How can I support local pollinators?

Pollinators play an important role in supporting biodiversity. Pollinators are diverse and include bees, flies, butterflies, moths, beetles, hummingbirds and others. 75% of flowering plants depend on the role of pollinators in fertilization and subsequent production of seeds and fruit. 1/3 of these plant products are consumed by people and a much larger portion consumed by wildlife. Creating and protecting natural pollinator habitat is thus critical to the health of our ecosystems and the diversity of local pollinators. Small steps can make a difference.

JUST FIVE STEPS CAN GO A LONG WAYS TO CREATE POLLINATOR HABITAT TO SUPPORT ALL STAGES OF A POLLINATOR'S LIFE CYCLE.

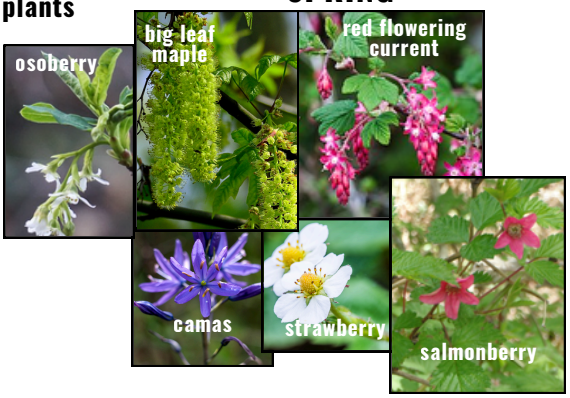
1 Provide pollinator-friendly flowers through the seasons.

- plant for a variety of plant heights, and flower size, shape and colour
- plant in patches of one species (5+ plants) to reduce foraging time

Many home gardens already include a variety of pollinator-friendly flowers. Augmenting existing gardens with native plants to bloom through the seasons will support the local pollinator community and increase diversity.

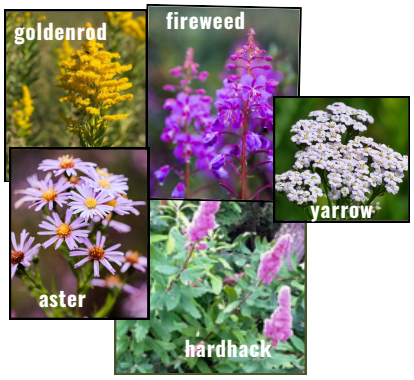
Examples of pollinator-friendly native plants

SPRING



SUMMER

FALL



2 Provide host plants for butterfly & moth larvae.

- plant a variety of HOST plants for larvae that feed on different types of plants (generalists)
- include specific HOST plants for specialists, if known

Adult butterflies & moths lay their eggs on or near plants that the larvae (caterpillars) eat. These plants are referred to as HOST plants. Some caterpillars are *generalists*, which feed on many types of plants, while others are *specialists* which are only able to feed on a very narrow range of plants.

Examples of butterflies whose larvae depend on specific HOST plants:

Silvery Blue

Satyr Anglewing

Mibert's Tortoiseshell

Red Admiral

Examples of HOST plants used by a variety of butterfly & moth larvae:

- alder
- aspen
- cottonwood
- lupine
- maple
- native grasses/sedges
- ocean spray
- pearly everlasting
- pine
- Saskatoon berry
- sedum
- stinging nettle
- wild rose
- willow

3 Provide & maintain nesting and egg-laying sites for bees.

- leave untended, open patches of bare, well drained, soil for bees to excavate nests
- leave hollow and pithy flower stalks intact over winter, e.g., rose, elderberry, raspberry, goldenrod, aster. Prune dead flower stalks in the early spring at varying heights (e.g., 20-60 cm) to provide nest sites for bees. Leave stalks through to next season.
- construct small dense piles of brush or fieldstones to provide dark protected nest cavities sheltered from the rain

Most native bees are solitary, laying their eggs in a variety of garden locales depending upon the species. Many are wood-and tunnel-nesting (e.g., abandoned beetle tunnels in stumps & snags, woody plant stems & twigs, spaces between field stones), while others are ground nesting (e.g., abandoned rodent nests under grass or in the ground, bare undisturbed sandy soil and under dense piles of brush).

hollow stem

pithy stem

undisturbed ground & leaf litter

brush piles &rock piles

4 Protect overwintering sites.

- limit exuberant fall yard and garden cleanup
- avoid shredding the leaves with a lawn mower to protect insects, cocoons, chrysalises and eggs that use the leaf layers for cover or incubation.
- rake and pile leaves around shrubs and in garden areas
- wait until late spring to prune and clear away dried garden debris

Leaves and garden materials provide food, insulation from the cold and nurseries for eggs, larvae and pupae, during the winter months.

THIS

NOT THIS

LAST BUT NOT LEAST!

5 Avoid using pesticides, especially insecticides.

RESOURCES

LEARNING THROUGH COMMUNITY PARTICIPATION (Mid-Island, BC)
- NALT/Pollinator Project - https://nalt.bc.ca/pollinator-project
- iNaturalist - https://www.inaturalist.org

WEBSITES
1. Xerces Society for Invertebrates - https://www.xerces.org/
2. Native Bee Society of British Columbia - https://www.bcnativebees.org/
3. GreenPeace - https://www.greenpeace.org/canada/en/story/60841/how-fall-yard-maintenance-can-help-protect-pollinators/
4. Pollinator Partnership Canada -https://pollinatorpartnership.ca/
5. Common Pollinators of B.C. - https://borderfreebees.com/wp-content/uploads/2017/11/Common-Pollinators-of-British-Columbia-2nd-Edition.pdf
6. Garry Oak Recovery Team Society - www.goert.ca
7. E-Flora BC Electronic Atlas of Flora of B.C. - https://ibis.geog.ubc.ca/biodiversity/eflora/
8. Habitat Acquisition Trust. (2024). Gardening with Native Plants. - https://static1.squarespace.com/static/5e3c5b7e5460c55405a6d4d6/t/623baaa8eddecd26341cb18d/1648077485684/Native_Plant_GardeningGuide.pdf

BOOKS
1. Mader, E., et al. (2011). *Attracting Native Pollinators*/The Xerces Society Guide. North Adams, MA: Storey Publishing. ISBN 978-1-60342-695-4
2. Lee-Mader, E., et al. (2016). *100 Plants to FEED THE BEES*/The Xerces Society. North Adams, MA: Storey Publishing. ISBN 978-1-61212-701-9
3. Stevens, L. (2024). *Common Insect Pollinators Field Guide*. Nanaimo, B.C.: Nanaimo Area & Land Trust.

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DID YOU KNOW?

It is estimated there are approximately 500 bee species native to B.C.