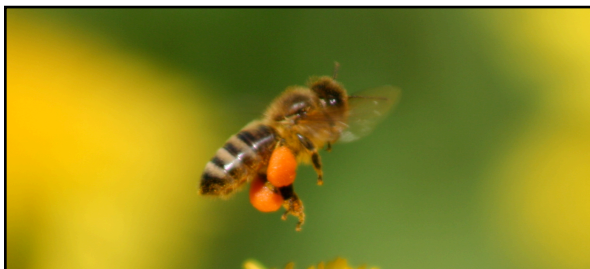

Managed Bees

Did you know that there are no honey bees native to North America? Honey bees were brought to North America by early European settlers. Managed honey bees are now widely used for agricultural crop pollination and for honey production.

Our wild bees have an annual life cycle, which is how they've adapted to deal with our harsh winters. It's because of this that they do not stockpile honey to over-winter like honey bees and why we do not harvest honey from them. Honey bees survive Alberta winters because beekeepers winterize their colonies. They typically cannot survive on their own here.

Honey bees are important crop pollinators and honey producers but they can spread pathogens and compete with wild bees for food. More than 40% of all honey bees in Canada are in Alberta and that number continues to grow.

We can avoid negatively impacting wild bees by keeping honey bee colonies in cultivated agricultural areas and avoiding placement in natural areas rich with native plant diversity.



Alberta Native Bee Council

The Alberta Native Bee Council was incorporated in 2017 as a non-profit society.

Vision:

To promote healthy and resilient native pollinator populations and habits in Alberta.

Mission:

Promote conservation of native pollinator communities through research and monitoring, advocacy, education and collaboration with others.

Objectives:

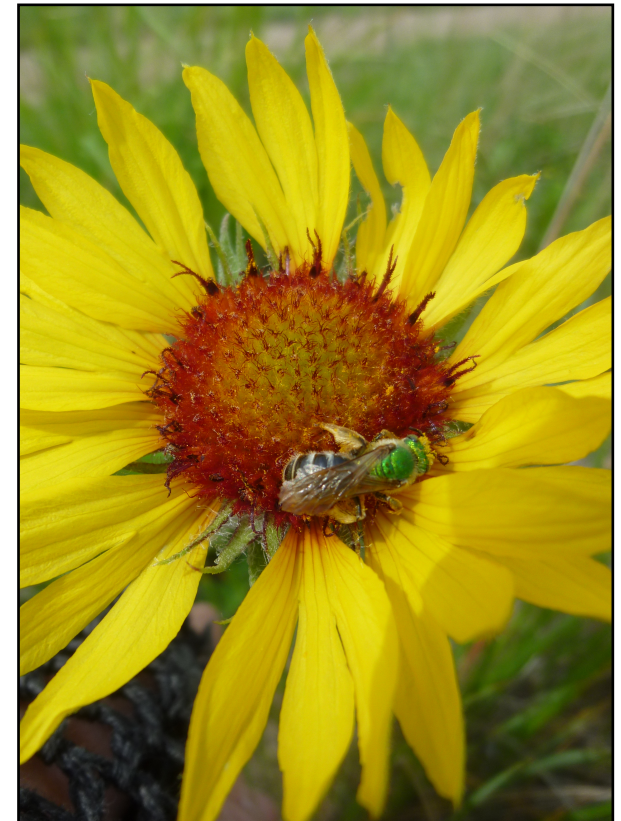
- Learn more about native pollinator diversity and abundance in Alberta.
- Promote conservation and enhancement of native pollinators and their habitats in Alberta.
- Provide education and outreach to raise awareness about native pollinators in Alberta.
- Provide a collaborative network for people with an interest in native pollinators.



Photo/Image credits: Alex Farmer, Sam Robinson, Megan Evans, Jordan Steeves

Alberta Native Bee Council

Promoting healthy and resilient native pollinator populations and habitats in Alberta



Developed by the Alberta Native Bee Council 2018

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Wild Bee Diversity in Alberta

There are over 300 wild bee species in Alberta. In fact, there are twice as many wild bee species than all of the mammal, fish, amphibian and reptile species combined. Most of these bees are solitary ground nesters.



Clockwise from top left: Bumble Bee, Leafcutter Bee, Sweat Bee, Mining Bee

Our wild bees pollinate both agricultural crops and the wild plant species that they evolved with. Maintaining diverse and healthy bee populations is critical for native plants and can improve agricultural crop yields.

Just like flowers, bees come in different shapes and sizes and not all bees are good at pollinating all flowers. Some bees rely entirely on a single flower species for pollen and nectar, while others are able to utilize a broader range of species for food. Diversity truly is nature's insurance policy!

Flowers

Alberta's wild bees need a diversity of flowers that bloom all season long. Apple trees, male willows, saskatoonberry, raspberry, gooseberry and wild rose are great trees and shrubs for bees. Bee friendly flowers include: crocus, lupin, aster, wild onion, sweet vetch, larkspur, bee balm, arnica, harebell, blanket flower, scorpionweed, vetch, milk vetch, fireweed, goldenrod and avens.

Native varieties are ideal but bees will visit non-native species as well. The Alberta Native Plant Council's list of Alberta's native plant species is an excellent resource. And be sure to check out the Alberta Invasive Species Council's 'Grow Me Instead' brochure to avoid planting invasive species.

Nesting Habitat

The nesting requirements of wild bees are just as diverse as they are!

Leave areas in your flower bed bare and unmulched for ground nesting bees. A couple of pieces of decaying wood can provide important nesting habitat for leaf cutter bees. Plant flowers with hollow stems like larkspur or cow parsnip for cavity nesting bees. These can be left standing or cut into 6" lengths, bundled together and placed in an area protected from rain.

Bumble bee nests can be tricky to find in the wild but you can encourage them to nest on your property by building a bumble bee box! Boxes can be placed on the ground or affixed to a fence or tree. Make sure the box is protected from rain and does not receive full or afternoon sun.

Bumble Bee Nesting Box

Instructions:

Using 3/4" plywood cut:

Front: 7" x 4" - Drill 18 mm hole

Top: 7" x 7"

Base: 7.5" x 7"

Back: 4.75" x 7"

Sides: 4" x 6" (two)

Legs: 1" x 7" (two) optional

Approximately 12 x 1 1/2" deck screws;

1 x 2" hinge and shorter hinge screws

Attach all pieces together using the deck screws except the top piece which is attached to the back piece using the hinge.

Use only non-pressure treated wood and paint with non-toxic latex paint. Cover the top with plastic to protect the nest from rain. Line the box with raw/upholsterers cotton. Place a thick wad of cotton so that the Queen will fly into the center of it through the hole in front.



Citizen Science in Action!

To participate in the Alberta Native Bee Council's Bumble Bee Box Monitoring Program:

1. Build a bumble bee box!
2. Download a registration form at www.albertanativebeecouncil.ca or email: BBBMonitoring@albertanativebeecouncil.ca for more information.
3. Monitor your bumble bee box and report activity to the Alberta Native Bee Council. An annual reporting form can be found on our website.