

Welcome to VanDusen Botanical Garden, which is jointly operated by the VanDusen Botanical Garden Association and the Vancouver Park Board. Please follow the directional arrows and numbers for this tour.

Turn right down the ramp and follow the gravel path on your left along Livingstone Lake. At the edge of the lake is the (1) goldenrain tree (Koelreuteria paniculata), a native of East Asia and a member of the soapberry family (Sapindaceae), which includes maple trees. The tree blooms in mid-summer, when thousands of tiny yellow flowers appear. After blooming, they transform into beautiful green seed pods, shaped like paper lanterns which will turn golden brown in the later fall and remain on the tree throughout the winter. Chinese researchers recently discovered that goldenrain trees, when planted in abandoned mining areas, actually remove heavy metals from the soil while beautifying the landscape. Koelreuteria is drought tolerant and produces large amounts of seed in areas with warm winters, so it has become invasive in many parts of the southern United States.

Continue down the path, turn left onto the paved walkway and turn left at the junction.

On your right are pink-flowered **(2) Guernsey lilies** *(Nerine bowdenii)*. The brightly colored flowers of this robust perennial are nice to see before the onset of winter! The 20 - 30 species of the *Nerine* genus are all native to South Africa, where 10% of all known flowering plant species are found. The rich biodiversity of the Cape floral kingdom is particularly vulnerable to climate change through drought and the increased intensity and frequency of fires.

Continue along the path to the peninsula. There are many plants of interest on the peninsula, but one of the most unusual in appearance is the Mexican grain (3) amaranth (Amaranthus sp). The Spanish conquistadors banned its cultivation because it was used by the indigenous Aztecs in their religious ceremonies. Fortunately, it continued to grow as a weed, providing high quality protein, iron and lysine from the gluten-free grain. Nearby you will see (4) lemon verbena (Aloysia citrodora), a native of South America that was brought to Europe in the 17<sup>th</sup> century and grown for its oil. The glossy pointed leaves emit a strong scent of lemon when bruised. Today, it is a popular plant for the herb garden.

Walk around the peninsula, turn left to cross the floating bridge and walk straight ahead. On your left is the **(5) Highdown shrub rose (Rosa 'Highdownensis')**, named after Highdown Gardens, a unique and beautiful garden overlooking the sea in West Sussex, England. The brightly colored rosehips, which develop after the flower has finished, can contain 60 times the dose of vitamin C found in an equal amount of citrus fruit. Rich in antioxidants, they can be used to make a delicious, nourishing syrup, tea or jam.

Continue along the path and enjoy the delightful Black Garden, filled with plants that have foliage, flowers or fruit that appear to be black because they are so dark in color. These are offset by the brilliant acid green of other plants. Take a look on your right at the contrast between the pineapple lily (Eucomis bicolor 'Purple Passion'), which is a member of the asparagus family (Asparagaceae), and the golden Hakone grass (Hakonechloa macra 'All Gold'). What an amazing planting scheme!

At the end of the pathway, veer right, walk up the stone steps and pass under the stone archway to the Heritage Rose garden.

Throughout the summer, this area of the garden is a colorful mix of roses, annuals and perennials, including several mallows (*Althaea* sp.). The reclining figure on your left, (6) "Van Duse Chilling", by Michael Dennis, is part of the Touch Wood Sculpture Exhibition in the garden. It is carved from western redcedar (*Thuja plicata*), which is the official tree of British Columbia. The wood from large fallen redcedars can remain sound for over a century because of its resistance to decay and insect damage. The western redcedar is fundamental to West Coast aboriginal culture and has very great spiritual significance to Coastal people.

On your right is the **(7)** European mountain ash (*Sorbus aucuparia* var. *edulis*). The berries provide winter food for many of the over 60 species of birds that inhabit our garden, including the chickadee, bushtit, towhee and robin.

At the junction, turn left into the Perennial Garden.

On your left is the traditional formal bed which is backed by an evergreen yew hedge. Can you see the vivid leaves and stems of the perennial hybrid (8) coral bells (*Heuchera* 'Crimson Curls')? There are between 50 – 70 species of *Heuchera* and hundreds of hybrids. They all have spectacular names that

evoke their tremendous range of foliage color, including 'Berry Marmalade', 'Blackberry Crisp', 'Frosted Violet', 'Georgia Peach' and 'Green Spice'! Cross over to the three small informal beds and enjoy the variety of plants, including another vividly colored plant, the (9) Japanese blood grass (*Imperata cylindrica* 'Rubra'). While slow-growing in our area, *I. cylindrica* is an invasive species in warmer climes and is on the U.S. Federal Noxious Weeds List.

At the four-way junction, walk straight ahead and admire, on your right, the unusual shape of the (10) snakebranch spruce (*Picea abies 'Virgata'*), which is a cultivar of the Norway spruce. A very fine example of this tree can be found in Pruhonice Park, which is close to Prague in the Czech Republic. This 250-hectare park, which is a Czech National Historic Landmark and a UNESCO World Heritage Site, contains a castle and wonderful botanical gardens.

Continue along the path and look to your left. In the distance there is a group of trees with stunning white bark. These are the **Himalayan white birch** (*Betula utilis* var. *jacquemontii*) which may gradually disappear from our Garden landscape. This species is highly vulnerable to attack by the bronze birch borer, a native beetle which continues to lay its eggs in the tree tissue damaged in the long hot summer of 2006. It is being replaced by *Betula nigra* 'Heritage', a river birch cultivar that is beetle-resistant and has beautiful brown and beige peeling bark.

Turn right and walk down the grass to the clump of Douglas-firs, where you will find a wood and fiberglass canoe (11) Black Eagle. This canoe is a replica of a dugout canoe called Lootaas (Wave Eater), created by the great Canadian artist Bill Reid. He and a team of assistants carved Lootaas from a single piece of cedar for Expo '86. Reid both celebrated and defended his rich Haida heritage; when he died in 1998, Lootaas was used to bring his ashes to his mother's ancestral village.

Close to the canoe is the slender and beautiful (12) golden Japanese cedar (*Cryptomeria japonica* 'Sekkan-sugi'). This is a cultivar of the monotypic Japanese native which is the national tree of Japan and is planted extensively around temples and shrines. Like our native western redcedar, Japanese cedar wood is also resistant to rot and makes fine timber.

Walk back along the edge of the lake, past the Japanese maples, turn right and carefully walk down the stone steps to the head of the lake.

Pause for a moment to take in the beautiful vista before you and listen to the sound of the small waterfall behind you. The waterfall, ponds and landscape of the Garden were designed by Bill Livingstone, Deputy Superintendent of the Park Board, using reclaimed materials from local building excavations. Our first Director and Curator of Plants was Roy Forster, O.M.

Continue up the slope. On your left is the **(13) umbrella pine** (*Sciadopitys verticillata*). This is the only remaining species in the genus *Sciadopitys*, but fossil evidence suggests that the ancestors of this unique tree grew all across Eurasia in the Jurassic and Cretaceous Periods, over 150 million years ago. *Sciadopitys verticillata* is native to Japan, where its durable, water-resistant wood is used in construction and boat-making.

Turn right and walk on the mulched path through the Japanese maple grove.

Cultivated in Japan since the 17<sup>th</sup> century, Japanese maples were introduced to western horticulture in 1820. Centuries of breeding have resulted in over 1,000 different cultivars, with a variety of leaf forms and colors. Are the maples brightly colored or dull? The brightest colors can be seen when late summer is dry and autumn has bright, sunny days and cool nights. In these conditions the trees contain many anthocyanin pigments. The scent of phlox and lilies perfume the flower beds in this area!

Continue along the side of the lake until you reach the stepping stones leading back to the South African Garden. On your right is the small and aptly named (14) treasure flower (*Gazania* 'Tiger Stripes'). It has a long season of colorful blooms and is easy to grow, although it may not survive a very cold winter. It is close to a clump of blue (15) lily-of-the-Nile (*Agapanthus* Headbourne Hybrids). It may look exotic and delicate but it can withstand tremendous heat and drought, attracts butterflies and hummingbirds and even the deer leave it alone!

Turn left and then right onto the grass and head down to Cypress Pond. In autumn, the fallen leaves from our deciduous trees provide natural mulch that protects the roots in winter, adds nutrients to the soil and inhibits weeds. Just before the floating bridge on your right is the deciduous (16) bald cypress tree (*Taxodium distichum*). Its delicate needles are shed in the autumn, leaving bare, "bald" branches during the winter. Bald cypress is a member of the cypress family (Cupressaceae), as is the dawn redwood (*Metasequoia glyptostroboides*), another deciduous conifer which can be seen growing nearby. Their foliage turns rusty-orange in autumn, providing a spectacular show of color and a fitting end to our tour.