

The bumblebee year

In the UK we have 25 species of bumblebee, about 250 species of solitary bee and only one species of honeybee! Bumblebees are social insects (like honeybees), living in a colony with one queen and her worker daughters. Bumblebees cannot make honey in the same way as honeybees so cannot normally survive the British winter. Only the queen bees hibernate and emerge alone in the spring to start a new nest and the annual life cycle begins...

Autumn New mated queens search for a place to hibernate. The old nest, including all the males will die off naturally.



Spring Queen emerges from hibernation. She needs to feed on pollen and nectar, and find a nest site.

The bumblebee year



Queen lays eggs which develop into female worker bees. Queen then remains in nest and lays more eggs.

Late summer

Some eggs develop into males and new queens which leave the nest to feed and, if they're lucky, to mate!



Summer Workers are busy foraging on flowers and caring for eggs and larvae in the nest.

Helping bees in spring

Queen bumblebees need to feed as soon as they wake from hibernation. Willow trees provide some of the earliest sources of food for bees – both the male and female flowers (or catkins!) carry sugary nectar and the male flowers also carry protein rich pollen. Look out for queens on willow in spring!



Photo credit: Claire Flynn

Did you know?

Queens bumblebees hibernate in the soil and can survive temperatures as low as -19°C .

Wow!



Practical ideas for willow

Growing willow

Willow is wonderful for wildlife and has been used by humans for centuries, from baskets to medicines to biofuel! There are many different species and easy-to-grow crosses (hybrids), sourced from numerous online specialist growers. Grow on a small or large scale, from a single specimen plant to a hedge or copse.

- It will root from cuttings (rods about 60cm), taken from 1 or 2 year old stems.
- Push rods about half way into the ground (buds must be pointing upwards!) during winter when they are dormant.
- Keep weed free during first growth season – can be planted through weed blanket to help with this.

Sit back and watch them grow, then get busy – see our ideas below!



Caution: Willow roots will vigorously seek out moisture – don't plant near pipes, buildings or similar structures.

Practical ideas for using willow

Willow kindling

- Cut established willow as required (from 2nd year onwards).
- Cut stems into 30cm lengths.
- Stack in a shed or under tarpaulin until dry (a few months for wood up to 4cm in diameter).

Use for kindling, or alternatively use for habitat piles in your meadow or hedgerow!

Getting creative

Willow has long been used for weaving due to its bendy quality when fresh and green. There are many online suggestions and books for willow craft. Try willow...

- stars
- dragonflies
- fish
- Christmas wreaths
- Valentine hearts.

Willow plant supports

Create growing supports for climbing plants such as beans, peas and honeysuckle (all great for bees too!)

- Use 7 or 8 willow canes about 1.5m tall. If you don't want it to root use last year's cut dried canes or dip end in boiling water. Use 20 or so flexible green willow withies to weave with.
- Push long canes into prepared ground or large pot. Tie together at top with twine.
- Use withies to weave bands at top middle and bottom to secure structure.
- Plant climbing plants at base and enjoy!



Visit <https://www.rhs.org.uk/advice/profile?PID=588> for more info on willow. For lots of great information on spotting bumblebees, visit: bumblebeeconservation.org



All activities should be carried out with standard **Health and Safety and Risk Assessment** procedures. Children should not carry out any of these activities without responsible adult supervision and some activities using tools may be unsuitable for younger children.

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