biomass out of the harvested material instead can support renewable energy on-farm and add income generation potential to the practice of managing hedges.

The species present will make a difference to the yield produced. Hedges with larger growing species such as beech, oak and ash, or fast growing species like willow, will yield more than smaller growing species such as hazel or hawthorn.

Potential woodfuel from hedgelaying: logs from larger material and wood chip from the brash (ENPA)

Managing hedges for wood fuel is likely to differ to traditional approaches, with hedges left to grow out for longer to increase the height and diameter of the stems. The size would be at the stage more associated with coppicing rather than laying to enable logs to be harvested. Younger and smaller stems can be used for small rounds and wood chip.

More detailed information on managing hedges for wood fuel can be found via the links at the end.

Planting new hedges and gapping up

New hedges provide opportunities to provide links to the existing hedgerow network and re-establish those that were removed in the past to create larger fields, helping restore the historical field pattern and restore connectivity for wildlife. The hedge plants are usually planted as two rows on an earth bank (double combe) with a gap in the middle for casting up soil. These should be planted from November to the end of March as bare root stock. For detailed practical advice on how to create new hedges, refer to local hedge groups listed at the end.

Hedges are at their most vulnerable to the effects of drought and exposure to wind when newly planted. As a result of climate stresses, as well as tree diseases, it is recommended that a variety of species are included in the plant mix to increase the resilience of a new hedge. Single species beech hedges were planted extensively on Exmoor in the 19th century, but beech is shallow rooting and is vulnerable to drought, and when planted on banks it will experience frequent drought. It also responds less favourably to some forms of management, especially when mature.

A more varied mix of native species is preferable, ideally contain seven different native species of local provenance. Being guided by species that grow well locally is a good starting point as these will be best suited to the local conditions. A mix of tree and shrub species including those that produce fruits and berries, will be more valuable for wildlife. Species that are indigenous to, or do well on Exmoor include: oak, sycamore, rowan, wild cherry, crab apple, hazel, hawthorn, blackthorn, field maple, holly,

elder and goat willow. Hornbeam has not historically been found on Exmoor but with a changing climate, may do well. Ash, since 2012, has been subject to a Plant Health Order that prohibits movement of seeds, plants and trees in the UK. The key consideration when choosing a mix is ensuring a continuous supply of flowers and berries through the year for wildlife, starting with willow and cherry and ending with ivy.

Newly formed and planted hedgebank (Rob Wolton)

Hedge Management next to rights of way and roads

Management of hedges next to public rights of way and roads are the responsibility of the landowner or occupier, in accordance with the Highways Act 1980. The Management of Hedgerows (England) Regulations 2024 also applies (see Section 2 introduction).

If a hedge encroaches on a highway and causes an obstruction or a danger, the landowner is expected to cut the hedge. On main roads, the local highways authority may help maintain road safety by cutting hedges at junctions or bends and verges. However, this does not relieve owners and occupiers of their legal responsibilities and a notice can be served on them, requiring the work to be completed within a stated timescale.

When hedgerow management works coincide with public rights of way, these must stay open, safe and easy to use at all times. A temporary footpath closure may be required, depending on the scale and duration of the works. On Exmoor, rights of way closures are administered by Exmoor National Park Authority, which require at least two weeks' notice to make arrangements, and for which there is a charge. Where significant works are planned, a six-month closure may be required and at least three months' notice should be given (again charges apply).

To minimise risk and disruption, vehicular access to carry out hedgerow management works should avoid using a route which coincides with or crosses public rights of way where possible. Any damage done to the public right of way as a result of vehicular access must be repaired to the same condition it was in prior to the works.

Rights of way on the ground can differ from the definitive map, so if there is uncertainty about the routes of public rights of way, contact the Public Rights of Way and Access Officer at the Authority. Further advice is available on the Exmoor National Park website including contact details for the Area Rangers.

Hedges frequently bound footpaths and bridleways (ENPA)

SECTION 4
REGULATIONS TO PROTECT HEDGES

Hedgerows Regulations 1997

In addition to the Management of Hedgerows (England) Regulations 2024 outlined in Section 2, the existing legal protections under the Hedgerows Regulations 1997 remain in place. These regulations protect important hedgerows by controlling their removal and it is unlawful to remove or destroy most countryside hedgerows without the prior permission of the local planning authority, Exmoor National Park Authority. An assessment is carried out to determine whether the hedgerow is classed as 'important' and cannot be removed, using criteria based on archaeological, ecological, landscape and wildlife value. Hedges over 30 years old and which qualify under any one of the criteria are deemed to be important. Removing a hedgerow without consent is a criminal offence, including acts which could result in its destruction. There are some exemptions from the regulations, such as if it forms a garden boundary or is less than 20m and not connected to other hedgerows. For further information and exemptions refer to guidance by Defra.

Wildlife and Countryside Act 1981
The Wildlife and Countryside Act specifically outlines protections for birds and other wildlife, including small mammals (such as dormice), insects and plants which may live in or close to hedges. It is essential to check all hedges before work is undertaken to ensure no breeding or nesting activity is taking place in the hedge and that it is not being used by hibernating mammals such as dormice and bats. It applies whether trimming a hedge or doing other management work which could disturb nesting birds or harm other protected wildlife within the hedge.

Felling Licences
A Felling Licence is required from the Forestry Commission if more than 5m3 is to be felled in a hedgerow in any calendar quarter, as long as no more than 2m3 of the wood is not sold. The licence applies to coppicing a hedge if the multi-stems to be coppiced are 15cm or large in diameter when measured at 1.3m above ground and for felling single stems of 8cm or larger in diameter at 1.3m above ground.

5m3 equates roughly to 20 to 40 larger stems (15-20cm diameter, 6-7m high) in a hedge of optimal coppice size, or to one mature oak tree (diameter 60cm, 15m high). Felling licences are normally issued for a 5-year period but can be for 10 years if a woodland management plan is agreed.

During the licence application process, consultation is carried out to find out if there are any constraints or issues affecting the felling. For instance, work next to rights of way may require temporary footpath closures, depending on the scale and duration of the works (see section 3),

Felling must not begin until the licence is issued, and felling without a licence is an offence. Other permissions may still be needed, such as planning approval. If in doubt, get advice.

Planning and Tree Preservation Orders (TPOs)
Individual trees in a hedgerow or whole hedges may be subject to a TPO. If there is a TPO, planning consent for management works is required,

whether it is an individual hedgerow tree or a whole hedgerow. Works to any trees in hedgerows within a Conservation Area will also require planning consent. To find out if a hedgerow or hedgerow trees have a TPO, contact Exmoor National Park Authority. The location of conservation areas can be seen on the Historic Environment Record for Exmoor National Park (details at the end).

If a felling licence has been applied for and there is a TPO in place, the Forestry Commission will liaise with Exmoor National Park Authority as necessary.

For more information on any of the sections above, contact Exmoor National Park Authority or visit the website for details on publications, resources and links to organisations.

SECTION 5
FURTHER INFORMATION

Online resources and key organisations
Exmoor National Park Authority: www.exmoor-nationalpark.gov.uk

Natural England: www.gov.uk/government/organisations/natural-england

Hedgelink: www.hedgelink.org.uk

Devon Hedge Group and Somerset Hedge Group have publications and online resources, including detailed management guidance, how to make new hedges and managing hedges for wood fuel:

Devon Hedge Group: www.devonhedges.org

Somerset Hedge Group: www.somerset-hedgegroup.org.uk

Peoples Trust for Endangered Species (PTES) have published case studies, good management practices and a healthy hedges guide: www.ptes.org

Rights of way advice and temporary closures
Exmoor National Park Authority:
Tel. 01398 323665. Email: access@exmoor-nationalpark.go.uk.

Tree Felling and Forestry Operations affecting Public Rights of Way
www.exmoor-nationalpark.gov.uk/community/information-for-farmers-and-land-managers/public-access-info-for-farmers-and-land-managers/forestry-operations-and-rights-of-way

Apply for the temporary closure of a Public Right of Way
www.exmoor-nationalpark.gov.uk/community/information-for-farmers-and-land-managers/public-access-info-for-farmers-and-land-managers/apply-for-the-temporary-closure-of-a-public-right-of-way

Felling licences
Forestry Commission: Tel 0300 067 4960.
www.gov.uk/government/organisations/forestry-commission

Planning and Tree Preservation Orders
Exmoor National Park Authority:
Tel. 01398 323665. www.exmoor-nationalpark.gov.uk

Natural Environment
Exmoor Natural Environment Record: Natural Environment Record
www.exmoor-nationalpark.gov.uk/

Historic environment
Exmoor Historic Environment Record for Exmoor National Park:
www.exmoorher.co.uk

Funding opportunities
DEFRA – www.gov.uk/guidance/funding-for-farmers


Shaun Davey

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