10 Steps to Helping Pollinators on Small Units

Practical Guide

Farm Advisory Service

Honey bees and bumblebees are important pollinating insects. Solitary bees, wasps, moths, butterflies, hoverflies, beetles and flies also pollinate different types of flowers and crops.

Pollinators are in decline. This is largely due to habitat loss through intensive farming and other developments which have reduced the availability of flowering plants, suitable shelter and cover that pollinators need throughout the year.

Crofts and small units typically have small fields and are extensively managed, offering a number of ways to help these essential insects.

Create a pollinator haven on your land by following these 10 steps:

Step 1

Look after unimproved or long established habitats such as ponds, wetlands, ditch and burn banks, woodlands, tree-lines, scrub, knolls, steep banks, field edges and road verges as the vegetation may contain specialised plants and associated insects. Sunny, south facing slopes will be most used by insects. Reduce grazing on these sites, especially during the breeding and flowering season between March and July, to boost flowering plants; even if this is only done on a 2 - 3 year rotation, it will help!

Avoid fertilisers and pesticides on unimproved areas, and don't use these habitats for winter feeding which will cause poaching, trampling and nutrient enrichment which alters the vegetation.

Our Practical Guide covers the 10 steps to helping Pollinators on Small Units:

1. Look after unimproved or long established habitats & lower rich sites.
2. Make more room for field margins
3. Plant a hedge
4. Plant trees or shrubs in corners of fields
5. Sow or plant a wildflowers meadow
6. Sow an annual mix onto bare ground
7. Cut meadow hay or rotate grazing
8. Provide nesting sites for bees and bumblebees
9. Dig a pond or wetland
10. Test your soil pH

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Step 2

Make more room for field margins, and create ungrazed strips around fields to protect ditches, wildflowers & shrubs in field edges, dykes or hedges. Even a temporary scare or electric fence can be used to protect a 2m strip which allows plants to flower and produce pollen and nectar and gives pollinators a safe route across the landscape.

A 2- 3m strip creates good biosecurity for your croft by avoiding nose to nose contact between your animals and those of your neighbours.

Step 3

Plant a hedge using flowering plants and native species eg hawthorn, blackthorn, hazel, holly, ivy, wild roses, honeysuckle, crab apple. Within a few years it can transform the local landscape.

Plant 40-60cm whips in double staggered rows about 30cm apart at about 6 plants per metre

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X X X

Use a bark/muck mulch, or black plastic to control weeds initially and prevent losses

Step 4

Plant pollen rich trees or shrubs in corners of fields. Native trees and shrubs are generally most valuable for pollinators e.g. willows are especially valuable in spring and ivy is important for bees in the autumn. Avoid planting into open landscapes if skylark or lapwing are present as enclosing these open landscapes with trees will deter these other priority species.

Step 5

Sow or plant a wildflower meadow, however small, to provide vital early and late season food sources e.g. clover, knapweed, birdsfoot trefoil, vetches, yarrow, wild mint, viper's bugloss, teasel, willows. Even small areas will attract pollinators. Choose sunny south facing slopes for greatest benefit to insects.

Use a seed mix at 2g/m2 onto patches of bare soil and firm in. Allow a season for flowers to establish before grazing. Birdsfoot trefoil and yarrow are usually quick and easy to establish. Add yellow rattle, a hemi-parasitic plant in the autumn to help reduce the vigour of competitive grasses.

Step 6

Sow an annual mix using some pollen and nectar rich flowers attractive to insects eg flax, phacelia, sunflower and mustard, or rare arable “weeds” that have typically disappeared from arable crops due to frequent spraying eg cornflower, corn marigold, poppy.

Step 7

Cut meadow hay or rotate grazing so that grasses and clovers get a chance to mature, flower and seed. This will help insects but will also allow roots to penetrate deeper into the soil and increase earthworm activity which reduces soil compaction. A break in grazing also helps interrupt the cycle of parasitic worms, reducing the need for chemical wormers in livestock.

A period of rest provides habitat for insects and helps aerate the soil by allowing compacted areas e.g. field gates, bare ground to establish plants such as pineapple weed, redshank, fat hen and nettles which are used by insects.

Step 8

Provide nesting sites for Bees and Bumblebees

Shady mossy banks, earth dykes and bare ground, particularly north west facing, provide nesting sites for bees, bumblebees and wasps. Dead wood and holes in wood are used by solitary bees and wasps.

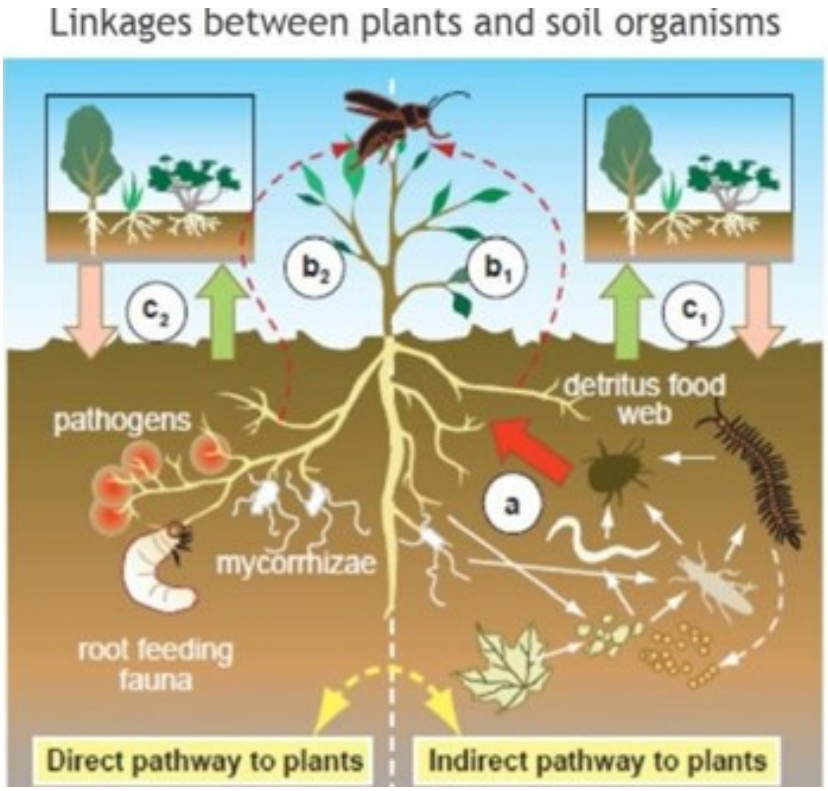
Step 9

Dig a pond or wetland – even a small pond or wetland can create a suitable habitat for valuable marginal or wetland plants rich in nectar e.g. cuckoo flower, lady’s smock and wild mint.

Ponds and wetlands can also attract dragonflies, frogs, newts and toads.

Step 10

Test your soils for pH - many wildflowers and clovers prefer a neutral soil, so add lime where required.



Soil pH, organic matter and soil organisms are affected by agricultural activity. On improved land soils have been significantly altered by ploughing, fertilisers, pesticides and grazing. Soil organisms are the vital life force of the soil as they recycle organic materials. Many soil organisms such as mycorrhizae form a close relationship with the vegetation, providing nutrients and environmental protection. The correct pH will also improve grassland growth and crop yield.

Other considerations

Agri-environment schemes offer payments to help create and maintain flower-rich areas for bees and other wildlife on small units. Wildflowers and shrubs attractive to pollinators can also transform gardens into pollinator havens.

Make a plan and take small manageable steps.