

HEAD FOR THE HILLS

Winter 2016/2017 Self-Guided Tour Contributed by Sunday Guides

Please follow the directional arrows and numbers for this tour.

This tour heads away from the holiday bustle of Christmas lights into the hills of VanDusen and its Sino-Himalayan collections. Head left from the Plaza, across the bridge, past the Glasshouse, and turn left at the paved path. On the knoll ahead are several Japanese fibre banana plants (*Musa basjoo*) huddled under wraps for winter protection. Standing guard to the left is a Minotaur sculpture by UK sculptor Sophie Ryder. As you explore the garden today, enjoy the fragrances of the winter blooms, the textures of fuzzy leaves and exfoliating bark, and the stories hinted at by the names of the plants you encounter.

Continue along the paved path and after it bends to the right look for the evergreen shrub **1** – **sweet olive (***Osmanthus armatus***)** introduced by Ernest Wilson in 1901. The botanical name is derived from the Greek *osme* for "fragrance" and *armatus* for "armed", referring to the tiny intensely-scented flowers and toothed leaves. Nearby is a similar shrub with smooth-edged leaves, *Osmanthus decora*. Look up for small purple-black fruits, the single seeded drupes that may still cling to the branches.

Just ahead on the left is a **2 – fragrant epaulette tree** (*Pterostyrax hispida*). Its one-sided panicles of flowers hang down like epaulettes, the ornamental shoulder pieces on military uniforms. Dried seed clusters often persist on the branches in winter. Like others in the styrax family (Styracaeae), this tree has fragrant bell-shaped flowers. The epithet *hispida* refers to the bristles on the fruits.

Continue up the Rhododendron Walk and look to your right for the **3 – yuzuri-ha** (*Daphniphyllum macropodum*). It is named for its evergreen, daphne-like leaves (*phyllum* means "leaf") arranged in whorls. Each leaf has a stout pink stalk (the Greek *makros* means "large" and *podos* means "stalk"). The species is dioecious, which means male and female flowers are borne on separate plants and only female plants bear fruit. Introduced in 1879 by Charles Maries, this relict species, with fossil pollen dating it to the middle Miocene in Austria, is now restricted to East Asia.

Further along on the path to your right is a **4 – paperbark maple (Acer griseum)**, introduced from China by Ernest Wilson and popular for its cinnamon-coloured, peeling bark. The name *griseum* refers to the grey underside of its leaves. The Botanic Gardens Conservation International (BGCI) Red List of Maples lists paperbark maple as Endangered. Wild populations are small, scattered and set few fertile seeds. A North America-China plant consortium is working to increase genetic diversity of cultivated stock in an effort to help conserve the species *ex situ*.

Several steps ahead, on the right is a **5- Bodnant viburnum (***Viburnum* **x** *bodnantense***)**, a hybrid of *Viburnum farreri* and *Viburnum grandiflorum*, crossed by Charles Lamont in Edinburgh in 1933 and crossed again at Bodnant in north Wales in 1934. Its fragrant pink flowers are a winter standby.

In front is **6 – dwarf sweet box** (*Sarcococca hookeriana* var. *humilis*), a spreading low evergreen in the box family (Buxaceae), first collected by Augustine Henry, introduced by Ernest Wilson, and named for Joseph Hooker, a plant explorer in the Sikkim Himalayas in 1848-49. Tiny fragrant white flowers appear in winter in the leaf axils. This dwarf variety is described by the epithet *humilis*.

Winter is a time to enjoy the silhouettes and patterns of branches, buds and bark and also a time to check the health of shrubs and trees. Just ahead on the right is **7 – Japanese flowering cherry** (*Prunus* (Sato-zakura Group) 'Jo-nioi') that has been here since 1973, two years before VanDusen Garden opened. Note the horizontal striping of lenticels, a common feature of cherry bark. Huge gouges mar the smooth bark where large branches broke off from the trunk during a winter storm some years ago.

Ahead on the left is **8** - *Rhododendron yakushimanum*. This native of windswept Yakushima, an island of Japan, has been widely hybridized. It is valued for its hardiness, compact habit and beautiful flowers, rose-pink in the bud and paler when open. Feel the underside of the leaves for the soft, velvety indumentum, which helps it resist water loss and survive temperature extremes.

Just ahead on the right and overhead the fragrance of **9- Chinese witch hazel** (*Hamamelis mollis*) perfumes the air. Its filamentous yellow flowers cluster in late winter on bare branches. On warm winter days they provide pollen to foraging honeybees from our hives at the Canadian Heritage Garden. Introduced from China in 1879 by Charles Maries for Veitch nurseries and later by Ernest

Wilson for Arnold Arboretum, this species is a parent to other witch hazel hybrids blooming along this walk. Linnaeus named it *mollis*, Latin for "soft", for the soft felted underside of its leaves.

Further along beside the expanse of lawn look left for **10- Japanese stewartia** (*Stewartia pseudocamellia*), a native of Japan and a deciduous member of the tea family (Theaceae). Geographically separated but closely related species of *Stewartia* occur in eastern North America and in Asia. These survived the last ice ages and are an example of a disjunct distribution. Exfoliating bark is a feature of the Asian species.

Proceed to the junction. On the opposite side of the path, note the pendulous branches of **11** – **Himalayan spruce** (*Picea smithiana*) native to mountain forests of the Himalayas. It was described in 1832 by Nathaniel Wallich and named for Sir James Edward Smith, a founder and first president of the Linnaean Society from 1788 until his death in 1828. After the death of Linnaeus in 1778 Smith purchased his collections, which eventually were acquired by the Linnaean Society.

Across the path to the right is a deciduous conifer 12- Japanese larch (*Larix kaempferi*) native to the mountains of central Honshu. It is named for Engelbert Kaempfer, a German physician and plant explorer who studied the plants and culture of Japan while serving the Dutch East India Trading Company in Nagasaki Bay from 1690 to 1692. Its needles fall in autumn, exposing the bumpy leaf buds and cones which give texture to the bare winter branches.

Proceed to the edge of the Meditation Garden to 13- black bamboo (*Phyllostachys nigra*), a plant in the grass family (Poaceae), valued for its striking black stems and clumping habit. This native of China has edible shoots and is slow growing. Unlike many bamboo species, it is not invasive in our region. It was introduced in Europe in 1827. Feel the stalk for the lengthwise indentation between nodes on alternating sides that is a trait of *Phyllostachys*.

To the left is **14- Formosan sweet gum** (*Liquidambar formosana*) named by Henry Fletcher Hance, a British botanist and civil servant in Hong Kong. His specimen in the Kew herbarium dates to 1867. Once placed in the witch hazel family, *Liquidambar* has been reclassified to Altingiaceae, a small family. This resinous tree is used in medicines and perfumes. Wilson observed that the wood was traditionally used in China to make boxes for high quality teas.

A few more steps to the left is **15- Harland's box** (*Buxus harlandii*), another member of the box family (Buxaceae), with small fragrant flowers. Hance named this plant in 1872 for his friend Dr. William Aurelius Harland. Both men are buried in the Hong Kong cemetery. This boxwood has dark green foliage with an identifying slight notch at the tips of the leaves. It is drought-tolerant, and deer resistant. Feel the twigs for the ridge between nodes, which develops into the fissured or corky bark on older specimens, a desirable feature when it is used for bonsai.

Proceed through the intersection and at the entrance to the Fern Dell stop at the **16- wheel tree** (*Trochodendron aralioides*), a relic species found in Miocene fossil deposits in Austria. Its name, *trochos* (for "wheel") and *dendron* (for "tree"), refers to the wheel-like pattern of its stamens.

Return to the intersection and turn left up the hill. You may notice several *Rhododendron* yakushimanum on your right. Head up and look to your left for **17- aino mulberry (Morus australis)** native to China, Japan and Korea and introduced in 1907 by Ernest Wilson. Several species of *Morus* are grown to feed silkworms and the leaves are also used as as livestock fodder.

Continue on and at the crest of the hill by the Stone Garden look left for **18- prickly ash** (*Zanthoxylum schinifolium*), a spiny member of the citrus family (Rutaceae).

To the right on a little knoll is **19** – **honey locust** (*Gleditsia vestita*). Despite being well-armed with enormous red spines, it is listed as Critically Endangered on the International Union for the Conservation of Nature (IUCN) Red List. Only two individuals survive in the wild on Mt. Hengshan in China, one being 270 years old and the other 90 years old. This tree was grown by Piroche Nursery in Pitt Meadows from seed collected in Yunnan in 1995. Arnold Arboretum in Massachusetts also has two specimens of this rare tree from 1996.

Head down to the main path and to the right enjoy the soft textures of the 5-needled **20-Himalayan pine** (*Pinus wallichiana*), named for Nathaniel Wallich.

Thank you for visiting VanDusen. We hope you enjoyed your tour. To return from the hills of the Sino-Himalayan, retrace your route to the Visitor Centre or explore the Garden on your own.