

ALL ABOUT

# Native Plants

FOREST GARDENS



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**PRESIDENT  
FREE THE FERN STEWARDSHIP SOCIETY**

*Purpose:*

- To restore the ecology of the Champlain Heights Trail System by removing invasive plants and replanting native plants
- To promote environmental stewardship through community engagement and education.



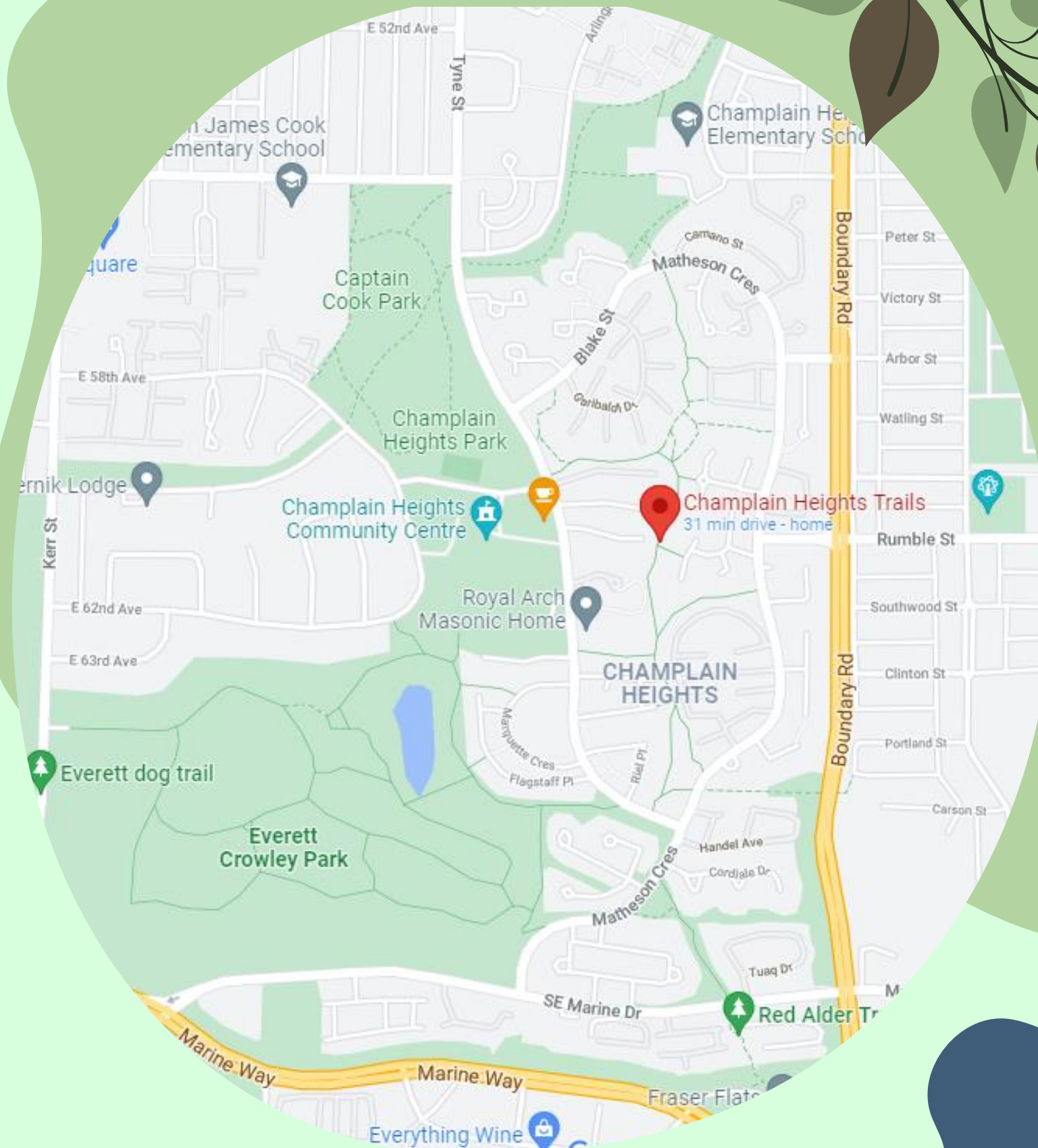


# Champlain Heights Trail

The Champlain Heights Trail system is located within the shared, unceded, ancestral territories of the *x<sup>w</sup>məθk<sup>w</sup>əy'ə*m (Musqueam), *S<sub>k</sub>wxwú7mesh* (Squamish), and *səlilwətaɫ* (Tsleil-Waututh) Nations.

North of Marine Way and West of Boundary Road.

Will be the site of a new Native Food Forest or Forest Garden in Oct 2023.







# The History of Forest Gardens

## AN INTRODUCTION

Ts'msyen and Coast Salish peoples created forest gardens along the north and south pacific coast

A 2021 SFU study found that Indigenous Forest Gardens contain more biologically diverse species & habitat for animals & pollinators



# In a Forest Garden

## fruit & nut trees

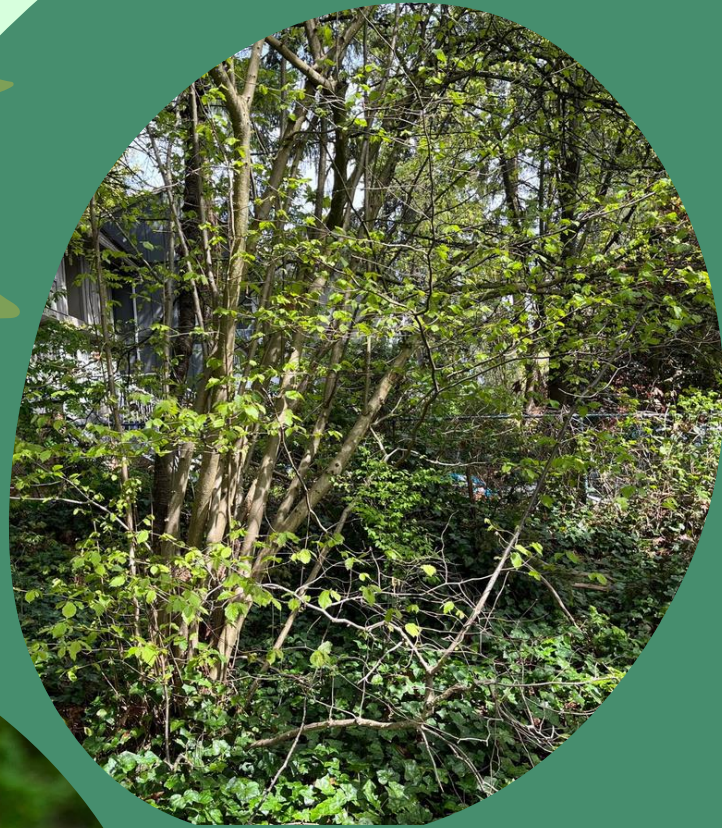
native fruit and nut trees, such as crab apple & beaked hazelnut, are the tallest plants in the forest garden

## shrubs

berry shrubs, such as thimbleberry & Indigenous plum, grow in the mid-level of the forest garden

## ground cover

low plants, that provide medicine and food, such as wild ginger and strawberry, grow along the floor of the forest garden





# Fruit & Nut Trees



Beaked hazelnut



Pacific crabapple



Bitter cherry

# Beaked hazelnut

*Corylus cornuta*

*Helmet horn*

*Height:* 1-5 metres tall

*Flowers:* hanging yellow clusters bloom Jan-March.

*Nut:* spherical nuts, which ripen Sept-Oct, are enclosed in a husk “beak.” Peel off this husk, crack the nut and eat.

*Habitat:* It grows best in moist, well-drained sites; open forests and edges of forests.

*Indigenous uses:* Indigenous people ate the nuts; some ate them fresh, others buried them to eat later. Twisted twigs were used to tie things. Stems were used for weaving baskets and fish traps. Straight stems were used for arrows.





# Pacific Crabapple

*Malus fusca*

*Apple that is dark and dusky*

*Height:* 12 metres in height

*Flowers:* white to pink clusters of flowers April-June

*Fruit:* The yellow to purplish-red apples, 2 cm across, are tart but edible. Ripen Sept-Oct. After a frost, they turn brown and soft.

*Habitat:* It grows best in moist, well-drained sites; open forests and edges of forests.

*Indigenous uses:* important fruit for all coastal people, fresh or stored under water. Because of their acidity, the apples did not require further preservation.

The deeply coloured wood is hard and somewhat flexible. Coastal people used it to make tool handles, bows, wedges, and digging sticks.

<https://www.for.gov.bc.ca/hfd/library/documents/treebook/pacificcrabapple.htm>





# Bitter Cherry *prunus emarginata*

*The fruit outcast*

*Height:* 9 metres tall

*Flowers:* small, white clusters of flowers (5-12) bloom April-May

*Fruit:* dark red, with juicy, bitter flesh

*Habitat:* common in moist deciduous forests and open woods, along streams and on recently disturbed areas.

*Indigenous uses:* Indigenous people ate the fruit only occasionally because of its unpleasant taste. Because the bark is tough and waterproof, they peeled it off in long horizontal strips and used it for basket-making. They also softened it by pounding to make twine for baskets and mats and for tying together joints in house-building.

<https://www.for.gov.bc.ca/hfd/library/documents/treebook/bittercherry.htm>







# Fruit & Nut Tree Poll

Questions?

Select your favourite fruit or nut tree in our poll



# Shrubs



Red flowering  
currant



Saskatoon berry



Indigenous plum



Elderberry



Thimbleberry



## Shrubs

# Indigenous Plum/Osoberry

*Oemleria cerisiformis*

*cherry-shaped*

*Height: 1.5-7 metres tall*

*Flowers: Small, white, five-lobed flowers in drooping clusters. Bloom March-April. Smell: watermelon-cat urine*

*Fruit: plum-like, small purple/bluish-black in June*

*Habitat: found in open woods (drought tolerant)*

*Indigenous uses: fruit were eaten in small quantities fresh, cooked, or dried by Indigenous people. Flavor of unripe fruit is bitter and astringent, but they become more palatable when they are fully ripe. Leaves, seeds and even fruit may contain small quantities of hydrogen cyanide, and should therefore only be consumed in small quantities.*



<https://nativeplantspnw.com/indian-plum-oemleria-cerasiformis/>



## Shrubs

# Red Flowering Currant



*currant blood-red*

*Ribes sanguineum*

*Height: 1-3 metres tall*

*Flowers: 10-20 flowers are borne on drooping flower clusters. Bloom April-May*

*Fruit: blue-black with glandular hairs and a waxy bloom, ripen Aug-Sept.*

*Habitat: dry open woods (drought tolerant)*

*Indigenous uses: Flowers attracted the hummingbird. First Nations peoples knew the red-flowering currant mainly as a food plant. The Coast Salish peoples collected and sometimes ate the fruit raw or mixed with other berries.*

<https://nativeplantspnw.com/red-flowering-currant-ribes-sanguineum/>





## Shrubs

# Saskatoon/ Service Berry

*Amelanchier alnifolia*

*alder-like leaves*

*In Cree Saskatoon means “fruit of the tree with many branches” & service berry indicates when Spring thaw*

*Height: 1-5 metres tall*

*Flowers: The showy flowers are white and star-like. Bloom April-May.*

*Fruit: In late summer, it produces clusters of purplish-black little “apples”*

*Habitat: It grows in sun or partial shade; and is superb in an open woodland garden*

*Indigenous uses:* Indigenous people ate the fruit fresh and dried; some used it to season soup or meat. If suffering from fire blight (a bacteria), some tribes used burning to kill the blight. The plant will resprout from the root crown or rhizomes after the top is killed by fire and may fruit again after two years. Interior tribes used the tough wood for arrows, digging sticks, and drying racks.



<https://nativeplantspnw.com/saskatoon-serviceberry-amelanchier-alnifolia/>



## Shrubs

# Elderberry

*fire berry*

*Anglo-saxon 'auld,' 'aeld' or 'eller', meaning fire, because the hollow stems were used as bellows to blow air into the center of a fire.*

*Height: 2-4 metres tall (blue) 1-6 m (red)*

*Flowers: Small, creamy white flowers are borne in clusters. Bloom April-June.*

*Fruit: Berries are waxy bluish-black or red. Aug-Oct.*

*Habitat: It grows in moist sites; shady or open forests, streambanks, and moist clearings.*

*Indigenous uses:*

- **flowers:** boiled down to treat coughs and colds
- **berries:** cook the berries, raw berries may cause nausea. Berries were steamed on rocks and stored underground or in water for winter.
- **seeds:** are considered poisonous (the seeds contain a cyanide-inducing glycoside, which can cause a buildup of cyanide in the body and make you quite ill.)
- **Leaves, bark or roots:** applied to aching muscles/sore joints. Roots or bark were chewed or made into a tea to induce vomiting or as a laxative. Hollow stems used for whistles & pipes.



Blue Elderberry



*Sambucus nigra (black)*  
*ssp. cerulea (sky-blue)*



Red Elderberry



*Sambucus racemosa*  
*(grape-like)*



# Shrubs

## Thimbleberry

*red & small flowers*

*Rubus parviflorus*

*Height: 0.5-3 metres tall*

*Flowers: Flowers are white and large (about 4 cm) bloom May-June.*

*Fruit: Small, red, hairy fruit in the shape of a cap/thimble.*

*Habitat: Moist to dry open woods, edges, open fields, and along shorelines.*

*Indigenous uses: Young shoots eaten raw in early spring. The berries were eaten fresh, mixed with other berries. Some tribes collected unripe berries and stored them in baskets or cedar-bark bags until ripe; others dried them like salal berries. Today the berries is sometimes made into jelly. The large leaves made handy containers for collecting berries and were also used for wrapping and storing elderberries. Hikers call it the soft fuzzy leaves “nature’s toilet paper.” The boiled bark was used as soap. . Dried, powdered leaves were applied to wounds and burns to prevent scarring.*





# Native Shrubs

Questions?

Poll





# Ground cover



strawberry



kinnikinnick



redwood sorrel



nodding onion



wild ginger



Ground cover

# Strawberry

*Height: 10-15 cm*

*Flowers: White flowers with yellow centre. Bloom in May-June.*

*Fruit: tiny, hairy, sweet red berries June-August*

*Habitat: Woodland: grows in partial shade; Coastal: grows in full sun.*

*Indigenous uses: Eaten fresh from the plant. They are too juicy to be dried like some other berries such as Salal. Leaves are high in vitamin C and can help keep colds away. They are also high in iron and can be used to treat anemia. Tea infusion can help regulate menstruation, calm morning sickness, and promote breast milk production*



Woodland  
Strawberry



*Fragaria (strawberry)  
vesca (thin)*



Coastal  
strawberry



*Fragaria (strawberry)  
Chiloensis (of Chile)*

<https://eya.ca/news/woodland-strawberry-fragaria-vesca/>



Ground cover

# Redwood Sorrel

*Oxalis oregana*

*Sorrel = sour wine; oxus = sharp (taste) from Oregon*  
*Height: 10-25 cm tall*

*Flowers: small white flowers with yellow centers*  
*bloom Feb-Sept.*

*Habitat: forest shade (hence name "redwood")*

*Indigenous uses:* Leaves of redwood sorrel are edible cooked or raw but are mildly toxic from the presence of oxalic acid. When consumed, they should be eaten in small quantities. Northwest peoples were known to eat redwood sorrel with dried fish. Indigenous people would also prepare decoctions of the entire plant to wash body parts affected by rheumatism. A poultice prepared from the plant was applied to boils and sores and used to draw out infection.





Ground cover

# Kinnikinnick

*Arctostaphylos uva-ursi*

*"grape of the bears" (in Greek and Latin)*

*Height: 15-30 cm tall*

*Flowers: pinkish clusters of hanging bell-shaped flowers appear from March to June.*

*Berries: red berries, that look like mini-apples, hang on and on, from July to Feb.*

*Habitat: full sun to part shade and dry soils*

*Indigenous uses: to be tasty the berries need to be fried or stewed. Kinnikinnick is an Algonquian word referring to the dried leaves' use in smoking mixtures. Kinnikinick is smoked in a sacred pipe, carrying the smoker's prayers to the Great Spirit. It is also made into a tea to treat inflammation of the urinary tract, kidney stones, and other infections.*



<https://www.wnps.org/blog/plant-profile-kinnikinnick>

<https://sierraclub.bc.ca/kinnikinnick-common-bearberry/#:>



Ground cover

# Nodding Onion

*Allium cernuum*



*"onion that nods/droops"*

*Height: 50-60 cm tall*

*Flowers: clusters of beautiful, bell-shaped flowers ranging in colours from lilac to white, June-July.*

*Habitat: full to partial sun (drought tolerant). In meadows and grassy wooded banks*

*Indigenous uses: The leaves are edible (either raw or cooked) and have a strong onion flavour. They are tasty in salads. Many First Nations people use the onion medicinally. The juice of the plant is used in treating colds & sore throats, The plant is also a bug repellent: it deters moths and when the juice is rubbed on skin it repels mosquitos and other bugs*

<https://bcinvasives.ca/play-your-part/plantwise/grow-me-instead/nodding-onion/>



Ground cover

# Wild Ginger

*Asarum canadense*

*Canadian Altar/sanctuary*

*Height: 10-20 cm tall*

*Flowers: April-June, hidden below the leaves grows a single darkish red-brown, jug-shaped flowers.*

*Habitat: part-shade/shade moist soil, forests*

*Indigenous uses:* The fleshy rootstock has a strong, gingery flavor, so it is used as a seasoning. Indigenous peoples also make tea and poultices for headaches and other pains, like arthritis, from the roots.



[https://www.wildflower.org/plants/result.php?id\\_plant=asca](https://www.wildflower.org/plants/result.php?id_plant=asca)



# Ground Cover

Questions?

Poll







Thank You