

“Autumn, the year's last, loveliest smile.” --William Cullen Bryan

Self-Guided Tour - September/October 2009

Welcome to VanDusen Botanical Garden, which is jointly operated by the VanDusen Botanical Garden Association and the Vancouver Park Board. Before leaving the deck, take a moment or two to enjoy the beauty and diversity of the autumnal vista before you.

Please leave the deck via the ramp and turn left. Immediately to your left is **(1) the golden false acacia (*Robinia pseudoacacia* ‘Frisia’)**. This deciduous ornamental tree is hardy, fast growing and resistant to pollution and is often planted as a street tree by urban planners. This cultivar was introduced by the William Jansen nursery in Friesland, Holland in 1935 and is a cultivated variety of the North American tree commonly known as the black locust. Carl Linnaeus recorded the black locust tree in his two-volume work *Species Plantarum* (“The Species of Plants”), which was published in 1753. His system of plant classification is still widely used today, although there have been many changes over the years.

Walk straight ahead to the Grasses Bed and find **(2) the mosquito grass (*Bouteloua gracilis*)**. This important species of the original North American short grass prairie occurs in desert regions in California. Like all grasses, it is herbaceous and does not develop woody tissue. The roots form a fibrous mass and enable the plant to survive a long-term dry period, conserving precious water. Plant it in your garden as a water conserving lawn!

Follow the walkway on your right, over the little stone bridge until you come to a gravel path on your left.

On either side of the path, see the distinctively-shaped yellow leaves of **(3) the ginkgo (*Ginkgo biloba*)** tree. The ginkgo tree to your left, by the lake, is a female tree – to your right are two male trees. The ginkgo was a favourite tree of architect Frank Lloyd Wright. They are pest- and pollution-resistant, making them ideal for use as city street trees (the male trees, that is... the seeds of the female tree have an unusual smell!)

Return to the walkway and continue towards the VanDusen Garden Map on the post, passing, on your right, the **horse chestnut tree (*Aesculus hippocastanum*)**. The tree has been banded with tanglefoot, an environmentally friendly way to control wintermoth.

Turn left and walk towards the sign directing you to the floating bridge, which crosses Cypress Pond. Turn right at the sign and cross the bridge. It is floating on tires! At the end of the bridge, on your left, is **(4) the bald cypress tree (*Taxodium distichum*)**. This North American deciduous conifer, which is the State Tree of Louisiana, can live for 500 years or more. The bright green, needle-like leaves in spring and summer are transformed in autumn, deepening in colour until they are almost black in November. The wood from this tree is sometimes called the “eternal wood”, as it is very resistant to decay. It is used to make bridges, docks, boats and buildings. It also has a medicinal use, as the resin can be used to sterilize wounds.

Walk along the edge of the pond and up the slope until you find a little bark path on your left. Follow this path and it will lead you into the Southern Hemisphere Garden.

Turn right. Ahead are **(5)** the pink-flowered **Guernsey lily (*Nerine bowdenii*)**. These autumn-flowering bulbs are native to South Africa but this variety is hardy here. South Africa is rich in biodiversity within an array of ecosystems, including coastal, jungle, alpine and plains habitats. This area of our Garden is a representation of the South African alpine bulbous meadow ecosystem.

Follow the little stone path through the *Nerine* to the lawn next to Heron Lake. Walk along the edge of the lake toward the large **(6) golden weeping willow trees (*Salix × sepulcralis* var. *chrysocoma*)** – beautiful at all times of the year, but especially so in autumn. The golden weeping willow is an ornamental tree widely planted and admired across the world. This hybrid was introduced by the Späth tree nursery in Berlin in 1888. It has inspired many artists, including Claude Monet, Vincent Van Gogh and Emily Carr, who wrote about it in her journals. However, its beauty is deceptive. In the southern states of Australia, where this tree has been extensively planted along waterways, it has been declared “a weed plant of national significance” by the Australian authorities.

Keep walking beside the lake and take the bark path through the Japanese maples. Cultivars of Japanese maple (*Acer palmatum*) were first developed in Japan in the 17th Century and introduced to North America in 1820. Today there are more than 1000 cultivars. We have a wide variety throughout VanDusen. Hardy in Zones 5-9 in Canada, they can be grown in Coastal BC, Southern Ontario, Quebec and in some areas of the Maritime provinces. The Japanese word "momiji" is sometimes applied to this tree in its native land. The word is said to have two meanings, both of them appropriate for the description of this wonderful tree: "baby's hands" and "becomes crimson leaves." Japanese maple is a tree that has been cultured intensively for over 300 years and it retains a special place in the hearts of all who love exotic trees.

Continue on the bark path beside the lake, turning left past the **(7) umbrella pine (*Sciadopitys verticillata*)**. This very slow growing conifer has longevity! In Japan, one of these temple trees has been worshipped since 1310. The wood has the scent of spice and is water resistant. It has been over-logged and is now on the World Conservation Union's Red List of endangered species. As a member of the Botanic Gardens Conservation International, we grow over 100 rare and endangered taxa (unique species, subspecies and varieties of plants).

Take a few more steps to the head of the lake. Stand next to the rustic fence for a moment and enjoy a view of one of the most photographed spots in the garden! Listen to the sound of the little waterfall to your right. All the ponds in VanDusen were created when the garden was developed. All are interconnected. Water courses through the garden from the highest point (the Stone Garden) to the lowest point (Cypress Pond) and then re-circulates. This is just one of the water conservation measures undertaken by the garden.

Turn around and rejoin the path. Turn left and left again when you come to the walkway. The Maple Collection is to your left. Are the maples brightly coloured or dull? The brightest

colors are seen when late summer is dry, followed by an autumn with bright sunny days and cool nights, 4-10° Celsius. This encourages the trees to produce more anthocyanin pigments, which creates those rich fall colours. A Fall with cloudy days and warm nights – more typical here in Vancouver - brings drab colors. Notice the piles of fallen leaves under each tree? This layer of organic mulch protects the roots of the trees over winter, inhibits weeds and adds important nutrients to the soil. Leaf mulch is used extensively throughout the garden and is an example of VanDusen's commitment to using more organic fertilizers and natural methods of pest control.

Turn left where the path splits until you reach the next junction.

The **(8) mountain ash (*Sorbus*)** on your left is one of several in the Mountain Ash Collection. Mountain ash berries are beautiful but bitter and not very edible, although they are sometimes used to make a tart jelly. Birds eat the berries throughout the fall. After the first frost the berries begin to ferment and you might even see a tipsy bird perched on a branch, drunk from eating too many of them! Commonly known as Rowan trees in Britain, they are said to be magical – offering protection against malevolent beings. The wood is used to make wands, staves, and dowsing rods.

Walk up the hill. On your right is a drift of **(9) staghorn sumac (*Rhus typhina*)**, with its beautiful red-orange autumn leaves and fruit. This Eastern North American native is named for the dense, velvety covering on new twigs – easier to see in winter, when the leaves have fallen. The fruit is a source of food for our winter birds, including robins, chickadees, bushtits and towhees.

On your left is the Great Lawn. VanDusen Botanical Garden was originally a golf course, constructed in 1912 on land owned by the Canadian Pacific Railway (CPR). When the golf course moved to a new location in 1960, CPR proposed building a development on the 55-acre site. Six years later, on May 26, 1966, the VanDusen Botanical Garden Association (VBGA) was formed, determined to ensure the site was purchased from CPR to build a botanical garden for the public. Whitford J. VanDusen and the Vancouver Foundation, the government of British Columbia and the City of Vancouver jointly purchased the site from the railway in 1971. It was opened officially as a Botanical Garden in August 1975. You can still see some remnants of the original golf course fairway at the top of the Great Lawn.

Turn right at the first walkway and follow the signs to the waterfall.

The tree next to the waterfall is a **(10) weeping katsura (*Cercidiphyllum japonicum* 'Morioka Weeping')** – the autumn leaves of the katsura tree are said to smell of cinnamon. The first Curator and Director of the Garden, Roy Forster, was fond of weeping trees and knew the visitors would enjoy them, so he planted many throughout the Garden. The landscape and infrastructure of the Garden, including the waterfall, were designed by Bill Livingstone, the first Superintendent of the Garden, using local reclaimed materials.

Walk to the next junction. Straight ahead is the **(11) blue bean tree (*Decaisnea fargesii*)**. Another name for this tree is dead man's fingers – can you see why?

Turn around and walk down the gravel path and stairway. Cross the path to the walkway through the Great Lawn. Stop among the Douglas firs. Do you notice a dedication plaque on one of the trees? Trees or benches may be adopted as a way to remember a loved one or celebrate a significant event.

Look down the Great Lawn towards the magnificent grove of **beech** trees (*Fagus species*). They are especially beautiful in their autumn colours. Did you know that Modal, which is used to make shrink- and fade-resistant fabric, is a bio-based fiber made by spinning reconstituted cellulose from beech wood? It is a good substitute for cotton.

Continue walking down the path.

At the next junction turn right into the Perennial Garden, which shows two ways to display perennials—a formal perennial border and island beds. On the right are the island beds, an idea of Alan Bloom (Blooms of Bressingham). Walk between the first two beds. On your left is **(12) ice plant** (*Sedum spectabile* 'Brilliant'), combining interesting foliage with wonderful fall flowers that attract butterflies. This plant has been given the prestigious Award of Garden Merit from the Royal Horticultural Society and is very easy to grow. Turn left and cross the walkway to the traditional formal border backed by a yew hedge. Directly ahead, at the back of the border, is **(13) cardoon** (*Cynara cardunculus*), a naturally occurring variant of the globe artichoke that we eat. Selection for large, non-spiny heads resulted in the globe artichoke and selection for non-spiny, large stalked tender leaves resulted in leafy cardoon. Although we tend to use them as showy border perennials, cardoon stalks are still commonly eaten in Southern Europe.

Return to the walkway at the entrance to the Perennial Garden and turn right at the next junction. Walking past the Heritage Rose Garden, you will come to an arch, taking you into the Formal Rose Garden. Is it too late to smell the last rose of summer?

Our tour began with Carl Linnaeus and ends here, at his statue **(14)**. When Linnaeus was studying medicine at the University of Uppsala in 1727, training in botany was part of the program of study, as every doctor had to prepare and prescribe drugs derived from medicinal plants. He continued his studies in the Netherlands and returned to Sweden, practicing medicine until he returned to Uppsala as a professor in 1741 and restored the University's botanical garden. He lived in a wonderful age of exploration and discovery and inspired a generation of students, including the nineteen students he ensured were sent out on significant trade and exploration voyages to all parts of the world, including Australia, North and South America, Southeast Asia, Africa and the Middle East.

We hope you have enjoyed this autumn journey of discovery through VanDusen Botanical Garden.