

# Managing traditional orchards... for bumblebees

Bumblebees and other wild bees are very important for orchards as they pollinate the trees while collecting pollen and nectar. By changing how you manage habitats in and around your orchard you can support more bumblebees, boosting pollination and fruit yields.

## Why manage an orchard for bumblebees?

This factsheet is aimed primarily at people who manage their orchard traditionally, although many practices can also be used in larger, commercial orchards. Whatever the size, there is plenty that you can do for bumblebees.

Since the 1950s, many of Britain's orchards have vanished as a result of development pressures, conversion to other uses and neglect due to economic difficulties of small-scale fruit growing. Sensitively managed orchards can provide a haven for bumblebees, particularly if they support flower-rich grassland beneath the trees.

Bumblebees need pollen- and nectar-rich flowers throughout their nesting season (March to late-September). The blossom from apple, pear, cherry, plum and other fruit trees provides early food for bumblebees. This is particularly important for queen bumblebees coming out of hibernation in the spring. After this, bumblebees use flowers in the grassland beneath the trees, as well as in the hedges and edges around the orchard. These flowers support bumblebees throughout their lifecycle to ensure they produce the new queens in late summer that are needed to establish nests the following year.

## What is a traditional orchard?

Traditional orchards are a valuable feature of our rural landscape and heritage. They typically have widely-spaced trees of old and often scarce varieties. They are defined as having five or more fruit trees spaced no further apart than 20 metres from crown edge to crown edge over permanent grassland.

## Grassland management

To encourage a wide diversity of wildflowers, management should ideally mimic that of a traditional hay meadow. The grassland beneath the trees should be allowed to flower from May to late July/August and then be harvested as hay. Grazing in autumn and spring will also help maintain and enhance flower-rich grasslands, as will ensuring no chemical fertilisers are applied (in accordance with traditional orchard management practices).

Grazing is widely used as the sole means of management of the grassland in traditional orchards. Rather than taking a hay cut, stock can be used to graze-off the standing crop at the end of the summer – so long as livestock are excluded over the vital summer months to ensure the flowers are there when the bumblebees need them.

## Key facts

 **Upkeep**  
Annual mowing and/or grazing

 **Suitable for**  
Long-term option

 **Sustainability**  
Orchards

 **Bumblebee rating**  
♥♥♥♥♥

## Grassland enhancement

Implementing good management on grassland areas can sometimes be enough to increase the diversity of flowers that your orchard supports. However, if there is no source of seed nearby you may need to introduce key species such as clovers, vetches, yellow rattle and knapweed.



Bumblebees provide a vital 'pollination service' in orchards, with almost all fruit resulting from pollination by a bee or other insect.

## Sensitive orchard management to help conserve bumblebees

<i>Management</i>	<i>When</i>	<i>Why</i>
Cut for hay once annually.	Mid-July to August	Cutting before mid-July would prevent many important wildflowers from flowering and setting seed.
Leave hay to dry for a few days prior to bailing, turning if possible. Always remove cuttings.	Mid-July to August	Encourages seed to drop which promotes regeneration of the seedbank. Removing cuttings helps to maintain low soil fertility which suppresses coarse grasses and allows wildflowers to flourish.
Rotate an uncut strip (e.g. two metres) along one edge, cutting the following year.		Provides important late-summer foraging areas for bumblebees and a refuge for other invertebrates.
Graze with cattle or sheep in autumn and spring, removing stock by mid-May.	Autumn and spring	Grazing livestock helps to provide good conditions for seed establishment by keeping the grass level low, removing thatch and creating patches of bare ground.
Do not apply chemical fertilisers.		Use of chemical fertilisers will encourage growth of vigorous grasses and weeds, restricting meadow flowers.
Rotational hedgerow and edge management. Leave hedges uncut for two-three years and vary the time of cutting.	October to February	Hedges provide vital spring and summer flowers and are important nest sites for bumblebees so cutting should not take place between March and the end of September. Leaving some hedges uncut will encourage a greater range of wildlife.

### Hedge and edge management

Hedgerows and other edge habitats can provide vital pockets of forage for bumblebees, particularly as they come to the end of their nesting season. It is important not to cut hedges or trample hedge-bases until the end of September, as they not only provide vital flowers but are often popular nesting sites for bumblebees.

Rotational cutting of ditches, banks and grassland strips in sections in late summer provides valuable uncut flowery areas throughout the bumblebee season. Another simple way to help bumblebees and boost pollination is to sow a clover-rich strip around the edge of your orchard.

### Other wildlife love orchards too

Orchards provide habitat for many solitary bees, which are also fantastic pollinators. Providing small patches of bare ground and keeping deadwood within the orchard creates nest sites for these bees. Deadwood is also used by the rare noble chafer beetle and many other insects.

### Funding

Funding to support this kind of beneficial management may be available under agri-environment schemes or local projects. If your land is in an agri-environment scheme please discuss any changes in management with your agreement advisor.

For advice on how to manage your land sensitively for bumblebees, please contact BBCT.

### Get in touch

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