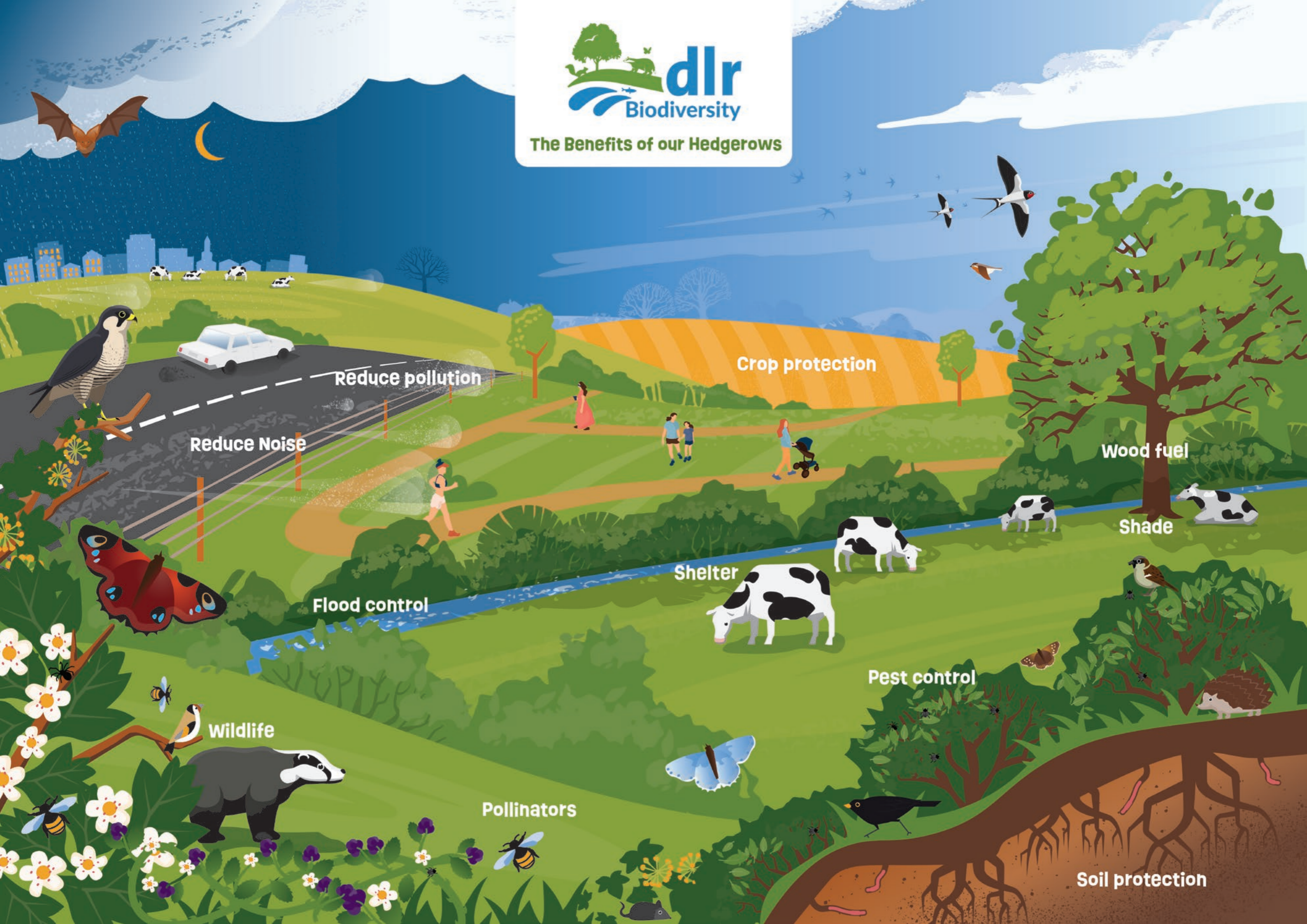




The Benefits of our Hedgerows



Reduce pollution

Reduce Noise

Crop protection

Wood fuel

Shade

Shelter

Flood control

Pest control

Wildlife

Pollinators

Soil protection

The Value and Benefits of our Hedgerows



Our Wildlife Corridors and Networks

Hedgerows and their associated field margins

or ditches occur across our county and are crucial for biodiversity, with so many species using them, such as plants, birds, bats, insects, badgers, hedgehogs and much more. Of the 110 bird species regularly recorded in the Countryside Bird Survey during the breeding season in Ireland, 55 use hedgerows. Hedgerows are important for the long-term survival of many species, acting both as corridors – providing connectivity to important habitats and to the wider landscape – and offering both food sources and nesting sites for many species. Hedgerows provide habitats for many of our native flora, such as the primrose. Flora in turn provide food sources, such as blackberries on bramble for birds, badgers and other fauna.



Water Quality and Flood Control

Water infiltration – plant roots help soils absorb water

faster. This allows the soil to act like a sponge, soaking up flood water rather than allowing it to run off the land quickly and cause floods. Tree and hedgerow roots run deep, allowing a larger, deeper area of the soil profile to act like a sponge, thus absorbing more water. The soil under a hedge stores more water, and stores it faster, preventing and delaying its movement downslope.

Water uptake – trees and shrubs remove water from soils by absorbing and releasing it back into the air as vapour via the leaves (transpiration).

Reducing sediment in waterways –

waterways that become clogged with sediments and pollutants are more prone to flooding. Much of the sediment in our waterways is carried from the land. Hedgerows and hedgerow trees help prevent soil erosion and stop sediments reaching our streams and rivers.

Slowing flood water – by slowing water flow, trees reduce the impact of flooding, allowing more time for soil infiltration, and time to respond to flood warnings.

Pollution – hedgerows reduce the amount of fertiliser and pesticides that reach watercourses. They act as a physical barrier, increasing infiltration to the soil, and recycle nutrients through the trees, shrubs and other plants. They also improve air quality by capturing pollution particles.



Climate Change and Carbon Storage

Carbon storage – hedgerows store carbon above and below

ground, and so can help us in our fight against climate change. They store carbon in the woody growth above ground and in roots, leaf litter and other soil organic matter at and below ground level. Hawthorn and blackthorn, which are common in Irish hedgerows can contain about 48.3% carbon on average.

Air Pollution and Heat – Hedgerows can absorb air pollution and dust particles, such as from car exhaust fumes, cleaning the air. Hedgerows can also absorb heat, providing a cooling effect and provide shade under their trees during warm weather.



Heritage and a sense of place

Hedgerows are a defining feature of our countryside, with

significant cultural and historical importance. They tell the story of our land boundaries and our farming traditions over many centuries and add to our county's distinctiveness. They make areas more attractive and contribute to our mental health and wellbeing.



Noise Pollution

In urban areas, there are many unwanted sounds, such as noise from traffic, industrial

activities, farm machinery and other human activities. Hedgerows and trees can help to reduce noise from surrounding areas and provide the more pleasant sounds of birds singing and bees humming.



Farming

Wind damage – hedgerows provide a wind break and increase crop yields by reducing damage from strong

winds, such as: crop lodging which makes them much more difficult to harvest and dramatically reduces yield; premature flower and fruit shedding; shoot damage; and wind chill damage.

Crop pest reduction – hedgerows increase populations of predator and parasitic species of crop pests. Farmland birds and predatory invertebrates, such as spiders, beetles and wasps, all limit crop pests.

Pollinators – hedgerows help support diverse pollinator populations, essential for crop pollination and good crop yields. Hedgerows provide food for pollinators throughout the year when crops aren't in flower, as well as places to nest.

Shelter – livestock without shelter require more food and face higher mortality. Shelter increases lamb survival rates, reducing the effect of wind chill and hypothermia.

Shade – in the summer months, heat stress reduces milk yield in dairy herds and affects fertility, growth rates and disease resistance. Hedgerows provide places for livestock to find shade.

Diet diversity – supplementary feeding on native hedgerow plants can increase livestock gut microbial diversity, help immune function, and improve feed conversion efficiency.

Biosecurity – thick, stock-proof hedges create barriers to the spread of disease such as bovine TB by reducing animal-to-animal contact between farms.

Parasitic load – livestock self-medicate by browsing on common species found in hedgerows. Some leaves have anti-parasitic properties, rough surfaces that act as a rasping plug or can cause a purging response.

Soil – Soil is the fragile skin that anchors all life on Earth and is one of our most precious resources. The effects of soil erosion go beyond the loss of fertile land. It has led to increased pollution and sedimentation in streams and rivers, clogging waterways and causing declines in fish and other species. Hedgerows reduce soil erosion by reducing surface wind speeds, by acting as a barrier to water run-off and their roots help to stabilise the soil surface. Tree and shrub roots grow deeper than crops so they can access nutrients deeper in the soil profile. This process cycles nutrients into the topsoil. Shelter also creates warmer soils, extending the growing season.

