



NOTES FROM SQUAMISH CLIMATE
ACTION NETWORK'S
2020 GARDEN TALK SERIES

PLANTING FOR POLLINATORS

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WHY WE NEED POLLINATORS

Did you know that 90 percent of flowers and plants need pollinators to reproduce? Only 10 percent of plants rely on wind and gravity (ex: evergreens). The vast majority are entirely dependent on the work of these busy creatures.

Considering our entire food system relies on plants, without pollinators, we could be able to eat.

Because many species of pollinators have developed a unique relationship with the local species of plants in our area, we must protect these environments.

To protect our native species of pollinators, we must plant native food sources for them.

WHY ARE POLLINATORS IN TROUBLE?

Pollinators are getting hit with 3 major issues right now:

- Habitat loss
- Climate change
- Disease

Bees, in particular, have been hit with parasites and pesticide use, which have caused a massive colony die-off - upwards of 30 to 40 percent a year.



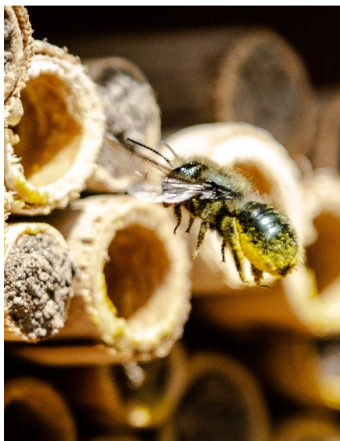
WHO ARE THE POLLINATORS IN COASTAL BC?



BEETLES

We often label beetles as the pests that start to nibble on our veggies, but not all beetles are bad.

Many beetles are pollinators for specific species, including pond lilies and magnolia. Plus, as a bonus, many beetles love to eat other pests like slugs!



BEES

There are several different varieties of bees, which all have different preferences, nesting habits, and food sources.

In BC alone, we are home to over 450 species of bees, including both colony living bees and solitary ones.

Common species of bees you may find around the garden include mason bees, mining bees, and plasterer bees. Bees are most attracted to purple, white, yellow and orange.



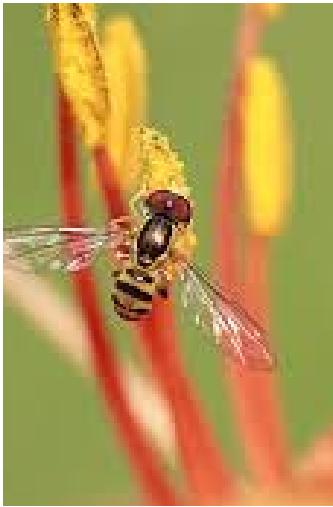
BUTTERFLIES & MOTHS

In BC, there are 187 different species of butterflies. Butterflies love sunny open areas, like a sunlit wildflower meadow. They are attracted to colourful flowers and vegetation, in fields and along the edges of forests.

Butterflies also lay their eggs on certain species of plants, which makes them even more valuable. Butterflies love milkweed, comb flowers, catnip, and nettle, among many others.

Moths are nocturnal pollinators, which are attracted to plants through scent for more than by appearance. When planting to attract moths, you'll want to aim for late bloomers, with pale colouring that stay open at night and have a strong scent.

POLLINATORS CONTINUED



FLIES

Flies are the most efficient pollinators. They go after small flowers, especially umbel chapped flowers (think flowers shaped like a head of dill), which other pollinators may overlook.

Some flowers evolved specifically for pollination by local fly species. Flies are very helpful for the pollination of plants in a moist and shaded environment.

In the garden, flies help pollinate carrots and related veggies (the Apiaceae family). One example of a pollinating fly is the hoverfly.



BIRDS

Hummingbirds have evolved to feed on flowers with long tubular shapes. These tiny creatures fit their long beak and tongue into the flowers to pull out nectar, dusting their bodies with pollen in the process.

Hummingbirds migrate thousands of kilometres every year to move into BC for the warmer weather.

WHAT TO PLANT IN YOUR VEGETABLE GARDEN FOR POLLINATORS?

- White flowers
- Bee balm
- Bergamot
- Chives, onions and other flowering alliums
- Dill (and other umbel shaped flowers)
- Marigolds
- Oregano
- Calendula



TIPS FOR ATTRACTING POLLINATORS

Leave a Mess! Some pollinators (flies, mason bees, etc.) thrive with a semi-composted pile of leaves, mulch, and garden debris. Others use clay to make their nest. Leave an area of your yard in an organic mess to make them feel at home.

Plant by the Bloom Schedule! Plant a garden with a plan! Aim to have flowers blooming in your garden from February to September. The Habitat Acquisition Trust has a good resource on Blooming Schedule for our region.

Plant Native Species! Our native pollinators are more attracted to the plant species found in the wild, so it's best to plant native flowers as encouragement. If there is a choice between native and nonnative, always go native.

Plant in Clusters! Plant the same species together to help pollinators stay efficient on their pollination journey. Instead of flying from one space to the next, wasting energy and time, they can keep in the same area on their trips.

Don't Weed! Some weeds support pollinators long before anything else is blooming in your garden. Keep flowers from unwanted weeds (like Dandelions) around until your garden has other options for the pollinators.

Diversity! Plant a diverse array of flowers and native plants to promote a vibrant ecosystem. Try to work in a variety of annuals and perennials and different heights.

HOW TO ATTRACT POLLINATORS

CREATE THE RIGHT HABITATS

- Leave an area of light leaf and mulch in the corner of your yard to attract solitary bees. Mulch is also another excellent attractant for bees.
- Some pollinators prefer grassy areas, while others gravel and pebbles.
- Create nooks and crannies around your yard with different environments, and canopies suitable for a variety of species.
- Mason bees love exposed earth (clay in particular) as it helps them build their nests.
- Don't forget about water. Consider a birdbath or bee bath to provide constant access to your pollinators.

PLANT FOOD SOURCES THEY LOVE

- Remember, native pollinators are most attracted to native species. While they might accidentally find other flowers in your garden, it's best to bring them in with native species.
- Check out page 16 of the Pollinator Partnership Ecoregions Guide for Pacific Ranges for a detailed list of some of the most common plants for our Pacific Range. It contains a hundred or more species to get you started planting for pollinators.

AVOID THE USE OF PESTICIDES

- Do not use pesticides or other harsh chemicals around your yard. Consider integrated pest management instead of chemicals.

ADDITIONAL RESOURCES

- The Habitat Acquisition Trust: Blooming Schedule
 - <http://hat.bc.ca/images/Pollinator-Guide-Web.pdf>
- BC Farms and Food
 - <https://bcfarmsandfood.com/plant-a-bee-attracting-garden/>
- Pollinator Partnership Ecoregions Guide for Pacific Ranges
 - <https://www.pollinator.org/pollinator.org/assets/generalFiles/Pacific.Ranges.2017.ver4.pdf>
- Pacific Northwest Insects By Merrill A. Peterson