

The BUZZ About Bees



GEORGIAN BAY
BIOSPHERE
MNIDOO GAMII

Did you know there are more than 400 species of native bees in Ontario? We often don't realize how many bees are buzzing around, and sometimes even mix-up wasps and bees.

English: Bee
French: Abeille
Ojibwe: Aamoo

It is important to learn about *bumblebees* and *mason (solitary) bees*, which are different from honey bees. Honey bees aren't native to Canada, and can be disruptive to the native species of pollinators.

Unfortunately, some species of native bumblebees and solitary bees are *species at risk* and they may become endangered. These bees are important to all living beings because of their incredible *pollination* ability. Without pollination, many foods and medicines that we use would no longer be available.

How to distinguish a Wasp from a Bee?

Honey Bee

Stocky shape
Thick waist
Hairy body
Pollen baskets on legs
Length: 12 mm (worker)



Bumblebee

Stocky shape
Thick waist
Very hairy body (looks like fur)
Pollen baskets on legs
Length: 6 to 25 mm



Wasp

Slender shape
Very narrow waist
Smooth body (little hair)
Slim legs
Length: 10 to 25 mm



1. Make Seed Balls #FeedTheBees

Flowers produce a powder-like material called pollen. For a seed to develop, a flower needs pollen from another flower. This often happens by animals called *pollinators*. Pollinators eat the sweet nectar in flowers and travel from plant to plant, spreading extra pollen. This is called *pollination*, it is how plants reproduce and make fruit.

Materials: 5 parts clay soil, 1 part compost or rich soil, 1 package native wildflower seeds (or collect your own!), water

1. Mix together all the ingredients with your hands until the consistency is similar to cookie dough. Then roll the mix into 2-4cm balls with your palms. Leave them somewhere to dry



Milkweed is helpful for bees and butterflies.

- overnight or for a few days.
2. Select a sunny area with good soil. Throw seed balls into this area! Be sure your family knows where the seeds are too, avoid using the lawnmower here!
 3. As the ball breaks apart, the small crumbs become heavy enough to hold a seed in place and offer a nice start for the root system. After a few weeks, or even next summer, you'll notice that your flowers will begin to bloom!



2. Build a Mason Bee Home

Solitary bees don't live in a hive and rarely sting because they don't protect a queen. Their number one priority is finding food... and pollinating! Help promote biodiversity by giving solitary bee eggs a safe place to develop!

Materials: pipe cleaner or string and 10cm pieces of hollow stemmed reeds



1. Wrap the pipe cleaner around the reeds and tie tightly.
2. Hang the bee home in a sunny place, at least 2 meters high and sheltered from wind and rain.
3. Monitor to see if a pollinator has laid eggs there. You'll be able to see by the plugged appearance at the end of the reeds. It can take months for the larvae to come out!
4. Try different materials and locations to see if the bees like some more!



3. Pollination Relay Challenge

For this activity you and a friend will challenge each other to see who can pollinate fastest! Race against the clock, or against each other!

Materials: 2 turkey basters, 4 bowls, stopwatch, water, yellow food colouring (optional).

1. To race against each other, fill two bowls halfway with water and place them side by side. Roughly 20 ft away from the bowls of water, place two empty bowls. The bowls of water are flowers full of pollen and the empty bowls are flowers to be pollinated!
2. Add yellow food colouring to the water to make it look more like pollen. (optional)
3. Each player will start at the flower with pollen (bowl of water) and use the turkey basters to fill with water, race over to their corresponding empty bowl (the flower to pollinate) and pollinate it by releasing the water from the turkey baster.
4. If you only have 1 turkey baster, pollinate one at a time and see who is the fastest by using a stopwatch.
5. Each player will have to perform multiple trips until the flower has been completely pollinated. Once there is no more water left in the starting bowl you have successfully pollinated the other flower!

How do you compare to a bee?

Some bees can visit hundreds or thousands of flowers every day!