

For information about the London Beekeepers' Association and how you can get involved visit our website or follow us on social media



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London Beekeepers Association

bees and other pollinators

- Information about bees
- How to help bees
- How to attract them to your garden
- Help make London a city fit for pollinators



About bees

Bees have survived on planet Earth for over 100 million years. The very first bees appeared during the age of the dinosaurs when the first flowering plants emerged. Today there are over 20,000 bee species worldwide with over 275 species recorded in the UK.

Bees are among the most efficient of insect pollinators due to their bodies being covered in a dense coat of plumose hairs which carry pollen. Along with other insects they are of huge economic importance in the production of fruit and vegetables. A third of the food we eat is pollinated by insects along with cotton used for our clothing.

Unfortunately, many of our wild bees along with other insect pollinators are in rapid decline. Habitat destruction, climate change, urban development, attack by exotic pests and diseases along with pesticides have all taken their toll on pollinators. But in some places, such as London, bees are bucking the trend with many species to be found in the city's parks and gardens. Honey bees in particular are doing very well in London with numbers of hives increasing significantly as beekeeping rises in popularity.

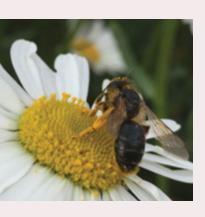
In some parts of London honey bee hive densities are now higher than in the surrounding countryside. However, in such a built up environment there may not be enough flowers for all these insects to forage on.

Some of London's parks and gardens are effectively 'green deserts' to pollinators offering little more than short grass and plane trees — neither of which produce nectar or pollen.

What can you do?

You don't have to keep honey bees to help bees. The best way everyone can help is by making gardens and community spaces more 'bee friendly'. Here's how:

- Plant a flowering hedge. It doesn't have to be native, you could try mixing native hawthorn with flowering currant, roses, Ceonothus, Viburnum tinus, Pyracantha and Mahonia. This will create a hedge that has flowers all year round.
- Plant fruit trees. Fruit trees produce masses of blossom containing highly nutritious nectar and pollen. You'll also get lovely fresh fruit from them!
- Plant a cottage garden. Old fashioned plants tend to be more attractive to bees and other insect pollinators.
- Plant a wide variety of flowers. This ensures flowers throughout the seasons. Bees need food all year round.
- Provide a source of water. Bees need to drink!
 A small pond or bird bath is ideal, but include some pebbles so they can climb in and out.
- **Erect a solitary bee house.** This will attract harmless solitary bees to nest.
- Don't plant highly bred flowers. Plants with double blooms and additional petals like Cactus Dahlias and many bedding plants such as Pelargoniums are all about show and often contain no nectar or pollen for insects
- · Don't use pesticides which may harm bees.









Bees need flowers all year round to provide them with a constant food supply. Plant your garden with varieties that will provide a succession of different flowers through the seasons.

Spring

In early spring, honey bee colonies resume brood rearing while wild bees emerge from hibernation and begin looking for nest sites. Bees require high quality pollen to feed to their offspring and laying queens. During early spring it is often too cold for plants to produce nectar and bees will survive using stores of honey or fat reserves laid down the previous year. Planting pollen rich flowers will help bees the most. By late spring, blossom trees begin to flower and life for bees becomes a bit easier for a while.

- Anenemone blanda
- Crocus
- Dandelion
- Flowering currant
- Forget-me-not
- Hazel
- Hellebores
- Mahonia
- Pulmonaria
- Pussy willow
- Sarcococca
- Snow drop
- Viburnum tinus
- Wall flower 'Bowles Mauve'
- Winter aconite







Summer

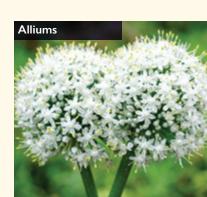
After the late spring peak in nectar, most of the blossom trees finish flowering and the summer flowers emerge. Bees are now most reliant on ground flora and shrubs like bramble. In towns and cities away from wild flower meadows, bees are heavily reliant on domestic gardens, railway verges and public green spaces.

- · Agastachi 'Black Adder'
- Borage
- Helenium
- Eryngium
- Echinacea
- Geranium
- Knifophia
- Lavender
- Oregano
- Penstemon
- Perennial cornflower
- Perovskia
- Phacelia
- Poppy
- Sage
- Thyme
- Verbena
- Salvia nemorosa
- Scabious
- Alliums









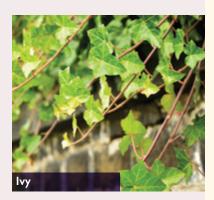


Autumn

Late summer and autumn is the last chance for honey bees to stock their stores of pollen and nectar to last them through the winter and for bumble bees it is their last chances to gain enough weight to survive hibernation until spring.

- Aster
- Helenium
- Ivy incredibly important to bees!
- Single open
 Chrysanthemum
- Single open Dahlia
- Golden Rod
- Sedum Spectable
- Rudbeckia
- Helianthus









Native or non-native?

For many years experts have recommended that native British wild flowers are planted in gardens to benefit pollinators. Whilst emphasis on native wild flowers has its merits, research shows that a mixture of natives and non-natives is often better. This is because the majority of our native flowers have evolved to exist in a hay meadow regime where they must flower and set seed by mid-summer before the hay is cut. After mid-summer our native plants therefore provide few flowers for bees.

- Native species offer food for many insect larvae that are host plant specific.
- Most native UK meadow flowers have a short flowering season.
- Some native plants provide important materials needed in nest construction.
- Exotics often flower for longer, providing forage for a range of insects when most natives have come and gone.
- The majority of adult pollinators do not discriminate between native and non-native nectar sources as long as the quality of the forage is good.





Taking care of London's pollinators

There are many ways in which everyone can help bees and other pollinators to thrive in our wonderful city. Here are some examples of what the London Beekeepers' Association and our partners are doing to help.

Lobbying London politicians and local authorities to plant with pollinators in mind.

We're working with local councils to advise and steer new planting projects to ensure trees and flowers being planted are beneficial for bees and other pollinators. We advise city conservationists on how to best help bees through representation on local authority biodiversity action plans and steering groups.

Educating and supporting new beekeepers

The LBKA run training courses for new beekeepers, deliver a mentoring programme to our students, run bee disease awareness training, monthly meetings and educational lectures through the winter months. Our Education Officer also helps prepare beekeepers wishing to undertake their beekeeping exams. This work is vital to ensuring that new beekeepers learn the skills needed to become successful in the craft and keep healthy, productive honey bees.



We attend community events, exhibitions, country fairs and harvest festival events throughout the capital with our information stand, spreading the word about the importance of bees and other pollinators. We also visit community groups and schools to deliver informative presentations about how we can all help pollinators.

Working with corporate sponsors and city businesses

LBKA work hard to ensure that businesses in the city are doing the right thing for pollinators. Many seek advice on putting hives of bees on their roof tops to improve their corporate image. But not all roof tops are appropriate and, in such cases, we work with them to better invest funds and staff time in planting for pollinators and improving the environment for bees (and humans) in the city. We work with corporate volunteers to transform public and community green spaces for pollinators. Some of the companies we work with include Nando's, City law firm Ashurst, cosmetics company Neal's Yard Remedies, utility companies, social housing landlords, banks and financial services companies.





Bee facts

Today there are an estimated 20,000 bee species worldwide with 275 species in the UK including 24 species of bumble bee. However, only eight of these bumble bees are commonly found throughout the country, the rest are becoming increasingly rare with two species becoming extinct as recently as 2000. Scientists warn that common species such as the Red Tailed Bumble bee could disappear within our generation.

Around 10% of Europe's wild bees are critically endangered. Another 30% lack sufficient data to estimate their population size and complete distribution.

Bumble bees form colonies ranging from several dozen to a few hundred bees, headed by a queen bee. Most bumble bees nest underground but a few will occasionally nest in tree cavities, bird boxes or buildings. Bumble bee colonies only survive for one season, leaving queens to hibernate over winter and restart a colony again the following year:



Honey bees

In the UK we have one species of honey bee, *Apis melifera*. Honey bees live in large colonies of a single queen, a few thousand drones (male bees) and tens of thousands of female workers. These colonies can survive for many years. Honey bees are the only European bees we have managed to domesticate and from which we collect honey.

The remaining bee species found in the UK are bumble bees and solitary species. Solitary bees make individual nests containing small broods of offspring. There are no workers, just males and females. Some nest underground in special burrows while some make nests in hollow stems or decaying wood. See our separate leaflet the *Who's who of London's bees*.

Bees and other insects are incredibly important pollinators of flowering plants and are responsible for reproduction in 80-90% of UK plant species.

The biggest threats to bees are changes in land use resulting in fewer flowering plants for bees to forage on and exotic pests and diseases such as the Varroa mite which is now widespread in UK honey bee colonies.

- A honey bee's compound eyes are comprised of 6,900 lenses.
- A colony of honey bees needs to collect 300-500 lbs of nectar and about 100 lbs of pollen annually to survive.
- A colony of honey bees will fly around 55,000 miles and visit between two to four million flowers just to produce one jar of honey.
- A honey bee beats its wings 230 times per second and can fly at 15mph.
- One in three UK bee and wasp species are under threat.
- There may be as many as 75,000 bees in a honey bee colony yet each individual bee only lives for six to eight weeks during the busy summer months, six months through winter when there is little work to be done.

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