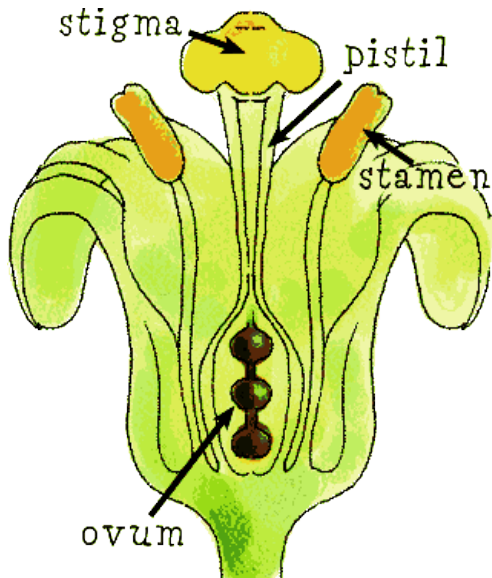


Pollination Power



GEORGIAN BAY
BIOSPHERE
MNIDOO GAMII



A Reputation for Pollination

Flowers produce a powder-like material called *pollen*. For a seed to develop inside the plant, a flower usually needs to receive pollen from another flower. That pollen must travel from the *stamen* to the *stigma*.

The collection of pollen from other flowers can happen by wind, water, or animals called *pollinators*. Pollinators eat the sweet nectar produced in flowers and become covered in pollen. As they travel from plant to plant, they spread pollen. This process is called *pollination*, it is how plants reproduce and make fruit. Pollination is important for entire *food webs*, not just plants.

1. Pollination Appreciation: Wind Power

Without pollinators, all plants would need the wind and rain for pollination. Challenge your family to pollination appreciation!

You'll need to collect a handful of seeds, anything from acorns to pinecones to fluffy cattail seeds.

Decorate a shallow bowl with paper flower petals on the edges and make it your finish line two to three meters away on a level playing field (such as a deck or patio). Place the seeds in a line on the ground, this will be your start line.

Pretend your seeds are pollen. Count down, then race to get your pollen into the bowl with your *wind power*; you'll have to blow the pollen!

Does wind power take more time and energy?

Do you have an appreciation for pollinators?

Be sure to thank a pollinator for your favourite fruits!

Who is not a pollinator?



Answer: Either in the Biosphere, or somewhere else in the world, each animal here is a pollinator!

2. Build a Bee-autiful Home

There are over 100 species of *solitary* bees in Ontario - they don't live in a hive. Solitary bees rarely sting because they don't protect a queen. Their number one priority is finding food... and pollinating!

Help promote biodiversity by giving solitary bees eggs a safe place to develop, a bee box! You'll need pipe cleaner or string and 10cm pieces of hollow stemmed reeds. (Phragmites is perfect! See Invasive Species activity)

1. Wrap the pipe cleaner around the reeds and tie securely.
2. Hang the bee box in a visible place. It's that easy!
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. Help a Pollinator in Need: Monarch Butterflies

We celebrate the return of the Monarch butterfly each summer. Monarchs have not been doing well. The Monarch is a *species at risk* in Ontario and overall in Canada. Some people estimate Monarch populations have declined by 80% since the 1990s. **You can help!**

Opt for Native Plants: Native plants are the safest bet when it comes to creating or improving habitat and gardens for pollinators. They support other wildlife such as birds.

Choose No 'Cides: Pesticides and insecticides do not only kill "bad bugs". Pesticides are designed to kill all insects. Even "organic-approved" insecticides can harm pollinators and wildlife.

Let it Grow: As a family, discuss where you are currently mowing grass that might not be necessary. Let it grow and be amazed at the variety and beauty you'll see!

Mission Monarch: Mission Monarch is a research project dedicated to Monarch conservation through citizen science. Help scientists understand Monarch breeding habits: www.mission-monarch.org

Limit Your Consumption of Avocados and Avocado Oil: Avocado sales have exploded in Canada... they're delicious! But avocado demand is increasing illegal logging in Monarch overwintering habitat in Mexico. It will take many people to influence this issue, so spread the word!

Learn more: Check out *Memengwanh, The Monarch Butterfly: A Guide for Eastern Georgian Bay*. This guide helps people understand Monarchs, problems they face, and ways to help: www.gbbr.ca/conservation-guides

