



Hedgerows are an iconic feature of the rural landscape, particularly in lowland Scotland and provide significant benefits to the natural environment. These habitats are normally found as a boundary between fields, roads and other habitats, creating a network of connections for biodiversity. The extent of hedgerows in Scotland has increased, largely due to funding through agri-environment schemes. This has supported the creation of new hedges, and ongoing management of existing hedges.

The estimated length of hedgerows in Scotland is now over 22,000 km and most hedges, that comprise native woody species such as Hawthorn, Blackthorn, Elder and Hazel, are classified as a **UK BAP Priority Habitat**. Healthy hedgerows can also play a part in your **farm profitability**.

Ecosystem services supplied by hedgerows

Provisioning	Cultural	Supporting
 Crops (and feed) Livestock Water supplies Wild foods 	 Landscape and Aesthetic value Cultural heritage 	Nutrient cyclingSoil formationWater cycling
Regulating		
 Local climate regulation 	• Water purification	
 Carbon storage and sequestration 	 Air purification 	
 Pest and disease regulation 	 Pollination 	
• Soil quality and erosion regulation	Flood control	

Benefits to crop and livestock production

Hedgerows provide shelter from the wind, which benefits livestock such as new-born lambs as well as crops, which suffer lower rates of evapotranspiration in drought-prone areas downwind of hedges.

Hedges are natural pest controllers, which support crop security. They provide key overwintering habitats for predatory insects, which move into crops in the spring and feed on insect pests. Additionally, they can be key in forming a barrier to windblown pests.



Benefits to soil and water

The shelter provided by hedges reduces wind erosion of sandy soils and they can also provide a physical barrier to water run-off, reducing diffuse pollution of watercourses in the process. This, along with increased infiltration into the soil through the deep roots of hedges, slows the flow of water through river catchments and reduces peak flood levels during heavy rainfall.

Benefits to biodiversity

Hedgerows provide benefits to pollinating insects through the flowers of the component shrubs. Hazel, blackthorn, hawthorn and elder provide a succession of flowers during the spring and summer, so more diverse hedges support pollinator populations for a longer proportion of the year.

Hedges and their associated margins provide shelter for nesting birds such as tree sparrow, linnet, and yellowhammer.

In the autumn, hedgerow plants produce berries that provide food for birds such as redwings and fieldfares, as well as small mammals. You can learn more about the benefits of hedgerows by visiting the **PTES website**.

Risks to be aware of

The main threat to hedgerows is their condition deteriorating through over-trimming, rather than their deliberate removal, which is not permitted under cross-compliance rules. Wherever possible, consider restoring the structure and enhancing the biodiversity of existing hedgerows before planting new ones. **Read more about creating or restoring hedgerows**.

It is crucial that when creating new hedgerows you plan properly and take expert advice. Hedgerows can provide **wildlife corridors**, habitat and a food source for a range of species, however, **they can be unsuitable for ground nesting wading birds.** Many species associate woodland and similar habitats with predators and will avoid nesting close to them. Hedgerows can also dry out important wetland habitats.

Management actions to enhance

If planting new hedgerows, use a variety of native shrubs and trees that provide resources and shelter to **beneficial insects and farmland birds** throughout the year. Use hedges to create corridors between areas of woodland and scrub and other habitats. Leaving dead timber is valuable for insects while leaving a few trees untrimmed will benefit a wide variety of species. Ditches and grassy vegetation alongside hedges provide habitat for frogs, toads, newts and reptiles. When planting new hedgerows for wildlife corridors, visit **MOREhedges** for additional information on hedgerow creation and funding opportunities. For more information on how to improve your hedges' condition, visit **Hedgelink** website.

Assessing the condition of hedgerows

Frequency of cutting, species diversity, size, age structure and the amount of gaps are key factors to be considered when assessing hedge condition. **The PTES website photo gallery** provides great examples of different hedges quality.

Wind speeds downwind of a hedge can be reduced for distances up to 30x the height of the hedge

Find out more about what hedgerows have ever done for us with this **PTES video (3:36)** or **The Benefits of Healthy Hedgerows**. The **Teagasc website** also offers a wealth of information in bite size format.

