

10 Things You Didn't Know About Bumblebees: The Friendly, Fuzzy Bee

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The bumblebee is the largest and gentlest of bees—and a pollination champ! We answer some common questions about bumblebees—and find out which flowers can attract (and help) our fuzzy friends.

After reading about the drastic decline in bumblebee populations in my state, I feared I would not see the black-and-yellow bombers this spring, so I was greatly relieved when they visited my early-blossoming 'Purple Gem' and 'Olga Mezitt' rhododendrons.

There were so many bumblebees and they moved so fast from flower to flower in search of pollen and nectar that it was hard to get one to stand still long enough to get a good picture. They are fast workers and, because of their larger bodies, can carry larger loads.



1. Are Bumblebees Good Pollinators?

Yes! Bumblebees are excellent pollinators—much more efficient pollinators than honeybees, in fact. They mainly forage for pollen rather than nectar, and transfer more pollen to the pistils of the flowers with each visit.

Many crops are well suited to natural pollination by bumblebees, including cucumbers, peppers, tomatoes, seed crops, strawberries, blueberries, raspberries, melons, and squash. They are especially attracted to tube-shaped flowers and some flowers have evolved to be almost exclusively pollinated by these beefy bees.

The bottle gentian (*Gentiana andrewsii*), for example, has developed bottle-shape flowers that never open fully, which means that a strong bee must pry its way into the flower to pollinate it.



Bottle gentian flowers

Female worker bees do the collecting of nectar and pollen. They perform a unique service called “buzz pollination” by grabbing the pollen producing part of the plant in their jaws and vibrating their wing muscles to loosen trapped pollen. Bumblebees’ wings beat more than 130 times per second!

If you can get one to hold still long enough, look closely and you’ll notice the pollen basket (or “corbicula”) on its rear legs where it stashes a load of pollen to carry back to the nest. Crops such as tomatoes, peppers, berries, and cranberries bear better fruits if they are buzz pollinated. The flowers on berries are enclosed, so it takes a bumblebee’s long “tongue” to get to the plant’s nectar.



2. Which Flowers Attract Bumblebees?

Bumblebees have to work harder than ever to find food and shelter due to habitat loss and the overuse of pesticides.

To attract bumblebees and other native bee species, **consider native plants**—such as asters, coneflowers (*Echinacea* spp.), lupines, bee balm (*Monarda* spp.), and spring ephemerals. However, bumblebees are not fussy; anything that produces nectar and pollen works for them! If you plant even a small area or a few containers with flowering plants, the bees will find them.

Plan your garden to have a long season of bloom. Bumblebees are able to fly in cooler temperatures and lower light conditions than other bees, making them among the first pollinators you'll see in the spring and the last ones flying in the fall. Unfortunately, this ability also makes them more vulnerable to agricultural pesticides and herbicides, which are usually sprayed in early morning and later in the day to avoid harming the honeybees that are active during the middle of the day.

- For **spring**, try planting crocuses, Virginia bluebells, lungwort, comfrey, hellebore, California poppies, columbine, low-growing phlox, or spring ephemerals.
- For **early and late summer**, plant coneflowers, sunflowers, black-eyed susans, bee balm, gentian, larkspur, or tall phlox.
- For **fall**, when it gets harder to find nectar, try planting fall bloomers such as salvia, wild geranium, anemone, basil, chives, cilantro, and parsley.

3. How Do Bumblebees Fly?

There are about 45 species of bumblebees (*Bombus*) in the United States alone. These large bees are round and fuzzy with short, stubby wings.

You have to wonder how these big round bees fly so well. A recent study showed how the tiny wings keep the bees aloft: Bumblebees flap their wings back and forth rather than up and down. Apparently, bumblebees' wings are more similar to a helicopter propellor than an airplane.

4. Do Bumblebees Make Honey?

Yes, but not enough to be a source for human consumption. Bumblebees make a small amount of honey, just enough to tide them over a few days of bad weather. They can maintain about a week's worth of food in their bodies, so they need to forage regularly to survive. **Early-blooming trees and shrubs, like fruit trees, pussy willows, and serviceberry,** are especially necessary to give the newly emerging queens some nourishment as they wake up and start their new colonies. The whole hive dies off in late fall, leaving just new, mated queens to start new colonies in the spring. If even one new queen dies, a whole potential colony will be lost.

Despite the fact that they don't produce much honey, the pollination service that bumblebees provide is worth far more than any amount of honey!

5. Do Bumblebees Sting?

Bumblebees rarely sting, though they are able. They are generally very docile. They do not form swarms like other communal bees and they only sting when truly provoked.

Only female bumble bees have stingers. But they are so good-natured that getting a female to sting you is a major undertaking.

According to BumbleBee.org, a bumblebee will even warn you before it stings. It will stick up a middle leg if it's annoyed by your presence, which means "back off!".

They will really only become aggressive if you are bothering their nest. Bumbles can sting more than once, however, their sting lacks barbs and a stinger is not left behind.

Ever noticed how bumblebees just "bumble around" in the early morning, moving slowly? Their Teddy-bear fur and their ability to regulate body temperature allows bumble bees to be out and about on cold mornings, but they can't fly until they have warmed up.

At this point, they may even sit quietly in your hand and let you gently pet their furry bodies.

6. So, Are Bumblebees Friendly?

We can't speak to human-bee friendships, but bumblebees are a naturally social bee, living together in groups called colonies. Colonies may contain between 50 and 500 individuals, according to the National Wildlife Federation, whereas honeybee hives may have 50,000!

7. Where Do Bumblebees Live?

Bumblebees have small nests, between the size of a baseball and a softball. Unlike a honeybee hive, bumblebees usually nest close to the ground or even underground, in stone walls, under clumps of grass, or in hollow trees and stumps. Abandoned mouse holes are a favorite since they come complete with a warm fur lining.

Bumbles stay close to home. After foraging at various flowers, they carry their collected pollen and nectar back to the nest to feed.

Unlike honeybees, the bumblebee colony dies in late fall. The queen (who rules the colony) is the only member of a bumblebee colony to survive the winter! She hibernates during the winter months underground and starts a new colony in the spring.



8. Do Bumblebees Sleep?

Yes, of course! Male bees will also sleep outside, after they leave the nest (never to return). Sometimes, it's the female who's caught outside the nest because the temperature cooled so rapidly that she couldn't fly back; she'll wait until morning to bring her pollen back to the nest. Usually, you'll find resting bumblebees under flowers or even inside them!

9. Bee Populations Are in Decline. Are Bumblebees in Trouble, Too?

Yes. Many bumblebees are listed as endangered, vulnerable, or near threatened.

A few years ago, the rusty patched bumblebee (*Bombus affinis*) was the first bee listed as an endangered species in the continental U.S., and it is thought to be extinct here in New Hampshire—the last recorded sighting of it being in 1993! According to the Dept. of Agriculture, the decline in bumblebee populations can be blamed on the 5 "P's"—parasites, pests, pathogens, poor nutrition, and pesticides.

10. How Do I Attract Bumblebees to My Yard?

If you notice a lack of bees in your yard, consider whether your neighborhood uses a lot of pesticides in their lawns and gardens. You may have your answer!

At minimum, try to eliminate pesticides from your garden. A group of insecticides called neonicotinoids have been shown to have a devastating effect on all types of bees. It is a systemic insecticide that can come from pre-treated seeds or sprays applied to bedding plants. The chemical is present in every part of the treated plant—flowers, stems, leaves, etc. Buy organic whenever possible or ask your local nursery to make sure that no systemics were used on the plants you are purchasing.

To provide nesting sites, leave some part of your yard a little wild and brushy. Don't mow or rake there, and leave some plant stems standing over the winter to give the new queens places to hibernate and spots to establish new colonies in the spring.

See our video showing [easy ways to attract bees to the garden](#) for more flowers and food!

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