

**Please follow the arrows and number signs for this Self-Guided Tour.**

Welcome to the beauty of VanDusen in winter. On this tour we invite you to sample the plant diversity of the vast Sino-Himalayan region of Asia as represented in our botanical collections. As a member of Botanic Gardens Conservation International (BGCI at bgci.org), VanDusen contributes to global conservation and education efforts that support Earth's biodiversity.

**Just what is biodiversity?** "Very simply, the term *Biodiversity* refers to the variety of life: the diversity of all living organisms from the various ecosystems of the planet. It 'includes diversity within species, between species and of ecosystems' in which they live." **Convention on Biological Diversity (2005)**

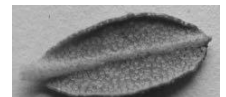
To begin the tour, head left from the Plaza, cross the wooden bridge, pass the reflecting pool and the boxwood hedges on your left and go left just before the low rock wall. Past the the wire Minotaur sculpture the path curves right. Stop at the double gate and look left at **1- Japanese tree lilac (*Syringa reticulata* 'Ivory Silk')**. When grown in tree form, this deciduous species and its cultivars can reach eight metres high with showy somewhat pungent flowers and silky textured bark. Its species name refers to the reticulated pattern of the netted veins of its leaves. This cultivar was selected and introduced into horticulture in 1973 by Sheridan Nurseries of Ontario.



Continue through the 4-way intersection that passes a second double gate, up the Rhododendron Walk, and look left at VanDusen's only specimen of **2 - hananoki (*Acer pycnanthum*)**, a maple endemic to Japan but closely related to the North American red maple and silver maple (*Acer rubrum* and *Acer saccharinum*). Only about 1500 of this rare species are left in the wild in central Honshu. At 300 years old some have reached 30 metres in height and 3 to 4 metres in girth. Botanic gardens around the world are helping preserve genetic material of this species by propagating and growing trees from wild-collected seed.



Further along opposite the Magnolia & Hydrangea bed look left for **3 - *Rhododendron impeditum***, a dwarf rhododendron with purple flowers and small grey-green leaves. Native to rocky alpine habitats of southwest China from 2500 to 4800 metres elevation, this is a lepidote rhododendron.



"Lepidote" refers to the scales that help regulate water loss from the stomata (leaf pores). Look for the tiny dots on the top and underside of the leaves. This rhododendron thrives in sunnier, drier conditions than many larger leaved varieties.

Continue on to the **Japanese Collection**. Follow the paved path that curves along the edge of the bed, and on the right you will see the low growing **4 – creeping alpine willow (*Salix nakamura* var. *yezoalpina*)**. *Salix* is a large, widespread, and variable genus of nearly 400 species of woody trees and shrubs. Prostrate forms are adapted to windswept alpine habitats. Willows are generally vigorous growers. All are dioecious with male and female flowers on separate plants. Male plants of this species have tall upright catkins in spring.

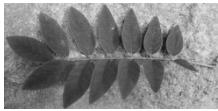
Continue on the paved path to the Y intersection and go left. At the next Y intersection go right onto the paved path uphill. On your left stop to admire the green striated bark of **5 - (*Acer* 'White Tigress')**, a type of maple referred to as "snakebark maple" for the interesting bark pattern. Its leaf shape is another attractive feature.



Continue a few steps forward and turn right onto a gravel path beneath the spreading branches of a white mulberry tree. On the right stop at the evergreen shrub **6 – *Helwingia chinensis***. This genus (formerly classified in the Dogwood Family) has four species, all native to east Asia, and is the only genus in the Helwingia Family (Helwingiaceae). Look closely for the tiny brown bump on the upper mid-vein toward the base of each leaf – this will develop into a small umbel of tiny flowers in spring, an unusual feature referred to as "epiphyllous", meaning "on the surface of the leaf".

Ahead also on the right is **7 - *Rhododendron cinnabarinum* subsp. *cinnabarinum* (Roylei Group)**, a larger leaved lepidote rhododendron. This native of Bhutan and China (southeastern Tibet) is prized for its aromatic foliage and pendant red flowers.

Continue along and on the right enjoy the perfume of several **8 – hybrid witch hazels (*Hamamelis x intermedia* 'Pallida')** whose pale-yellow blooms brighten the woodland garden from January to March and welcome the earliest pollinators. It is a hybrid of Chinese and Japanese witch hazels, *Hamamelis mollis* and *Hamamelis japonica*.



At the junction ahead look across the path and right at the small multi-trunked tree **9 - *Maackia fauriei***, a deciduous legume with long pinnate leaves and creamy panicles of flowers, native to Korea. A modern medical compound derived from its bark (a lectin, Maackia Fauriei Agglutinin or MFA) was patented in 2006 and is used in cancer research.

This attests to the myriad practical ways that biodiversity directly benefits humanity.

Turn left toward the waterfall and take the gravel path down to the right to **10 - *Rhododendron thomsonii***, native to Nepal, Bhutan, and northeastern India at elevations between 3000 and 4000 metres. With rounded leaves, early red flowers borne in loose trusses, showy peeling bark, open habit, and slow growth to 4.3 metres, it is attractive in all seasons.

As the path curves right stop at **11 – red stem willow (*Salix fargesii*)** endemic to mountains of central China at 1400 to 1600 metres elevations. Growing to just 3 metres, its robust multiple trunks, reddish-brown second year branches, bright red winter buds, and large glossy leaves in spring and summer make this willow a beauty all through the year.

Next on the right is **12- variegated false holly (*Osmanthus heterophyllus* 'Variegatus')**. The species is native to Japan and Taiwan and a member of the olive family. The juvenile leaves are spiny and the older leaves are smooth. It is dioecious with fragrant male and female flowers borne on separate plants in autumn.



On the right just before the junction is **13 - epaulette tree (*Pterostyrax psilophyllus*)**, endemic to central China and listed as “Vulnerable” by the IUCN due to habitat loss. An online search of the BGCI website records 16 *ex situ* locations for this species. By keeping data records of *ex situ* plantings, i.e. conservation outside native habitats, botanical gardens act as genetic banks of threatened species.

In front of and also left of the epaulette tree along the curve of the path is **14 – variegated grassleaf sweet flag (*Acorus gramineus* 'Oborozuki')**. *Acorus* is the sole genus of the family Acoraceae, the oldest surviving line of monocots. This species is grass-like but not a grass, semi-evergreen, spreads slowly by rhizomes, and is native to wetlands in Korea and Japan. The foliage is sweetly fragrant when bruised. The Japanese name “*oborozuki*” means “hazy moon” or “moon obscured by clouds”.

Look to your left across the intersection at **15 – Henry’s maple (*Acer henryi*)**, a young multitrunked tree native to Hubei and Sichuan, grown from wild collected seed and planted at VanDusen in 2011. Its bark has a pleasing texture revealing an inner green layer. It is dioecious and has attractively coloured foliage in both spring and fall. It is named for Augustine Henry, a doctor and botanist, who sent specimens of this tree to Kew Gardens in the 1890s.



On the lower left side of this little knoll, beside the path is another plant named for Dr Henry, **16 – Henry’s viburnum (*Viburnum henryi*)**, an evergreen shrub with bronzy spring foliage, mildly fragrant white flowers borne in June, and bright red fruits turning black on female plants (like this one). It was introduced by E.H. Wilson in 1901 and new seed was collected in Qinling Mountains of China’s Shaanxi province in 1996 by NACPEC (North America-China Plant Exploration Consortium).

With your back to the viburnum take the path across the small stream into the small grove of **17 – dawn redwood (*Metasequoia glyptostroboides*)** planted around 1980. This tree is often called a “living fossil” because the genus was known only in fossils before the discovery of living specimens in China in the 1940s. Seeds have been collected and distributed to botanical gardens and arboreta around the world. The IUCN Red List designates it as “Endangered” because the species is rare and in decline in its native range with only an estimated 5393 mature individuals in the wild (*in situ*). However, the success of its *ex situ* conservation in parks and gardens allows us the pleasure of strolling among these deciduous conifers once thought to be extinct. Notice the graceful fluted form of their trunks. The botanical wonder of the *Metasequoia* story and the lovely trees themselves have sparked a quest for cultivars. VanDusen has a golden foliated form called ‘Gold Rush’. True dwarf forms that you might find commercially available are the cultivars ‘Miss Grace’ and ‘Northlight’ (‘Schirrmann’s Nordlicht’).

**This ends our tour. Please retrace your steps to return to the Visitor Centre.**

*VanDusen Self-Guided Tours are online at <http://vandusengarden.org/explore/vandusen-botanical-garden/>*