VanDusen
BOTANICAL GARDEN

September Self Guided Tour 2013
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To begin the tour, exit the Visitor Centre, cross the plaza, proceed down the ramp and turn left towards the wooden sculptures.

Please follow the black and white number and arrow signs.

Here you will see the distinctively shaped, two-lobed leaves of the **1) ginkgo or maidenhair tree (*Ginkgo biloba*)**. Today, this unique species has no known living relatives, but fossils of several different ginkgo species have been found that date back 270 million years, when very different eco-systems existed on our planet. It is estimated that ginkgo was first cultivated by humans about 1,000 years ago in China and was introduced to Europe in the mid-18th century. Today, the graceful and controlled growth and resistance to pollution make the male form a popular street tree – the female fruit has an odor of very ripe cheese!

Return to the main path passing by the three white sculptures and turn left at the next junction. Follow the right hand bark mulch path to Cypress pond. On your right, just before you cross the bridge is the **(2) oakleaf hydrangea (*Hydrangea quercifolia*).** This versatile deciduous shrub is native to the southeastern states of the U.S.A., growing from North Carolina west to Tennessee and south to Florida. The pure white flower heads have numerous sterile florets that bloom from late spring to late summer and slowly turn pink, then brown in the fall. Unlike the big-leafed hydrangeas, the flower color does not vary with soil pH. The distinctive leaves resemble those of a red oak, turning bronze, crimson and purple in the fall. All parts of this plant are poisonous.

Walk across the floating bridge over Cypress Pond. As you step off the bridge, on your left, you will see a **(3) bald cypress (*Taxodium distichum* var. *distichum*)**, one of many growing around this pond. Look for the distinctive "knees" of their roots emerging from the water and adjacent shoreline. This deciduous conifer can live for 500 years or more. Its young, acid-green needles appear in spring, turning a rich bronze in autumn and deepening in color until they are finally shed. These trees are classified as deciduous conifers because their needles are thin skinned and cannot survive cold winters.

Continue up the grass slope to the **(4) sweet chestnut tree (*Castanea sativa* 'Variegata').** This deciduous sweet chestnut tree grows at a slower rate and is smaller in size than the species. The distinctive leaves, bee-attracting white flowers, edible autumn nuts and drought resistance make it an excellent choice as a small specimen tree. Follow the little bark mulch path on your left and you will find another distinctive, small deciduous tree, the **(5) Persian ironwood (*Parrotia persica*).** This native of Northern Iran has leaves of vivid autumn color and its bark is outstanding in winter, with alternating green, white and tan patches beneath the outer bark.

Continue along the winding path. Can you hear the sound of running water from the small waterfall? All the water features in the Garden are interconnected. Water flows from the highest point, at the top of the large waterfall in the Sino-Himalayan Garden, to the lowest point at Cypress pond and then recirculates. This is one of the many water conservation features of the Garden. The water features were designed by Bill Livingstone, the first superintendent of the Garden, who used local reclaimed building excavation materials

Turn right at the paved path. Straight ahead of you is the South African Garden, with swathes of red montbretia in the summer and pink Guernsey lilies in the autumn. These bulbs are native to South Africa, home to 10% of all known plant species. The rich biodiversity of the Cape flora is threatened by climate change and the resulting increase in temperature, drought and wildfire. Follow the little stone path to the lawn bordering Heron Lake. Either side of the little path is planted with the blue **(6) lily-of-the-Nile (*Agapanthus* 'Headbourne Hybrids'),** a firm favorite in the yard of Mr. & Mrs. Dursley in 'Harry Potter and the Half Blood Prince'! To your left, the recently planted perennial **(7) nodding chocolate flower (*Glumicalyx goseloides*)** is a member of the figwort family, ***Scrophulariaceae*,** and has unusual brightly colored flowers that smell of chocolate!

Continue along the lake edge and follow the bark mulch path through the Japanese maples. Centuries of breeding have resulted in over 1,000 different cultivars, with a variety of leaf forms and colors to choose from. Their autumn leaves are most brilliantly colored when late summer is dry and autumn has bright sunny days and cool nights. These conditions encourage the production of more anthocyanin pigments in the leaves, which are responsible for those rich colours. When late summer is dominated by cloudy days and warm nights less pigment is produced and the colours are more subdued.

Continue along the mulch path beside the lake to the newly planted **(8) Japanese maple (*Acer palmatum* 'Crimson Queen').** This red lace leaf cultivar will grow to a height of 4 – 6 feet in ten years and will be a stunning sight against the backdrop of the **(9) umbrella pine (*Sciadopitys verticillata*)**. Fossils that are very similar to this modern species date back to the upper Triassic period. The umbrella pine, endemic to Japan, is named after the distinctive whorls of long, needle-shaped leaves that resemble the spokes of an umbrella. Due to over-logging, it is now on the ICUN (International Union for Conservation of Nature) Red List of Threatened Species. VanDusen Botanical Garden is a member of BGCI (Botanic Gardens Conservation International), and this is just one of 100 rare and endangered taxa (unique species, subspecies and varieties) growing in our living plant collections.

Rejoin the main paved pathway and turn left. On your right is a collection of **(10) linden trees (*Tillia* species)**, also known as lime or basswood. The bark, leaves, berries and creamy white flowers of these trees are all used in Eastern Europe for medicinal purposes. In autumn, the fallen leaves provide natural mulch beneath the trees, which protects the roots in winter, adds essential nutrients to the soil and inhibits weeds. Throughout the Garden we use leaf mulch from a variety of species.

Follow the pathway as it curves to the left and at the next junction, turn right and walk up the hill toward the Sino-Himalayan Garden. On your right you will pass a drift of **(11) cutleaf staghorn sumac (*Rhus typhina* 'Dissecta')**, with beautiful red-orange autumn leaves and clusters of red fruits that provide a winter food source for robins, chickadees, bushtits and towhees.

On your left is a grouping of **(12) Himalayan white birch (*Betula utilis* var. *jacquemontii*)**, with stunning white bark. This species is highly vulnerable to attack by the bronze birch borer, a native beetle that lays its eggs in the inner bark where the larvae feed, damaging the tree's vascular system until the tree eventually dies. Increased stress due to the summer drought of 2006 made these trees even more vulnerable to the borer and all of the Himalayan white birches in the Garden have now succumbed. They are gradually being removed and will be replaced with cultivars of **river birch (*Betula nigra*)**, a species that is resistant to the birch borer and has beautiful peeling bark.

Turn right at the next junction and follow the signs to the Waterfall. You will soon come to two small stone bridges on your right. Between them is a beautiful **(13) golden full moon maple (*Acer shirasawanum* 'Aureum')** – a wonderful name for a wonderful tree! If the nights have been cool and the days warm, you may see the yellow moon in the intensely colored foliage. At the foot of the waterfall is a fine example of a weeping tree, the **(14) weeping katsura tree (*Cercidiphyllum japonicum* 'Morika Weeping')**, whose autumn leaves smell of cinnamon. The first curator and director of the Garden, Roy Forster O.C. was very fond of weeping trees and planted many throughout the Garden.

Follow the path leading to the Fern Dell and, on either side of the path you will find two mature **(15) Chinese tulip trees (*Liriodendron chinense*).** The Chinese tulip tree is one of two surviving species of *Liriodendron,* a genus within the magnolia family. The spring foliage has a purple hue, with very distinctive large, deeply lobed leaves that turn bright yellow in the autumn. It is a very rare, threatened tree in the wild, fast disappearing due to large scale tree felling.

Turn left at the Fern Dell and head down the slope to the wonderfully decorated Korean Pavilion, a gift from the Korean government to the Garden in 1986. The pavilion was restored in 2005, thanks to the support of the local Korean business community and the government of Korea. The view of the Great Lawn from the pavilion is a reminder that this Garden was once a golf course! Follow the arrow signs down the Great Lawn through the beech grove to the paved path by the Lath house. Now turn left and walk under the weeping beeches to the Perennial Garden.

On your left are three island beds displaying perennials, a design concept we owe to the vision of British horticulturist Alan Bloom. Can you find the vivid colored **(16) Japanese blood grass (*Imperata cylindrica* 'Rubra')** in the third bed? It is invasive in warmer climes and is on the U.S. Federal noxious weed list. On your right is the traditional formal perennial border backed by a yew hedge. At the back of this lush border you will see the tall silvery-green stems and spiny purple flower heads of the **cardoon (*Cynara cardunculus*)**, a relative of the globe artichoke.

Leave the perennial garden and turn right. Continue along the paved pathway, enter the Formal Rose Garden through the stone arch and turn right onto the main paved path. Our tour ends at the magnificent **(17) Indian bean tree (*Catalpa bignonioides* 'Aurea')**, which was planted by Mr. VanDusen on the opening day of the Garden, August 30, 1975.

The roof of our Visitor Centre, which is planted with thousands of spring bulbs, can be seen close by. Take a few moments to wander back through the Fragrance and Phyllis Bentall Gardens to one of Canada's most exciting and greenest buildings!