

# Practical Guide: Multi-functional Hedgerows

## Hedgerows and their benefits

Hedgerows are a familiar and well-loved feature of the Scottish countryside and provide a range of benefits (Fig. 1). They stockproof fields and create physical barriers between farms which enhances biosecurity. Trapping sediments, hedgerows reduce erosion and protect watercourses from diffuse pollutants. Hedgerows also play an important role in helping us tackle and adapt to climate change. They not only sequester and store carbon offsetting greenhouse gas emissions, but also provide shade and shelter for livestock reducing heat stress, and cold exposure, helping us maintain high welfare standards and production.

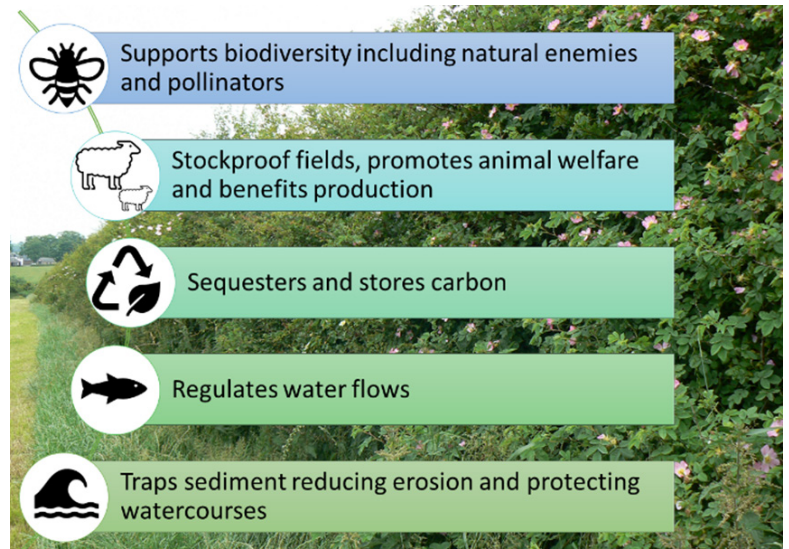
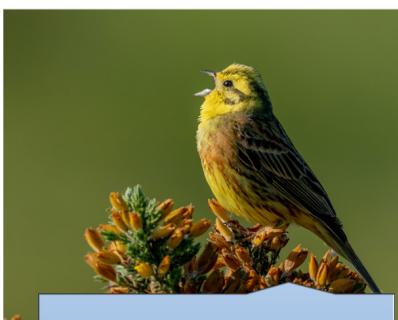
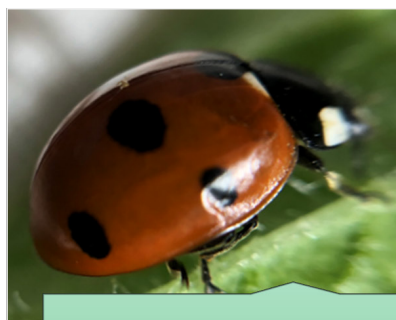


Fig 1: Ecosystem services provided by hedgerows

Hedgerows provide nesting sites and berries for farmland birds and small mammals. They provide shelter and overwintering sites for a range of insects including butterflies and natural enemies such as spiders, ground beetles and ladybirds. They provide floral resource for insect pollinators, particularly in spring when hawthorn and blackthorn flower prolifically. Above all, hedgerows act as wildlife corridors, allowing species to move more freely around agricultural landscapes.



Yellowhammer



7-spot ladybird



Carder bumblebees  
on knapweed

Tall, thick, hedgerows with a dense base and a variety of tree and shrub species provide the greatest benefits. Allowing some trees to grow within the hedgerow provides a greater variety of resources for wildlife. With hawthorn being intolerant to shade, it may be necessary to plant shade tolerant species such as holly below trees to reduce gaps forming. Maintaining a wide vegetated border helps to protect the hedge base and provides additional habitat for wildlife. At the farm scale, a diversity of floral rich borders, alongside undisturbed tussocky grasses, will help to support both pollinators and natural enemies.



Over trimmed hedgerow



Neglected hedgerow



Healthy hedgerow

## Cutting hedgerows

As tempting as it is to keep hedgerows neat and tidy, messy hedgerows tend to provide the greatest array of benefits. Hedgerows suffer from both over-trimming and neglect. Over-trimming results in stunted hedgerows that are gappy at the bottom and a gnarled scar typically forms at the cut line. Hedgerows that are left uncut, on the other hand, becoming tall and leggy.

To maintain structure and save money, it is recommended to cut hedges every 2-3 years. Gradually increasing the height by 5-10 cm each cut, will help increase hedgerow height whilst maintaining a dense base. Woody plants typically only flower on the second-year growth, and hedgerows that are trimmed annually provide fewer flowers for pollinators, and less berries for birds. Cutting hedgerows in rotation, so only some of the hedgerows are cut in any one year, will ensure that flowers and berries are present in some areas of the farm every year.

## Planting new or rejuvenating hedgerows

Gappy hedgerows can be rejuvenated by coppicing or laying. Coppicing is appropriate when the stems are too thick for laying and involves cutting the woody trunks right back at the base to a height of about 5 cm. In some instances fences may be needed to protect the new growth from browsing wildlife such as deer. Hedge-laying, is more appropriate when the stems are not quite so thick. Here the main stems are partially severed at the base and laid. Traditional laying involves removing excess side stems and weaving the partially cut stems between stakes, creating a stock proof barrier. However, wildlife or conservation laying, where the stems are partially cut, and the hedge is simply pushed over (e.g. with a digger) provides similar benefits but is easier and cheaper.

When establishing a new hedgerow, or filling the gaps in an existing hedge, it is important to choose a diversity of tree and shrub species with local provenance. Species such as hawthorn, blackthorn, hazel, ash, rosehip and holly all flower at slightly different times ensuring more stable forage for insect pollinators and a diversity of berries for birds and mammals. Planting a double row of shrubs will increase both the ability of a hedge to support wildlife and to capture and store carbon. With new shrubs vulnerable to grazing protecting with a fence or tree guards may be necessary.

Newly planted or rejuvenated hedges will grow tall and leggy as they compete for light. Annual trimming during the first five years, allows the hedge to grow a little taller each year whilst retaining a robust dense structure.



Conservation hedge laying



Traditional hedge laying

## Hedgerow management and GAEC regulations

Hedge management operations are likely to disturb birds nesting within the hedgerow which are protected by law. To protect breeding birds, operations must comply with GAEC (Good Agricultural and Environmental Conditions) regulations on The Retention of Landscape Features. Unless subject to exemptions at the time of writing the follow regulations apply\*:

- It is not permitted to remove or destroy hedges or trees (in line, in a group or isolated) without prior written consent of the Scottish Ministers.
- It is not permitted to trim hedgerows, or cut branches from drees during the breeding season (from 1st March to 31st August).
- It is not permitted to cultivate, apply fertilisers (organic or inorganic) or pesticides within two metres of the centre line of a hedge.
- Traditional hedge laying can only be carried out up to and including 31 March.

\* GAEC rules are regularly reviewed and we therefore refer you to the [Scottish Governments Rural Payments and Services website](#) for the most up to date guidelines.



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Visit the FAS Hedgerow Management webpage to to access more publications: [Hedgerow Management | Helping farmers in Scotland | Farm Advisory Service \(fas.scot\)](#)



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