

Bee in the Know

THE BUZZ ABOUT BEES



“If the bee disappeared off the surface of the globe man would only have four years of life left.”

- Albert Einstein

Bees are important to human survival on Earth. Bees pollinate 30 per cent of all food we eat. According to a recent United Nations report just 100 crop species provide 90 per cent of the world’s food—and 70 per cent of that is pollinated by bees. Bees are essential to biodiversity and to plant reproduction.

Studies show that honeybees are healthier and produce more honey in urban settings where there are fewer pesticides sprayed and greater diversity of flowers.

Today, there is a growing movement across North America to bring apiaries (bee colonies) into cities. The City of Vancouver, for example, has two beehives on the roof of City Hall and in Toronto the Canadian Opera Company installed two new hives on the roof of its Four Seasons Centre for the Performing Arts. Paris hosts more than 300 urban bee colonies. London, New York, Ottawa and other major cities are following suit.

Urban beekeeping is part of a growing urban agriculture movement and can help address growing food demands as the world’s population increases. Urban beehives in gardens, on roofs and in other places not only add value for their honey and for the species of fruits and vegetables pollinated, but also for raising public consciousness and accelerating the transition to green communities.

One challenge faced by urban beekeeping is education—for both the beekeeper and the public. Fortunately, here in Alberta we have good resources for new urban beekeepers, including courses and support information.

Visit edmonton.ca/bees for more information.



Bee calm and know the difference between a pollinator and a pest



Bumble bees tend to be rounder, larger, fuzzier and noisier than honey bees and wasps. Bumble bee colonies are often located in the dirt or underneath steps or a deck. Bumble bee nests look like waxy grey bubbles. Bumble bees eat only pollen and nectar and are uninterested in human food or drinks. You can coexist with a bumble bee nest in your yard without any risk of stinging to you, your pets or your children.

Key Features:

- Yellow, black and white
- Big and fuzzy (body segments not as obvious)
- Small colonies (100-500 bees)
- Docile, reluctant to sting



Honey bees' furry bodies are shaped more like a wasp than a bumblebee. Wild honeybee colonies are often found in garden sheds, trailers or soffits. Honeybee nests are made of white or yellow wax with hexagonal cells. Like bumblebees, honey bees eat pollen and honey made from nectar and are not interested in human food or drinks. They only sting when directly threatened, dying in the process.

Key Features:

- Golden brown/orange with black stripes
- Small, segmented furry body
- Large colonies (15,000-70,000 bees)
- Docile, reluctant to sting



Yellowjacket wasps make grey, papery nests in protected areas like overhangs and sheds, but can also make nests in the ground. They are quite defensive of the nest. Yellowjacket wasps are carnivorous, eating other insects and meat. They are also attracted to sugary drinks and rotting fruit. Yellowjacket wasps are more present around picnics and barbecues and are more aggressive than bees. They are able to sting multiple times.

Key Features:

- Bright yellow and black
- Smooth, segmented body with no fuzz
- Medium colonies (up to 15,000 yellowjacket wasps)
- Aggressive, able to sting multiple times



Dealing with unwelcome guests who won't **buzz** off

Q | How do I get rid of unwanted bees around my property?

If you have identified a colony of **bumble bees** on your property, consider leaving them alone! They are great native pollinators, have small nests and are generally very docile. If you must remove it, try to relocate it first. At last resort, you can exterminate the colony. All bees but the queen bumble bee die in the fall, so if you can wait out the summer, the entire nest will be gone. To prevent the bumble bees from returning in the spring, plug up the hole to their nest.

If you have identified an established colony of **honey bees**, call a beekeeper. Honey bees can often be removed safely from buildings and are a valued source of free bees for a beekeeper. Bees play an important role in pollinating flowering plants and are the major type of pollinator in many ecosystems that contain flowering plants. It is estimated that one third of the human food supply depends on pollination by insects, birds and bats, most of which is accomplished by bees, especially the honey bee.

If you have a **yellowjacket wasp** nest in your yard, call an exterminator. Never swat a wasp. They can release a pheromone that will attract other wasps and signal them to be aggressive. It's best to move away calmly.

Q | I don't like bees/I'm allergic to bees. How can I keep them away from me?

Bumble bees and honey bees generally don't spend time near people. They are hard at work collecting nectar and pollen for their colonies. They have no interest in your food or drinks, or your backyard activities. If you are experiencing issues with bees in your yard, you can make a bee repellent by boiling six cloves of chopped garlic in one liter of water for five minutes. Strain out the garlic and put the liquid into a spray bottle to use in your yard. If you find bees are coming to your water fountain, put one cup of white vinegar into it every seven days.



How to **bee**-have in potentially frightening situations



Q | What should I do if I see a swarm of bees?

A swarm of bees occurs when a colony grows too large for their location and splits into two colonies. A swarm of bees is nothing to be alarmed about—they are docile because they gorge on honey prior to leaving the hive. The bees gather in a cluster around the queen on tree branches, buildings, or cars while scout bees search for a new hive location. This may take between 12 and 24 hours. After this, the entire swarm of bees will move to its new home.

If you see a swarm, keep your distance and call 311. The City of Edmonton will work with a local beekeeper to capture the swarm and find a suitable home for the bees.

Key features of a swarm:

- Large ball of bees (more than 10,000)
- Very docile and reluctant to sting
- Temporary



Q | I've just been stung, what should I do?

Honey bees usually leave a stinger behind when they sting. Remove that stinger as soon as you can as it has a tiny venom sack attached to it. This can usually be done by scraping with your fingernail.

If a **bumble bee** or **yellowjacket wasp** stings you, there will be no stinger left behind. Treat with ice if you experience pain, swelling, or itchiness. Medication for allergies can help reduce swelling and itchiness.

If you experience swelling around your mouth or nose and do not have an epipen, call 911.



And in conclusion: don't **bee** afraid.

Encountering bees can be a frightening experience for many people. They are widely thought to be aggressive pests, but that couldn't be farther from the truth. Pollinators, including bees, affect 35 per cent of the world's food supply. Generally very docile, they only sting when directly threatened.

Severe reactions to bee stings are very rare and although everyone should be aware of the possibility, a bee sting for most normal people is a minor inconvenience. Panic and anxiety have been shown to multiply pain, so staying calm is key.

Give bees a chance. You too can become a bee-liever in urban beekeeping.

