

Managing wildflower meadows... for bumblebees



Factsheet 1
Land management
series

The loss of over 97% of the UK's wildflower-rich grasslands has, unsurprisingly, had a huge impact on bumblebees, which have seen simultaneous dramatic declines. Wildflower meadows provide key summer forage for bumblebees so need careful management to maintain their wealth of wildflowers.

Key facts:

Funding available: England, Wales,
and Scotland

Sustainability: Long-term option

Suitable for: Permanent grassland

Upkeep: Annual mowing & grazing

Habitat quality: Very high

Why maintain a wildflower meadow?

Wildflower meadows are the most important habitat for bumblebees as they provide flowers throughout the summer and contain many nectar – and pollen-rich plant species favoured by bumblebees. Plants like red clover, yellow rattle, bird's-foot-trefoil and red bartsia are great pollen sources for queen and worker bumblebees, whilst knapweed and scabious are important nectar sources.

Conserving our remaining flower-rich meadows is therefore vital to help bumblebees, particularly in areas that support rare species. Unfortunately, whilst these meadows used to be common, the majority have been lost in recent decades with changes in agricultural practices. Returning to less intensive, more traditional meadow management is much better for bumblebees as it supports a far greater variety of flowers.

Why conserve bumblebees?

Almost all of the UK's 20+ species of bumblebee are thought to have declined in range or abundance.

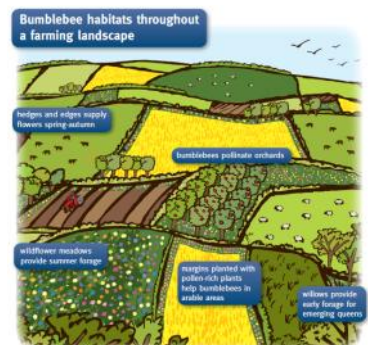
Bumblebees are hard-working and versatile pollinators that provide an important service to agriculture. They are also key in maintaining our biodiversity, as so many wild plants depend upon them for pollination.



Wildflower meadows contain up to 40 plants per square-metre, many of which provide pollen and nectar for foraging bumblebees and other wildlife

How meadow management for bumblebees can work on your farm...

- supports pollination
- increases yields in adjacent crops
- supported by agri-environment payments
- has diversification benefits e.g. for tourism
- reduces outlay e.g. no fertiliser costs



Please find a step-by-step guide to managing your meadow for bumblebees overleaf...



For more information on bumblebees please visit

www.bumblebeeconservation.org

Sensitive meadow management to help conserve bumblebees

Managing a meadow following the regime below will, over time, help to increase the range and number of flowers that it supports, increasing the quantity and quality of foraging habitat for bumblebees.

Management	Why?
Cut for hay once annually during mid-July to August	Cutting before late summer prevents many important meadow flowers from flowering and setting seed
Turn and dry the hay over 3-5 days before baling. In wet summers try to turn 2-3 times before making haylage	Encourages seed to shed which promotes regeneration of the seedbank, supporting a flower-rich sward
Do not apply chemical fertilisers	Use of chemical fertilisers will encourage growth of vigorous grasses and weeds, restricting meadow flowers
Apply only a light dressing of well rotted farmyard manure and only as part of a traditional management regime	Applying farmyard manure at high levels or when fresh acts like chemical fertiliser and can cause weed problems
Harrow or roll before mid- March	Operations in spring and summer could destroy nests of bumblebees and ground-nesting birds
Only add lime to maintain a pH of 5-6.5 if part of traditional management	Maintaining a neutral pH will provide the best conditions for a range of bumblebee-friendly plants
Graze with cattle or sheep in autumn and spring, removing stock by mid-May	Grazing stock help provide good conditions for seed establishment by keeping the sward low, removing thatch and create patches of bare ground

Other ways to help bumblebees...

Rotational late-cut

If you have several meadows, rotate a late cut (mid August – mid September) around the farm, with each field cut late once every five years or so. This will provide forage for bumblebees later in the season and maintain a flower-rich sward by allowing later-flowering plants to set seed, .

Rotational late-forage patches

To provide a refuge and late-summer forage for bumblebees, leave a two-metre uncut margin along one edge of the field. Cut this edge as normal the following year and rotate the uncut edge around the field each year.

Meadow restoration

Implementing good management can sometimes be sufficient to increase the diversity of flowers that a meadow supports. However, you may often need to introduce key species that are missing if there is no source of seed nearby. Please see our 'Grassland restoration' factsheet (No. 3 Land Management series) for more information.



Funding (England):



Entry Level stewardship

EK3/EL3 Permanent grassland

with very low inputs 150 points per ha

This can provide useful habitat on land in the entry-level scheme and encourage a more flower-rich sward. However, as it is less prescriptive than the higher level options, with an earlier cut date, the diversity of flowers that can be supported will be limited.

Higher Level stewardship

HK6 Maintenance of species-rich, semi-natural grassland £200 per ha

This is the best option for maintaining flower-rich meadows.

HK7 Restoration of species-rich, semi-natural grassland £200 per ha

This is the best option for restoring flower-rich meadows through management and/or seed addition.

HK15/16 Maintenance/restoration of grassland for target features £130 per ha

Can be used to support favourable management for target species where the grassland lacks potential to be restored under HK7.



Please contact your local Bumblebee Conservation Officer for advice on the best options for your land : Phone: 01786 467818 Email: enquiries@bumblebeeconservation.org

If you are in an agri-environment scheme you must also discuss any changes in management with your Natural England adviser