



**Ophiopogon planiscapus
'Nigrescens'**

Black mondo grass

Black mondo grass is in area A.

It grows to 8" in a tall clump and spreads slowly to 1' wide. The emerging green leaves are hidden by the mature black strap-like leaves which can grow to 14 "

long and 1/4" broad. The new green leaves turn black quickly. The inconspicuous flowers are white or purplish colored and bell shaped. The dark color of the leaves provides a good backdrop for other plants and provides another texture of groundcovers. Black mondo grass is native to E Asia and the Philippines.



**Ophiopogon japonicus
'Nana'**

**Dwarf mondo grass,
Fountain plant, Monkey
Grass**

Dwarf mondo grass grows in areas A, B, C.

Dwarf Mondo grass has 4-6" strap-like green leaves in a dense clump forming an evergreen ground

cover that spreads slowly. The light lilac flowers, followed by blue berries, are mostly hidden by the foliage. The plant is sensitive to cold and slow to establish. O. japonicus is native to Japan. The name Ophiopogon means "ophis" = snake and "pogon" = beard.

It is a Chinese cardinal herb for yin deficiency. The tuberous root is ground into flour that is edible, and used in Chinese medicine. It nourishes the yin of the stomach, spleen, heart and lungs and clears heat and quiets irritability.



Skimmia japonica
Japanese skimmia, skimmia
‘Rubella’

Skimmia japonica
‘Wakehurst White’, ‘Alba’,
‘Fructu Albo’

Grows in Area D in a clump maintained at 4’ high with mixed white and red berries.

Skimmia japonica is a rounded evergreen shrub with glossy, leathery leaves, arranged alternately on stiff stems. The leaves are aromatic, having a sweet fragrance when cut or bruised. Its fragrant flowers can be cream-yellow to white, followed on female plants by small round red fruits. It grows to 20’ tall and wide. The plant tolerates a wide range of conditions, including frost, drought and atmospheric pollution.

Skimmia japonica 'Wakehurst White' is a rounded evergreen shrub with mid-green, oval leaves and small white flowers in spring, followed by glossy white berries.

Skimmia is best known for its ability to thrive in the shade and still produce bright red berries and fragrant flowers. As plants are male and female, the fruit will only occur on the female plants when a male pollinator is nearby. One male plant is needed for every six female plants. All parts of the skimmia plant are considered poisonous (if ingested in large quantities).

Native to Japan, China and Southeast Asia. Many cultivars have been developed for ornamental garden use, including varieties that are significantly more compact than their parent. It is suitable for bonsai and for Chinese gardens.



Ilex crenata and cultivars

Japanese holly, box leaf holly.

Ilex crenata grows in Areas C, D, K, O, V & W

The cultivar ‘**Glass**’ grows in Area H; cultivar ‘**Helleri**’ grows in Areas H, J & Q; cultivar ‘**Convexa**’ grows in Areas A, G, I, K, M & V; **Ilex crenata var. nummularia** (also known as I. crenata ‘**Mariesii**’) grows in Area F.

Ilex crenata is a small broadleaf evergreen shrub with small, hard, oval leaves. It blooms in early summer with small, white, male and female flowers, but both are considered insignificant. Fruits are round and purplish in color, appearing in autumn. The species name, crenata means “with shallow, rounded teeth.”

The cultivar ‘Glass’ has very small leaves and a compact, upright habit. ‘Helleri’ is also a dwarf form, with a mounded habit & less lustrous leaves than most of the other cultivars. ‘Convexa’ is a female form of Japanese origin, with cupped (convex) leaves. It is more cold hardy than the species, and often fruits heavily. I. crenata var. nummularia is a slow-growing, upright female form.

The simple forms created by the traditional shearing of Ilex crenata and other small-leaved evergreen shrubs contribute to the simplicity and tranquility of Japanese-style gardens. Two of the most important forms are *tamamono* (a low, mounded shape at least twice as wide as tall) and *o-karikomi* (a wavelike shape of connected *tamamono* forms).

Ilex crenata is native to Japan, growing in woodland conditions on Honshu. It is used extensively in landscapes, but not as bonsai. Although stiff in habit, it takes very well to sheering – and is pruned into various forms, including hedges. Although it prefers sun, and light, moist, slightly acid soil, Japanese holly is tolerant of part- shade, drought, and urban conditions.

One of the most important landscape plants in the United States and Japan, it has more than 170 cultivars. It is often used in place of boxwood because it has darker, more lustrous foliage, and is much less prone to insect and disease problems.



Ilex c. ‘Glass’



Ilex c. ‘Helleri’



Ilex c. ‘Convexa’



Ilex c. ‘Nummularia’



Thuja plicata

Western red cedar

Grows in Areas D, G, ZZC & ZZW; the cultivar *T. plicata* 'Zebrina' forms part of the hedge in W.

Thuja plicata is a pyramidal conifer with a buttressed base, a drooping leader, and scale-like evergreen foliage. The common name refers to its aromatic reddish bark and wood. Branches tend to be "J-shaped" – that is, slightly drooping and then turning upward. Branches and foliage are usually retained to the ground, even with great age.

The scale-like foliage of Western red cedar is a glossy yellowish-green,

closely pressed to the stem in an overlapping pattern that's been described as a "flattened braid." The reddish pollen cones are tiny and numerous. The egg-shaped seed cones are larger, about 4/10" long. Green when young, they become brown and woody, with winged seeds.

Native to the coastal Western U.S. from Northern California to southeastern Alaska, at low to medium elevations. It grows for the most part in moist to wet forests. As a landscape plant, it is greatly valued for this adaptability to a range of conditions. Slow-growing, it takes many years to mature, and can reach over 200' in height.

Thuja plicata is an iconic tree in the Pacific Northwest, and was called the "tree of life" by the native peoples of its range. Its wood is rot-resistant and easily split. All parts have many uses -- including the wood for shelter, canoes, carvings & fuel; the soft inner bark and roots for clothing, blankets & baskets; the branches for rope and incense; and many of its parts for medicine. Its healing and spiritual powers are still greatly revered.

The cultivar 'Zebrina' is slower-growing than the species, and has variegated green and creamy-yellow foliage.





Buxus microphylla 'Kingsville Dwarf'

Small-leaved Boxwood

Two in Area J and one in Area L

This compact evergreen shrub has elliptic-oblong to inversely lance-shaped bright green, tiny (about ¼") leathery, opposite leaves with a rounded or notched tip. It grows one

to two" a year, reaching a height of 24" – 30" and a 30" spread. The leaves turn bronze in winter.

Inconspicuous flowers are yellow-green, small star-shaped, of both sexes borne on the same plant; several male flowers, with conspicuous yellow anthers, surround one female. It has a dense horizontal growth habit and rough bark, making it highly suitable for bonsai. It is also often used for small and formal hedges and topiary.

The 'Kingsville' cultivar originated in the United States; however Buxus microphylla is native to Japan and Taiwan. 'Kingsville' Boxwood began as a selected seedling from a witch's broom by William Appleby of Baltimore in 1912 and was named after the Kingsville Nursery in Maryland.

Released to the public in 1937, they did not become sought after until the Bonsai world favored them in the 1960's.





Pieris japonica

Japanese Andromeda, Lily of the Valley shrub

Grows in areas D, G, I, L, O, V, W, Y. Forms part of the hedge surrounding the Tea Garden.

Pieris japonica is a compact, rounded, broadleaf evergreen shrub with narrowly obovate to elliptic, toothed, glossy, mid-green leaves, to 3 ½" long. It reaches a typical height of 12' and spread of 10'.

Pieris blooms in early spring with drooping clusters of small, white, urn-shaped flowers that are produced in large, semi-erect to pendent, terminal panicles to 6" long. With a honey-like scent, they are a nectar source for early spring bees.

The flowers resemble those of the perennial plant, Lily of the Valley – hence its common name, Lily of the Valley Shrub.

Pieris japonica is also attractive in fall and winter, because its flower buds form in autumn and remain showy for months — before bloom begins in March or April. After flowering, its new leaf growth emerges in various tones of red or bronze, depending upon the cultivar. Native to E. China, Taiwan, Japan

The genus *Pieris* consists of seven species of evergreen bushes in the rhododendron-heath family (Ericaceae). Named in the 19th century by British Botanist David Don, *Pieris* means “of the Muses.” The Muses, nine daughters of Zeus and Mnemosyne, were born by the fountain of Pieria on Mount Olympus.

By giving *Pieris* this name, Don was pointing out that the shrubs were closely related to the Lapland heath “*Andromeda*,” named in 1732 by Linnaeus, who traditionally gave new genera names of mythological characters. Hence the other common name, “Japanese Andromeda.”





Tsuga heterophylla

Western Hemlock

Grows in Areas C, M, Z, ZZE

Western Hemlock can grow to 200' tall with a narrow crown, with graceful down-sweeping branches, and a conspicuously drooping leader. The bark is rough, reddish-brown, scaly, thick and furrowed in old trees. The needles are short, flat and irregularly spaced, of unequal

length (Heterophylla), twisted at the base to appear 2-ranked. *Tsuga* is from the Japanese *tsu-ga*, the elements for 'tree' and 'mother'.



The Klallam, Lummi and the Makah used the bark for a red-brown dye. It was used on fishnets by the Chehalis to make them invisible. The Quileute chop the bark fine, boil it and apply the juice to spruce-root baskets to make them water-tight.



Tsuga mertensiana

Mountain Hemlock

Grows in Areas B, Y, ZZE, ZZW

Mountain Hemlock grows to 70' to 100' in sub-alpine elevations, often stunted at higher elevations. The branches droop or spread but tend to have an upward sweep at the tip. The leader droops only slightly. The needles are similar to

Western Hemlock but are equal in length, bluish-green, ½ - 1" long, densely covering branches on all sides, not flattened. The cones are 1 – 3" longer than Western Hemlock. The species name *mertensiana* was named the German botanist Franz Karl Mertens.





***Pinus strobus* 'Radiata'**

Dwarf Eastern White Pine

Grows in areas D, O, and ZZW

The tree belongs to the 'Nana' group, which is slow growing compact form. It may become a small tree to 7' and 12' wide over time. They often have multiple trunks. The branches emerge in regular whorls.

The blue green needles come 5 to a bundle and are 3-5" long and flexible and feel soft to the touch. The light brown cones are curved, reaching 3-8" long. Mature trees are often 200-250 years old with some dated 500 years old.

Some feel that the overall appearance of the White Pine tree is airier, more elegant, less dense, less dark, and less heavy than other pines.

Native to Eastern North America, the Eastern White Pine tree was a prime economic factor on the east coast and greatly prized by the British. The wood is light in color and weight but strong with a straight grain. Needles have 5 times the amount of Vitamin C as lemons and have been used in herbal tea. The cambium is edible when been pounded into flour.

Pine tar mixed with various additives can cure tapeworm, roundworm, dandruff, and mixed to make turpentine.

The tree is popular with bonsai makers. "Pines are a symbol of longevity, evoking wisdom and knowledge. They are resistant to change, remaining evergreen through the turning seasons, and they are strong against the elements."





Quercus myrsinifolia

Bamboo-leaf oak, Japanese live oak, Japanese white oak, Chinese evergreen oak

Grows in Areas R & S

A broadleaf evergreen tree, *Q. myrsinifolia* can reach 80 feet in height. Narrow when young, it matures with a compact-rounded crown. Its glossy, leathery leaves are narrow, lance-shaped and drooping, with finely-toothed margins and pointed tips.

They are 4 to 6" long, and are held alternately on the stem. However, they seem to be clustered at the ends of branches, giving the appearance of bamboo. The new leaves emerge rather late, in purple-bronze tones, and change with time to dark green on top, paler beneath.

Two kinds of flowers bloom in May. The male flowers are golden, resembling catkins, and hang downwards. The female flowers are upright, and appear in the upper part of the tree. Like other oaks, the fruit is an acorn, held in groups of 2 to 4, and are ½ to 1 " in length. The acorn's cap has 3-6 concentric rings.

It has smooth, silvery-gray bark, and white wood. The trees in the Seattle Japanese Garden, planted in the 1960s, have broad trunks that look like elephant legs.

The species name, *myrsinifolia*, means "myrsine-leaves," from the Greek name for myrtle. A separate genus, *myrsine* consists of numerous glossy-leaved evergreen trees and shrubs. The Japanese name is *shira kashi* (*shira* means "white," *kashi* means "oak").

Widely distributed in eastern Asia (including Korea, southern China, Laos, Thailand and Vietnam), *Q. myrsinifolia* is native to central & southern Japan, usually in mixed evergreen forests. It is planted as a shade tree in parks, and used as a tall hedge, in urban areas and in the countryside. When needed, its size is artfully controlled by the annual removal of branches and leaves throughout the tree. This pruning method is known as *chirashi*.

Bamboo-leaf Oak is still rare in the United States, including Seattle, although older specimens are to be found in the Arboretum, at the Locks and in Redmond's Marymoor Park.





Buxus sempervirens 'Suffruticosa'

Dwarf English Boxwood, Edging Boxwood

Area W - Forms part of the hedge surrounding the Tea Garden

Buxus sempervirens 'Suffruticosa' is lush, compact and very slow growing. The leaves are

opposite, simple, obovate-rounded, up to $\frac{3}{4}$ " long, and quite fragrant (some say reminiscent of feline urine). The shrub can be severely pruned to a mere 6". If left unsheared, it forms tufts of growth resembling a cloud and can reach 4 to 5'. This cultivar may show winter bronzing. Inconspicuous yellow-green flowers are small star-shaped, of both sexes borne on the same plant; several male flowers, with conspicuous yellow anthers, surround one female.

Our head gardener, Peter Putnicki, shares this information about our hedge:

"In most cases, boxwoods are sheared to maintain a dense, smooth textured form, they are highly suited to this application and are thus, an essential plant for formal elements (topiary, hedges, knot gardens etc.) in European gardens.

Our hedge however, has a very different appearance. We prune to emphasize the branch structure, the short, angled branches inside, while minimizing the foliage to wisps of green trailing over a framework of wood. We still prune in early summer, (traditional boxwood shearing in England and the US is Derby Day, mid-May) but rather than shearing off the new growth, we prune back the new foliage to redirect it into short horizontal sprigs, while also keeping a thin, tapered profile. In any hedging, it is important to maintain a slight taper, thinner at the top, to compensate for the more vigorous growth in the upper portion of the plant. We also continue thinning, keeping branch junctures simple and clear."

The genera sempervirens means, "always green;" species name "Suffruticosa" means "slightly shrubby." Latin translations for Buxus are 'box' and 'fruit'; the name may have been derived from its use to make small, finely carved boxes known in Greek as pyxos.



Polystichum munitum

Sword Fern

Grows in Areas: Q, S, X, Y, Z, ZZE, ZZW

Sword Fern is a large evergreen fern that grows to 4 ½' tall, with erect leaves or fronds forming a crown from a stout, woody, scaly rhizome. Each frond is blade lance-shaped and erect to arching. These ferns are abundant in moist forests at low to middle elevations from central Vancouver Island and adjacent mainland south.

Sword Ferns were used by native people for food, cooking, and medicine. There was a traditional game played by native children called 'pala-pala' in which children competed in pulling the most leaflets off a leaf in a single breath while saying 'pala' with each one.

Blechnum spicant

Deer Fern

Grows in Areas: B, D, E, F, K, Q, T, W, X, Y, Z, ZZW

Deer Fern is a medium sized, evergreen fern tufted at the end of a short, stout rhizome. It has 2 kinds of fronds – sterile leaves about 30" tall, often pressed to the ground, and fertile leaves similar but upright, arising from the center of the clump, deciduous and with much narrower leaflets. It grows in moist to wet forests from the lowlands to subalpine elevations. The leaves were used a medicine for skin sores, a use said to have been learned by watching deer rub their antler stubs on this plant after their antlers had fallen off.

Blechnum penna-marina

Alpine water fern, Antarctic Hard fern

Grows in Areas K, Y, Z

Native to S. America. It is a low spreading evergreen fern with two types of fronds. The fertile fronds are longer and upright emerging with a reddish color fading to green over the summer giving the ground cover a seasonal interest. The sterile fronds are shorter and have wider lobes than the fertile ones. The fern grows 6" high and spreads to 5' in dappled shade. The fern is in the Chain fern family as is the Deer Fern. It can also be used as a house plant. In the Japanese Garden it provides another texture to the ground covers.



Sword & Deer Ferns



Top & Middle – Deer Fern Frond
Bottom - Sword Fern Frond



Alpine Water Fern



Taxus brevifolia **Western or Pacific Yew**

Grows in Area Y

Pacific Yew is a long-lived evergreen shrub to small tree. It grows from 6' to 45' high with drooping branches and twisted trunk. The bark is reddish, papery, and scaly to shred-like. The needles are flat, 1 to 2" long, dull green above, striped with stomata below and ending in a fine point and arranged in 2 rows in flat sprays. Male and

female cones are inconspicuous and on separate trees. It is a conifer but it produces a single bony seed surrounded by a bright red, fleshy aril that looks like a red huckleberry with a hole in the end. The seed is poisonous to humans but highly attractive to birds.

Yew grows in mature forests at low to middle elevations, often with Douglas fir and hemlock.

The wood of the Yew is heavy, durable and was prized by all coastal Native Americans and traded to the interior nations. Yew was named 'bow' plant by several nations and 'wedge' plant by the others. It was used for numerous war implements as well as for canoes, paddles, clubs and kitchenware. Yew also had many medicinal uses, many of a magical nature, using the tree to impart strength.

In 1963 researchers at the National Cancer Institute demonstrated that a bark extract of Pacific yew showed activity against certain cancer-cell tissue cultures, and in 1966 Dr. Monroe Wall isolated the active principle, taxol. Molecular structure of taxol was published in 1971. Taxol has been used to treat breast, ovarian and kidney cancers. Taxol is now produced synthetically.

