

Welcome to VanDusen Botanical Garden. Please follow the black and white arrow signs for this tour.

Exit the Visitors Centre and you will see Livingstone Lake before you. The lake was named for Bill Livingstone, VanDusen's first Superintendent, who designed the Garden's renowned rockwork and interconnected water features in the 1970s. VanDusen's first Curator and Garden Director, Roy Forster O.C., worked closely with Bill Livingstone and designed the Garden's plant collections to blend harmoniously within the landscape, work for which he was later awarded the Order of Canada. Together they created this destination garden, which is enjoyed by visitors from around the world today.

In front of you, just to the right of the lake, is a sunken Rain Garden, a low-lying garden which captures excess runoff from the Plaza's permeable hardscaping and directs the water into Livingstone Lake. Cattails, grasses, rushes and other marginal aquatic plants help filter and clean impurities from the runoff.

Now turn left toward the small wooden bridge. Left of the bridge you will see a very unusual **1- weeping Douglas fir (*Pseudotsuga menziesii* 'Pendula')**, a weeping form of British Columbia's native Douglas fir, one of the most common conifers in the region. You will see several mature Douglas firs further along the tour.

The statue at the edge of the lake, on the other side of the bridge, is called "Fisherman Hauling in Net" by Gerhard Juchum, who also created the sculpture "Lovers" on the lawn at City Hall. This is just one of many sculptures around the garden for you to enjoy.

To the left of the statue are a couple of **2- Japanese maples (*Acer palmatum* *Dissectum atropurpureum* Group)**, the first of many Japanese maples on this tour. A cultivar is a plant variety that has been produced in cultivation by selective breeding, or selected from a naturally occurring mutation in the wild. Cultivars are chosen for desirable characteristics, such as variegated foliage, twisted branches, compact growth or an interesting flower or leaf colour. Note the interesting foliage and intricate branching of these small trees.

Follow the path that runs alongside the lake and keep a look out for red-eared slider turtles, seen sunning themselves on the rocks on sunny days. We suspect these turtles joined us as donations from families who didn't quite know what to do with their pet when they reached a certain size.

Continue along the path and take in the diversity of grasses on your left that form the Ornamental Grass collection. They are all labeled and warrant a closer inspection on your way back.

Just ahead, on your right, are some plants with enormous leaves growing along the shore. These **3 - gunnera or giant rhubarb (*Gunnera manicata*)** resemble rhubarb leaves in shape but they are completely unrelated. Gunnera is native to the mountaintops of Brazil and dates back to the Mesozoic era, 150 million years ago, when dinosaurs roamed the earth, a time when they were likely part of the diet of herbivorous dinosaurs. Take a close look at the spines on the stems and leaves. Large panicles of hundreds of tiny reddish-brown flowers are tucked between the massive leaf stalks. These tiny flowers will produce seeds when pollinated.

Follow the path sloping downhill to your right and cross the zigzag bridge to the Southern Hemisphere Garden. Keep right until you reach the stone steps at the top of the slope. To your right is a small grove of **4 - monkey puzzle trees (*Araucaria araucana*)**. Known as "living fossils", these trees can live for 1,000 years, and scientists have discovered fossilized monkey puzzle trees dating back to the Jurassic. Also known as Chilean pine, the species' natural range extends from Chile to western Argentina. The name "monkey puzzle" arose from an Englishman's comment that a monkey would be puzzled if it encountered such a tree because the sharp spiny leaves make it impossible to climb. Apparently he wasn't aware that there are no monkey species occurring within the natural range of this species.

Turn left and continue on the paved path to the towering **5 - western redcedar (*Thuja plicata*)**, which is native from coastal BC to northern California. A member of the cypress family (Cupressaceae), *Thuja plicata* is not a true cedar (*Cedrus* species). It can reach 70 meters high, four meters in diameter, and live well over a thousand years. To British Columbia's coastal First Nations, this tree is known as the "Tree of Life", because its roots, bark, wood and branches provided for nearly all aspects of life - from clothing, blankets, baskets, implements and tools, to canoes, long houses, ceremonial masks and totem poles. In fact, some coastal indigenous peoples refer to themselves as "the peoples of the red cedar".

Continue on to the four-way intersection. To your right is a **6 - cedar of Lebanon (*Cedrus libani*)**, a true cedar, native to the eastern Mediterranean which grows to 40 m tall and 2.5 m wide. It is very different from western redcedar, which you saw earlier. The Cedar of Lebanon is the national emblem of Lebanon and is depicted on the national flag. With durable, insect-resistant, fine-grained wood, it is prized for use in construction and furniture making. *Cedrus libani* was used to build the Temple of Solomon in 832 BCE.

Continue along the path you have been following, to the huge grove of **giant sequoias (*Sequoiadendron giganteum*)**. This is the world's largest tree species by stem volume, with old growth trees reaching up to 95 m (311 ft) tall and 8.2 m (27 ft) wide - as wide as a standard house lot in Vancouver! These trees are youngsters, planted around 1975, and will hopefully live another 700 years or more. Around the corner is an

informational sign so you can learn more about sequoias and their relatives, the coast redwoods (*Sequoia sempervirens*).

Continue up the path past the **7 - Eddie's White Wonder dogwood** (*Cornus* 'Eddie's White Wonder') trees on your right. This dogwood arose from an interesting cross between native western dogwood (*Cornus nuttallii*) and eastern North America's *Cornus florida*. The cultivar was selected to be resistant to dogwood anthracnose, a fungal disease that affects the foliage of western dogwoods, but unfortunately it is not immune and older trees in the garden show varying degrees of damage. *Cornus nuttallii* is British Columbia's floral emblem.

Ahead of you are the Japanese Maples, with the Maple collection just beyond. Japanese maple cultivars are selections of *Acer palmatum* or *Acer japonicum*, both species being native primarily to Japan. There are also numerous maples from North America, including BC's native bigleaf maple (*Acer macrophyllum*), vine maple (*Acer circinatum*) and eastern Canada's sugar maple (*Acer saccharum*), the source of delicious maple syrup.

In Japan during The Edo Period (1603 - 1867) at least 250 Japanese maple cultivars were developed. During the two world wars in the 1900s many cultivars were lost, harvested for firewood or for the creation of farmland. However, they have since made a resurgence and currently about 500 cultivars exist in Japan today.

VanDusen's Japanese maple collection includes dwarf trees and trees to 6 m tall, with a variety of colours and leaf forms. To your left, note the **8 - variegated Japanese maple** (*Acer palmatum* 'Shigitatsu-sawa'), also called ghost maple. Just one of many variegated cultivars developed in Japan, ghost maple's leaves are pale with colour along the veins and margins. Unfortunately, like many Japanese maples in our region, this tree has been affected by verticillium leaf wilt. Just across the path is **9 - trident maple** (*Acer buergerianum*) with its three-toothed leaf reminiscent of the mythological figure Poseidon's three-pronged trident (spear).

Turn left onto the mulched path toward the lake. Note the classic *palmatum* shape of the various Japanese maple leaves and their twisted branches which form a sculptural silhouette in the landscape in winter. In front of you is a cluster of **10 - cutleaf Japanese maple** (*Acer palmatum* 'Dissectum Viride Group') and **11 - red cutleaf Japanese maple** (*Acer palmatum* 'Dissectum Atropurpureum Group'). Further along the path are still more Japanese maples. Diversity in size, form, leaf shape and colour makes these trees fit into almost any landscape. There are about twenty different cultivars in this area alone and many more throughout the garden.

Retrace your steps to the main paved path and turn left. Just beyond the Japanese maples is the Maple Collection, including vine maple, sugar maple and Norway maple, among others. **12 - sugar maple** (*Acer saccharum*) is the source of the delicious maple syrup that we pour over pancakes, waffles and porridge. It can only be tapped from trees in eastern Canada and the United States as our Vancouver climate doesn't lend itself to syrup production in sugar maples grown here. The maple leaf depicted on the Canadian flag, though similar to a sugar maple leaf, is a stylized maple leaf which doesn't represent any particular species. Explore the shapes of the maple leaves in this grove and compare them with those of the Japanese maples.

Return to the paved path and follow the curve to the left, past the creek, and then turn left at the large western red cedar at the intersection. Head past the mountain ash trees to your right. Now look to your left for the grove of very tall **13 - Douglas fir trees** (*Pseudotsuga menziesii*). Cross the lawn past the white sculpture *Developing Form* towards the grove. These towering Douglas firs are very different from the weeping form we saw at the beginning of the tour. This species can reach 100 m high and is popular for construction due to its abundance and high quality lumber. Now search the ground for fallen cones. An aboriginal tale describes how mice fleeing from a forest fire sought shelter inside the cones of the Douglas fir tree. When the fire swept through, the tree survived, protected by its thick, furrowed, fire-resistant bark. But the intense heat sealed the mice inside the cones forever. Can you see their hind legs and tails (3-pointed bracts) sticking out from between the cone scales?

Return to the paved path and turn left until you reach the large tree with curved, snake-like branches. This is a **14 - snake branch spruce** (*Picea abies* 'Virgata'), which originated as a rare, naturally-occurring mutation of Norway spruce. To learn more, read the informational sign at the base of the tree.

Continue along the path and just past the stone bridge, stop at the oddly twisted shrub on your left, **15 - Harry Lauder's walking stick** (*Corylus avellana* 'Contorta'). The corkscrew-like branches are popular for floral arrangement and create a great winter silhouette in the garden after the leaves are shed. It is named after a Scottish comedian who used a corkscrew shaped cane on stage.

Continue along the path to the next intersection to complete the tour. Today we have covered only a very small section of VanDusen's 55 acres and we encourage you to explore more on your own. If you walk straight ahead, you will be treated to the Perennial Garden and further along, at the end of the main path, to the Rhododendron Walk. If you turn right from here, you'll pass through the Japanese flowering cherry trees, and wind up in the Sino Himalayan Garden. To return to the Visitor Centre, turn left here. We hope you enjoyed the tour and will return to VanDusen again soon.