

Protecting Pollinators

Did you know...?

- One out of every three mouthfuls of food we eat is made possible by pollinators.
- Over 80% of flowering plants are dependent on pollination by insects or other animals.
- There are over 400 species of wild bees in Ontario. Other pollinators include wasps, flies, butterflies, moths, birds, beetles, bats & other animals.
- The daily work of pollinators is essential for over a billion dollars worth of apples, pears, cucumbers, melons, berries, and many other types of Canadian farm produce.
- You don't have to have a large plot of land to support pollinators – even small container plantings help to provide food & shelter!



Plants and insects have a mutually beneficial relationship. One cannot exist without the other. Plants depend on insects to carry their pollen from flower to flower, and insects depend on pollen and flower nectar for food.

What is pollination?

Pollination is the movement of pollen within a flower or from one flower to another by insects, animals, wind, or water. This transfer of pollen leads to fertilization and successful seed and fruit production for the plant, enabling the species to survive.

Most staple grains are wind-pollinated (including wheat, rice, oats, rye, triticale, sorghum, and corn) while fruits, nuts, oilseeds, and most vegetables require an insect or animal for pollination.

Pollinators are both crucial to the human food system and an integral part of a healthy ecosystem.

What are the concerns?

Many pollinator populations are in decline due to:

- Loss of habitat
- Loss of food sources
- Pesticides
- Disease

How can we support pollinators?

- Start by recognizing pollinators as a vital component of urban and rural landscapes, both for their role in human food production and in maintaining healthy natural ecosystems.
- Plant pollinator friendly gardens! Pollinators need a variety of nectar & pollen-rich flowers available throughout their foraging period.
- Create & help protect suitable undisturbed nesting sites close to pollinators' forage.
- Go organic! Pesticides are a significant threat to pollinator health and have been linked to widespread bee deaths. Help reduce the use of pesticides by planting organic seeds and plants and by practicing organic gardening and yard care techniques.
- Support healthy agricultural systems by buying organic food.



Planting for Pollinators

Pollinator Friendly Species:

Early bloom:

- Blueberry
- Currant
- Dandelion
- Hazelnut
- Hawthorn
- Evening Primrose
- Wild Columbine

Mid-season bloom:

- Black-eyed Susan
- Blanket Flower
- Catnip
- Chives
- Coreopsis
- Raspberry
- Sunflower
- Swamp Milkweed
- Scarlet Beebalm
- Wild Beebalm

Late bloom:

- Joe-Pye Weed
- Goldenrod
- New England Aster
- Obedient plant

Resources

www.pollinationguelph.ca

www.pollinationcanada.ca

www.farmsatwork.ca

*A Landowner's Guide to
Conserving Native
Pollinators in Ontario*
by Sue Chan



Like humans, all pollinators require access to food, water, and shelter. Whether you have a large farm or a small urban space, there are many simple things you can do to help.

Establish an available food supply:

- Plant a variety of flowering plants – different types of flowers with different colours attract a diversity of pollinators.
- Plant native species - they have co-evolved with their pollinators. Avoid hybridized plants – many have no pollen or nectar, or are too difficult for pollinators to access.
- Aim for three seasons of flowering to support pollinators that are active early and/or late in the year.
- Plant flowers in clumps or groupings. Pollinators are less attracted to single plants.

Make water accessible:

- Provide a slow drip or shallow container filled with small pebbles or coarse sand that rises above the level of water. A pond with a gently-sloped bank can also work.

Provide and protect shelter:

- Many native bees live solitary lives in ground burrows. Leave bare, mulch-free ground in sunny, well-drained areas to help protect nesting sites.
- Some native bees commonly nest in the pithy stems of plants like raspberries and blackberries. If you must remove the old canes to encourage fruiting, place the cut stems in vertical bundles close to the plants for at least one year.
- Allow leaves and broken branches to remain in your yard or garden. They provide important overwintering sites for many beneficial insects.