Creating Pollinator Habitat - It Doesn’t Take Much!

A tiny flower, a pot or patch can provide valuable habitat for pollinators. Most common pollinators include: bees, butterflies, wasps, hummingbirds, beetles, ants and moths.

Pollinators help plants reproduce by spreading a powdery material called pollen among flowers of the same species. Animals, primarily bees, pollinate a majority of fruits and vegetables used in agriculture. Pollinators don’t just help plants. Plants help them as they rely on energy-rich nectar and protein-rich pollen, to survive and reproduce.

Pollinators are responsible for pollinating over 30% of the foods we eat. Pollinators are at risk due to climate change, habitat loss and pesticides.The decline of pollinators could lead to a matched decline of plant species, threatening biodiversity and food security. We can help protect them by creating new homes for pollinators in our cities and suburbs.

(Ruby Throated Hummingbird (female) and Monarch Butterfly feeding on Common Milkweed.)

Pollinators require a constant source of food from when they emerge in the Spring right through to Fall. They need a continuing sequence of flowers in bloom to provide pollen through the growing season. For example, the Monarch lays its eggs on the underside of Common Milkweed leaves. The Monarch caterpillar feeds on the Milkweed leaves exclusively. Eventually builds its chrysalid. The Monarch emerges and feeds on the Milkweed flowers along with Joe Pye Weed, Butterfly Weed, Fall Asters etc.

(Bee pollination)

Insects make up two-thirds of all life on Earth! Wild bee species are responsible for every one in three bites of food at our dinner table and help maintain natural ecosystems.

Beekeepers produce honey, beeswax and other retail items such as beeswax candles, cosmetics etc. They also provide a service to farmers by providing honey bees to ensure there are enough bees to pollinate their crops. Honey bees are not native to Canada. Beekeepers play a critical role in Canadian agriculture.They produce 75 million pounds of honey each year and are responsible for pollinating many fruits (apples, peaches, cherries, blueberries, cranberries, strawberries); field crops (cucumber, water melon, tomato, pumpkin, squash); nuts (cashews, macadamia); oilseed crops (canola, soybean, sunflower, alfalfa) and life necessities (**coffee** and **chocolate**). Through these activities, they contribute more than $4.6 billion to the Canadian economy each year.

In Ontario, ~3,000 registered beekeepers operate 100,000 honey bee colonies. This results in generating about $897 million of the roughly $6.7 billion in sales for agricultural crops grown in the province each year. This is equivalent to about 13% of Ontario's total annual crop value.*

Fun Facts About Native Bees

- The Common Eastern bumble bee is an important pollinator in greenhouse production and makes its nest in a cavity above and below ground.
- The Two Spotted bumble bee (black bee with golden fur on its back and black on its head and bottom) is an excellent crop pollinator and makes its nest in a cavity above and below ground.
- The Carpenter Bee (shiny black abdomen) is best known for being a pest because it makes its home in dead wood, including wood used for construction! It is a great pollinator of native plants, gardens and even some crops.

Here are some ways to attract pollinators to your garden, your yard, your property and even your patio. This can be as simple as adding clumps of target plants to your existing garden and flowerbeds or hanging baskets. Remember to use a mix of colours and shapes that bloom throughout the growing season. Try to use plants that appeal to a variety of pollinators.

Plant Native

Native plants support native pollinator species. Of course, you may chose to plant non native as long as they are not invasive.

Plant Single Bloom Varieties

This makes it easy for pollinators to navigate because their nectaries (nectar-secreting glandular organs in flowers) are exposed, making easy collection of nectar and pollen. Double blooms often block flowers' nectar, making it difficult to find.

Plant Host Plants

The Monarch Butterfly for example, requires Common Milkweed, a specific host plant. The butterfly feeds on the Common Milkweed bloom and then lays its eggs underneath the Common Milkweed leaves. The Monarch caterpillars feed almost exclusively on the Milkweed leaves.

Mass Planting

Group plant species together. This helps pollinators spot resources more easily, (think flashing billboard) pollinate more efficiently and spend less energy to collect pollen and nectar. Bees tend to collect pollen from one type of plant at a time.

Minimize Manicuring

Perfectly manicured lawns and gardens don't have much of a benefit to pollinators. The bees will thank you for leaving those dandelions in your lawn. Fallen trees can provide habitat for the many species of cavity nesting bees. Excessive raking may destroy ground nesting pollinators' nests.

Many native bee species build their nests in the ground, by tunneling into the soil. You can provide habitat for them by leaving areas of bare soil throughout your garden, perhaps even hidden behind your plants.

Pollinators require a fresh water source. This can be provided by filling a shallow dish with water and marbles or small stones. Bees and other pollinators can land on these and drink water without the risk of drowning. If you have birdbaths, add a few stones or a twig to give pollinators a much needed life line.

Get your family involved!

DIY Bumble Conservation
https://www.bumblebeeconservation.org/wp-content/uploads/2017/08/Making_a_bumblebee_nest-1.pdf

Grow A Wild Bee Sanctuary
https://davidsuzuki.org/queen-of-green/choose-best-mason-bee-home-make-one/

Create a Butterfly Garden
https://davidsuzuki.org/queen-of-green/how-to-create-a-butterfly-garden/

Canadian Wildlife Federation sells Pollinator-friendly Garden Kits
https://cwf-fcf.org/en/explore/gardening-for-wildlife/plants/buy/medallion/

Native Plants for Pollinators
https://cvc.ca/wp-content/uploads/2017/04/17-uo-nativeplantsforpollinators-booklet-v8-web.pdf

Feed Hummingbirds
Is your garden red enough? Hummingbirds are guided by their eyes. And many red colored flowers (cosmos, petunias, honeysuckle, summer phlox or bee balm) provide good sources of nectar along with red coloured hummingbird feeders. Nectar for the feeder is 4 parts sugar to 1 part water. Do not use red food colouring. Don't see much action. Wait a year and enjoy the flowers.

With Your Shopping Power
Influence agricultural practices by buying organic products where possible.
Support your local beekeepers. Buy honey! Honeybees are not native to Canada. And are critical to our food supply. Native bees can be great pollinators, but most large-scale agricultural practices currently rely on honeybees.
Buy shade-grown coffee to help slow the deforestation of Central and South American countries.

Sources:
Credit Valley Conservation - Native Plants for Pollinators
David Suzuki
*Genome Canada 2015/16
Landscape Ontario - Pollinator Friendly Garden