

VanDusen Botanical Garden Seasonal Self -Guided Tour October 2011

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With more than 50 documented plant collections from around the world, VanDusen Botanical Garden is a living museum, promoting awareness of plant biodiversity and conservation. We grow more than 100 rare and endangered plant species and varieties, and working with organizations, such as Botanic Gardens Conservation International, contribute to global *ex situ* conservation efforts.

Please Follow the Black Number and Arrow Signs

Emerging from the Visitor Centre, walk to your left toward the small wooden bridge at the end of **Livingstone Lake**. From here you have a perfect view of the lake and Garden beyond, and may even see turtles sunbathing or the resident heron fishing. There are seven water features in the Garden, all created as part of the original Garden design, and all connected, with water circulating throughout the system.

Stroll ahead to the **pool in the Phyllis Bentall Garden** on your left, where there is a collection of hardy waterlilies. To your right, various ceramic pots feature plants typically found in bogs, including several carnivorous plants native to eastern North America. Bogs are nutrient-deficient environments and in order to obtain the nutrients they need, carnivorous plants capture insects and digest them. The **1 – common pitcher plant** (*Sarracenia purpurea*) secretes nectar to attract insects, which fall into the tube-shaped leaf or pitcher. The inside of the pitcher is slippery with downward pointing hairs that prevent its victim from escaping. Eventually, the insect drowns in fluid at the bottom of the pitcher and is slowly digested by enzymes secreted by the leaf. This curious plant is the Provincial Flower of Newfoundland.

Continue straight ahead to the **2 - Herb Garden** on your left. In North America, herbs are used mainly in cooking, but historically they were used to cure illness and ward off evil spirits. In many parts of the world, herbal medicine is still the primary form of health care and it is regaining popularity in Western cultures. Ancient Greeks believed in the Doctrine of Signatures: that the plant indicated its use. For instance stinging nettle was used for skin problems, and the heart shaped violet for cardiac ailments. Fennel was stuffed into keyholes to protect against the Devil, and mint, representing hospitality, was rubbed on the table.

Follow the path to your right past the **3-golden catalpa tree** (*Catalpa bignonioides* ‘**Aurea**’), planted to mark the opening of the Garden in 1975. Also called the Indian bean tree it is invasive in the southeastern United States, but our climate is too wet for the species to thrive. In spring, catalpa bears large clusters of trumpet shaped, white flowers which develop into long, skinny bean-like fruit in fall. There seems to be a scarcity of fruit this year, but you may see some from last year.

Continue to your right, with the **Formal Rose Garden** on your left, and walk straight ahead past the low curving stone wall into the **Black Garden**. Here plants with dark, nearly black, foliage or blooms are combined with plants with contrasting chartreuse or lime green foliage to create a dramatic effect. On the right, the dark red **4-stonecrop** (*Sedum telephium* ‘**Postman’s Pride**’) is strikingly beautiful here, as is the **5-Kamchatka bugbane** (*Actaea simplex* ‘**Brunette**’) on the left with its dark foliage and feathery white plumes of tiny flowers. The lovely dark red hips of the **6-redleaf rose** (*Rosa glauca*) along the right provide colour all winter long. Rosehips are also a great

source of Vitamin C, with one cup of rosehips providing as much Vitamin C as a dozen oranges.

At the end of the Black Garden, turn left and walk through the **Grotto** to the **Heather Garden**. There are many species of **7 - heath** (*Erica cinera*, *Erica carnea* and *E. spiculifolium*), but only one species of true **8- heather** (*Calluna vulgaris*), with **hundreds of cultivated varieties of both heath and heather**. If you look closely at the foliage of these similar plants, you will notice that heather (*Calluna*) has tiny scale-like leaves while heath (*Erica*) has small needle-shaped leaves. Take a stroll around the Heather Garden and return through the Grotto to the main path. Turn left and proceed to the zigzag bridge down the slope. Just before the bridge, notice the **9-Japanese umbrella pine** (*Sciadopitys verticillata*) on your left, an ancient plant now on the red list of endangered plants published by the International Union for Conservation of Nature (IUCN) due to over-logging. The tree's common name is inspired by the whorls of needles that resemble umbrella spokes. A slow growing tree, its spice scented wood is much revered in Japan.

Crossing the bridge, you will see some **10-monkey puzzle trees** (*Araucaria araucana*) to your right. The edible seeds of this primitive conifer were brought back to England by the botanist Menzies who travelled with Captain Vancouver to Chile. It comes from the region in Chile where the Araucana indigenous people live. Trees are either male or female, although the trees you see here are too young to bear cones. Near the Maze you can see example of both male and female cones on some more mature monkey puzzle trees.

At the end of the bridge, keep right along the path and go up the steps on your right. From this peninsula you have a great view of the new Visitor Center. Go back down the steps and continue straight ahead along the path, then turn right at the **Mediterranean Garden** sign. Behind the sign is a tall **11- blue Atlas cedar** (*Cedrus atlantica*) and to its right, the Cedar of Lebanon (*Cedrus libani*), the tree on the official flag of Lebanon. Both are members of the pine family (Pinaceae) and are true cedars, unlike many trees which bear the common name "cedar", including our own western redcedar (*Thuja plicata*), the provincial tree of British Columbia, which is not a true cedar.

Continue walking toward the stone bridge. Just before the bridge, on your left is a **12-strawberry tree** (*Arbutus unedo*) with its brown-red peeling bark. This year it has a wonderful crop of red berries which are edible but not very tasty. Crossing the bridge you can hear the sound of the waterfall from the stream connecting Livingstone Lake to Cypress Pond, at the lowest point in the garden. Continue straight ahead, following the path, with Cypress Pond on your left, to the end where you will turn left at the **13-red maples** (*Acer rubrum*). Like all deciduous trees, in Autumn, nutrients from the leaves are returned to the trunk and roots and the chlorophyll in the leaf breaks down into red and yellow pigments. The fall colour of these trees is at its best and brightest when grown in climates with sunny days and cold nights. In Vancouver's autumn, with our typical cloudy days and warm nights, the leaves are not quite as brightly coloured.

As you continue onto the floating bridge, notice the "knees" of the **14-bald cypress trees** (*Taxodium distichum*) emerging from the water at the base of the trunks. The needles of these Jurassic-aged deciduous conifers are bright green in summer, turning amber before being shed in the fall. The decay resistant wood of bald cypress is used in making docks

and boats, while the resin is used to sterilize wounds. At the end of the bridge on the right is a **15- sweet gum (*Liquidambar styraciflua*)** tree which is also valued for its fall colour. The fragrant amber sap is used to make perfume. Its characteristic spiny, ball-like fruit remain on the tree all winter.

Retrace your steps back around the pond toward the stone bridge and turn left toward the Visitor Centre. As you walk along this path watch on the right for the **16-golden rain trees (*Koelreuteria paniculata*)** which have beautiful yellow flowers in mid-summer, and inflated seed 'bladders' shaped like little lanterns in winter. The tree has been used to remove heavy metals from contaminated mining sites and the sap used to make varnish. Just before the Visitor Centre, on the right, is the **17-maidenhair tree (*Ginkgo biloba*)** another living fossil dating back to the Jurassic period. Although common in gardens, it is rare in the wild and is listed as endangered. Thanks for visiting the Garden today!