

**Please follow the black and white number and arrow signs for this tour.**

One of the interesting features of a botanical garden like VanDusen is the wide variety of plants which produce edible seeds, fruit or roots. Many of these are not well known. On this self-guided tour you will encounter a few of these. You may be surprised by the variety and appearance of these plants as well as how they have been used for food and medicine over time in different parts of the world.

To begin the tour, walk from the Plaza towards the small Rain Garden bordering Livingstone Lake. To the left and at the back of these water-filtering plants is **1 – horsetail (*Equisetum* species)** Look closely and you can see that the stalks are divided into segments between the nodes. Each segment stores water containing minerals. To access this natural mineral water you can push through the nodes with a stick. The minerals are drawn into the plant's cells through the roots which can push 150 feet through soil into bedrock. These minerals help improve soil health. For those who drink horsetail tea, they also help build strong bones, hair, skin and nails. Traditionally, Coast Salish peoples pinched off the new spring fertile shoots close to the ground, peeled off the brown papery sheath around each node and ate the tender growth between the nodes, dipping them in oil. They used the green stalks, which appeared later, in various medicines.

Face the Visitor Centre, turn right and head to the little wooden bridge. In the stream bed to your left you can see **2 – skunk cabbage (*Lysichiton americanum*)**. Northwest Coastal peoples steamed the roots in cooking pits during times of starvation. They also used the leaves as wax paper to dry berries or pemican (a highly nutritious blend of fat, wild game meat and berries). Skunk cabbage leaves were also shaped into cone-like containers to gather wild foods or water. Should you be tempted to sample skunk cabbage, be very cautious. The leaves, flowers and roots contain crystalline shards of oxalate that irritate mucous membranes. The oxalate can be eliminated by changing the cooking water several times during boiling but eating large portions of raw leaves can be fatal. The roots can be eaten if peeled into thin slices and left to dry for several hours before cooking. Once very dry, they can be chopped and made into a tea. Skunk cabbage is also known as swamp lantern because of its bright yellow spadix which is a fleshy spike consisting of many tiny petal-less flowers, surrounded by a leaf-like spathe. Its appearance is one of the first signs of spring and because it blooms before the bees emerge from hibernation, its pungent skunk-like smell attracts available pollinators like flies and carrion beetles. The appearance of skunk cabbage flowers is also a reminder that bears are emerging from hibernation. To get their bowels in operation again, black bears are known to munch on the leaves as a natural laxative.

Walk straight ahead to the pathway that borders a bed of Ornamental Grasses on your right. Carry on until you come to **3 – Washington hawthorn (*Craetagus phaenopyrum*)**. Hawthorn belongs to the Rose family and is known as the “heart herb”. It is used medicinally for heart and stomach complaints, but should be taken with caution since it can interact with prescribed medications. May is usually the best time to harvest the leaves and flowers. Branches are pruned and left to dry until the leaves separate easily. Leaf buds are called “pepper and salt” and are used to flavour salads. Berries, which appear in late summer and early fall, contain a lot of pectin and are used to make jelly. They are also high in selenium and chromium. Hawthorn berries are even converted into flour.

Near the hawthorn is a **4 – western redcedar (*Thuja plicata*)**, which the Coast Salish people call “Mother” and “Long Life Giver”. All parts of this tree are useful. The fan-like branches can be gathered in late summer or early fall, when their aromatic oils are most concentrated, and used fresh or hung to dry. When using, crush them then store in a paper bag or glass jar. The oils in the leaves naturally repel insects, mould, fungi, bacteria and viruses. But since these oils can also be toxic, they must be used in small doses. You can make a tea by steeping the leaves for several hours or overnight but this should not be consumed by pregnant or breastfeeding women or anyone with kidney problems.

Evergreen conifers are a mainstay of our Pacific Northwest landscape. The new branch tips of fir, spruce, hemlock and Douglas-fir can be harvested when they are tender and pale green. The vitamin C and electrolytes they contain are helpful in warding off hunger and thirst. Syrup, tea and even a sorbet can be made from the new growth of these trees. Keep your eyes open for evergreen conifers as you continue your tour through the Garden.

Now walk to the curved stone wall at the entrance to the Black Garden and turn left. Walk past the Formal Rose Garden and continue on to where the path curves right at the foot of the Rhododendron Walk. Look for **5 –sweet olive (*Osmanthus decorus*)** on your right. It is native to the Mediterranean, Turkey and

western Asia, where the flowers are used on their own to make tea, sometimes mixed with black or green tea leaves. *Osmanthus* wine is also added to rice wine for extra flavouring. The flowers' scent is reminiscent of plums, apricots and prunes, which makes it desirable for use in perfumes. The flowers are also used in jams. Scientists are still studying the chemical properties of this plant, but so far they believe it to be rich in polyphenol compounds (anti-oxidants) and niacinamide. Try freezing some flowers in ice-cubes and add them to water. Their rich, sweet, buttery taste makes them a great addition to desserts or for use as a sweetener or to flavour soups.

As you continue up the Rhododendron Walk, look for the lush ground-cover on your left called **6 – redwood sorrel (*Oxalis oregana*)**. Its leaves, flowers and bulbs are edible and used medicinally. Leaves and flowers can be added to salads as an edible decoration or flavouring, or they can be chewed to quench thirst. You can use the leaves to make a drink similar to lemonade. The green pods can be eaten raw and have a tart flavour similar to rhubarb. If you don't mind drinking a tea that smells a bit like cooked green beans, brew the whole plant. And if you have run out of vinegar, you can extract the plant's juices to use as a substitute! The entire plant is used in alternative medicines as a diuretic, to treat high fever and scurvy. As its name implies, however, it does contain oxalic acid which can cause digestive discomfort if consumed in large amounts.

Further along the pathway you will come across a swathe of tall, upright **7 – ostrich fern (*Matteuccia struthiopteris*)**. Fiddleheads are the coiled tips of the newly emerging fronds (leaves) that gradually uncurl as they grow upwards. Fiddleheads of some ferns are toxic but ostrich fern fiddleheads are a culinary delight. The best time to harvest them is when they are still tightly closed. Soak them, rub the husks off and rinse them thoroughly, then boil for ten minutes or steam for twenty minutes. A little butter or lemon makes them extra tasty. Consuming raw or undercooked fiddleheads may cause illness so take the time to prepare them properly.

Near the end of the Rhododendron Walk there is access to the Great Lawn on your right. Walk onto the grass and follow the arrows to find the **8 – tea plant (*Camellia sinensis*)**. Leaves and leaf buds of this species are used to brew traditional tea. The twigs and stems are also used to make twig tea or Kukicha. *Camellia sinensis* var. *sinensis* is used for Chinese teas and *Camellia sinensis* var. *assamica* for Indian Asam teas. White tea, yellow tea, green tea, oolong, and black tea are harvested from one or the other, but each is processed differently to achieve different degrees of oxidation. This plant is not the source of tea tree oil, which is derived from the leaves of the Australian ti-tree (*Melaleuca alternifolia*).

Now follow the arrows through the bark mulch path, past the Korean Pavilion and onto the paved path. Continue straight ahead, past the Meditation Garden on your right, until you come to the **9 – Vegetable Garden**, opposite the Maze. This year the Vegetable Garden celebrates the true origins of vegetables and their cultural journeys with 125 different vegetable varieties representing seven geographic regions around the globe. Across continents and cultures, we are all connected by food and as humans have moved around the world, so too have the vegetables, fruit and spices we grow. We often identify cultures with their cuisine but many of those foods originated half a world away, with early exploration and trade introducing new foods that have become staples of local diets. Explore the Vegetable Garden, with each section representing a distinct geographic region, and learn where your favourite veggies really came from and how they have been transformed across cultures. Learn how the teachings of indigenous peoples, early exploration, the beginnings of modern agriculture and modern food culture have shaped our food landscape and try out one of the recipes from our Fusion Tasting Menu.

As you head back to the garden entrance, return to the Korean Pavilion and turn left at the crossroads. Then turn right at the next intersection, past the Douglas-fir Grove, and onto the Great Lawn. Keep to your right, past the twisted "Horizontal Column" sculpture, as you head down towards the foot of the lawn where you will come to the **10 – Beech collection**, just across the path from the wooden Lathhouse. Beech trees (*Fagus* species) produce several edible products, the most well-known being the beechnut. The nut somewhat resembles a pine nut in appearance and taste. Beechnuts, also called mast, are high in tannins and should only be eaten in small quantities. They have a high enough fat content that they can be pressed for edible oil. Europeans used beechnut oil for cooking and as a hair tonic for centuries. They also ground up the nuts and added them to cornmeal and berries to make bread. Beech sawdust has also been mixed with flour to extend it when making bread in times of scarcity.

This is the end of the tour. Hopefully you are inspired to learn more about edible plants from throughout the world. Always remember to research thoroughly and take precautions before consuming any plant parts.