Honey Bee

In addition to honey and wax, honey bees provide billions of dollars worth of service each year as our main managed pollinator. They are not native to the Western Hemisphere but were brought here by early European settlers. Unfortunately, honey bee populations are under attack from several diseases and parasites, placing their continued viability as pollinators at risk.

Cuckoo Bee

Like the cuckoo bird, this bee (*Xeromelecta californica*) sneaks into the nest of a host species in order to lay its eggs and leave its young for others to raise. The hosts here are bees of the genus Anthophora. Saskatchewan's first recorded collection of this bee was made in the southwestern corner of the province in the summer of 2012. This species is the only member of the genus known in Canada.

Digger Bee

The ground-nesting *Andrena milwaukeensis* is one of our most colourful spring solitary bees. Adult bees hibernate during the winter and are often seen when they become active again visiting early-flowering trees and plants. Interestingly, the abdomen of the western form has much more red hair covering it than does that of the eastern form, which is mainly black.

Leaf Cutter Bee

Leafcutter bees, like *Megachile perihirta*, belong to a family with a unique method of carrying pollen. Instead of transporting it on their legs, most leafcutter females pack dry, powdery pollen into a dense brush of hairs on their abdomen. Leafcutter bees are important pollinators and have been semi-domesticated to help produce alfalfa seed.

Bumble Bee Queen

Bumble bees are members of the genus *Bombus* (*B. huntii* shown here.) Most people imagine them to be social like honey bees but that is only partially true. Each year, mated queens emerge from solitary hibernation, feed on early-flowering plants, and then look for an abandoned rodent den in which to nest, lay eggs, and produce worker bees. The workers take over most of the colony's duties while the queen devotes herself to laying eggs. In the late summer, some of her eggs develop into new queens. They mate with males, and then seek a site in which to winter over. When cold weather comes, the old queen, her workers, and all the males die. The new queens wait for spring when the cycle will begin again.

SASKATCHEWAN BEES

Presented By:
The Royal Saskatchewan Museum

Yellow-faced Bee

As their name suggests, most yellow-faced bees have yellow areas on their face. In the male of *Hylaeus basalis* (shown here), the bottom segments of the antennae are swollen to form an enormous, heart-shaped structure that blocks much of the bee's face. Yellow-faced bees collect pollen and nectar in their crop, using their forelegs to brush pollen from their head and thorax into their mouth. They are relatively common and most species nest in hollow plant stems.

Agapostemon

With its brilliant, metallic colouring, *Agapostemon texanus* (shown here) and its relatives would seem more suited to a tropical jungle than to the Saskatchewan prairie. In fact, these solitary bees are rather common summer flower visitors. The females carry pollen on brushes of hair on their back legs. *Agapostemon* bees are part of a group commonly called "sweat bees" due to their habit of lapping up human sweat for its sodium.

Cuckoo Bumble Bee

This may look like a typical bumble bee but appearances are deceiving. This is a cuckoo bumble bee, *Bombus insularis*. Female cuckoo bumble bees sneak into the nests of true bumble bees, kill the queen, and lay their own eggs which are cared for by the workers of the old queen. Feeding only enough for immediate needs, these bees neither collect nor carry pollen when not in the nest, and therefore lack the shiny pollen baskets of true bumble bees on their hind legs. These large insects are seen most often in the autumn before they overwinter or in the spring when true bumble bees are starting their nests.

Male Nevada Bumble Bee

Did you know that male bees like the *Bombus nevadensis* shown here are fatherless? They develop from their mother's unfertilized eggs. As a result the males are haploid and possess only a single set of chromosomes — half as many as their mother, sisters and daughters. The same is true of male wasps.