BRITISH COLUMBIA BEE ATLAS

2024-2025 Annual Report

Photo by Jade Lee

Native Bee Society of British Columbia

The BC Bee Atlas is a flagship project by the Native Bee Society of BC

What is the BC Bee Atlas?

The BC Bee Atlas is a community science initiative of the Native Bee Society of BC to document the diversity, distribution and floral partners of BC's 500+ bee species. It is run in partnership with the Oregon State University Extension Service Master Melittologist Program.

Why do we need an Atlas?

BC's native bees and other crucial pollinators are facing unprecedented challenges from habitat loss, climate change, introduced species, and pesticide use. Supporting these pollinators requires knowledge of where and when they occur, how they nest, and what plant species they use for pollen and nectar.

How does it work?

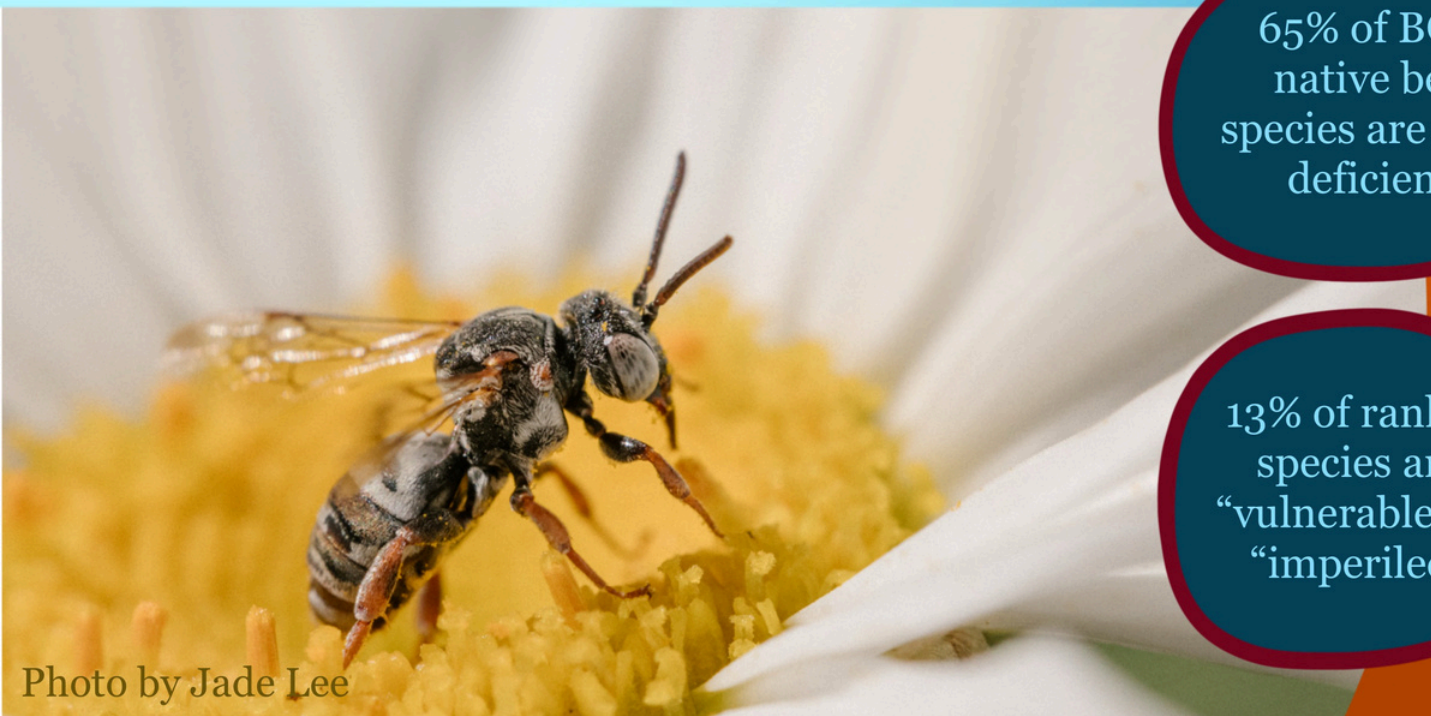
Our 75+ highly trained volunteers have boots-on-the-ground across the province collecting museum-quality bee specimens. The iNaturalist app is used to record forage-plant data. Specimens are identified by experts to genus and species and associated with their plant hosts. The information is made public so that conservation efforts can preserve these keystone species for future generations. Online education and data management are supported by the Oregon State University Extension Service Master Melittologist Program.

Oregon State University
Extension Service
Master Melittologist

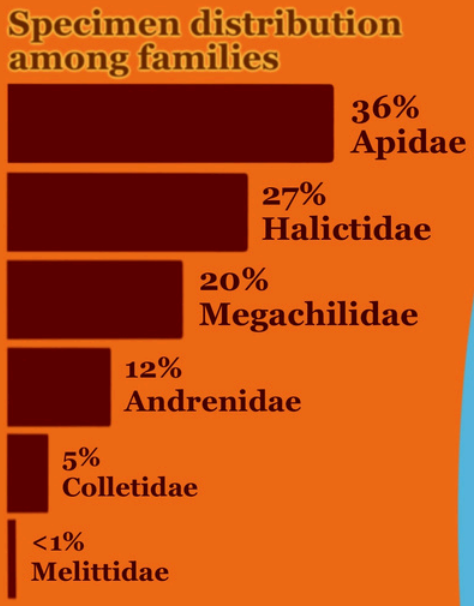
BC has the greatest bee diversity in all of Canada - 500+ species!

65% of BC's native bee species are data deficient

13% of ranked species are "vulnerable" or "imperiled"



BC Bee Atlas at a glance



4500+ specimens collected from 300+ plant species currently in our database


Photo by Leanne Cleaveley

Records of 100% of BC bee families and 86% of BC bee genera!


Photo by Kim Smith

75+ Melittologist students trained across the province

Data to Date:

2024 was our first official program year, bringing in 2467 specimens. With 80% of the 2024 specimens identified, the BC Bee Atlas has recorded 165 species - 33% of the known BC fauna! We are expecting 4000 - 5000 specimens from our 2025 collection efforts, including an increase in Northern species.

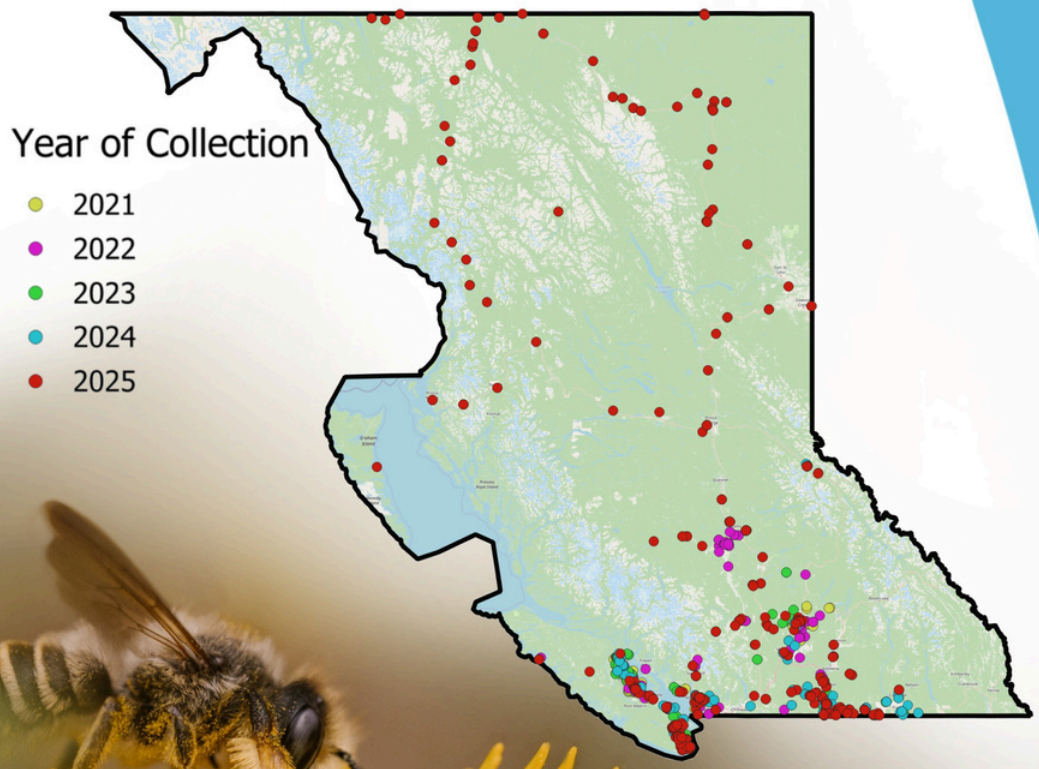



Photo by Jade Lee

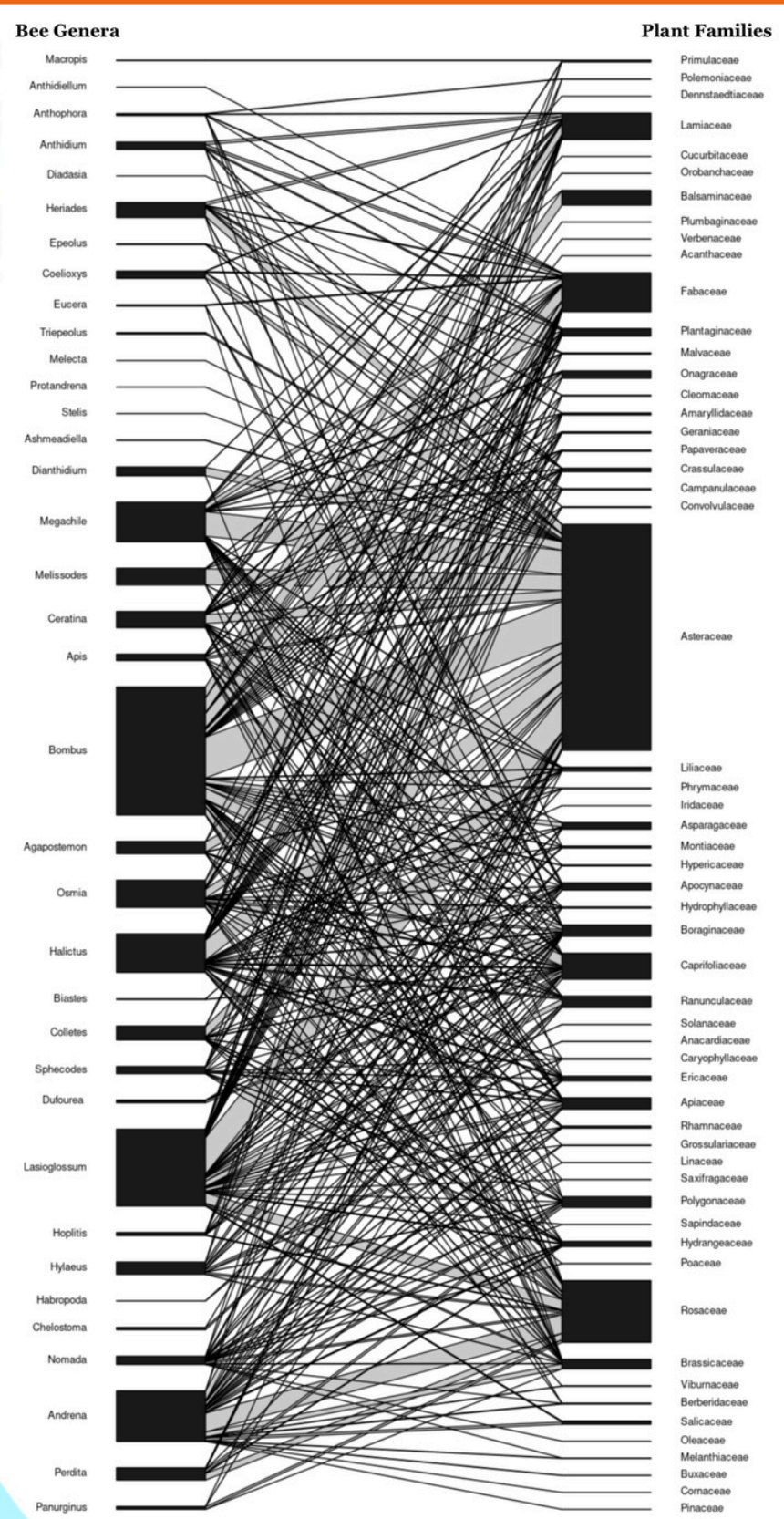
Bee-Plant Network

Bees rely on flowering plants for pollen and nectar to feed themselves and their offspring, but not all flowers are the same to bees! Some specialist bees need specific flowers to provide appropriate nutrition to their offspring. Even generalist bees that can feed on many flowers have preferences. Our data on bee-plant relationships can inform restoration efforts to ensure that all bees have the food they need.

Andrena astragali, the death camas mining bee, uses only the pollen from this toxic plant to feed to her offspring

Diadasia diminuta, the globe mallow bee, collects pollen from streambank hollyhock

Bombus vancouverensis, the Vancouver bumble bee, was recorded on 32 different plants!



2024 - 2025 Financials

The 2024 - 2025 year was one of growth for our program. Our dedicated volunteer NBSBC grant writers and fundraisers were able to secure a BC Conservation and Biodiversity Award with our partner BC Nature. As well, a Habitat Conservation Trust Foundation Capacity Grant will come into effect in the 2025 - 2026 fiscal year. Along with individual donations, these funds allow for the contracting of a part-time Bee Atlas Lead to identify bees and coordinate the program. In addition, our Mini Bee Schools and BC Bee Course brought in sufficient revenue to cover costs, while also providing bursaries to students in need! The BC Bee Atlas continues to rely on the dedication of our volunteers for all our data collection, and the support of our community to keep the program growing.

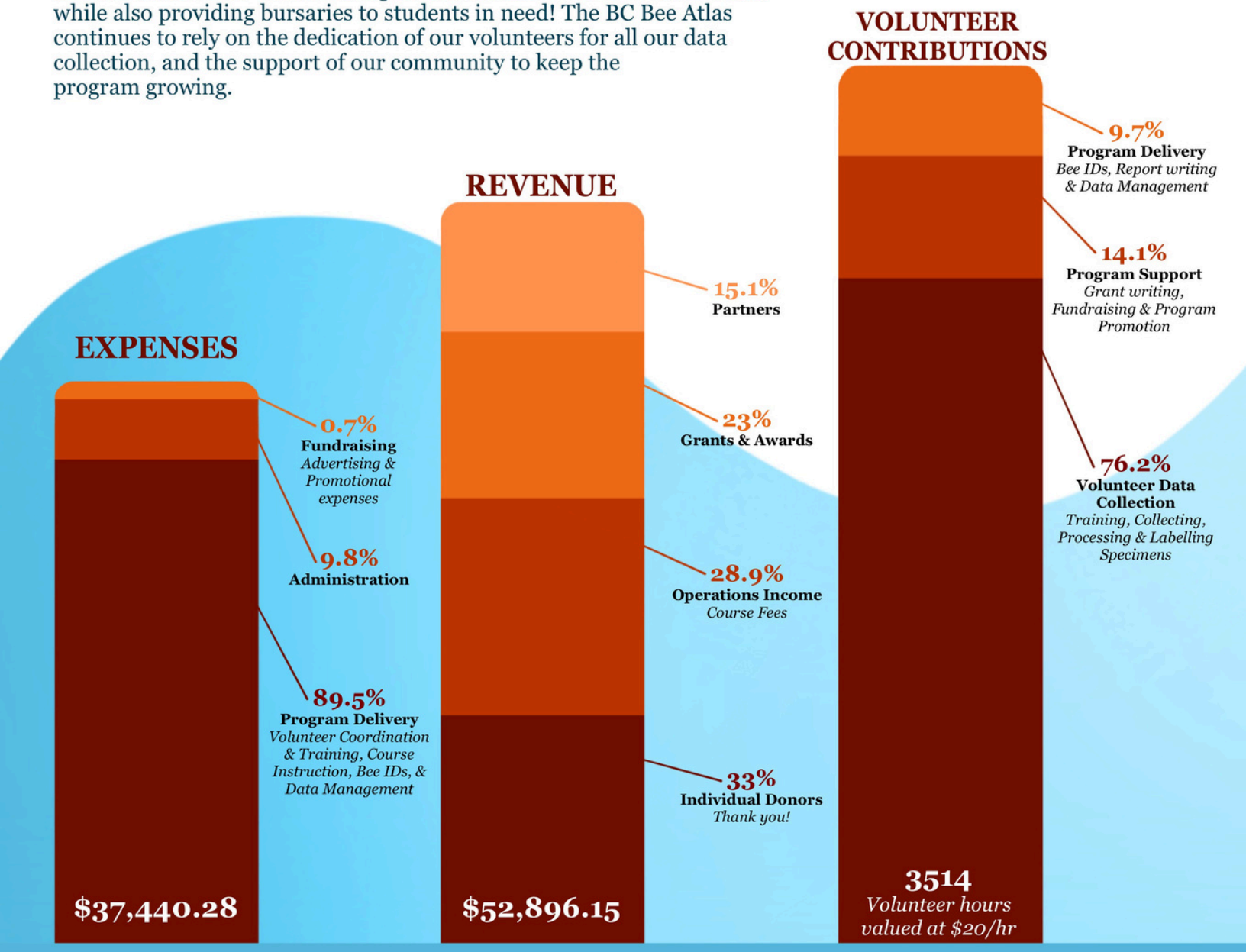



Photo by Sarah Johnson

$2825 in course bursaries for indigenous and in-need participants


Photo by Sarah Johnson

Over 3000 hours of volunteer time!

Special Projects

Our trained volunteers are busy contributing to native bee research and conservation!

Photo by Lynda Stevens

In partnership with the City of North Vancouver, our data is being used to inform habitat management for pollinators in urban parks and boulevards. Over our 2024 collecting season, we increased the number of publicly available species records from the City of North Vancouver from 13 to 43!

Donor-supported work in the Kamloops areas resulted in a list of 34 species, including two species not previously recorded from BC, while other volunteers sought out rare specialists such as the oil collecting *Macropis nuda*.

Photo by Jakob Dulisse

A new species record for British Columbia! *Andrena sulcata* was collected on rabbitbrush in Kamloops.

In 2025, our volunteers continued to work with the City of North Vancouver, and also contributed to a bioblitz in Nanaimo. They completed surveys of bees in native plant seed fields on Vancouver Island, agricultural collections in Langley, and collections in northern and remote areas of BC.

Publicly Accessible Data

Our data is shared yearly to the Global Biodiversity Information Facility (GBIF), and live-managed on the Ecdysis portal. ***Explore all our data:***

Global Biodiversity Information Facility

Ecdysis Portal

OSU Master Melittologist Program

Volunteer with us!

Join the OSU Master Melittologist Program to contribute data (Link above)
Learn more about the Native Bee Society of BC and our programs:

bcnativebees.org

Native Bee Society of British Columbia

Proudly Partnered with

OREGON BEE ATLAS

BRITISH COLUMBIA BEE ATLAS

Oregon State University
Extension Service
Master Melittologist

The BC Bee Atlas is the flagship project of the Native Bee Society of BC. It empowers British Columbian scientists to produce biodiversity data and make amazing discoveries about the province's wild bees and diverse flora. Online education and data management are supported by the Oregon State University Extension Service Master Melittologist Program.

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