



How-to-guide

Hedgerows for Pollinators



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What is pollination and why is it so important?

Pollination is a vital action in nature; it is the means by which plants fertilise each other in order to produce viable seed to keep the species going.

In some plants pollen is spread by wind, others require the actions of insects to transfer the pollen from the male to the female flower. These insects (honeybees, bumblebees, solitary bees, hoverflies and others) are known as pollinators. In general trees and shrubs that produce blossom (whitethorn, blackthorn, cherry, crab apple, etc.) are insect pollinated and those that produce catkins (hazel, alder, birch, oak, poplar) are wind-pollinated. The exception is the 'pussy' willow which produces an insect pollinated catkin. The blossoming species are often the woodland-edge species and so are the ones most commonly found in hedgerows.

Pollinators are a link in the chain of living (eco) systems that enable life to continue on earth.

Healthy ecosystems (and therefore healthy pollinator populations) are essential for sustainable agricultural production.



How do hedgerows support pollinators?

Good quality hedgerows provide the four essential needs of pollinators:

- Sources of pollen and nectar for food
- Places to breed
- Places to overwinter
- Corridors and pathways to travel across the landscape

Most agricultural crops that require pollinators only provide a food source for a few weeks – diverse hedgerows and flower-rich verges can provide food over a much longer period to fill the hungry gaps.



What makes a good quality hedgerow for pollinators?

Food Source

Trees, shrubs and wild flowers in hedgerows provide food throughout the season from spring to autumn. Dandelion, blackthorn and pussy willow are very valuable in the spring when little other food is available. Mature whitethorn provides a good source of food later in the spring, followed by elder. Later in the season ivy provides a critical food supply.



Networks / Corridors

When moving between their nest and feeding sites most pollinators like to follow linear features like hedgerows which give them some protection from the wind and rain. Hedgerows and other linear landscape features in agricultural landscapes can increase the connectivity between otherwise isolated plant and pollinator populations so well-connected networks of hedgerows are important to increase pollinator movement and pollen transfer.



Places to breed and overwinter

Open fields provide few opportunities for bumblebees to nest but hollows and holes in hedge banks along with tussocky grass in hedge margins are ideal. The hollow stems of dead brambles provide nesting and over-wintering sites for cavity nesting solitary bees. Hedgerows that have sandy, earth, or earth and stone banks provide ideal nesting and over-wintering sites for mining solitary bees, particularly if they are south facing.

Hedgerow Management

Hedgerow management for pollinators needs to be considered as part of the wider context of other management objectives – stock control, shelter, screening, etc.



For more guidance or advice on hedgerow management see the further information section at the end of this leaflet.



New hedgerows for Pollinators

Planting a diverse range of species is key

Many common and uncommon hedgerow species will provide food for pollinators. The following is a list of some native hedgerow species that are insect-pollinated with their approximate period for blossoming – this can be affected by a number of factors such as local climate and altitude.

Species	Blossoming Period
Willow	March - April
Blackthorn	March - April
Wild Cherry	April - May
Crab apple	April - May
Rowan	April - May
Bird Cherry	April - May
Whitebeam	May - June
Spindle	May - June
Whitethorn/Hawthorn	May - June
Guelder Rose	May - July
Elder	June

Shrubs like gorse and climbers like wild rose, honeysuckle and brambles also provide food and habitat for pollinators. Hedgerow species need to be suitable for their environment (soil and climate) and complementary to each other – in some situations some species can become dominant and push out less vigorous species. Try and select a suitable mix that will provide blossom throughout the season. Be sure to source species of native (preferably local) provenance.

Ensure good connectivity between hedgerows and other natural and semi-natural habitats

If you can link in your new hedge with other natural and semi-natural habitats in your area then this will make it easier for pollinators to get to and from your new hedge safely and will complement the general ecology of the area. Remember that areas of scrub are also important sources of food for pollinators.

Willow



Blackthorn



Elder



Managing existing hedgerows for Pollinators

Unmanaged hedgerows produce more flowers and fruit than managed hedges but leaving hedges unmanaged might not be consistent with other objectives.

Hedgerows should not be over-managed

Cutting hedges back to the same point every year reduces their capacity to flower and fruit. Ivy is a rich source of nectar and pollen. Removing all ivy from trees, shrubs and structures is detrimental to wildlife. Establishing a balance is important.

- ✓ If hedgerows are to be trimmed, cut them on a two or three year cycle in rotation. This will result in there being some areas producing flowers each year.
- ✓ Where annual cutting is necessary try and cut a few centimetres further out each year (especially for whitethorn) – this will leave a small amount of older wood on which the plant can produce flowers.
- ✓ When planting up any gaps in hedgerows try and increase the diversity of species.
- ✓ Where ivy is a threat to the health or stability of trees control excessive levels on a rotational basis so that there is always some ivy available for wildlife.



The base of a hedgerow can provide important food and shelter for pollinators

Hedgerow margins and verges, especially sheltered south-facing ones are good places to try and increase the amount and diversity of wild plants.

- ✓ Flowers like knapweed, vetches and woundwort are good for bees, while hogweed, rough chervil and wild angelica are good for hoverflies.
- ✓ Keep fertilisers, pesticides and herbicides well

away from hedgerows and verges; they are all detrimental to pollinators.

- ✓ Don't allow hedgerow margins to become poached by livestock.
- ✓ Hedge banks, especially sheltered south-facing ones, are important nesting and over-wintering sites for solitary bees.

Timing of management activity is important

Some species of hedgerow and verge wild flowers like self-heal, woundwort and vetches can still flower (produce pollen) well in to the autumn. Cutting hedges early in the hedge cutting season (currently September to February (inclusive)) can reduce the available food for pollinators at a critical time of the year.

- ✓ Cutting hedges between November and January is likely to be less disruptive to pollinators.

Repairing and rejuvenating hedgerows

- ✓ Damaged hedge banks should be repaired as part of hedge management activities.
- ✓ In the longer term virtually all hedgerows will need to be periodically rejuvenated through coppicing or laying if they are to remain sustainable.
- ✓ Laying should be the preferred option for rejuvenation as laid hedges will continue to flower and provide food for pollinators. Most coppiced hedges will not return to a flowering mode for a number of years.



About the National Biodiversity Data Centre

The National Biodiversity Data Centre is a national organisation that collects and manages data to document Ireland's wildlife resource, and to track how it is changing.

Find out what biodiversity has already been recorded in your local area:

maps.biodiversityireland.ie

Help us to build up the knowledge of biodiversity in your local area by submitting sightings to **records.biodiversityireland.ie**

Further information:

Hedge Laying Association of Ireland www.hedgelaying.ie hlai@eircom.net

Hedgeline UK <http://www.hedgeline.org.uk/index.php>

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