

SOLITARY BEES

Information

Permit is NOT required for solitary bee house(s).



What are solitary bees?

Solitary bees do not live in colonies, rather they make individual nest cells for their larvae. There are over 370 different native solitary bee species in Alberta that vary considerably in size, appearance and nesting habitats. Most solitary bees are mining bees, which nest in underground burrows. Solitary bees that nest in houses are cavity nesting bees.

Solitary bees do not produce honey or wax, but are very efficient pollinators. They do not have pollen baskets to carry pollen, causing them to lose far more pollen than social bees. A single red mason bee is equivalent to 120 worker honeybees in the pollination it provides. One out of every three mouthfuls of food we eat is dependent on a pollinator.

Why are solitary bees important?

Bees are important for human survival. They pollinate a variety of plants and can help to improve the overall biodiversity of the City.

What is a solitary bee house?

Bee houses provide a nesting site for a variety of solitary bee species. A bee house serves as the bee's permanent home for eleven months, from when the female lays eggs in the spring, as it develops from an egg through a larval stage, then as a dormant pupa, and finally emerges as an adult the following spring.

Bee houses can be constructed out of a variety of materials including timber, cardboard bee tubes, air bricks, bundles of bamboo canes, or bundles of dried stems from various herbaceous garden plants.

For more information about beekeeping, please visit the City of St. Albert webpage:

<https://stalbert.ca/city/approvals/>

If you have questions about beekeeping in St. Albert please email bees@stalbert.ca or call 780-459-1642.



Maintaining a solitary bee house

While solitary bee houses do not require the same amount of maintenance as honey bee hives, it is important that you manage your bee house to prevent the growth of moulds and parasites.

Solitary bee houses should be removed in September/October and stored indoors, in an unheated area, such as a shed or garage, over the winter months to protect the bees from the wet and predators. The bee houses can be returned to the outdoors in April. By the end of the summer, any holes that remain walled-up from the previous year, should be cleaned out.

Tips for building and placement of a bee house:

- Hole diameters should be between 2 mm and 10 mm.
- Do not drill through to the other side, as bees prefer a closed end tunnel.
- Holes must be smooth and free of splinters, as bees will not enter holes with rough splintered wood.
- Locate the bee house facing south or south east.
- Locate the bee house a minimum of one metre off the ground.
- Ensure the bee house is well anchored, so that it cannot sway in the wind or be knocked over by animals.
- Exterior walls should be rain proof with an overhanging eave in the front.
- Have pollen and nectar plants nearby for when the bees hatch, or else they may fly to another garden.

Example of Pollinator Bees:

Miner bees (solitary), Carpenter bees (solitary), Sweat bees (social), Masked bees (solitary), Halictid bees (social), Plasterer Bees (solitary), Leaf cutter bees (solitary), Mason bees (solitary), Orchard bees (solitary), Squash bees (solitary), Bumblebees (social), Stingless bees (social), Cellophane bees (solitary), and Long-horned bees (solitary).