

Sea to Sky Pollination Guide



The goal of this manual is to provide a user-friendly educational guide to pollination practices in the Sea to Sky, from Britannia Beach to Lillooet, located on the unceded lands of the Ha7lh en skwalwn Kwis tl'iknumut tl'a Skwxwuu7mesh, St'át'imc and Lil'wat nations respectively.

What is Pollination?

- Pollen contains genetic material used for the reproduction of plants, much like the function of sperm and egg in animals.
- The transfer of pollen from the male reproductive part (stamen) to the female (pistil) is essential for a plant to produce its fruit, vegetable, or grain.

Why is Pollination Important?

- Pollination is required for $\frac{2}{3}$ of the crop varieties we eat. Without pollination, our global food system would collapse!
- Flowering plants provide food and habitat for other species within an ecosystem. Protecting flowering plants and pollinators can in turn protect the biodiversity of the entire food chain.

What Threatens Pollinators?

	Habitat Loss Pollinators have limited migratory range and cannot relocate if habitats are destroyed from industrial or agricultural development
Climate Change The intensity of extreme weather events such as heatwaves, floods, wildfires, rising sea levels and storms threatens pollinators who cannot adapt to the rapid onset of a change	
	Pesticide Use Chemical treatments used to kill insects will spread throughout the entire plant system (including its pollen) and become toxic to pollinators

How to Support Pollinators in Your Garden

Include bare soil for pollinator nesting sites

Keep it messy
Pollinators thrive in gardens with sticks, debris, and dead leaves to help them build nests.

Plant Indigenous species



Avoid Neonicotinoids

These are pesticides commonly used in garden depot plants. They are sprayed externally and enter the pollen, seeds, and fruits of plants, making them toxic to pollinators

Plant in clusters



Provide water baths for drinking

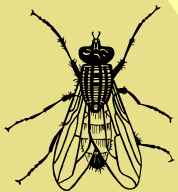
Plant a diverse range of flowering plants

Meet the Pollinators



BEES prefer bright white, yellow, and blue flowers with mild odor and shallow landing platforms on their petals. The majority of species in BC are solitary, meaning they do not live in colonies and remain in a small localized habitat throughout their entire life.

- Honey Bee
- Yellow Fronted Bumble Bee
- Yellow Faced Bumble Bee
- Western Leafcutter
- Modest Masked Bee



FLIES often dominate alpine meadow pollination due to their high tolerance to harsh environmental conditions and ability to forage for a longer season.

- Hoverfly
- Bee Fly
- Black Blow Fly
- Common Green Bottle Fly
- Deadhead Hover Fly



BATS pollinate night-blooming plants with white coloration and rich fragrances to guide them towards the flower.

- Hoary Bat
- Silver haired Bat
- Big Brown Bat
- Yuma Myotis
- Californian Myotis
- Long legged Myotis



BIRDS are often attracted to scarlet, red, orange and white flowers that are long and tubular in shape. Birds are important because they occupy larger habitats and can pollinate longer distances than insects.

- Rufus Hummingbird
- Anna's Hummingbird
- Black Swift (rare)
- Vaux Swift (rare)



WASPS enjoy all coloured flowers except red which they cannot see. Wasps are omnivores, meaning they eat both plants and smaller insects. Their diverse diet means they need less nectar to survive.

- European paper wasp
- Sand Wasp
- Bald-faced hornet



BUTTERFLIES prefer pink, purple, yellow and orange flowers.

- Painted Lady
- Canadian Tiger Swallowtail
- Cabbage white
- European skipper



MOTHS are similar to bats in that they use their sense of smell to locate flowers at night. They prefer pale-coloured rich-smelling flowers.

- Ceanothus Silkmoth
- One-eyed Sphinx Moth
- Bent-line carpet Moth

Non-Indigenous Flowering Plants

Agastache (Licorice Mint)
Borage
Bergamont
Asclepias (Butterfly Bush)
Buckwheat
Calendula
Cardoon
Celosia
Centaurea (Cornflower)
Chives
Cosmos
Cucumber
Echinacea
Sunflower



Note: Species lists are meant as a general guide and are by no means comprehensive. For additional resources on gardening and pollination please visit:

squamishcan.net/growfood
squamishfoodpolicycouncil.com

Indigenous Flowering Plants

Western Yarrow
Canada Golden Rod
Douglas Aster
Red Columbine
Broad-leaved Stonecrop
Kinnikinnick
Pearly Everlasting
Woolly Sunflower
Pacific Bleeding Heart
Oceanspray
Hardhack (Rose spirea)
Showy Milkweed
Pacific Willow



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Thank you to our funders!

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