BC Bee Atlas

City of North Vancouver

2025 Survey Results

Prepared For:

City of North Vancouver
Engineering, Parks & Environment Department.

Prepared by:

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BRITISH COLUMBIA BEE ATLAS

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Richard Parker and Lianne Shyry from the City of North Vancouver oversaw the contract and provided permits and guidance on survey areas and priorities.

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Cover Photo: *Andrena prunorum*: Prunus Miner Bee. © Lori Weidenhammer
All other photos by Bonnie Zand

Table of contents

Executive Summary

Over the summer of 2025 the Native Bee Society of BC, in collaboration with the volunteer Master Melittologists, surveyed for bees in the City of North Vancouver. Over 9 survey days 280 specimens from five families, 13 genera and 43 species were collected from 42 different plant species. Four non-bee specimens were also collected on flowers. One species at risk, *Bombus flavidus* Eversmann, 1852, was observed, as well as five non-native species. When combined with work done in 2024, the total species list for the City of North Vancouver is now 57 species, an increase of 16 species. A species checklist is provided, as well as details on plant use by different bee families.

Description of project

The BC Bee Atlas provided native bee survey services to the City of North Vancouver during the 2025 field season, under contract with the City of North Vancouver Engineering, Parks & Environment Department. Surveys were intended to provide ongoing data on native bee diversity and plant use to the City of North Vancouver, as well as an updated species list to guide ongoing pollinator conservation efforts. As in past years, the project focused on City of North Vancouver efforts to reduce mowing and increase pollinator habitat. The “low-mow” meadow in Grand Boulevard Park was re-surveyed, while additional new meadow areas created on boulevards throughout the city were also sampled. With this ongoing data the City can continue to track pollinator diversity and adjust habitat modification plans accordingly. Pollinator planting mixes may support common and introduced species, while failing to provide the required floral resources for rare and specialized native species. The included species list provides the City of North Vancouver with specific information on the rare, common and introduced species present in the City and the nesting and floral resources necessary to support those species.

BC Bee Atlas Survey Methods

Surveys were conducted by volunteers trained by the Oregon State University Master Melittologist Program, following methods outlined by Best et al. (2022). Non-standardized wandering transect surveys were conducted within the City of North Vancouver between April and September 2025. Volunteers hand-netted bees from flowers growing in parks and boulevards. Bee specimens were retained, pinned, labelled, and submitted to the BC Bee Atlas for identification. The citizen science platform iNaturalist was used to photographically document the flowers where bees were collected, producing bee-plant association records. Each sampling event consists of all the bee specimens collected from a single plant species by a single observer within one day and site.

Surveys focused on sites managed by the City of North Vancouver for pollinators, including the Grand Boulevard low-mow meadow area (#5, *Figure* 1) and additional boulevards throughout the city. Vegetation in the pollinator meadow sites included grasses, weedy vegetation, and intentionally planted annual and perennial bee forage plants (Figure 2). Management strategies for pollinators included reduced and altered mowing regimes,

installing forage plants, and the addition of large woody debris for nesting habitat. Additional sampling occurred in other City parks and green spaces.

Results are reported for both the 9th – 11th street block of Grand Boulevard (the “low-mow” meadow), which has been under altered management for multiple seasons, and for all other areas of the City of North Vancouver.

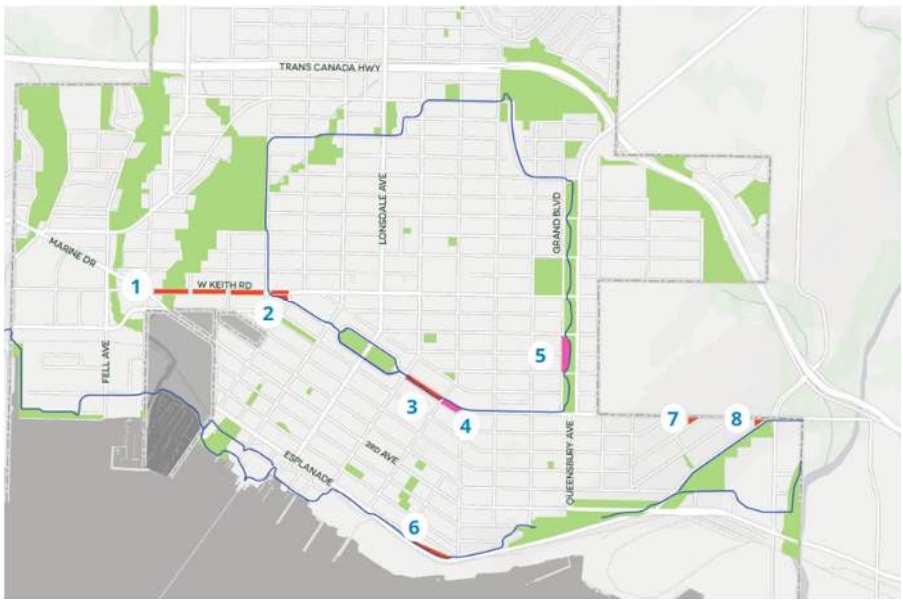

Figure 1. 2025 pollinator meadow sites seeded by the City of North Vancouver. Map provided by City of North Vancouver.

A permit letter for volunteers participating in surveys was provided by the City of North Vancouver. Volunteer guidance was provided by the Native Bee Society of BC at a training event on June 8th 2025; through project documents and maps; through regular email communications and through additional planned collecting events over the field season.

Specimens collected during the 2025 field season were identified to species or morphospecies using taxonomic keys and reference materials. Their conservation status, nesting habitat and pollen preferences were noted (Appendix 1). For morphospecies and others where life history information was not available, generic trends were used. Some species identifications are still tentative, awaiting confirmation with reference material. Those species have been marked with (*Prov.*) in the text and tables. Male specimens in subgenera *Lasioglossum (Dialictus) and Lasioglossum (Sphecodogastra)* were identified only to the genus level and lumped together during analysis. The following references were consulted: Ascher and Pickering 2025, BC Conservation Data Centre 2025, Canadian Endangered Species Conservation Council 2022, DeSilva 2012, Engler et al. 2024, Fowler 2020, Gardner and Gibbs 2022, Gonzalez and Griswold 2013, LaBerge 1969, LaBerge 1986, LaBerge 1973, LaBerge and Bouseman 1970, McGinley 1986, Oram, 2019, Portman et al. 2024, Roberts 1973, Sheffield 2025, Sheffield et al. 2011, Williams et al. 2014.

Graphs and summary statistics were created using the R programming language in R Studio. Species accumulation curves were run using the iNEXT application (Chao et al. 2014, 2016), while bee-plant network visualizations were created using the bipartiteD3 package (Terry 2021). Data collected during this project is publicly available on the ecdysis platform (Ecdysis 2026), and will be provided to the Global Biodiversity Information Facility (GBIF 2026).

Ecoprovince wide bee-plant associations reported in Appendix two were created from both the BC Bee Atlas data set (Ecdysis 2026) and a multi-year dataset pollinator diversity and interaction dataset from Guzman et al. (2023).

Figure 2. A sampling of the pollinator habitat provided by the City of North Vancouver in 2025. Clockwise from the top left: Annual blooms from mix seeded spring 2025, primarily non-native annuals; Intentionally placed large woody debris for nesting habitat; Master Melittologist volunteers sampling in Grand Boulevard “low-mow” meadow; Perennial pollinator gardens in the grand boulevard.

BC Bee Atlas Survey Results

Sampling Effort:

During 2025 a total of 11 volunteers participated in surveys. Surveys occurred from April to September, with volunteers collecting on 9 different days over the season. A total of 87 sample events occurred, with collections made on 42 different species and 37 genera of plants. An average of 3.2 bee specimens was collected during each sample event, with a range of 1-23 (Table 1).

Table 1. The number of survey days, sampling events, specimens collected and bee species documented in the City of North Vancouver during the 2025 field season by the Native Bee Society of BC.

Month	Survey days	Sample events	Specimens collected	Bee species
April	2	6	9	8
June	2	41	107	24
July	2	16	93	19
August	2	20	6	19
September	1	4	6	3
Total	9	87	284	46

Thirteen of the sample events were from the Grand Boulevard meadow area, with 74 from other areas in the City. Eight plant species were sampled from the Grand Boulevard meadow area and 47 from elsewhere in the City of North Vancouver (Figure 3).

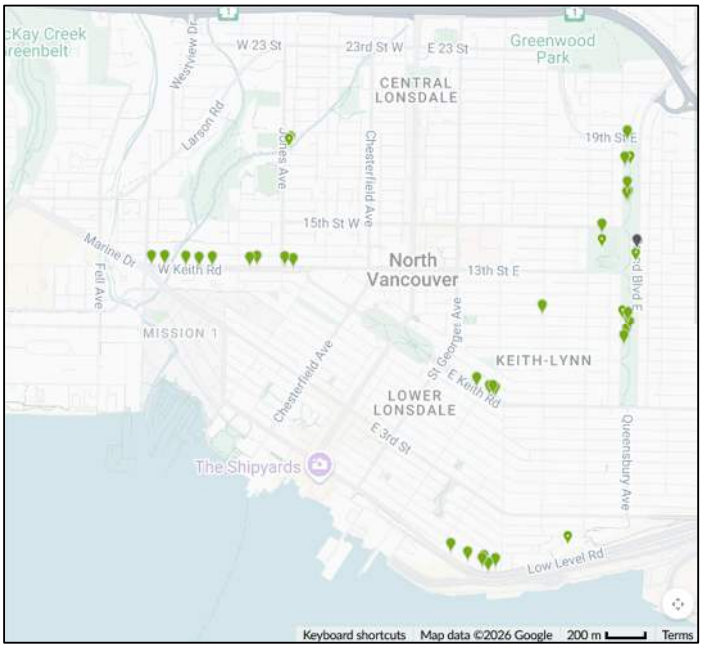

Figure 3. Location of sampling events during native bee surveys in the City of North Vancouver provided by the Native Bee Society of BC and the Master Melittologists during the 2025 field season. Green points indicate sample events on plants, while black dots are sampling events without a plant host. Map data ©google maps 2005. Point data ©iNaturalist 2005.

Bee Diversity

Between April and September 2025, the Bee Atlas volunteers collected 280 bee specimens from 5 bee families, 13 genera, and 43 species. Of the 280 specimens, 260 were identified to the species level (Table 2, Figure 4). Most of the specimens were in the Apidae family (155 specimens, 11 unique species), while the Andrenidae family were the most diverse (41 specimens, 14 unique species). The five most frequently collected species were *Bombus mixtus* Cresson, 1878 (46 specimens), *Bombus flavifrons* Cresson, 1863 (32), *Apis mellifera* Linnaeus, 1758 (24*), Bombus vosnesenskii* Radoszkowski, 1862 (24), and *Halictus rubicundus* (Christ, 1791) (18), comprising 51% of all specimens collected. Just one specimen was collected for 14 of the 43 species identified (Table 2). An average of 6.5 specimens per species (range 1-46) were collected. In the Grand Boulevard low-mow meadow, a total of 10 bee species and 23 bee specimens were collected.
Four specimens of non-bee insects were also collected during surveys. While non-bees were not the focus of these surveys, improving pollinator habitat will enhance populations of many different pollinating taxa!

One recorded species is considered to be at risk. *Bombus flavidus* is blue-listed in British Columbia and considered to be of special concern (BC Conservation Data Centre 2025).

The most frequently collected family was the Apidae. Eleven species and 155 individuals were recorded in 2025. The four most frequently collected species in this study were all in the family Apidae, with a bumble bee, *Bombus mixtus* as the most commonly collected taxa. Two non-native species are included in this group, *Apis mellifera*, the introduced honey bee, and *Bombus impatiens* Cresson, 1863, the introduced eastern bumble bee. Bees recorded from the family Apidae also include small carpenter bees (*Ceratina*), long-horn bees (*Melissodes*) and nomad cuckoo bees (*Nomada*).

Six bumble bee species were documented, with *Bombus melanopygus* Nylander, 1848 detected by our surveys in the City of North Vancouver for the first time in 2025. Social bumble bees live in colonies with a single queen and multiple workers. Bumble bees are common generalist pollinators that can forage long distances from their nest and are common visitors in gardens. As in 2024, we documented one individual of a socially parasitic bumble bee species, *Bombus flavidus.* This species is blue listed in BC, so the continued occurrence in the City of North Vancouver is positive.

The second most abundant family, the Halictidae, had 10 species, and 66 individuals. An interesting find this year was the bee *Lasioglossum leucozonium* (Schrank, 1781), a species last recorded in the lower mainland in 1931 (GBIF 2026). Most members of the Halictidae are ground nesting bees, while *Lasioglossum cressonii* (Robertson, 1890) has been recorded nesting in rotten wood. Many members of the small sweat bees (*Lasioglossum*) and furrow bees (*Halictus*) have social colonies and are present throughout the season. Additional genera such as green metallic sweat bees (*Agapostemon*) have multiple generations per year. All the Halictidae species we detected were generalist foragers.

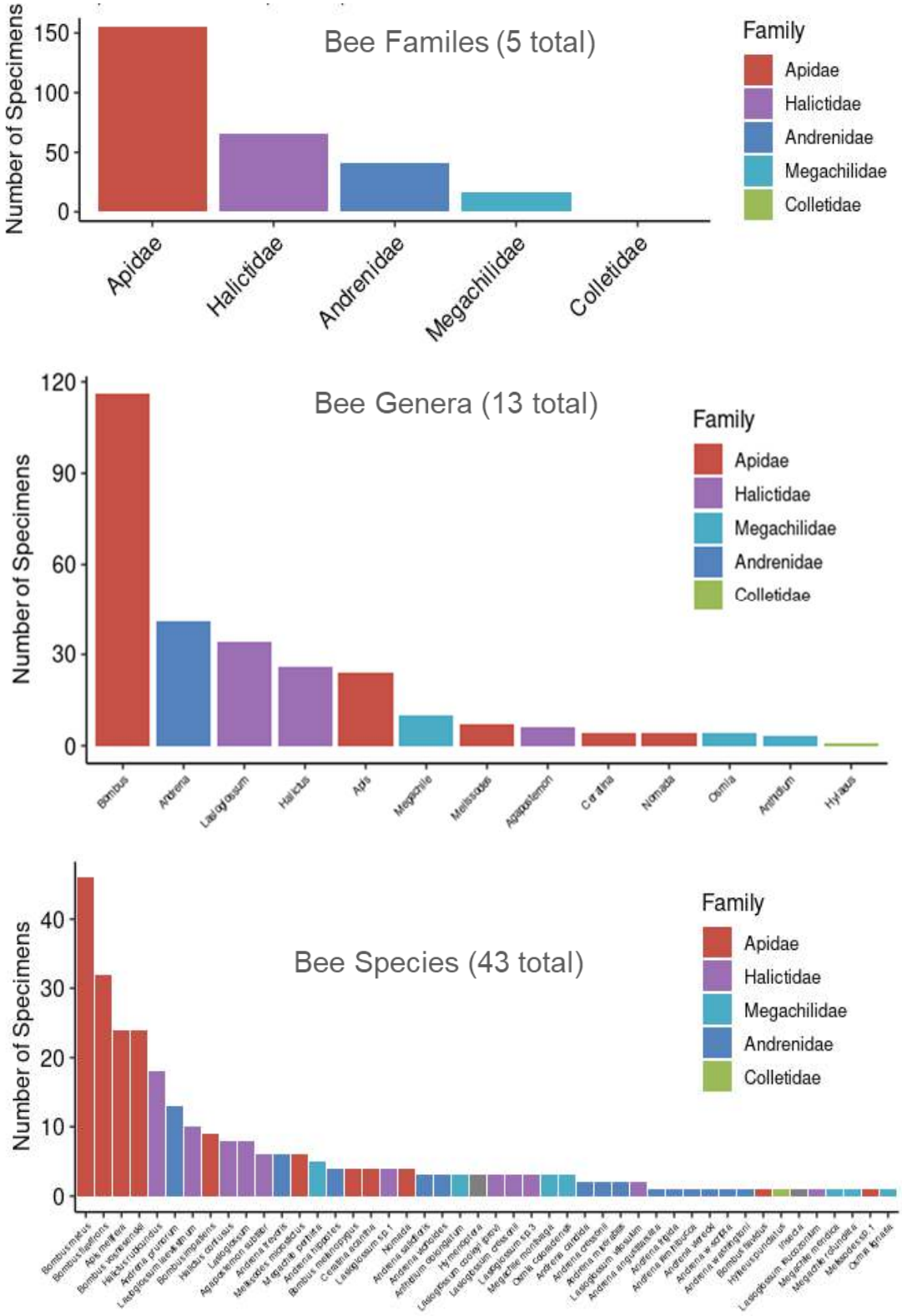

Figure 4. Rank abundance plots of specimens collected by the Native Bee Society of BC from the City of North Vancouver during the 2025 field season. Number of specimens is recorded on the y axis, while family, genus and species are organized along the x axis in order of abundance.

The family Megachilidae (7 species, 17 individuals) consist of leafcutters, mason bees and their allies. The leafcutter bees (*Megachile*) are summer and fall bees that use a variety of plant materials, soils and resins to construct nest cells. While some species, such as the introduced *Megachile rotundata* (Fabricius, 1787) will nest in provided tunnel nests, many other species in this genus nest in the ground. One species added to the list this year is *Megachile montivaga* Cresson, 1878, which uses flower petals to line its nesting cells. Both females collected were on their preferred petal source, plants in the genus *Clarkia*. We also added two species of mason bees to the City of North Vancouver list, *Osmia lignaria* Say, 1837 and *Osmia coloradensis* Cresson, 1878.

We recorded 14 species and 41 individuals from the family Andrenidae, all from the genus *Andrena* (mining bees). All *Andrena* are solitary, ground nesting bees. The most frequently collected *Andrena* was *Andrena prunorum* Cockerell, 1896, a floral generalist. However, many *Andrena* species have specific floral hosts. Both *Andrena salicifloris* Cockerell, 1897, and *Andrena frigida* Smith, 1853 are pollen specialists on *Salix* (Fowler 2020). *Andrena trevoris* Cockerell, 1897 is suspected to be a specialist on *Symphoricarpos*. While both males and females will visit other plant species for nectar, the presence of an appropriate pollen host plant will determine which *Andrena* species can reproduce in an area. Spring blooming woody shrubs are important for *Andrena* – 68% of our *Andrena* specimens were collected on shrubs, with *Holodiscus* and *Symphoricarpos* and *Salix* playing an important role. Additional shrub collections will likely continue to increase the number of *Andrena* species recorded.

The rarest family during our study continues to be the family Colletidae, represented by one individual in 2025. Similar to 2024, we detected the introduced species *Hylaeus punctatus* (Brullé, 1832). The genus *Colletes* has not yet been detected.

The estimated species coverage for all sampling performed during both 2024 and 2025 is 95%, with an estimated 68 species (95% CI: 28-78) if the sampling effort was doubled (Figure 5). These estimates are only valid for the areas and times where sampling occurred – sampling in additional areas of the City of North Vancouver, at different times, or on different plant species would increase species numbers.

*Table 2. Bee Species documented by the Native Bee Society of BC in the City of North Vancouver during the 2025 field season. Specimens were collected from either the Grand Boulevard Low-Mow Meadow or elsewhere in the City. The genus of plants each bee species was collected from was recorded using iNaturalist. Species with a * are not native to the region, while species with a ~ are new records for 2025.*

	Location in North Vancouver			
Species Detected	Grand Boulevard "low-mow" meadow	Other	Total	Associated Plant Genera
Agapostemon	**3**	**3**	**6**	
Agapostemon subtilior	3	3	6	*Achillea, Gilia, Hypochaeris, Nemophila*
Andrena		**41**	**41**	
Andrena angustitarsata~		1	1	
Andrena candida~		2	2	*Achillea, Holodiscus*

Species Detected	Location in North Vancouver			
	Grand Boulevard "low-mow" meadow	Other	Total	Associated Plant Genera
Andrena cressonii~		2	2	*Prunus*
Andrena frigida~		1	1	*Salix*
Andrena hippotes		4	4	*Holodiscus, Physocarpus*
Andrena laminibucca~		1	1	*Achillea*
Andrena miserabilis		2	2	*Salix*
Andrena prunorum		13	13	*Achillea, Anaphalis, Holodiscus*
Andrena salicifloris		3	3	*Holodiscus, Physocarpus*
Andrena trevoris~		6	6	*Symphoricarpos*
Andrena vicinoides		3	3	*Achillea, Physocarpus*
Andrena vierecki~		1	1	*Prunus*
Andrena washingtoni~		1	1	*Rosa*
Andrena w-scripta~		1	1	
Anthidium	**2**	**1**	**3**	
*Anthidium oblongatum**	2	1	3	*Trifolium*
Apis	**1**	**23**	**24**	
*Apis mellifera**	1	23	24	*Anaphalis, Clarkia, Gilia, Hypochaeris, Layia, Nepeta, Rubus, Rudbeckia, Salvia, Solidago, Symphoricarpos, Trifolium*
Bombus	**7**	**109**	**116**	
Bombus flavidus			1	*Solidago*
Bombus flavifrons	5	27	32	*Calystegia, Chamaenerion, Clarkia, Collinsia, Lupinus, Monarda, Nepeta, Trifolium*
*Bombus impatiens**		9	9	*Dahlia, Helianthus, Nepeta, Salvia, Solidago, Trifolium*
Bombus melanopygus~		4	4	*Rubus, Symphoricarpos, Trifolium*
Bombus mixtus	1	45	46	*Clarkia, Layia, Nepeta, Phlox, Rosa, Rubus, Salvia, Solidago, Symphoricarpos, Trifolium, Weigela*
Bombus vosnesenskii	1	23	24	*Achillea, Anaphalis, Calendula, Clarkia, Eriophyllum, Holodiscus, Hypochaeris, Layia, Melilotus, Nepeta, Ranunculus, Salvia, Solidago, Trifolium*
Ceratina		**4**	**4**	
Ceratina acantha		4	4	*Claytonia, Eriophyllum, Geranium, Symphoricarpos*
Halictus	**8**	**18**	**26**	

Species Detected	Location in North Vancouver: Grand Boulevard "low-mow" meadow	Other	Total	Associated Plant Genera
Halictus confusus	7	1	8	*Achillea, Eriophyllum, Gilia, Nemophila, Trifolium*
Halictus rubicundus	1	17	18	*Achillea, Calendula, Eriophyllum, Hypochaeris, Layia, Ranunculus, Solidago*
Hylaeus		**1**	**1**	
*Hylaeus punctatus**		1	1	*Solidago*
Lasioglossum	**1**	**33**	**34**	
Lasioglossum		8	8	*Achillea, Anaphalis, Eriophyllum, Layia, Matricaria, Solidago*
Lasioglossum cooleyi (prov)		3	3	*Achillea, Matricaria*
Lasioglossum cressonii		3	3	*Hypochaeris, Rosa, Rubus*
Lasioglossum laevissimum		10	10	*Achillea, Epilobium, Monarda, Solidago*
Lasioglossum leucozonium~		1	1	*Hypochaeris*
Lasioglossum sp.1		4	4	*Achillea, Layia, Ranunculus, Solidago*
Lasioglossum sp.3	1	2	3	*Achillea, Nemophila*
Lasioglossum villosulum~		2	2	*Hypochaeris*
Megachile		**10**	**10**	
Megachile mendica		1	1	*Calendula*
Megachile montivaga~		3	3	*Clarkia, Hypochaeris*
Megachile perihirta		5	5	*Achillea, Gilia*
*Megachile rotundata**		1	1	*Clarkia*
Melissodes		7	7	
Melissodes microstictus		6	6	*Hypochaeris*
Melissodes sp.1~		1	1	
Nomada	**1**	**3**	**4**	
Nomada	1	3	4	*Achillea, Eriophyllum*
Osmia		**4**	**4**	
Osmia coloradensis~		3	3	*Layia*
Osmia lignaria~		1	1	*Ribes*
Non-Bee Specimens		**4**	**4**	*Achillea, Anaphalis, Rosa, Solidago*
Grand Total	23	261	284	37

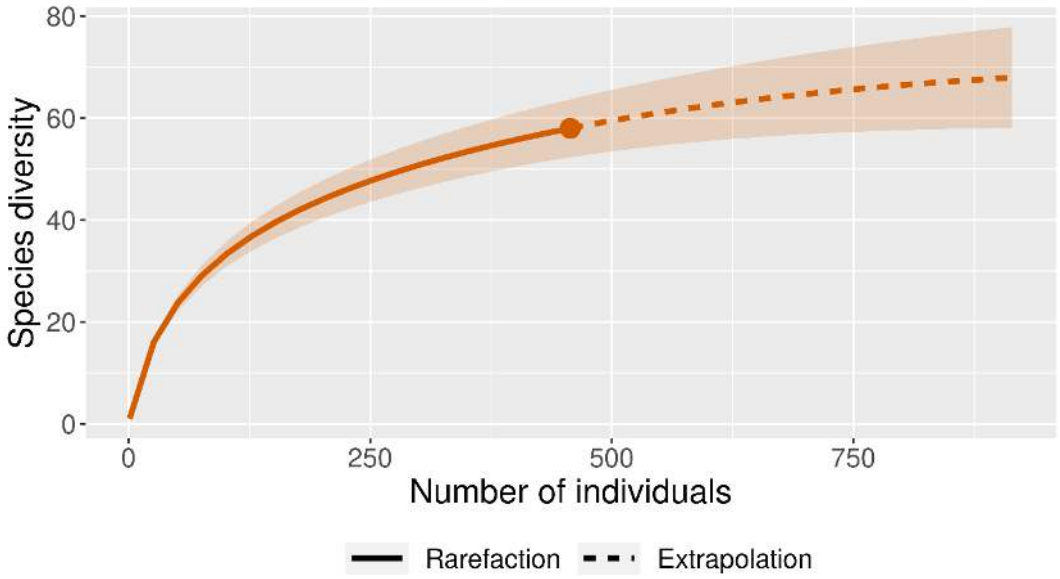

Figure 5. Species accumulation curve for sampling in the City of North Vancouver. The solid line indicated a rarefied species accumulation curve based on actual samples. The dotted line is an extrapolation of the curve, with an endpoint at twice the actual number of individuals sampled. The shaded area represents 95% confidence intervals. Analysis run and figure created using the iNEXT 2016 application.

Introduced Species in North Vancouver

During the 2025 surveys, five non-native bee species were collected in the City of North Vancouver: *Apis mellifera, Bombus impatiens*, *Anthidium oblongatum* (Illiger, 1806)*, Hylaeus punctatus* and *Megachile rotundata.* In total these 5 non-native species made up 11% of species and 13% of individuals. While the number and proportion of introduced species decreased from 2024, it is unlikely that this represents an actual decrease, but rather that volunteer collectors are avoiding sampling non-native species. *Apis mellifera*, *Bombus impatiens* and *Megachile rotundata* are economically important species managed for agricultural pollination. Their presence may indicate either active species management in the area, or feral populations. We also collected *Bombus vosnesenskii*, a species native to British Columbia, but with a historical range that did not include the lower mainland.

Nesting Habitat

The majority (74%) of bee species recorded during 2025 nest in the ground, with an additional 20% nesting in existing cavities such as mason bee blocks, beetle tunnels in dead wood or hollow stems. One species has been recorded nesting in rotting wood, while one species excavates pithy stems.

Plant Associations

In 2025, Bee Atlas volunteers collected 271 bee plant association records, and nine records of bees without a plant association. These included 15 plant families, 37 genera and 42 species. An average of 3.6 bee species were collected per plant genera (range 1-14), with an average of 7.56 specimens per genera (range 1-39). The ten plant families and genera that attracted the greatest diversity of bees overall are shown in Table 3, while the plant

families supporting diversity for each bee family are shown in Figure 6. Associated plants for all species collected are in Table 2. A pollinator network for all genera of bees and plants sampled during 2024 is found in Figure 7.

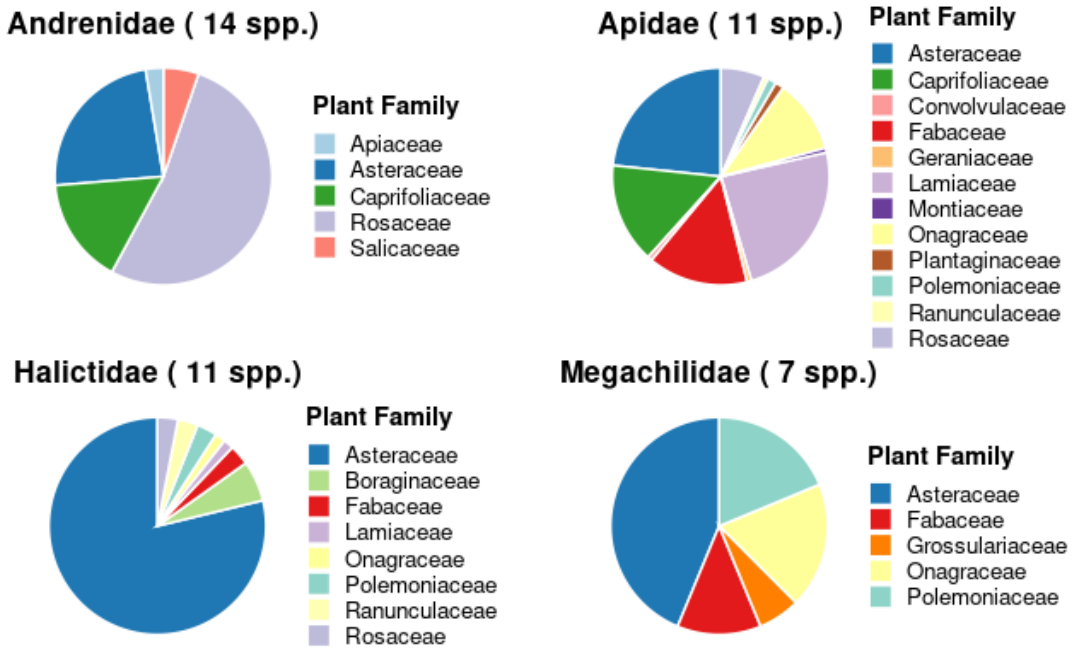

Figure 6. The proportion of bee species documented by the Native Bee Society of BC using each of the plant families surveyed in the City of North Vancouver. Graphs are organized by bee family. The family Colletidae was represented by only one specimen, foraging on Solidago.

Table 3. The 10 Plant families and Genera that supported the greatest number of bee species during non-standardized sampling conducted by the Native Bee Society of BC in the City of North Vancouver during the 2025 field season.

Plant Family	Bee Species	Bee Specimens
Asteraceae	28	105
Rosaceae	13	32
Fabaceae	8	27
Onagraceae	7	21
Lamiaceae	6	38
Caprifoliaceae	5	29
Polemoniaceae	5	7
Boraginaceae	3	4
Ranunculaceae	3	3
Salicaceae	2	2

Plant Genus	Bee Species	Bee Specimens
Achillea	14	38
Solidago	10	20
Hypochaeris	10	14
Layia	7	14
Trifolium	8	25
Clarkia	6	19
Eriophyllum	5	6
Symphoricarpos	5	28
Holodiscus	5	15
Nepeta	5	19

Most of the bee species documented are generalists, meaning they will forage on a variety of plants. However, even within generalist species, floral preferences are evident. Eight of the species recorded in 2025 are known to be specialists or to have strong floral preferences; meaning they forage on only a small subset of available plants, often within one plant family or genus. Generalist foragers are more likely to persist and thrive in many

different environments, while specialist foragers are unable to persist in an environment unless their required plant host is present (Figure 6).

The plant genus *Salix* and the plant families Asteraceae and Fabaceae support known specialists found in this study. Asteraceae, Rosaceae and Fabaceae supported the greatest diversity of species, however, because sampling effort was not standardized across all plant families, families with few species but a high ratio of species to specimens may also be important contributors to diversity.

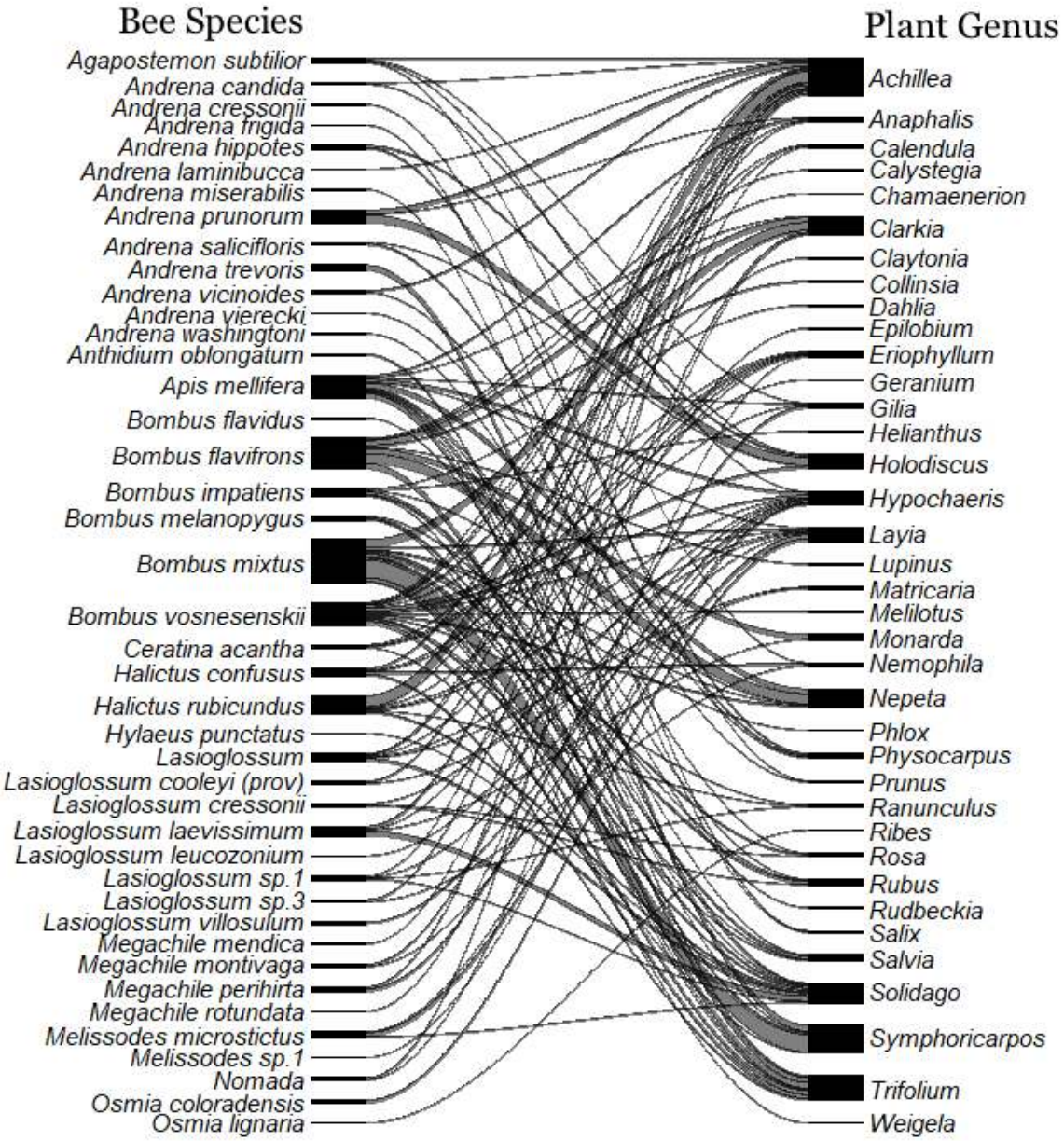

Figure 7. Bi-partite pollinator interaction network for the City of North Vancouver. Sampled bee species are on the left, while plant genera are on the right. Each line represents one individual specimen. Specimens not associated with flowers were not included in this analysis.

Discussion and Specific Recommendations

Bee and Floral Diversity

The total diversity of floral species sampled in 2025 increased by 45% from 2024, the total number of bee specimens increased by 61% and the total number of bee species documented in the City of North Vancouver increased by 25%. Because sampling effort is not standardized, these increases represent changes in sampling effort, but do not indicate anything about actual numbers of bees or flowers in the City of North Vancouver. An increase in overall bee species diversity would be expected based solely on an increase in sampling effort and specimen numbers, as seen in our species extrapolation curve. However, many of the new species detected in 2025 came from sampling on plants and sites not surveyed in 2024, suggesting that the increase in species number is also driven by the expansion of sampling across the City of North Vancouver. By sampling in more locations, our volunteers encountered more micro habitats with differing plant species composition, soil composition, and nesting site availability. These differing conditions will support different bee species.

Several plant species sampled for the first time in 2025 supported bee species that were new to the list. Shrubs were especially important in increasing the number of *Andrena* species. *Salix* supported *Andrena frigida, Symphoricarpos* supported *Andrena trevoris* and *Bombus melanopygus*, *Holodiscus* supported *Andrena candida* Smith, 1879, *Physocarpus* supported *Andrena vicinoides* Viereck, 1904, *Prunus laurocerasus* supported *Andrena cressonii* and *Andrena vierecki* Cockerell, 1904, *Ribes sanguineum* supported *Osmia lignaria* and *Rubus spectabilis* supported *Bombus melanopygus*. While none of these plant species were part of the boulevard pollinator meadows, many of the species they support are bees with restricted foraging preferences. All but one of the shrubs (*Prunus laurocerasus*) listed above are native species. Protecting and planting these and other native shrubs is an important part of supporting bee diversity in the City of North Vancouver.

Within the boulevard pollinator meadows, two forbs supported species reported for the first time in the City of North Vancouver: *Clarkia* supported *Megachile montivaga*, while *Layia* supported *Osmia coloradensis*.

No new species were detected in the Grand Boulevard “low-mow” meadow, however sampling effort in that site was lower in 2025 compared to 2026.

During training events and sampling volunteers noted that the floral diversity and abundance in the pollinator planting appeared much improved in 2025 compared to 2024, with many seeded species establishing well and providing excellent foraging resources. Some observed perennial species such as lupin were not in bloom during our surveys, and we expect to see continued increase in bee diversity and abundance as more species establish and spread in the meadow. Since many solitary bee species take a full year to reproduce, increases in the reproductive capacity of a species due to the increased floral resources will not be observed until the following year.

Planting Recommendations

While many of the seeded species were of Pacific Northwest origin, they are not native to the lower mainland. To further increase native bee species diversity, consider adding some

additional native plants. *Collinsia parviflora* is an early spring annual that attracts a high diversity of *Osmia* species. *Grindelia* is a summer and fall blooming, highly drought tolerant annual that supports many specialist bees, including the genera *Dianthidum, Triepeolus, Colletes, Melissodes* and *Coelioxys*. *Allium cernuum* is a midsummer blooming perennial known to attract *Colletes*. *Arctostaphylos* are low growing shrubs with early season blooms that support establishing bumble bees and also a diversity of *Andrena*. These species are easy to establish from plugs or seed. In general, adding more native species to all plantings, both perennial and annual will increase the likelihood of supporting a native bee or other pollinator with specific plant host requirements, while also supporting the many generalist species already present in the region. Appendix two includes a list of bee-plant associations from the entire Georgia Basin Ecoprovince, which can be used to guide additional planting choices.

General Recommendations

Increase Flower Abundance

As bee reproductive success is partially based on the amount of pollen they can collect to provision offspring, increasing the amount of pollen and nectar available will increase bee numbers. This can include increasing the area of formal plantings, as well as creating conditions that allow flowers to bloom in lawn areas, such as increasing mower height, decreasing mowing frequency, or replacing grass with a more diverse and flower-rich ground cover. Many weedy species provide excellent pollinator resources if they are permitted to bloom. Unmanaged areas, such as riparian corridors with native shrubs, also provide an increase in floral abundance for pollinators. Where current plantings consist mainly of ornamentals without accessible pollen or nectar, replacing these plants with species that provide resources to pollinators can increase abundance without increasing the area under management.

Increase Flower Diversity

Many bee species have generalist foraging habitats, and any increase in floral resources will benefit them. These include bumble bees and honey bees. However, some of the least common species we detected are specialists. These bees require specific flower hosts to provide pollen for their young. While the specific pollen preferences of many bee species are still unknown, providing flowers with a diversity of shapes, colours and bloom times will support a greater diversity of bees. Aim for multiple families and genera of flowers in bloom during each season. Where possible, using native plants will increase the likelihood that specialist bees are provided for, while also providing resources to generalists.

Increasing Nesting Sites

Bees are central place foragers, meaning they must return to their nest multiple times per day. When nesting resources are far away from floral resources bees' reproductive success is reduced. Many bees also spend the majority of their lives, including overwinter, in their nests. Nests must be undisturbed for long periods (over a year for some species) to allow the larva within them to fully develop and emerge. Protecting and providing nesting sites close to floral resources will increase bee abundance. Many species nest in the ground, and

multiple ground nesting aggregations were observed in areas of patchy lawn during surveys. Tolerating areas of bare soil or patchy grass provide ground nesting species with soil access. Some species nest in hollow or pithy stems. For these species, reducing the amount of “garden clean-up” will allow them to complete their development. Other species will nest in tunnels in wood, often provided by beetles in snags. Retaining snags and providing logs will support these species.

Short-term reductions in mowing are not likely to provide nesting spaces for stem nesting species unless the areas are left unmown for over a year.

For meadow and pollinator garden maintenance, a three-year cycle, where only a third of the area is disturbed or mown each year will allow bees nesting in stems to complete their reproductive cycle.

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Appendix

Appendix 1. Detailed Species List

City of North Vancouver Species	Year		BC Status Rank				
	2024	2025	Wild Species Canada 2020	Conservation Data Centre 2016	Sociality	Nesting Habitat	Pollen Specialization
Agapostemon subtilior Cockerell, 1898	X	X	S5	S5 (NR)	Solitary	Ground	
Andrena angustitarsata Viereck, 1904		X	S5	S5 (NR)	Solitary	Ground	Preference for Apiacea
Andrena candida Smith, 1879		X	S5 (Yellow)	S5 (NR)	Solitary	Ground	
Andrena cressonii Robertson, 1891		X	S5 (Yellow)	S5 (NR)	Solitary	Ground	
Andrena frigida Smith, 1853		X	S5 (Yellow)	S5 (NR)	Solitary	Ground	*Salix*
Andrena hippotes Robertson, 1895	X	X	S5	S5 (NR)	Solitary	Ground	
Andrena laminibucca Viereck & Cockerell, 1914		X	SU	SU (NR)	Solitary	Ground	
Andrena miserabilis Cresson, 1872	X	X	S5	S5 (NR)	Solitary	Ground	
Andrena prunorum Cockerell, 1896	X	X	S5	S5 (NR)	Solitary	Ground	
Andrena salicifloris Cockerell, 1897	X	X	S5	S3S4 (NR)	Solitary	Ground	*Salix*
Andrena subaustralis (prov.) Cockerell, 1898	X		SU	S3S4 (NR)	Solitary	Ground	*Salix*
Andrena sp. 2	X				Solitary	Ground	
Andrena sp. 4	X				Solitary	Ground	
Andrena trevoris Cockerell, 1897		X	SU	S3S5 (NR)	Solitary	Ground	Preference for *Symphoricarpos*
Andrena vicinoides Viereck, 1904	X	X	S5 (Yellow)	S5 (NR)	Solitary	Ground	
Andrena vierecki Cockerell, 1904		X	SU	SU (NR)	Solitary	Ground	
Andrena washingtoni Viereck, 1904		X	S5 (Yellow)	S5 (NR)	Solitary	Ground	
Andrena w-scripta Viereck, 1904		X	S5 (Yellow)	S5 (NR)	Solitary	Ground	
Anthidium manicatum (Linnaeus, 1758)	X		SNA	SNA (Exotic)	Solitary	Cavity Renter	
Anthidium oblongatum (Illiger, 1806)	X	X	Not-Ranked: Exotic		Solitary	Cavity Renter	
Apis mellifera Linnaeus, 1758	X	X	SNA	SNA (Exotic)	Social	Cavity Renter	

City of North Vancouver Species	Year		BC Status Rank		Sociality	Nesting Habitat	Pollen Specialization
	2024	2025	Wild Species Canada 2020	Conservation Data Centre 2016			
Bombus flavidus Eversmann, 1852	X	X	S3S5	S3S4 (Blue)	Social Parasite	Ground	N/A
Bombus flavifrons Cresson, 1863	X	X	S5	S5 (Yellow)	Social	Ground	
Bombus melanopygus Nylander, 1848		X	S5 (Yellow)	S5 (Yellow)	Eusocial	Cavity renter	
Bombus impatiens Cresson, 1863	X	X	SNA	SNA (Exotic)	Social	Ground	
Bombus mixtus Cresson, 1863	X	X	S5	S5 (Yellow)	Social	Ground	
Bombus vosnesenskii Radoszkowski, 1862	X	X	S5	S5 (Yellow)	Social	Ground	
Ceratina acantha Provancher, 1895	X	X	S5	S5 (NR)	Variable	Carpenter	
Coelioxys rufitarsis Smith, 1854	X		S3S5	S3S4 (NR)	Parasitic	Ground	N/A
Halictus confusus Smith, 1853	X	X	S5	S5 (NR)	Social	Ground	
Halictus rubicundus (Christ, 1791)	X	X	S5	S5 (NR)	Variable	Ground	
Hylaeus punctatus (Brullé, 1832)	X	X	Not-Ranked: Exotic		Solitary	Cavity Renter	
Lasioglossum buccale (Pérez, 1903)	X		Not-Ranked: Exotic		Solitary	Ground	Lamiaceae, Plantaginaceae
Lasioglossum coolyeii (prov.) (Crawford, 1906)	X	X	S4S5	S5 (NR)	Social	Ground	
Lasioglossum cressonii (Robertson, 1890)	X	X	SU	S5 (NR)	Social	Rotting Wood	
Lasioglossum laevissimum (Smith, 1853)	X	X	S5	S5 (NR)	Social	Ground	
Lasioglossum pacificum (Cockerell, 1898)	X		SU	SU (NR)	Solitary	Ground	
Lasioglossum sisymbria Cockerell, 1895	X		S5 (Yellow)	S4S5 (NR)	Solitary	Ground	
Lasioglossum villosulum (Kirby, 1802)		X	Not ranked	Not ranked	Solitary	Ground	
Lasioglossum zonulum (Smith, 1848)	X		SNA	SNA (Exotic)	Solitary	Ground	
Lasioglossum (Dialictus) sp.1	X	X			Social	Ground	
Lasioglossum (Dialictus) sp.2	X				Social	Ground	
Lasioglossum (Dialictus) sp.3	X	X			Social	Ground	
Megachile angelarum Cockerell, 1902	X		S3	S3 (NR)	Solitary	Cavity Renter	

City of North Vancouver Species	Year		BC Status Rank		Sociality	Nesting Habitat	Pollen Specialization
	2024	2025	Wild Species Canada 2020	Conservation Data Centre 2016			
Megachile frigida Smith, 1853	X		S5	S4S5 (NR)	Solitary	Cavity Renter, Rotting Wood	
Megachile melanophaea Smith, 1853	X		S5	S5 (NR)	Solitary	Ground	Fabaceae
Megachile mendica Cresson, 1878	X	X	SU	S5 (NR)	Solitary	Cavity Renter	
Megachile montivaga Cresson, 1878		X	S4 (Yellow)	S4 (NR)	Solitary	Cavity Renter, Ground	Preference for *Clarkia*
Megachile perihirta Cockerell, 1898	X	X	S5	S5 (NR)	Solitary	Ground	Asteraceae, Fabaceae
Megachile rotundata (Fabricius, 1787)	X	X	SNA	SNA (Exotic)	Solitary	Cavity Renter	
Melissodes microstictus Cockerell, 1905		X	S3S5 (Blue)	S4 (NR)	Solitary	Ground	Asteraceae
Melissodes sp.1		X			Solitary	Ground	
Nomada	X	X			Parasitic	Ground	N/A
Osmia coloradensis Cresson, 1878		X	S5 (Yellow)	S5 (NR)	Solitary	Cavity renter	Fabaceae: *Astragalus, Lotus*
Osmia lignaria Say, 1837		X	S4 (Yellow)	S5 (NR)	Solitary	Cavity renter	
Sphecodes	X				Parasitic	Ground	N/A

Key: S=Subnational; 5= Secure; 4=Apparently secure; 3=Special concern, vulnerable; 2=Imperilled; 1=Critically imperilled; NA=Not applicable; U=Unrankable; ?=Inexact numeric rank; NR = Not reviewed

Appendix 2. Georgia Basin Ecoprovince Bee-Plant Associations

A merged dataset of bee-plant observations collected by Guzman et al., 2023 and the BC Bee Atlas (2026) was created to examine bee plant observations in the Georgia Depression Ecoprovince (N=29,545).

Datasets were filtered to include only specimens collected within the Georgia Basin Ecoprovince (Province of BC, 2026) (Figure 1). The filtered dataset contained 22,277 records. The plant genera supporting the greatest number of unique species are shown in Table 1. Table 2 provides plant associations for each species recorded in the combined and filtered dataset.

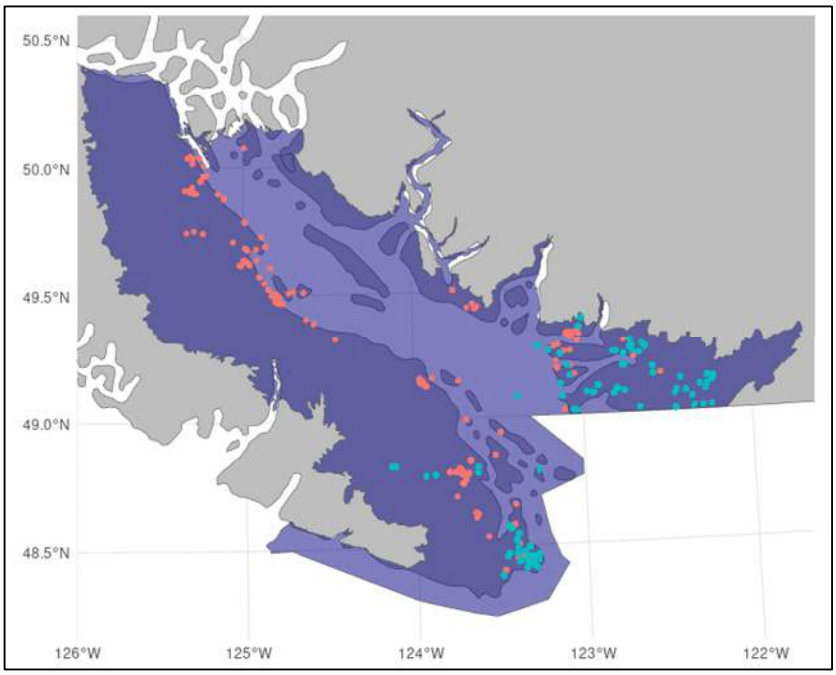

Figure 3. Spatial distribution of specimen records from Guzman et al. 2023 and the BC Bee Atlas (Ecdysis 2026), occurring within the Georgia Basin Ecoprovince within the Province of British Columbia. The Georgia Basin Ecoprovince is shaded in purple, while specimen records from the BC Bee Altas are depicted by orange points. Data from Guzman et al. are represented by blue dotes.

Table 4. Plant genera supporting the greatest number of unique species within the Georgia Basin Ecoprovince, based on data collected by Guzman et al. 2023 and the BC Bee Atlas (Ecdysis 2026).

Plant genus	Number of unique bee species
Camassia	68
Hypochaeris	68
Rubus	56
Vaccinium	56
Plectritis	55
Achillea	45
Lomatium	43
Ranunculus	43

Leucanthemum	42
Holodiscus	41
Rosa	39
Symphoricarpos	37
Allium	36
Eriophyllum	35
Geranium	35
Trifolium	35
Brodiaea	33
Centaurea	32
Cytisus	30
Sedum	30
Taraxacum	28
Vicia	28
Grindelia	26
Collinsia	25

Table 2. Bee species and their plant associations recorded in the Georgia Basin Ecoprovince by Guzman et al. 2023 and the BC Bee Atlas (Ecdysis 2026).

Bee Species	Plant Host Genera
Agapostemon subtilior Cockerell, 1898	*Achillea, Cakile, Calendula, Camassia, Ceanothus, Centaurea, Cichorium, Cirsium, Gilia, Grindelia, Helenium, Hypochaeris, Leucanthemum, Mentha, Nemophila, Ranunculus, Rosa, Rubus, Rudbeckia, Silybum, Sonchus, Tageta, Tanacetum, Taraxacum, Trifolium, Vaccinium*
Andrena amphibola (Viereck, 1904)	*Holodiscus, Leucanthemum, Polygonum, Sanicula*
Andrena angustella Cockerell, 1936	*Lomatium*
Andrena angustitarsata Viereck, 1904	*Arctostaphylos, Brassica, Camassia, Capsella, Ceanothus, Cerastium, Claytonia, Collinsia, Crataegus, Crataegus, Cytisus, Drymocallis, Eriophyllum, Fragaria, Geranium, Lepidium, Lithophragma, Lomatium, Malus, Montia, Muscari, Photinia, Physocarpus, Pieris, Plectritis, Ranunculus, Rhododendron, Sanicula, Sorbus, Spiraea, Taraxacum, Vaccinium*
Andrena astragali Viereck & Cockerell, 1914	*Zygadenus*
Andrena auricoma Smith, 1879	*Camassia, Capsella, Centaurea, Claytonia, Cotinus, Dodecatheon, Eriophyllum, Hypochaeris, Lomatium, Plectritis, Ranunculus, Rosa, Sanicula, Symphoricarpos, Zygadenus*
Andrena barbilabris (Kirby, 1802)	*Crataegus, Lomatium, Salix, Vaccinium*

Bee Species	Plant Host Genera
Andrena buckelli Alfken, 1927	*Camassia, Lomatium, Plectritis, Symphoricarpos*
Andrena caerulea Smith, 1879	*Camassia, Capsella, Holodiscus, Lithophragma, Lomatium, Plectritis, Ranunculus, Vaccinium*
Andrena candida Smith, 1879	*Achillea, Holodiscus, Lomatium, Medicago, Senecio, Trifolium, Viburnum*
Andrena chlorogaster Viereck, 1904	*Lomatium*
Andrena chlorura Cockerell, 1910	*Capsella, Claytonia, Plectritis*
Andrena columbiana Smith, 1879	*Achillea, Anaphalis, Grindelia*
Andrena crataegi Robertson, 1893	*Cotinus, Crataegus, Holodiscus, Photinia, Physocarpus, Rubus, Spiraea*
Andrena cressonii Robertson, 1891	*Camassia, Holodiscus, Lomatium, Plectritis, Prunus, Ranunculus, Rosa, Vaccinium*
Andrena cupreotincta Viereck, 1907	*Cerastium, Vaccinium*
Andrena frigida Smith, 1853	*Lomatium, Salix, Vaccinium*
Andrena hemileuca Viereck & Cockerell, 1914	*Crataegus, Cytisus, Mahonia, Rhododendron, Rosa, Rubus, Symphoricarpos, Vaccinium*
Andrena hippotes Robertson, 1895	*Eriophyllum, Holodiscus, Physocarpus*
Andrena knuthiana Cockerell, 1898	*Lomatium*
Andrena laminibucca Cockerell, 1936	*Achillea*
Andrena lupinorum Cockerell, 1916	*Lomatium, Plectritis, Rosa, Symphoricarpos*
Andrena mariae Robertson, 1891	*Vaccinium*
Andrena melanochroa Cockerell, 1898	*Fragaria, Lomatium, Minuartia, Montia*
Andrena microchlora Cockerell, 1898	*Lomatium*

Bee Species	Plant Host Genera
Andrena milwaukeensis Graenicher, 1903	*Cotoneaster, Rosa, Sanicula*
Andrena miranda Smith, 1879	*Symphoricarpos, Vaccinium*
Andrena miserabilis Cresson, 1872	*Cornus, Crataegus, Crataegus, Malus, Physocarpus, Prunus, Salix, Sorbus, Vaccinium*
Andrena nigrocaerulea Cockerell, 1898	*Brodiaea, Camassia, Capsella, Cerastium, Claytonia, Collinsia, Cotoneaster, Crepis, Cytisus, Doronicum, Erysimum, Fragaria, Geranium, Hypochaeris, Leucanthemum, Lithophragma, Lomatium, Mimulus, Minuartia, Montia, Myosotis, Plectritis, Rubus, Sedum, Senecio, Vaccinium*
Andrena nivalis Smith, 1853	*Achillea, Camassia, Ceanothus, Cornus, Cotoneaster, Crataegus, Crataegus, Heracleum, Holodiscus, Leucanthemum, Lomatium, Mahonia, Rosa, Rubus, Symphoricarpos, Vaccinium*
Andrena pallidifovea Viereck, 1917	*Lomatium*
Andrena perarmata Cockerell, 1898	*Rubus, Salix*
Andrena prunorum Cockerell, 1896	*Achillea, Cakile, Camassia, Cotoneaster, Crataegus, Deutzia, Euonymus, Hebe, Holodiscus, Lepidium, Leucanthemum, Petroselinum, Philadelphus, Physocarpus, Plectritis, Rubus, Sorbus, Spiraea, Symphoricarpos, Thymus, Vaccinium*
Andrena rufosignata Cockerell, 1902	*Escallonia, Holodiscus, Petroselinum, Potentilla, Rubus, Vaccinium*
Andrena saccata Viereck, 1904	*Bellis, Camassia, Ceanothus, Centaurea, Centranthus, Cerastium, Choisya, Claytonia, Cotoneaster, Cytisus, Digitalis, Fritillaria, Geranium, Hebe, Heuchera, Holodiscus, Hypochaeris, Isotoma, Lomatium, Mahonia, Physocarpus, Plectritis, Polygonum, Prunus, Ranunculus, Rhododendron, Rosa, Rubus, Saxifraga, Sedum, Spiraea, Symphoricarpos, Thymus*
Andrena salicifloris Cockerell, 1908	*Agoseris, Brassica, Camassia, Claytonia, Cornus, Cotinus, Cotoneaster, Cytisus, Delphinium, Deutzia, Geranium, Hebe, Holodiscus, Lomatium, Mahonia, Malus, Montia, Philadelphus, Physocarpus, Plectritis, Ranunculus, Rhododendron, Rosa, Rubus, Sanicula, Smilacina, Sorbus, Symphoricarpos, Vaccinium, Zygadenus*
Andrena schuhi Cockerell, 1898	*Ceanothus, Hydrangea*
Andrena scurra (Viereck, 1904)	*Arctostaphylos, Rosa, Sanicula*
Andrena sigmundi Cockerell, 1902	*Camassia, Cerastium, Choisya, Cotinus*

Bee Species	Plant Host Genera
Andrena sola Viereck, 1917	*Camassia, Cerastium, Cytisus, Dodecatheon, Lomatium, Plectritis, Ranunculus, Symphoricarpos*
Andrena suavis Timberlake, 1949	*Vaccinium*
Andrena subtilis Cockerell, 1898	*Bellis, Camassia, Choisya, Claytonia, Clematis, Cotinus, Crepis, Cytisus, Doronicum, Hypochaeris, Kolkwitzia, Lomatium, Physocarpus, Plectritis, Rosa, Sorbus, Symphoricarpos, Taraxacum*
Andrena thaspii Graenicher, 1903	*Camassia, Geranium, Mahonia, Spiraea*
Andrena transnigra Viereck, 1909	*Camassia, Lomatium, Mimulus, Plectritis, Ranunculus, Vaccinium*
Andrena trevoris (Viereck, 1909)	*Claytonia, Cotinus, Cotoneaster, Hebe, Holodiscus, Pieris, Spiraea, Symphoricarpos, Vaccinium, Vicia, Weigela*
Andrena vicina Smith, 1853	*Symphoricarpos, Vaccinium*
Andrena vicinoides Viereck, 1917	*Achillea, Camassia, Cotoneaster, Cytisus, Delphinium, Holodiscus, Hypochaeris, Lomatium, Photinia, Physocarpus, Ranunculus, Rosa, Rubus, Sanicula, Sedum, Spiraea, Symphoricarpos, Vaccinium, Vicia*
Andrena vierecki Cockerell, 1908	*Holodiscus, Prunus*
Andrena w-scripta (Viereck, 1904)	*Camassia, Cotinus, Holodiscus, Lomatium, Lupinus, Plectritis, Ranunculus, Spiraea, Symphoricarpos, Vaccinium*
Andrena washingtoni Viereck, 1917	*Rosa*
Anthidium manicatum (Linnaeus, 1758)	*Achillea, Ajuga, Allium, Antirrhinum, Cakile, Calendula, Cichorium, Cirsium, Cistus, Cymbalaria, Digitalis, Epilobium, Geranium, Hypochaeris, Laburnum, Lapsana, Lavandula, Lavendula, Linaria, Lobelia, Lotus, Melissa, Monarda, Myosotis, Nemesia, Nepeta, Origanum, Parentucellia, Pelargonium, Phacelia, Prunella, Rosmarinus, Rubus, Salvia, Satureja, Sempervivum, Sonchus, Stachys, Thymus*
Anthidium oblongatum (Illiger, 1806)	*Lotus, Sedum, Trifolium*
Anthidium tenuiflorae Cockerell, 1904	*Hypochaeris, Rosa*
Anthophora edwardsii Cresson, 1878	*Arbutus, Camassia*
Anthophora pacifica Cresson, 1869	*Anenome, Brassica, Camassia, Elaeagnus, Erica, Erysimum, Hyacinthoides, Lithodora, Mahonia, Ribes, Trifolium*
Anthophora porterae	*Cardamine*

Bee Species	Plant Host Genera
Cockerell, 1900	
Anthophora terminalis Cresson, 1869	*Parentucellia, Trifolium, Vicia*
Apis mellifera Linnaeus, 1758	*Abelia, Achillea, Allium, Amelanchier, Anaphalis, Anenome, Anethum, Arabis, Arbutus, Arctica, Aster, Astrantia, Borago, Brassica, Brodiaea, Buddleja, Cakile, Camassia, Campanula, Ceanothus, Centaurea, Centranthus, Cerastium, Chamerion, Choisya, Cichorium, Cirsium, Clarkia, Collinsia, Convolvulus, Convulvulus, Cornus, Cotinus, Cotoneaster, Crataegus, Crataegus, Crepis, Cucurbita, Cytisus, Delphinium, Echinacea, Echinops, Epilobium, Erica, Eriophyllum, Erysimum, Escallonia, Eschscholzia, Fragaria, Fuschia, Geranium, Gilia, Helenium, Heliotrope, Holodiscus, Hyacinthoides, Hydrangea, Hylotelephium, Hypericum, Hypochaeris, Ilex, Iris, Kolkwitzia, Lavatera, Lavendula, Layia, Lepidium, Leucanthemum, Ligustrum, Lobelia, Lobularia, Lomatium, Lonicera, Lotus, Lupinus, Malus, Melilotus, Mentha, Monarda, Montia, Myosotis, Nepeta, Ocimum, Origanum, Papaver, Phacelia, Phuopsis, Physocarpus, Plectritis, Polygonum, Pratia, Ranunculus, Rhododendron, Ribes, Rosa, Rosmarinus, Rubus, Rudbeckia, Salvia, Sambucus, Sanicula, Scabiosa, Sedum, Solidago, Sorbus, Spiraea, Spirea, Stellaria, Styrax, Symphoricarpos, Symphoricarpos, Symphyotrichum, Symphytum, Syringia, Tageta, Tagetes, Taraxacum, Thymus, Trifolium, Vaccinium, Viburnum, Vicia, Wisteria*
Ashmeadiella cactorum (Cockerell, 1897)	*Brodiaea*
Bombus fervidus Smith, 1854	*Abelia, Ajuga, Allium, Antirrhinum, Aquilegia, Arabis, Arbutus, Astilbe, Berberis, Brassica, Brodiaea, Camassia, Ceanothus, Centaurea, Cerinthe, Cirsium, Collinsia, Coronilla, Crocosmia, Cynara, Cytisus, Delphinium, Dicentra, Digitalis, Erysimum, Eschscholzia, Fuschia, Geranium, Geum, Glandora, Hyacinthoides, Hydrangea, Hypericum, Hypochaeris, Iris, Lamium, Lathyrus, Lavandula, Linaria, Lithodora, Lupinus, Lychnis, Medicago, Melilotus, Monarda, Myosotis, Nasturtium, Nepeta, Penstemon, Phacelia, Phlomis, Pieris, Prunella, Pulmonaria, Rhinanthus, Rhododendron, Ribes, Rosmarinus, Salvia, Sanguisorba, Spiraea, Styrax, Symphoricarpos, Symphytum, Taraxacum, Trifolium, Vaccinium, Vicia, Weigela*
Bombus centralis Cresson, 1864	*Epilobium*
Bombus flavidus (Eversmann, 1911)	*Leucanthemum, Rudbeckia, Solidago, Symphyotrichum, Lonicera, Lupinus*
Bombus flavifrons Cresson, 1863	*Acanthus, Achillea, Agastache, Ajuga, Allium, Arbutus, Arctica, Arctostaphylos, Borago, Brassica, Buddleja, Cakile, Calystegia, Camassia, Campanula, Ceanothus, Centaurea, Chamaenerion, Chamerion, Cichorium, Cirsium, Clarkia, Collinsia, Convolvulus, Crataegus, Cytisus, Dahlia, Daucus, Delphinium, Dicentra, Digitalis, Dodecatheon, Epilobium, Eriophyllum, Erodium, Erythronium, Escallonia, Fagopyrum, Fuschia, Gaultheria, Geranium, Glandora,*

Bee Species	Plant Host Genera
	Grindelia, Helianthus, Hemerocallis, Hesperis, Hibiscus, Holodiscus, Hosta, Hyacinthoides, Hypericum, Hypochaeris, Impatiens, Lamium, Lathyrus, Lavandula, Lavatera, Lavendula, Leucanthemum, Linaria, Lithodora, Lonicera, Lotus, Lupinus, Mahonia, Malus, Melilotus, Mentha, Mimulus, Monarda, Montia, Nepeta, Origanum, Ornithogalum, Penstemon, Phacelia, Physocarpus, Plectritis, Potentilla, Prunella, Prunus, Pulmonaria, Ranunculus, Rhamnus, Rhododendron, Ribes, Rosa, Rosmarinus, Rubus, Rudbeckia, Salvia, Scorzoneroides, Securigera, Sedum, Spiraea, Spirea, Stachys, Symphoricarpos, Symphytum, Taraxacum, Tradescanthia, Trifolium, Triteleia, Vaccinium, Veronica, Vicia, Vinca, Viola
Bombus huntii Greene, 1860	*Trifolium*
Bombus impatiens Cresson, 1863	*Cakile, Camassia, Capsella, Centaurea, Chamerion, Cirsium, Dahlia, Fragaria, Helianthus, Hylotelephium, Hypericum, Hypochaeris, Impatiens, Lathyrus, Lavandula, Lotus, Lupinus, Medicago, Melilotus, Nepeta, Plectritis, Rosa, Rubus, Salvia, Sedum, Solidago, Sonchus, Spirea, Symphyotrichum, Tanacetum, Taraxacum, Trifolium, Vaccinium, Vicia*
Bombus melanopygus Nylander, 1848	*Achillea, Allium, Arbutus, Arctostaphylos, Balsamorhiza, Berberis, Brassica, Brodiaea, Buddleja, Calendula, Camassia, Campanula, Capsella, Ceanothus, Centaurea, Cerastium, Claytonia, Collinsia, Convallaria, Coreopsis, Cornus, Cotoneaster, Crataegus, Cytisus, Daphne, Digitalis, Dodecatheon, Enkianthus, Erica, Eriophyllum, Eryngium, Erysimum, Escallonia, Euonymus, Fragaria, Fremontodendron, Gaultheria, Geranium, Grindelia, Hesperis, Holodiscus, Hyacinthoides, Hypericum, Hypochaeris, Kolkwitzia, Laburnum, Lathyrus, Lavandula, Lavendula, Leucanthemum, Linnaea, Lomatium, Lonicera, Lotus, Lupinus, Mahonia, Montia, Myosotis, Nepeta, Philadelphus, Phuopsis, Pieris, Plectritis, Pratia, Prunella, Ranunculus, Rhododendron, Rosa, Rosmarinus, Rubus, Salix, Salvia, Sanicula, Sedum, Sorbus, Symphoricarpos, Symphytum, Syringia, Tageta, Taraxacum, Thymus, Trifolium, Vaccinium, Vicia*
Bombus mixtus Cresson, 1878	*Abelia, Allium, Aquilegia, Arbutus, Arctostaphylos, Armeria, Balsamorhiza, Borago, Brassica, Buddleja, Cakile, Calendula, Camassia, Campanula, Ceanothus, Centaurea, Centranthus, Chaenomeles, Chamerion, Choisya, Cichorium, Cirsium, Clarkia, Clematis, Collinsia, Convulvulus, Cornus, Cotoneaster, Crataegus, Crepis, Cytisus, Daphne, Delphinium, Digitalis, Dodecatheon, Erica, Eriophyllum, Eryngium, Escallonia, Fagopyrum, Fragaria, Gaultheria, Geranium, Geum, Hebe, Heracleum, Hesperis, Heuchera, Hieracium, Holodiscus, Hyacinthoides, Hypericum, Hypochaeris, Impatiens, Iris, Kolkwitzia, Lavandula, Lavatera, Lavendula, Layia, Leucanthemum, Lilium, Linaria, Lithodora, Lomatium, Lonicera, Lotus, Lupinus, Lythrum, Mahonia, Malus, Melilotus, Mentha, Montia, Myosotis, Nepeta, Nigella, Oxalis, Penstemon, Phacelia, Phlox, Physocarpus, Pieris, Plectritis, Polygonatum, Polygonum, Potentilla, Pratia, Prunella, Pulmonaria, Ranunculus, Rhamnus, Rhododendron, Ribes, Rosa, Rosmarinus, Rubus, Rudbeckia, Salvia, Scabiosa, Sedum, Solidago, Sonchus, Sorbus, Spiraea, Spirea, Stachys,*

Bee Species	Plant Host Genera
	Stellaria, Symphoricarpos, Symphytum, Taraxacum, Tellima, Thymus, Trifolium, Vaccinium, Vicia, Viola, Weigela, Zygadenus
Bombus occidentalis Greene, 1858	*Camassia, Delphinium, Holodiscus, Hypericum, Hypochaeris, Lavendula, Phlox, Rubus, Rudbeckia, Symphoricarpos, Tanacetum*
Bombus rufocinctus Cresson, 1863	*Centaurea, Leucanthemum, Trifolium*
Bombus sitkensis Nylander, 1848	*Aruncus, Camassia, Comarum, Fremontodendron, Holodiscus, Hypochaeris, Lupinus, Origanum, Plectritis, Rubus, Scorzoneroides, Spiraea, Symphoricarpos, Viola, Weigela*
Bombus vancouverensis Cresson, 1878	*Achillea, Allium, Anaphalis, Apocynum, Arbutus, Arctostaphylos, Aruncus, Aster, Balsamorhiza, Brassica, Brodiaea, Calendula, Camassia, Campanula, Ceanothus, Centaurea, Cercis, Choisya, Cirsium, Collinsia, Cotoneaster, Cytisus, Dahlia, Delphinium, Dianthus, Dodecatheon, Echinops, Epilobium, Erica, Eriophyllum, Erysimum, Erythronium, Escallonia, Fagopyrum, Fragaria, Gaillardia, Geranium, Grindelia, Hebe, Helianthus, Holodiscus, Hypericum, Hypochaeris, Isotoma, Jacobaea, Laburnum, Lavatera, Lavandula, Leucanthemum, Linaria, Linnaea, Lithophragma, Lotus, Lupinus, Mahonia, Medicago, Melissa, Mentha, Mimulus, Montia, Myosotis, Nepeta, Origanum, Penstemon, Phacelia, Pieris, Plectritis, Pratia, Prunus, Ranunculus, Rhododendron, Rosa, Rosmarinus, Rubus, Rudbeckia, Salvia, Securigera, Sedum, Solidago, Sorbus, Spiraea, Symphoricarpos, Tanacetum, Taraxacum, Thymus, Tilia, Trifolium, Vaccinium, Veronica, Vicia, Vinca*
Bombus vosnesenskii Radoszkowski, 1862	*Abelia, Achillea, Allium, Anaphalis, Anenome, Arbutus, Arctostaphylos, Aster, Bacopa, Balsamorhiza, Borago, Brassica, Brodiaea, Buddleja, Cakile, Calendula, Camassia, Campanula, Capsella, Ceanothus, Centaurea, Centranthus, Cerastium, Cerinthe, Chamerion, Cichorium, Cirsium, Clarkia, Clematis, Collinsia, Cotoneaster, Crataegus, Crepis, Cytisus, Dahlia, Delphinium, Dianthus, Digitalis, Dodecatheon, Echinacea, Echinops, Epilobium, Erica, Eriophyllum, Erodium, Eryngium, Erysimum, Erythranthe, Escallonia, Eschscholzia, Fuschia, Geranium, Glandora, Grindelia, Hesperis, Hibiscus, Holodiscus, Hosta, Hydrangea, Hypochaeris, Isotoma, Kolkwitzia, Laburnum, Lamium, Lathyrus, Lavandula, Lavatera, Lavendula, Layia, Leucanthemum, Ligustrum, Linaria, Lomatium, Lonicera, Lotus, Lupinus, Lythrum, Mahonia, Malus, Medicago, Melilotus, Mentha, Monarda, Montia, Myosotis, Nepeta, Ocimum, Origanum, Penstemon, Petroselinum, Phacelia, Pieris, Plectritis, Polygonum, Potentilla, Prunella, Prunus, Ranunculus, Rhinanthus, Rhododendron, Rosa, Rosmarinus, Rubus, Salvia, Sanicula, Securigera, Sedum, Solidago, Sonchus, Spiraea, Spirea, Styrax, Symphoricarpos, Symphytum, Syringia, Tanacetum, Thymus, Trifolium, Ulex, Vaccinium, Verbena, Vicia, Vinca, Weigela, Xerochrysum*
Ceratina acantha Provancher, 1888	*Achillea, Allium, Alyssum, Anaphalis, Arabis, Arbutus, Arctostaphylos, Aster, Bellis, Brassica, Brodiaea, Cakile, Calendula, Camassia, Campanula, Cardamine, Centaurea, Cerastium, Chamerion, Cirsium, Clarkia, Claytonia, Cleome, Collinsia,*

Bee Species	Plant Host Genera
	Convulvulus, Crepis, Dasiphora, Daucus, Delphinium, Doronicum, Epilobium, Eriophyllum, Eschscholzia, Euphrasia, Fragaria, Geranium, Geum, Glandora, Grindelia, Hebe, Holodiscus, Hyacinthoides, Hylotelephium, Hypochaeris, Impatiens, Leucanthemum, Linnaea, Lithophragma, Lomatium, Lotus, Medicago, Mimulus, Minuartia, Montia, Myosotis, Nepeta, Origanum, Phacelia, Physocarpus, Plectritis, Potentilla, Prunella, Ranunculus, Rosa, Rubus, Rudbeckia, Salvia, Sanicula, Securigera, Sedum, Senecio, Sonchus, Symphoricarpos, Tanacetum, Taraxacum, Thymus, Trifolium, Vaccinium, Veronica, Vicia
Ceratina nanula Cockerell, 1897	*Achillea, Allium, Aster, Brodiaea, Camassia, Centaurea, Eriophyllum, Fragaria, Grindelia, Hypochaeris, Montia, Vaccinium, Veronica*
Chelostoma florisomne (Linnaeus, 1758)	*Ranunculus, Taraxacum*
Coelioxys alternatus Say, 1837	*Grindelia, Helenium*
Coelioxys moestus Cresson, 1864	*Apocynum, Leucanthemum*
Coelioxys porterae Cockerell, 1900	*Geranium, Rubus*
Coelioxys rufitarsis Smith, 1854	*Achillea, Apocynum, Brassica, Centaurea, Coreopsis, Grindelia, Lavandula, Lavendula, Lotus, Origanum, Satureja, Symphyotrichum*
Coelioxys sodalis Cresson, 1878	*Camassia, Campanula, Eriophyllum, Hypochaeris, Sedum*
Colletes fulgidus Swenk, 1904	*Achillea, Allium, Euonymus, Grindelia, Holodiscus, Lepidium, Saxifraga, Symphoricarpos, Tanacetum*
Colletes kincaidii Cockerell, 1898	*Achillea, Allium, Campanula, Deutzia, Digitalis, Euonymus, Foeniculum, Hebe, Holodiscus, Lavatera, Lupinus, Lythrum, Pastinaca, Polygonum, Potentilla, Prunus, Rubus, Saxifraga, Sedum, Solidago, Spirea, Symphoricarpos, Trifolium*
Dianthidium subparvum (Swenk, 1914)	*Agastache, Aster, Calendula, Centaurea, Cirsium, Coreopsis, Crepis, Grindelia, Hypochaeris, Lavendula, Leucanthemum, Origanum, Rubus, Senecio, Solidago, Tageta, Tanacetum, Thymus*
Epeolus americanus (Cresson, 1878)	*Centaurea, Hypochaeris*
Epeolus compactus Cresson, 1878	*Achillea*
Epeolus minimus (Robertson, 1902)	*Achillea, Eriophyllum, Holodiscus, Hypochaeris, Leucanthemum, Thymus*
Eucera frater Cresson, 1878	*Camassia, Collinsia, Hyacinthoides, Plectritis, Ranunculus, Securigera, Vicia*

Bee Species	Plant Host Genera
Habropoda cineraria Smith, 1879	*Camassia, Cerastium, Dodecatheon*
Habropoda miserabilis Cresson, 1878	*Plectritis*
Halictus confusus Smith, 1853	*Achillea, Allium, Anaphalis, Aster, Bellis, Brassica, Calendula, Calluna, Camassia, Campanula, Capsella, Ceanothus, Centaurea, Cerastium, Cirsium, Coreopsis, Cotoneaster, Dasiphora, Doronicum, Erica, Eriophyllum, Eryngium, Erysimum, Erythranthe, Eschscholzia, Fragaria, Geranium, Geum, Gilia, Helenium, Helichrysum, Hieracium, Holodiscus, Hyacinthoides, Hypericum, Hypochaeris, Isotoma, Leucanthemum, Lobelia, Lomatium, Lotus, Medicago, Mentha, Mimulus, Montia, Nemophila, Origanum, Phacelia, Plectritis, Potentilla, Prunella, Ranunculus, Rosa, Rubus, Satureja, Saxifraga, Sedum, Spiraea, Spirea, Symphoricarpos, Tanacetum, Taraxacum, Thymus, Trifolium*
Halictus farinosus Smith, 1853	*Brodiaea*
Halictus ligatus Say, 1837	*Hypochaeris*
Halictus rubicundus (Christ, 1791)	*Abelia, Achillea, Allium, Anaphalis, Anethum, Antirrhinum, Arbutus, Aster, Brassica, Brodiaea, Calendula, Camassia, Centaurea, Cerastium, Cirsium, Coriandrum, Cornus, Cosmos, Crataegus, Crepis, Cytisus, Daucus, Delosperma, Delphinium, Deutzia, Digitalis, Doronicum, Echinops, Erica, Eriophyllum, Erodium, Escallonia, Eschscholzia, Geranium, Gilia, Grindelia, Hebe, Hieracium, Holodiscus, Hyacinthoides, Hydrangea, Hypericum, Hypochaeris, Isotoma, Lathyrus, Lavatera, Layia, Lepidium, Leucanthemum, Lobelia, Lomatium, Lotus, Lysimachia, Medicago, Melilotus, Mentha, Mimulus, Montia, Myosotis, Origanum, Paeonia, Pastinaca, Petroselinum, Phacelia, Philadelphus, Pieris, Plectritis, Polygonum, Potentilla, Pratia, Ranunculus, Rhododendron, Rosa, Rubus, Rudbeckia, Sanicula, Sedum, Senecio, Solidago, Sonchus, Spergularia, Spiraea, Spirea, Stellaria, Symphoricarpos, Tageta, Tanacetum, Taraxacum, Thymus, Trifolium, Tripleurospermum, Vaccinium, Viburnum, Vicia*
Halictus tripartitus Cockerell, 1895	*Achillea, Agoseris, Aster, Bellis, Brassica, Brodiaea, Calendula, Calluna, Camassia, Cerastium, Cichorium, Coreopsis, Crepis, Cytisus, Dasiphora, Digitalis, Erodium, Eryngium, Eschscholzia, Ficaria, Foeniculum, Fragaria, Geranium, Grindelia, Hydrangea, Hylotelephium, Hypochaeris, Leucanthemum, Lomatium, Lupinus, Matricaria, Mentha, Mimulus, Montia, Myosotis, Origanum, Penstemon, Photinia, Plectritis, Potentilla, Rhododendron, Rosa, Rubus, Saxifraga, Sisyrinchium, Tanacetum, Taraxacum, Thymus, Trifolium, Tripleurospermum*
Heriades carinata Cresson, 1864	*Achillea, Allium, Anaphalis, Aster, Borago, Cirsium, Coriandrum, Crepis, Dasiphora, Filipendula, Hieracium, Hypochaeris, Leucanthemum, Mentha, Monarda, Origanum, Rubus, Satureja, Sedum, Solidago, Tanacetum, Thymus*

Bee Species	Plant Host Genera
Heriades cressoni (Dalla Torre, 1896)	*Sonchus*
Hoplitis grinnelli (Cockerell, 1910)	*Cerastium, Vaccinium*
Hoplitis producta (Cresson, 1864)	*Campanula, Rubus, Vaccinium*
Hylaeus basalis (Kirby, 1802)	*Apocynum, Brodiaea, Eriophyllum, Fragaria, Heracleum, Leucanthemum, Lomatium, Rosa*
Hylaeus modestus Say, 1837	*Achillea, Alyssum, Aster, Brodiaea, Cirsium, Crepis, Eriophyllum, Eschscholzia, Hebe, Holodiscus, Hypericum, Hypochaeris, Leucanthemum, Pastinaca, Ranunculus, Rubus, Symphoricarpos, Tanacetum*
Hylaeus nevadensis (Cockerell, 1896)	*Achillea*
Hylaeus punctatus (Brullé, 1832)	*Achillea, Cirsium, Daucus, Foeniculum, Grindelia, Leucanthemum, Solidago*
Lasioglossum albipenne (Robertson, 1890)	*Hypochaeris*
Lasioglossum athabascense (Sandhouse, 1933)	*Allium, Brodiaea, Lupinus, Taraxacum*
Lasioglossum brunneiventre (Crawford, 1906)	*Anaphalis, Arctostaphylos, Cytisus, Vaccinium*
Lasioglossum buccale (Cockerell, 1895)	*Digitalis*
Lasioglossum colatum (McGinley, 1986)	*Allium, Camassia*
Lasioglossum cressonii (Robertson, 1890)	*Achillea, Allium, Apocynum, Aquilegia, Aster, Brassica, Brodiaea, Calendula, Camassia, Centaurea, Cerastium, Cirsium, Cornus, Cotinus, Crataegus, Crepis, Digitalis, Erica, Eriophyllum, Geranium, Heuchera, Holodiscus, Hypochaeris, Leucanthemum, Lomatium, Lonicera, Mahonia, Montia, Phacelia, Physocarpus, Potentilla, Prunus, Ranunculus, Rosa, Rubus, Rudbeckia, Sanicula, Symphoricarpos, Tanacetum, Thymus, Vaccinium, Viburnum, Vicia, Xerochrysum*
Lasioglossum egregium (Vachal, 1904)	*Delphinium, Plectritis*
Lasioglossum incompletum (Crawford, 1906)	*Achillea, Antirrhinum, Brodiaea, Cytisus, Eriophyllum, Grindelia, Hypochaeris, Mimulus, Plectritis*

Bee Species	Plant Host Genera
Lasioglossum inconditum (Cockerell, 1916)	*Taraxacum*
Lasioglossum knereri (Cockerell, 1901)	*Achillea, Allium, Bellis, Brassica, Brodiaea, Camassia, Centaurea, Cerastium, Cistus, Crataegus, Cytisus, Eriophyllum, Fragaria, Geranium, Hebe, Holodiscus, Hyacinthoides, Hypochaeris, Leucanthemum, Linnaea, Lomatium, Lonicera, Lupinus, Mimulus, Minuartia, Nasturtium, Origanum, Plectritis, Potentilla, Prunella, Ranunculus, Rosa, Sanicula, Spergularia, Tanacetum, Veronica*
Lasioglossum laevissimum (Smith, 1853)	*Achillea, Aster, Bacopa, Bellis, Brassica, Brodiaea, Calendula, Convulvulus, Coreopsis, Cotoneaster, Crataegus, Crepis, Epilobium, Erica, Eriophyllum, Geum, Gilia, Holodiscus, Hypericum, Hypochaeris, Lactuca, Lapsana, Lathyrus, Lobelia, Lobularia, Lonicera, Medicago, Monarda, Origanum, Penstemon, Polygonum, Ranunculus, Rosa, Rubus, Sanicula, Sedum, Senecio, Solidago, Stellaria, Tanacetum, Thymus, Trifolium, Vaccinium*
Lasioglossum leucozonium (Schrank, 1781)	*Hypochaeris*
Lasioglossum macroprosopum (Cockerell, 1916)	*Bellis, Hypochaeris, Lupinus, Vaccinium*
Lasioglossum marinensis (Cockerell, 1906)	*Prunus*
Lasioglossum mellipes (Cresson, 1869)	*Brodiaea*
Lasioglossum nevadense (Crawford, 1906)	*Achillea, Allium, Arbutus, Bacopa, Bellis, Brodiaea, Calendula, Camassia, Campanula, Centaurea, Cerastium, Collinsia, Cotoneaster, Cytisus, Delphinium, Eriophyllum, Fragaria, Geranium, Hebe, Holodiscus, Hypericum, Hypochaeris, Impatiens, Knautia, Linaria, Mimulus, Montia, Penstemon, Prunella, Ranunculus, Rosa, Rubus, Trifolium, Vaccinium*
Lasioglossum olympiae (Cockerell, 1916)	*Achillea, Allium, Aster, Bellis, Brassica, Brodiaea, Calendula, Calluna, Camassia, Ceanothus, Centaurea, Cerastium, Choisya, Cotinus, Cotoneaster, Crataegus, Cytisus, Dahlia, Daucus, Delphinium, Deutzia, Epilobium, Erica, Eriophyllum, Eschscholzia, Foeniculum, Fragaria, Geranium, Gilia, Hemerocallis, Holodiscus, Hyacinthoides, Hydrangea, Hypochaeris, Leucanthemum, Ligustrum, Lithophragma, Lomatium, Mahonia, Mentha, Mimulus, Montia, Myosotis, Pastinaca, Plectritis, Ranunculus, Rhinanthus, Rhododendron, Rodgersia, Rosa, Rubus, Sanicula, Sedum, Spirea, Symphoricarpos, Vicia, Zygadenus*
Lasioglossum ovaliceps (Ellis, 1913)	*Geranium, Prunella*
Lasioglossum pacatum	*Anaphalis, Armeria, Aster, Bacopa, Bellis, Brassica, Camassia, Campanula, Chamerion, Cirsium, Convulvulus, Cornus, Crepis, Daucus, Epilobium, Fragaria, Geranium, Geum, Hebe, Heuchera,*

Bee Species	Plant Host Genera
(Sandhouse, 1924)	*Hypericum, Hypochaeris, Iberis, Leucanthemum, Lonicera, Lupinus, Malus, Myosotis, Penstemon, Phacelia, Philadelphus, Plantago, Polygonum, Ranunculus, Rosa, Rubus, Sambucus, Sedum, Sonchus, Spiraea, Spirea, Stellaria, Symphoricarpos, Tanacetum, Taraxacum, Vaccinium, Vicia*
Lasioglossum pacificum (Cockerell, 1897)	*Camassia, Campanula, Ceanothus, Cerastium, Claytonia, Cotoneaster, Cytisus, Eriophyllum, Geranium, Gilia, Hebe, Hypochaeris, Leucanthemum, Limnanthes, Lomatium, Mahonia, Nasturtium, Petunia, Philadelphus, Plectritis, Prunus, Ranunculus, Sanicula, Sedum, Solidago, Stellaria, Symphoricarpos*
Lasioglossum planatum (Lovell, 1905)	*Physocarpus, Ranunculus, Rubus, Taraxacum*
Lasioglossum pruinosum (Robertson, 1892)	*Vaccinium*
Lasioglossum punctatoventre (Crawford, 1907)	*Anaphalis, Cornus, Lonicera, Rubus*
Lasioglossum ruidosense (Cockerell, 1897)	*Bacopa, Hypochaeris, Lychnis, Plectritis*
Lasioglossum sagax (Sandhouse, 1924)	*Vaccinium*
Lasioglossum sisymbrii (Cockerell, 1895)	*Achillea, Aquilegia, Brassica, Calluna, Camassia, Campanula, Capsella, Ceanothus, Cerastium, Cytisus, Daucus, Digitalis, Eriophyllum, Grindelia, Hebe, Holodiscus, Hypochaeris, Isotoma, Kolkwitzia, Leucanthemum, Lobularia, Lomatium, Philadelphus, Phlomis, Photinia, Plectritis, Prunus, Rosa, Rosmarinus, Rubus, Sanicula, Senecio, Tanacetum, Xerochrysum*
Lasioglossum tenax (Sandhouse, 1924)	*Bellis, Lapsana, Leucanthemum, Rubus, Sedum*
Lasioglossum titusi (Crawford, 1902)	*Achillea, Calendula, Camassia, Cichorium, Cosmos, Eriophyllum, Hyacinthoides, Hypochaeris, Layia, Leucanthemum, Pratia, Ranunculus*
Lasioglossum villosulum (Kirby, 1802)	*Achillea, Brodiaea, Camassia, Cichorium, Crataegus, Crepis, Delphinium, Diascia, Digitalis, Grindelia, Holodiscus, Hypochaeris, Leucanthemum, Lomatium, Lonicera, Ornithogalum, Plectritis, Ranunculus, Rubus, Sonchus, Symphoricarpos, Taraxacum, Vaccinium*
Lasioglossum zonulum (Smith, 1848)	*Achillea, Agoseris, Anaphalis, Aster, Brassica, Brodiaea, Camassia, Capsella, Cerastium, Chamerion, Cirsium, Clematis, Cornus, Crepis, Cytisus, Dahlia, Epilobium, Escallonia, Eschscholzia, Fragaria, Geranium, Geum, Gilia, Grindelia, Hypericum, Hypochaeris, Impatiens, Layia, Leucanthemum, Linum, Lomatium, Lotus,*

Bee Species	Plant Host Genera
	Melilotus, Origanum, Phacelia, Physocarpus, Plantago, Plectritis, Polygonum, Ranunculus, Rosa, Rubus, Sonchus, Spirea, Stellaria, Symphoricarpos, Tanacetum, Taraxacum, Trifolium, Vaccinium, Veronica, Vicia
Megachile angelarum Cockerell, 1902	*Lotus*
Megachile fidelis Cresson, 1878	*Achillea, Gaillardia, Grindelia, Helenium, Malva, Origanum, Rudbeckia, Tanacetum*
Megachile frigida Smith, 1853	*Anethum, Campanula, Gaura, Lathyrus, Lavendula, Leucanthemum, Lotus, Ranunculus, Rubus, Sonchus, Vicia*
Megachile gemula Cresson, 1878	*Apocynum, Brodiaea, Camassia, Campanula, Eriophyllum, Hypochaeris, Lotus, Medicago, Physocarpus, Rubus, Styrax, Taraxacum*
Megachile melanophaea Smith, 1853	*Allium, Apocynum, Arabis, Brodiaea, Cakile, Camassia, Campanula, Dianthus, Eriophyllum, Hebe, Hypochaeris, Lavandula, Lavendula, Lotus, Lupinus, Physocarpus, Rosa, Rubus, Securigera, Silene, Symphoricarpos, Thymus, Trifolium, Vicia*
Megachile mendica Cresson, 1878	*Calendula, Cosmos, Lotus*
Megachile montivaga Cresson, 1878	*Clarkia, Hypochaeris*
Megachile nivalis Friese, 1902	*Allium, Hypochaeris, Leucanthemum*
Megachile perihirta Cockerell, 1898	*Achillea, Aconitum, Allium, Aster, Cakile, Calendula, Camassia, Campanula, Centaurea, Cichorium, Cirsium, Coreopsis, Dasiphora, Daucus, Echinacea, Eriophyllum, Fagopyrum, Gaillardia, Geranium, Gilia, Grindelia, Helianthus, Hypochaeris, Lathyrus, Lavandula, Lavendula, Layia, Leucanthemum, Lotus, Pteridium, Rubus, Rudbeckia, Satureja, Securigera, Sedum, Senecio, Solidago, Sonchus, Spiraea, Symphoricarpos, Symphyotrichum, Tagetes, Tanacetum, Taraxacum, Thymus, Verbena, Xerochrysum*
Megachile pugnata Say, 1837	*Helianthus*
Megachile relativa Cresson, 1878	*Calendula, Campanula, Chamaenerion, Crepis, Hypochaeris, Layia, Leucanthemum, Lotus, Sonchus*
Megachile rotundata (Fabricius, 1793)	*Achillea, Agastache, Allium, Aster, Brodiaea, Clarkia, Dasiphora, Eryngium, Hypochaeris, Leucanthemum, Linum, Lotus, Melilotus, Mentha, Origanum, Prunella, Securigera, Sedum, Thymus, Trifolium*
Melissodes microsticta Cockerell, 1905	*Achillea, Aster, Cakile, Calendula, Centaurea, Coreopsis, Epilobium, Hypochaeris, Lactuca, Layia, Rudbeckia, Senecio, Solidago, Sonchus, Tageta, Taraxacum*
Melissodes rivalis Cresson, 1872	*Centaurea*
Nomada cressonii	*Plectritis*

Bee Species	Plant Host Genera
Robertson, 1893	
Nomada crutchii Cockerell, 1903	*Camassia, Capsella*
Osmia albolateralis Cockerell, 1911	*Allium, Brodiaea, Camassia, Collinsia, Cytisus, Erythronium, Geranium, Hypochaeris, Lathyrus, Lavendula, Lupinus, Mimulus, Montia, Plectritis, Prunella, Ranunculus, Rubus, Trifolium, Vicia*
Osmia atrocyanea Cockerell, 1897	*Allium, Lavendula, Vicia*
Osmia bakeri Sandhouse, 1939	*Collinsia, Plectritis*
Osmia bella Cresson, 1864	*Prunella*
Osmia bucephala Cresson, 1864	*Camassia, Crataegus, Cytisus, Lathyrus, Lotus, Rhododendron, Spirea*
Osmia caerulescens (Linnaeus, 1758)	*Allium, Camassia, Crataegus, Geranium, Lotus, Melissa, Ranunculus, Rosa, Taraxacum, Thymus, Trifolium, Vaccinium, Vicia*
Osmia coloradensis Cresson, 1878	*Achillea, Aster, Calendula, Camassia, Cichorium, Cosmos, Eriophyllum, Erysimum, Gaillardia, Geranium, Grindelia, Hypochaeris, Kerria, Layia, Leucanthemum, Lomatium, Plectritis, Ranunculus, Rubus, Senecio, Symphoricarpos, Tanacetum, Vicia*
Osmia cyanella Cockerell, 1897	*Camassia, Collinsia, Plectritis, Rosmarinus, Rubus, Salvia, Sedum, Vicia*
Osmia densa Cresson, 1864	*Camassia, Collinsia, Hypochaeris, Plectritis, Prunella*
Osmia dolerosa Cockerell, 1911	*Allium, Brodiaea, Camassia, Cerastium, Chamerion, Collinsia, Eriophyllum, Fragaria, Geranium, Holodiscus, Hyacinthoides, Hypochaeris, Lathyrus, Lomatium, Medicago, Montia, Phacelia, Plectritis, Prunella, Ranunculus, Rosa, Rubus, Sedum, Stellaria, Taraxacum, Trifolium, Vaccinium, Vicia*
Osmia hurdi Sandhouse, 1939	*Trifolium*
Osmia juxta Cresson, 1864	*Camassia, Hypochaeris, Mimulus*
Osmia kincaidii Cockerell, 1898	*Allium, Collinsia, Cytisus, Grindelia, Mimulus, Myosotis, Plectritis, Sedum, Trifolium, Vicia*
Osmia lignaria Say, 1837	*Achillea, Allium, Arbutus, Arctostaphylos, Berberis, Borago, Brassica, Buddleja, Camassia, Ceanothus, Centaurea, Cercis, Choisya, Collinsia, Cytisus, Erica, Fragaria, Hyacinthoides, Isotoma, Laburnum, Lamium, Lavendula, Lomatium, Mahonia, Mimulus, Myosotis, Phacelia, Phuopsis, Pieris, Plectritis, Ranunculus, Rhododendron, Ribes, Rosmarinus, Rubus, Sorbus, Stellaria, Taraxacum, Vaccinium, Wisteria*
Osmia malina Cockerell, 1936	*Allium, Arabis, Arctostaphylos, Centaurea, Collinsia, Plectritis, Rubus, Trifolium*
Osmia nigrifrons Cresson, 1878	*Collinsia*

Bee Species	Plant Host Genera
Osmia odontogaster Cockerell, 1897	*Ajuga, Allium, Camassia, Centaurea, Collinsia, Cotoneaster, Cytisus, Delphinium, Erica, Eriophyllum, Erodium, Erysimum, Geranium, Hyacinthoides, Hydrangea, Hypochaeris, Lamium, Lavendula, Medicago, Mimulus, Plectritis, Ranunculus, Sedum, Trifolium, Vaccinium, Vicia*
Osmia proxima Cresson, 1864	*Hypochaeris, Myosotis, Plectritis, Sedum, Vaccinium*
Osmia pusilla Cresson, 1864	*Allium, Arabis, Brodiaea, Camassia, Ceanothus, Centaurea, Cerastium, Collinsia, Delphinium, Geranium, Holodiscus, Hypochaeris, Linum, Lithophragma, Origanum, Phacelia, Plectritis, Prunella, Ranunculus, Rubus, Salvia, Sedum, Spirea, Symphoricarpos, Thymus, Trifolium, Vaccinium*
Osmia sericea Friese, 1900	*Arabis, Camassia, Centaurea, Fragaria, Geranium, Isotoma, Lilium, Philadelphus, Plectritis, Rubus, Spirea, Trifolium, Vaccinium*
Osmia simillima Smith, 1853	*Trifolium, Vaccinium*
Osmia texana Cresson, 1872	*Eriophyllum, Hypochaeris, Plectritis*
Osmia trevoris (Cockerell, 1900)	*Allium, Camassia, Cardamine, Collinsia, Grindelia, Hypochaeris, Myosotis, Plectritis*
Osmia tristella Cockerell, 1897	*Allium, Brodiaea, Camassia, Clarkia, Collinsia, Fragaria, Geranium, Holodiscus, Mimulus, Plectritis, Prunella, Ranunculus, Rosa, Rubus, Taraxacum, Vaccinium*
Panurginus atriceps (Cresson, 1878)	*Brodiaea, Eriophyllum, Hypochaeris, Minuartia, Montia, Rosa, Rubus, Vaccinium*
Perdita nevadensis Cockerell, 1896	*Deutzia, Holodiscus, Hypochaeris, Leucanthemum, Pastinaca*
Stelis albosignata Cockerell, 1936	*Achillea, Aster, Bellis, Brodiaea, Coreopsis, Eriophyllum, Hypochaeris*
Stelis subcaerulea Cockerell, 1897	*Leucanthemum*
Triepeolus paenepectoralis (Viereck, 1905)	*Grindelia*