



Multiple pollinators on goldenrod. Photo courtesy of Shirley Bartz

Pollinators in Peril: Why They Matter and How You Can Help

Carolyn Gaudet | Saskatchewan Prairie Conservation Action Plan

Declines in pollinator populations have led to considerable interest throughout the world. More than 80 per cent of wild plants grown for food, beverages, fibres, spices, and medicine require or benefit from animal pollinators.

What is pollination?

Pollination takes place when a pollen grain moves from the anther (male part) of a flower to the stigma (female part). The pollen moves down a pollen tube, also called the *style*, to join with the ovules in the flower's ovary. Pollen transfer between flowers of the same species allows ovules to be fertilized, which leads to the production of seeds and fruit. Pollen can be moved by wind and precipitation, or by animal pollinators which are attracted to flowers to drink nectar or to feed directly on the flower parts.

Many flowers have low ultraviolet reflectance that guides pollinators towards the flower's centre, allowing nectar to be accessed more rapidly and thereby increasing the number of flowers visited by pollinators. These ultraviolet patterns can be seen by many pollinators

including bees, flies, butterflies, and birds.

Although we often think of pollination as a job that pollinators do to help create more flavourful fruits and higher yield crops, pollen is also a vital source of protein, lipids, and other nutrients for insects. Aside from benefits to humans, pollination is a win-win situation where pollinators receive nutrients and plants can reproduce.

Types of pollinators

There are thousands of species of pollinators in Canada.

Butterflies feed on nectar of various flowers, particularly flat, clustered flowers that allow easy landing. Unlike bees, butterflies do not eat pollen, so they have not developed specialized body parts, such as dense leg hairs, to collect pollen.

Moths also prefer flowers that grow in clusters and provide a landing platform, but they are mostly nocturnal and are attracted to flowers that are open in late afternoon or at night, with pale or white flowers that are very fragrant and have ample nectar production. Some moths

are active during the day and will drink nectar through a long proboscis, which they unfurl into the flower while hovering above it.

Wasps have very high-energy needs and require resources such as pollen and nectar from a variety of flowers. Wasps are generally not covered with fuzzy hairs and are much less efficient in pollinating flowers.

Beetles are thought to be among the first insects to visit flowers, with a relationship dating back to about 200 million years ago. Today, they continue to be key pollinators of many different flower types, with a preference for strongly-scented flowers with exposed anthers and stigmas.

Flies have one pair of wings and tend to be less hairy. Some flies have evolved to confuse predators by mimicking bees, with banded yellow abdomens, robust body structure, or with many hairs or bristles. Flies typically pollinate flowers that have a putrid odor like rotting meat, dung, or blood.

Birds are an important pollinator group throughout the world. However, in

North America, hummingbirds are the most commonly known pollinator. Hummingbirds are attracted to flowers open during the day and brightly coloured in red, yellow, or orange. Hummingbirds use their long beaks and tongues to access nectar in long, tubular flowers. As they feed, their face feathers get dusted with pollen and is transported to other flowers. Hummingbirds must visit 1,000 to 2,000 flowers each day, to eat enough nectar to power the rapid beating of their hearts and wings.

The most well-known pollinators are bees. Bees come in a variety of body shapes and sizes, with more than 20,000 species worldwide. Native bee species visit the widest range of flowering plants of any pollinator group. Flowers that are visited by bees are typically full of nectar, brightly-coloured, sweetly aromatic, open in daytime, and bilaterally symmetrical.

The decline of our native bees is often overshadowed by honeybees and the Colony Collapse Disorder (CCD), which has been reported for more than 20 years. Honeybees, imported from Europe, are important agricultural pollinators as well as an economic venture that produces honey and wax. Honeybees are a domesticated species that can be transported to pollinate crops and are maintained through beekeeping.

As an introduced species, honeybee viability in Canada is not considered a conservation concern. The number of honeybees can present significant competition in nectar availability for native wild bees. Native bees can be better at transferring pollen than honeybees, and can support agricultural activities through pollination if suitable sources of nectar, pollen, and water are provided and their needs for suitable nesting habitat are met.

There are more than 800 native bee species in Canada, with almost 400 species living in the Canadian Prairies. Many prairie bees are solitary, nesting alone in underground burrows, in crevices, or hollow stems. Species such as bumblebees are social and live in colonies while others, such as sweat bees, live in

aggregations with multiple females using the same burrow where each female digs her own nesting chamber.

Regardless of whether they are colonial or solitary, native bees are vulnerable to habitat loss. Native bee populations in Canada are declining due to pesticide use, disease, climate change, and loss of habitat following land-use changes. Factors, like the loss of native grasslands and wetlands, have significantly impacted wild pollinators' ability to find a diverse array of plants needed for food and habitat required for nesting.

How to Help

Creating habitat is the best way to increase pollinators in your area and can be done in the following ways:

- Grow native plants that are adapted to regional conditions, are drought

tolerant, and do not require pesticides, herbicides, or fertilizers;

- Incorporate a range of species that provide food for pollinators from spring to fall, including host plants (milkweeds for monarchs), but avoid invasive or noxious weeds (purple loosestrife, Leafy Spurge, Baby's Breath, etc.);
- Leave bare patches of soil, stems, and dead stalks as nesting space; and
- Avoid insecticides when possible.

For more information, see Pollinator Partnership's Bee Identification Guide: <https://pollinatorpartnership.ca/assets/generalFiles/Bee-Identification-Guide.pdf> as well as their Ecological Planting Guides: <https://pollinatorpartnership.ca/en/ecoregional-planting-guides>.



SSGA Saskatchewan Stock Growers Association's Semi-Annual General Meeting

Meeting Notice

February 6, 2026 • 2:00 - 4:30 PM
Tatanka Room • Dakota Dunes Resort, White Cap, SK

Please submit **meeting resolutions** on or before February 4, 2026

Mail: Box 4752, Evraz Place, Regina, SK S4P 3Y4
Telephone: 306-757-8523
Email: gm@skstockgrowers.com

Purchase Honour Scroll Banquet Tickets:
<https://skstockgrowers.com/semi-annual-online-registration/>

Visit www.skstockgrowers.com for more details as they become available