

Help save the Bumblebee...
get more buzz from your garden



Over the past seventy years, many kinds of bumblebees have become increasingly scarce; and two species have become extinct. Those species which have remained commonplace have been able to use gardens to provide part of their habitat.

However, we cannot afford to leave the continued existence of these attractive and harmless insects to chance. By growing suitable plants and providing a haven for bumblebees in our gardens we can help safeguard future populations.

Bumblebees are not aggressive and do not sting unless they feel threatened, such as by being handled roughly or accidentally caught underfoot or in clothing. When first accosted they are more likely to roll over on their backs and wave their legs at you. Unlike social wasps and honey bees who have a thousand or more workers, a bumblebee colony only has one or two hundred. There simply aren't enough spare workers to waste resources attacking potential threats; they will leave humans alone. The nests only last for one year and will not be used again.

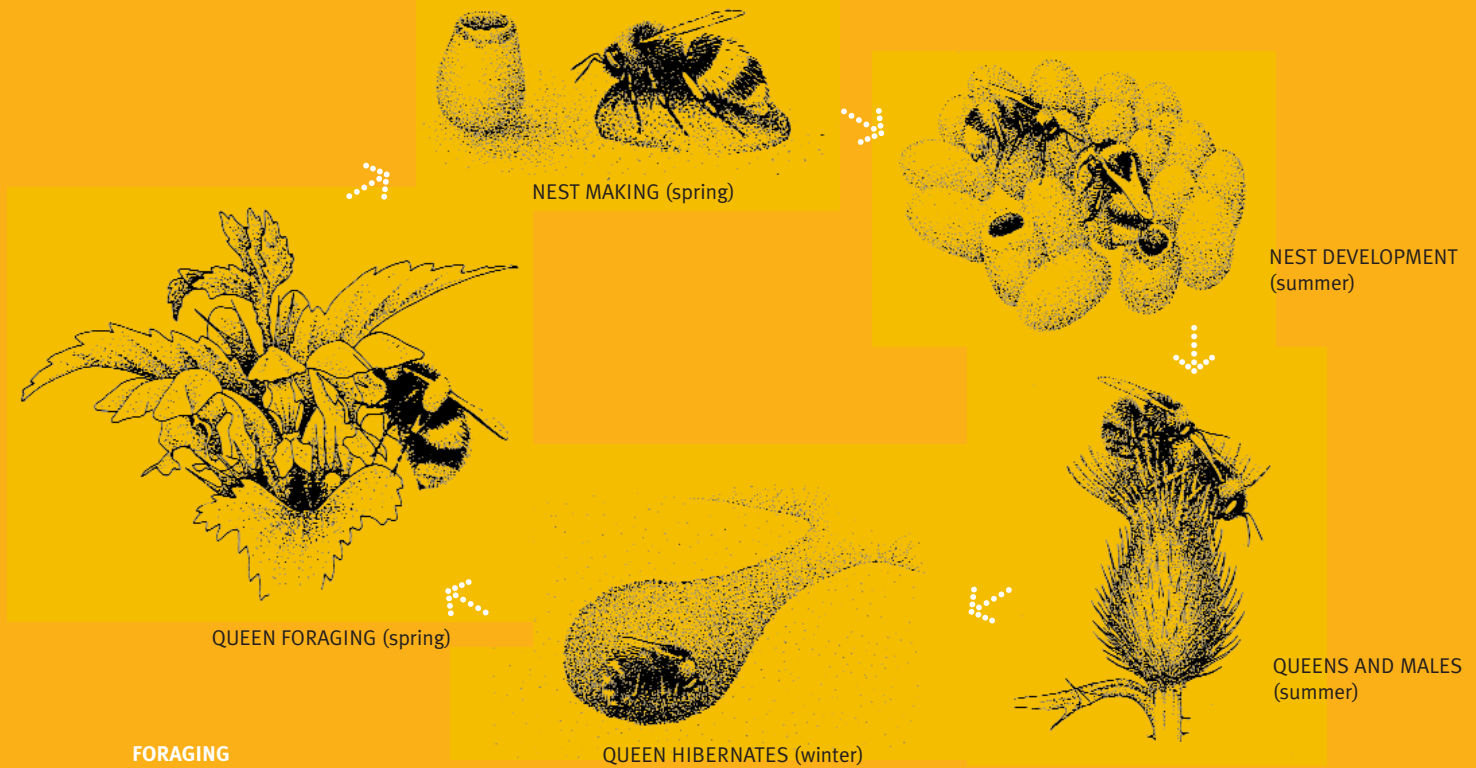
MAKE YOURS A BETTER GARDEN FOR BUMBLEBEES

- ❖ These attractive, harmless and friendly insects are a source of interest and enjoyment – especially for children.
- ❖ They are vital for the pollination of soft fruits, beans and flowers; and are able to pollinate at lower temperatures than other insects.
- ❖ The presence of bumblebees, and the sound of them working, brings gardens to life.

GARDENS ARE AN ESSENTIAL HABITAT FOR SOME BUMBLEBEE SPECIES

They provide:

- ❖ pollen to feed bumblebee young
- ❖ nectar to feed the adult bumblebees
- ❖ places for bumblebees to nest
- ❖ a vital replacement for lost habitat



FORAGING

The queen emerges in the spring, feeds and then gathers pollen and nectar

NEST MAKING

The queen finds a suitable cavity and begins to make a nest of her own. She stores nectar in a nectar pot to provide food for herself during bad weather and builds a pollen larder to feed her brood.

NEST DEVELOPMENT

The brood become workers and gather pollen and nectar to feed the later brood.

QUEENS AND MALES

Later in the year females (queens) and males are produced in the brood. They leave the nest and mate with queens and males from other nests.

QUEEN HIBERNATES

The old queen, the workers and the males die in late autumn. The new queens excavate underground chambers where they hibernate.

WHAT DO BUMBLEBEES NEED FROM THE ENVIRONMENT?

Bumblebee colonies are started anew at the beginning of each season by a single queen, who will have hibernated underground during the winter in a cool undisturbed place. The queen seeks out a suitable location for the new colony. While there may be plenty of potential nest sites - perhaps an abandoned mouse hole or shrew's nest - whether or not the colony survives the first perilous weeks will depend on the quality of the surrounding forage.

The colony needs nectar as a fuel for the adult and pollen for the developing larvae. Bumblebees will fly half a mile or more from the nest to find these, searching for new supplies when the old ones run out. A constant supply of food must always be present in the foraging area during the lifespan of the colony, between April and September.

At the end of its life, the colony produces new males and females and, after mating, the new queens hibernate.



Bombus pratorum (male)

PROVIDING FOOD FOR BUMBLEBEES

Pollen and nectar from many different garden plants are used by bumblebees to feed themselves and their young. To provide the perfect environment for bumblebees in your garden it is important to ensure that the flowering times of suitable plants cover the whole bumblebee season from March to August. The greater the number of suitable flowering plants in your garden, the better it will please bumblebees.

The following table suggests suitable plants and the main flowering times which will help get you started in planning a bumblebee diner! You do not need all of these – but it is a good idea to have a least two kinds of plant for each flowering period. If you notice bumblebees visiting other plants in your garden, you could make a list of these to pass on to your friends. We can't have too many bumblebee diners!

PLANTS FOR ALL SEASONS

Flowering time

Plant

March and April



Bombus lapidarius (female)

Berberis
Bluebell
Bugle
Flowering Currant
Lungwort
Pussy Willow
Rhododendron
Rosemary
Dead-nettle
Heathers

May and June



Bombus pascuorum (female)

Aquilegia
Campanula
Comfrey
Everlasting Pea
Geranium
Foxglove
Honeysuckle
Monkshood
Rhododendron
Stachys
Thyme

July and August



Bombus lucorum (male)

Cornflower
Delphinium
Fuchsia
Lavender
Rock-rose
Scabious
Sea Holly
Heathers



1



2



3



4

1. *Bombus lucorum*
(male)

2. *Bombus pratorum*
(female)

3. *Bombus hortorum*
(female)

4. *Bombus pascuorum*
(female)

cover image:
Bombus hortorum
(male)



Bombus terrestris
(female)

PROVIDING SUITABLE NESTING AREAS

The first step is to provide lots of the right kinds of plants. In the spring the nest-searching queens will be attracted to gardens where they can find plenty of food. If you watch a queen looking for a nest site, you will soon understand what she is looking for. When searching she flies low over the ground in a zig-zag pattern. She will stop to investigate piles of leaves, tussocks of grass or piles of dead (but not rotting) vegetation. What she is looking for is an old mouse or vole nest which will make a warm starting place.

If you keep an area of permanently taller grass along a hedge bottom there is a good chance that old vole nests will be present. Otherwise, you can provide starter nests by putting a tennis ball-size lump of dry moss and Kapok (or other natural plant fibre) at the end of holes poked into a bank; at the edge of a hedge; under flower pots (make sure the bees can find their way in!) or under pieces of metal sheeting lying on the surface of the ground in tall grass. The more starter nests you can provide, the more likely it is that they will be found and used.

Nest boxes for bumblebees are also available commercially but their success is very variable.



Bombus lapidarius
(male)

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