

Bumblebees



There are twenty-five species of bumblebee in Britain and, at this time of year, you may see queen bumblebees flying close to the ground in fields and gardens. They have just emerged from hibernation and are searching for suitable sites to build their nests. It may still be cold but they are among the few insects that can control their body temperature. They shiver their flight muscles to warm their bodies, which allows them to be active at lower temperatures than many other insects. Their large size and furry coats also help them retain their body heat.

As spring approaches, queen bumblebees are looking for holes in the ground in which to build their nests, such as disused mouse nests or cavities beneath the roots of trees and hedges. They may also be enticed to occupy large flower pots placed firmly on their sides in a hollow. They will pass through the hole in the bottom of the pot and, if you are lucky, you will be able to watch their offspring coming and going throughout the year.

All bumblebees feed on pollen and nectar, and rear the grub-like larvae on the same diet. In this respect they differ from wasps, whose young are fed on a diet of caterpillars and other insects. Bumblebees carry pollen trapped in hairs on their rear legs, areas known as pollen baskets, and can often be seen transporting their heavy loads back to their nests.

The nest consists of a spherical chamber made from material that is present nearby such as moss, leaves and tiny pieces of twigs. The first bees to develop are all sterile females called workers and soon take over the duties of collecting food, rearing the young and building and maintaining the nest, whilst the queen devotes herself to egg-laying.

A few species, known as cuckoo bees, are parasitic on the nests of other bumblebees. A queen cuckoo bee invades the nest, kills the resident queen, and the original workers raise the young parasitic bees along with those of their own colony. Occasionally, the invaders allow only their own young to survive. Because cuckoo bees do not forage for themselves they do not have pollen baskets.

Bumblebee queens and workers can sting, but rarely do so except in their own defence. Unlike wasps, bumblebees are generally quite docile and non-aggressive, and go about their business with little attention to human activity, even when this is close to the nesting site. Pollination of many agricultural and garden crops, like runner beans, depends almost entirely on the foraging activity of bees. Few, if any, bean flowers will set pods unless visited by these insects. As honeybees are expected to become rarer in the future, as many are infected with parasitic mites, bumblebees will assume even greater importance in pollinating our crops and flowers.

Towards the end of summer bumblebee colonies produce males and new queens which leave the nest. The males (drones) search for new young queens from other colonies to mate with. Once fertilised, the young queens start their winter hibernation in small underground chambers, but the drones and workers do not survive the winter. So the cycle begins again.