Native Trees in Our Gardens

A Guide for the Willamette Valley

Native Gardening Awareness Program

A Committee of the Emerald Chapter of the Native Plant Society of Oregon

Members of the Native Gardening Awareness Program, a committee of the Emerald chapter of the NPSO, contributed text, editing, and photographs for this publication. They include: Mieko Aoki, John Coggins, Phyllis Fisher, Tanya Harvey, Evelyn Hess, Heiko Koester, Danna Lytjen, Bruce Newhouse, Nick Otting, and Michael Robert

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Native Trees in Our Gardens

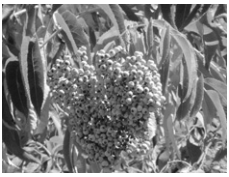
Increasingly, people have come to appreciate the natural beauty of native plants, not just in the wild, but also in our own backyards. Our native trees are uniquely adapted to our local soils and climate, and with native habitats under threat, many of these trees can provide critical habitat for birds, insects, lichen, and fungi, even in urban areas. Because many native trees and the native wildlife that depend on them have been lost to urban development in the last 150 years, the reintroduction of native plants can help mend the ecosystem and rebuild the community of plants and our relationship with them.

Native trees can play an important role in your landscape. Trees with showy bark, flowers, berries, or bright fall colors can be located in highly visible locations. Shade trees can be planted near a back patio or deck. Large deciduous trees planted to the southwest will cool a house in the summer but will allow sunlight to penetrate during short winter days.

For summer privacy, plant a mixed hedge of trees and shrubs along a border. For winter privacy, use strategically placed conifers. Any large tree will provide wildlife habitat; however, mixed hedges or dense plantings of different-size trees and shrubs are even more attractive to wild creatures. A small woodland on your site will contribute a balanced native habitat to your neighborhood. With careful design, these habitat values can be achieved on a small lot.

Tall conifers can be an important part of an urban landscape and can add diversity of habitat and scale. In general, tall conifers need the companionship of bands or groups of other trees because the roots and limbs can hold together, providing support against the stress of windstorms. Tall conifers may be better suited to hillsides rather than valley floor sites.

Consider providing your trees with a few native plant companions. Thoughtful placement of shrubs, flowers, and groundcovers can enhance the ornamental qualities of a tree and create a mini-habitat



Blue Elderberry

Oregon White Oak

Ponderosa Pine

for birds and insects. Using companion plants that can tolerate both sun and shade is especially helpful because these plants can help shade and protect the young tree's soil and can create an understory as the tree grows tall.

Many local nurseries specialize in propagation and sale of native plants of our local area. Before shopping, we encourage you to consult the native plant nursery guide available from the Emerald Chapter of the Native Plant Society of Oregon. When purchasing native plants, ask whether the plants were dug from the wild or are nursery grown from seed or cuttings. Also ask from where the seed or cuttings originated, as it is most beneficial to use local plants. Digging natives from natural areas can harm a site and kill the plants being collected.

Begin planting after the fall rains have begun and while the ground is still warm. Trees planted in the spring experience more stress and must be nurtured through the following dry summer. Summer watering is generally necessary until a tree is well established (2 or 3 years). During winter, bare-root trees may be available. These trees tend to be less expensive and are likely to establish well in native soil. Avoid planting in soils that are too wet. It is usually best to plant young seedlings of our native trees.

Sometimes trees that have been in a pot too long will develop roots that circle around the inside of the pot. When planting, these roots should be directed out into the soil and loosened or cut to break out of a potted ball shape. Be sure to water the tree after planting.

Many native trees are best planted as seeds. Scatter loose seeds over undisturbed ground, and let nature's mulch cover them. Protect the seeds from squirrels, birds, foot traffic, and mowers. Many of our native trees are slow growing, and you will be providing a gift for the enjoyment of future generations.

Oregon ash

Wetland Favorites

Natives that thrive in sunny sites with wet or poorly drained soils

Red Alder - *Alnus rubra*

This member of the birch family displays its tassels of greenish-yellow male flowers before leafing out in the early spring. Smaller female flowers form cones that persist through the winter. During winter, red alder shows off its attractive smooth, white, lichen-splotched bark. It is native to stream banks and uplands of the Coast Range and Cascades, and along the Willamette and other major rivers on the valley floor.


Red alder's small female flower clusters sit above dangling male catkins, alongside last year's cones.

These fast growing trees usually reach 40 to 50 feet in the Willamette Valley and thus may be ideal for small lots and urban areas. Transplanted red alder seedlings require an extended period of irrigation to successfully establish. Roots can be invasive, so place red alder in wet areas away from other garden plantings. In nature, red alder is usually a pioneer species. For example, after the 1981 eruption of Mount Saint Helens, dense red alder thickets appeared on the ash-covered slopes. As nitrogen-fixing plants, red alder can improve a site for subsequent plants.

Native Americans used various parts of the plant medicinally for many purposes, including for eczema, headaches, coughs, and as a general panacea.

White Alder - *Alnus rhombifolia*

White alder is another alder species that does well in gardens. This species is better adapted to the summer heat of the valley floor than red alder. The trees are fast growing, typically reaching heights of 50 to 90 feet. White alder is usually found on the banks of large streams in valley bottoms at lower elevations. It, too, should receive irrigation while becoming established.

Suksdorf's Hawthorn - *Crataegus suksdorfii*
(*C. douglasii* var. *suksdorfii*)

Suksdorf's hawthorn is a small tree that grows in moist-to-wet clay soils in sunny habitats on the Willamette Valley floor and occasionally into foothills of the Cascades and Coast Range. Although it is removed as an invader of wet prairie habitats on public lands to keep the prairie remnants free of invading woody vegetation, it is also highly valued for its qualities as a native species and for wildlife habitat. In spring, hawthorn is covered with white flowers that attract pollinators, and in the late summer and fall the fruits are treasured by many birds. Seed dispersal by animals and birds is the primary way the species is spread to new habitats. The leaves and twigs provide food for many insects which, in turn, attract birds who find nesting within.


The flowers of Suksdorf's hawthorn are quite showy, but be careful of the sharp thorns.

Suksdorf's hawthorn generally grows as a small single- or multi-stemmed tree, but it can be pruned to a more shrub-like form for small lots and intimate urban landscapes. Because the introduced English (or single-seeded) hawthorn (*C. monogyna*) will hybridize with our native Suksdorf's hawthorn, check to see that any stock you obtain was propagated from our native tree.

This persistent small tree seems to be willing to grow anywhere but will perform best in sunny, wet (even swampy) locations. Pacific serviceberry, Cusick's checkermallow, and common camas provide excellent complements to black hawthorn in damp, clay areas.

Oregon Ash - *Fraxinus latifolia*

This member of the olive family flowers very early in the spring. The flowers are wind pollinated; male and female flowers occur on separate trees. In late summer, the attractive winged fruits from the female trees flutter to the ground like helicopters. The leaves are 6 to 12 inches long and are divided into 5 to 7 oval, light green leaflets. The fast growing trees reach a maximum height of 80 feet.

In the wild, Oregon ash forms nearly pure stands in valley bottom areas where standing water occurs during the winter and spring.

Because Oregon ash does poorly in sites that dry out by early spring, garden plantings should be in low, wet areas or along streams. Some Oregon ash trees suffer leaf discoloration from the fungal pathogen anthracnose. To minimize the chance of infection, plant the tree in open areas where there is good air circulation.

Folk wisdom has it that rattlesnakes will not crawl over an Oregon ash stick, leading some people to believe that areas where this tree grows are free from poisonous snakes—an amusing myth with no scientific basis.

Fuzzy new leaves of Oregon ash

Pacific Crabapple - *Malus fusca* (*Pyrus fusca*)

Pacific crabapple is a sturdy native tree with attractive, fragrant flowers that look very similar to the flowers of domesticated apple. In the fall, look for its berry-sized, yellow-to-red, tart fruit. In the wild, it grows primarily in wet but sunny conditions.

Pacific crabapple can grow either into a large 8- to 10-foot, multi-stemmed shrub or into a 15- to 25-foot tree. It can be planted on a wide variety of sites from standing water to well drained soils. For rapid growth and for fruit and flower production, this tree should receive at least 3 to 4 hours of sunlight each day. Pacific crabapple is generally drought tolerant within a year or two of planting.

The pretty flowers of Pacific crabapple

To best appreciate this tree's fragrant flowers, colorful fruit, and showy fall foliage, it should be planted as an individual specimen in a visible location. To achieve a treelike habit, it may be necessary initially to prune the plant into a tree shape with from one to three trunks. This tree's durability and robust growth also makes it well suited for mixed hedges and wildlife areas.

Black Cottonwood - *Populus trichocarpa*
(*P. balsamifera* ssp. *trichocarpa)*

Black cottonwood is a beautiful, deciduous, native tree with glossy, green leaves that turn yellow in fall. The flowers are borne on catkins (dangling tassels) that emerge early in spring before the leaves. The buds of cottonwood are sticky-resinous and delightfully fragrant in early spring. When the seeds are mature, they waft on the wind, carried off by sails of downy hairs. Black cottonwood is the fastest growing native tree in Oregon, growing to heights of 160 feet or more. It grows near rivers, streams, and springs and is often found on disturbed places such as landslides and road cuts.


The handsome leaves of black cottonwood

The name *Populus* (poplar) derives from Greek and refers to the poplars that grew around public squares and meeting places. Historically, the wood has been used for construction, matchsticks, and brake-blocks (because of its low flammability), and more recently as a source of pulp for the paper industry. Bees use the bud resin as cement; humans have used it as a medicine, thus the name "balm of Gilead."

Cottonwood roots are extensive and water-seeking. For these reasons, this tree should be planted at least 40 yards away from pavement, house walls, and below-ground water or sewer pipes. Cottonwoods are excellent trees for open spaces, parks, riversides, and along streets and roads. They are fitting for large suburban yards and provide plenty of leaf compost in the fall. Mature trees have brittle limbs, and thus may be hazardous if grown too near houses but provide great habitat for birds and other animals.

Pacific Willow - *Salix lasiandra* ssp. *lasiandra*
(*S. lucida* ssp. *lasiandra*)

Pacific willow is a small to medium-size tree with vertically furrowed bark and attractive, long, shiny, green leaves that are whitish on the underside. Young branches are bright yellow. The tiny

flowers are borne in catkins on separate branchlets in spring and open to display a showy, yellow bottlebrush of stamens on male plants and yellow stigmas on female plants.

Historically, willows have symbolized chastity, because of their "spontaneous generation" in which cuttings readily form roots in water, and sadness, as in the weeping willow under which the children of Israel mourned. The pliable branches of willows have been used for basketry; the wood has been used in making Dutch clogs, canes, artificial limbs, and for biomass fuel. Salicylic acid, the natural form of aspirin, occurs in the bark of willows, but is now produced synthetically.

Shining willow blooms after the leaves come out, later than most willows.

Pacific willow is often found in parks and open spaces in the Willamette Valley, especially along the margins of rivers and creeks and in soggy areas. It requires abundant water or access to a high water table, and it will tolerate saturated soils. It makes a very attractive background tree for a large yard, but because the roots are water-seeking, it must be planted away from water pipes and sewer lines.

Most willows can easily be propagated from twigs placed in water or directly into the ground, particularly in late winter or spring. Sprouted cuttings should be generously watered for the first growing season after planting.

Bigleaf maple

Fabulous Foothill Plants

Natives that excel on sunny sites with well-drained soils

Bigleaf Maple - *Acer macrophyllum*

Bigleaf maple can provide a broad sheltering canopy that may extend 50 feet. The branches provide habitat for mosses, licorice ferns, and a host of insects and birds. The tree's native companions include sword fern, Oregon grape, and salal.

Bigleaf maples grow in sun or shade but will suffer in extremely hot locations. They grow best in deep, well-drained soils but can tolerate clay soils. They will not grow well in poorly drained soils or in the thin soils on hilltops. Some live to be 300 years old or more and commonly attain heights of 80 feet, often developing several trunks. The open, spreading structure of bigleaf maples can be enhanced by pruning out the lower limbs while they are young. Widely used as street trees, they are at their best in parks and open spaces where their majestic form is apparent.


Bigleaf maple's large flower clusters bloom as the leaves emerge.

Both male and female flowers occur in the same cluster. The tree's fruits, called samaras, are an inch or two long, hang down in clusters and then drop with whirligig wings. The large, lobed leaves turn a beautiful yellow in autumn. Leaf fall in western Oregon is mostly completed by the third week in October, after which the branches make a striking silhouette through the winter.

These maples are susceptible to internal rot. They should be inspected occasionally for decay once they have reached maturity.

The fragrant flowers of bigleaf maple are sweet tasting and edible and can be added to salads or deep-fried in batter. Some of the

Native Americans of the Northwest believed that if you rubbed the leaves of this tree on the face of a prepubescent boy, it would prevent him from growing thick whiskers.

Saskatoon Serviceberry - *Amelanchier alnifolia*

Saskatoon Serviceberry grows as a multi-stemmed shrub or a tree from 6 to 30 feet tall. Dense clusters of showy, white flowers provide nectar for spring azure butterflies. In early summer, you can harvest quarter-inch, red-purple fruits. These berries can be eaten raw or dried or made into jams or jellies if you are able get to them before many appreciative birds and mammals. The foliage is food for swallowtail and other butterfly larvae and turns a wonderful yellow or red in the fall.

Pretty white flowers of Saskatoon serviceberry

Serviceberry tolerates a wide range of soils and moisture conditions. It can appear as a 15- to 20-foot hedgerow, a forest edge tree in soggy bottom lands, or as a 3- to- 4-foot windblown shrub on rocky mountain outcrops. Serviceberry seems to grow best on well drained soil on hillsides, buttes, or riverbanks, where it can reach 40 feet in old age. Although it grows occasionally in shade, serviceberry needs at least half a day in sunlight.

When set apart in the garden, serviceberry shows off its ornamental features. To become a specimen tree, this native may need some simple pruning and training into a single-stemmed habit. Bright spring wildflowers such as camas, checkermallow, or native columbine make excellent companions.

Pacific Madrone - *Arbutus menziesii*

This evergreen broadleaf tree is a unique and beautiful part of the Willamette Valley palette of native plants and has been valued as an attractive garden plant since David Douglas sent seed back to Great Britain in 1872. It generally occurs in open and dry areas but sometimes is mixed into the forest edge. In the open, it will grow to a large, single-trunk tree and have a beautiful, shiny, red bark, exfoliating in interesting patterns that reveal the smooth yellow-green trunk

The attractive, urn-shaped flowers of the madrone

underneath. The leaves are shiny and evergreen. The flowers are beautiful racemes of white urn-shaped bells, typical of the heath family, and produce bright red fruit in the fall. Hummingbirds and other birds are attracted to madrones.

Seed can be sown in undisturbed areas to generate future populations. They are difficult to raise in pots and transplanting is not always successful. If planted from pot-grown plants, be sure to plant in the fall in well-drained areas, with minimal summer watering. Preserving habitat is the key to protecting these trees. The madrone is an attractive and garden-worthy tree but is best kept in dry habitat or on the edge of a garden, where it will lay down a thick litter of leaves.

Leaf spot is a typical disease of madrones, and the Oregon Department of Agriculture recommends raking up and destroying fallen leaves as a control measure. Canker is a fungus that causes bark damage and can lead to the tree loss. Infection generally occurs from sunburn, freezing, cuts or other injury.

Incense Cedar - *Calocedrus decurrens*

Male pollen cones of incense cedar

Incense cedar is a handsome, tall conifer that grows up to 140 feet and occurs frequently in the southern Willamette Valley. Unlike any other northwest conifer, it is distinguished by a narrow, almost perfectly pyramidal form and yellowish-green foliage.

In the wild, incense cedar grows successfully on hot, dry, thin-soil sites, or in well-drained soils such as flood plains of major rivers where other trees cannot outcompete it. Once established, it develops an impressive, wide, fluted base reminiscent of giant sequoias.

In the garden, incense cedar will succeed under a wide range of conditions. It is surprisingly tolerant and can survive in both sun and

shade, but to achieve a moderate growth rate, it needs to be placed where it can receive at least half a day of sunlight. In soil with a high water table in spring, however, it will not be long lived.

Incense cedars are useful in narrow landscape sites because their branches are shorter than those of most other trees. This makes them well suited as 40- to 100-foot hedge. Incense cedar is also a welcome choice for those locations where other plants wither and burn in the hot summer sun.

Incense cedar will retain its lowest branches as it ages. Preserve these lower limbs to maintain the natural elegance of this tree. If you do remove the lowest 6 to 10 feet of branches, you will find it challenging to garden directly under the tree because the dense foliage repels water so well it keeps the soil beneath bone dry even in winter. Sword fern may be the best companion plant here.

Golden Chinquapin - *Chrysolepis chrysophylla* (*Castonopsis chrysophylla*)

Golden chinquapin is a broad-leaved evergreen tree of the oak family that grows to about 50 feet tall. It has handsome, leathery, dark green leaves with fuzzy, gold-covered undersides. Tan female seed burs form at the base of creamy white male catkins in the summer. The nuts are loved by squirrels, chipmunks, and birds and are quite flavorful. They are similar to chestnuts, to which chinquapin is related.

The fuzzy flowers of golden chinquapin have a strong fragrance.

In nature, chinquapin is found on dry, rocky ridges and well drained, sunny, south-facing slopes. In your garden, this tree must have very good drainage and no supplemental summer water once established.

Golden chinquapin is best grown as a specimen tree in filtered sun or as a companion to rhododendrons and conifers. Its vigorous, deep roots coil quickly in pots, so it should be put in the ground when very young. As with all evergreens, older foliage is dropped year-round, so the tree should be placed away from highly maintained areas.

Ponderosa Pine - *Pinus ponderosa*

The bark of ponderosa pine resembles pieces of a jigsaw puzzle.

Ponderosa pine is often considered a tree of drier climates to the south and east, but it occurs naturally in the Willamette Valley. This valley pine, as it is sometimes known, is genetically different from ponderosa pine in other ecoregions. Much like Oregon white oak, valley pine occurs in both moist valley bottom habitats and dry slopes and ridges. Obtaining stock from a site with habitat characteristics similar to its new location may help ensure survival.

Ponderosa pine grows at a moderate rate to become a large tree, as much as 150 to 200 feet tall. Its crown is not as dense as Douglas fir or grand fir, and it has much longer needles (up to about 8 inches long), which give it a softer, more fluffy appearance. The pine white and western pine elfin butterfly caterpillars eat the needles, and numerous small mammals and birds utilize the cones, needles, and branches for feeding or reproduction. It grows best in full sunlight in sites with good drainage. Companion plantings on drier sites might include Oregon white oak, tall Oregon grape, mule's ears, and rosy checkermallow.

Western Chokecherry - *Prunus virginiana* var. *demissa*

Chokecherry fruit

Chokecherry is a large shrub or small tree that is native through much of North America.

In the Willamette Valley, chokecherry is largely overlooked. It appears sporadically, primarily in riparian zones or on forest edges and fencerows on the valley floor, or occasionally in the foothills, where it generally forms multi-stem thickets 20 to 40 feet tall.

In the landscape, chokecherry's outstanding features are its bottlebrush-like flowers, rich green leaves, excellence as a bird and butterfly plant, and bright fall color. Its tall, thicket-forming qualities make it an ideal background plant in a naturalized area, and it serves well blended into a hedge with

other species. If desired, chokecherry can be pruned to a single-trunk tree to create a shady spot.

Like all cherries, this tree's black (sometimes red) fruit is popular with birds. If you get to the fruit first, you can harvest the tart to mildly astringent berries for jams or other preserves.

Chokecherry is extremely drought tolerant. It performs best on sunny, well drained sites where it may grow 3 feet a year. If planted in full shade or on poorly drained sites, chokecherry will survive but will grow very slowly.

Douglas fir - *Pseudotsuga menziesii* var. *menziesii*

Douglas fir, the state tree of Oregon, blankets the Cascade and Coast Range mountains and is also common on the valley floor. It is a large tree, and therefore most appropriate for large-scaled landscapes. Ideally, it should be planted in groups or stands where root systems and limbs can interlock and provide mutual support.

The distinctive pendant cones of Douglas fir

Douglas fir grows rapidly in well-drained soils and should not be irrigated in summer. Summer drought, an integral part of the Willamette Valley climate cycle, is important to this species because it contributes to development of strong roots. A young Douglas fir will not grow in the shade of other plants, so it must be planted in full sunlight. It will drop its lower limbs as they become shaded by its own upper branches.

Even though its dense foliage lets little rain pass through, many understory plants thrive under Douglas fir. Summer and often winter drought will determine choice of plants. Native species such as sword fern, western Solomon's seal, fawn lily, salal, and snowberry will thrive as the tree grows.

Oregon White Oak - *Quercus garryana* var. *garryana*

Oregon white oak, also called Garry oak, is the most distinctive deciduous tree of the Willamette Valley savanna landscape. These trees can grow to be 70 feet wide and 70 feet tall. Some trees that were marked by pioneer surveyors of Oregon still exist with

Wide-spreading and gnarly branches of Oregon white oak

their classical wide spreading branches, round crowns, and often gnarly trunks, but the Willamette Valley oak savanna and oak woodlands are now considered "globally endangered," with less than one percent remaining intact.

Stands of Oregon white oaks form rounded canopies on hillsides or may grow in dense thickets in riparian areas. They also stand alone in open prairie landscapes. It has been suggested that indigenous people brought the acorns north as a food crop.

To preserve native oaks, protect their habitat by maintaining a summer drought period and avoiding excavation or filling around the entire broad root zone. Summer drought-tolerant species of native grasses and broadleaf prairie plants are appropriate underplantings.

Seedling oaks, which make deep roots within a year, should be started from acorns on site, or started in deep pots and transplanted while their roots are still small. Planting and protecting native oaks contribute to the heritage of your children and grandchildren.

California Black Oak - *Quercus kelloggii*

Pointed tips of the California black oak lobes

California black oak is the other native oak of the Willamette Valley and is at the northernmost edge of its range along the McKenzie River. The oak is a tall and upright tree with silvery gray bark. The lobes of the leaves are pointed and shed early in the fall. It has a narrow upward habit with few lower branches. It is generally faster-growing but shorter-lived than the Oregon white oak, surviving to an average of 100 years. Its cultivation requirements are similar to those of the Oregon white oak. The

habitat of this oak should be protected and young trees and acorns planted for future generations.

Both of our native oaks sustain an interdependent community of fungi, plants, insects, birds, and mammals. From mycorrhizal fungi at their roots to the lichenous limbs and cavities, the oaks support Willamette Valley wildlife, providing food and dwelling sites for many species.

Sudden oak death (SOD) is a recent blight to native oaks in California. Many oak and heath family plants (and plants from other families) are hosts for this disease. SOD has been found on the California black oak, and it has been identified in Oregon. To learn more about the extent of this problem and how to prevent its spread, go to this helpful web site: www.suddenoakdeath.org.

Cascara – *Rhamnus purshiana*

Cascara rates high for adaptability, making it hard to consign to wetland, foothills or shady categories. At about thirty feet in height, this stately small tree can be found in sun or shade and in wet or well-drained soils, making it an ideal candidate for almost any home garden. In the wild it usually associates with other trees, often Douglas firs on south-facing slopes, or with alder and vine maple in swampy sites.

Flower clusters and ribbed leaves of cascara

Prominent parallel veins furrow the dark green, oval, 2- to 6-inch leaves. In mid-spring, rounded clusters of tiny greenish-yellow flowers begin blooming in leaf axils, followed in summer by half-inch blue to purple-black berries. The dark, berry-like fruits are edible and apparently considered delicious by birds and squirrels, even if not by humans. Cascara is a host for pale swallowtail and brown elfin butterflies and probably for gray hairstreak and spring azure as well, making it an excellent tree for a wildlife garden or hedgerow. In the fall, the foliage glows clear yellow, blushing to peach and sometimes splashed with red with enough sun (and probably the right genetics).

Cascara's smooth silver-gray bark was boiled and used as a laxative by many northwestern Native tribes. European Americans

continued the practice, often girdling and killing a tree to collect the "chittam-bark," therefore mature specimens are rare.

If not readily available from a nursery, Cascara trees can be germinated from seeds harvested in the fall after they are ripe, as long as you keep a step ahead of the birds. Clean pulp from the seeds and plant outside in pots or flats (well protected from the animals) where winter's cold and wet will prepare them to germinate in the spring, or store cleaned seeds in the refrigerator in plastic bags of moistened vermiculite and plant them out in the spring.

Blue Elderberry - *Sambucus mexicana* (*S. cerulea* var. *cerulea*)

Blue elderberry is a small, fast growing tree quite unlike any of the Northwest's other native trees. Its segmented, pithy young stems are reminiscent of bamboo. Starting life as an open shrub, it will soon grow under favorable conditions into a fountain-shaped, 15- to 30-foot tree with fabulously ornamental fall fruit.

The flat-topped, white flower clusters of blue elderberry are strongly scented.

Blue elderberry is widespread in the western United States, growing in well drained soils wherever there is easy access to soil moisture.

In late spring, blue elderberry sprouts new stems that will shoot 20 feet to the top of the tree in a matter of weeks. These shoots are soon covered with the tree's lush and attractive compound leaves. By early summer, the tree is topped with creamy, flat-topped flower clusters. A mature tree will be loaded in late summer and early fall with hundreds of showy clusters of small, metallic powder blue fruit. These fruits are highly favored by birds. The berries have a strong, astringent flavor but are edible raw if the stems are removed. They can also be cooked for jams and preserves.

In the garden, blue elderberry performs best with irrigation or in cooler gardens having limited afternoon sun and little reflected heat. It will often survive drought in hotter locations but is likely to

be dwarfed or look tattered in summer. This tree's best landscape use is as a centrally located specimen tree. Its natural shape can be best appreciated if it is not crowded by other tall plants.

Scouler's Willow - *Salix scouleriana*

Scouler's willow is a fast growing upland willow that gains tree size. It is most often found on slopes with no apparent surface water, but it also appears occasionally on creek banks and wetland flats. It forms a vase shaped small- to medium-sized tree. The leaves vary from a soft, dusky, dark green on plants with hairy leaves to a rich, dark, leathery green color on plants with nearly hairless leaves. The common name "pussy willow" is applied to a particular willow species that is native to eastern North America, but the term is also sometimes used to describe the early phase of the emerging catkins in all willows. Like the "pussy willow" of the eastern United States, the flower scales of Scouler's willow are covered with soft, white hairs, and its catkins bloom in late winter before the leaves appear. Scouler's willow grows well in the Coast Range, Western Cascades, and the Willamette Valley.

The female catkins of Scouler's willow bloom on bare branches.

Willows are valuable plants for wildlife. They are browsed by deer and form good habitat for birds. A number of butterflies use willow as a host plant for their caterpillars, and adult butterflies and other insects nectar on the early flowers.

The most attractive use for Scouler's willow is in a woodland border where its spring catkins and golden fall color contrast with a conifer forest background. Because it is an upland willow, it requires less water than other willow species and may thrive without irrigation. Scouler's willow is the one willow that may be difficult to start from cuttings, but it should be easy to start from seed. Seeds of any willow collected from mature catkins that are beginning to fall apart can be laid out on a tray of wet sand and should sprout quickly.

Western red cedar

Shady Situations

Natives that perform well in shade

Grand Fir – *Abies grandis*

Like Douglas fir, grand fir will grow rapidly in well drained soils and achieve great height. It can be planted in either sun or shade. If planted in sun, the sun-loving plants growing with it can be replaced as the fir grows with shade-loving plants (e.g., western Solomon's seal, fawn lily, and sword fern).


Flat sprays of grand fir

Grand fir has very glossy, dark green needles that are especially attractive to human admirers. Small mammals appreciate the rich food source contained in the seeds. Like other true firs, grand fir does not drop its cones whole. Instead, the upright cones disintegrate on the limbs (unless prematurely dropped whole by chipmunks and squirrels), and seeds and cone scales fall individually.

Keep plantings of delicate shrubs and herbaceous plants at a distance from the root zone of grand fir. Only bulbs and flowering plants that tolerate summer drought will be successful at the base of this tree.

Pacific Dogwood - *Cornus nuttallii*

Pacific dogwood is an outstanding ornamental with one to several trunks. The "flowers" consist of 2- to 3-inch white to creamy petal-like bracts surrounding a cluster of tiny flowers. The trees make a spectacular show in late spring and often bloom again in the fall. In the garden, this tree can reach 20 feet, and in the wild it can grow to 50 feet tall and 25 feet wide. Pacific dogwood's fleshy, half-inch, bright red, button-like fruits attract woodpeckers, vireos, thrushes, grosbeaks, sparrows, and house finches. Fall foliage glows yellow,

pink, and red. After the leaves drop, the symmetrical, horizontal-branching winter tracery provides a striking focal point.

To grow this gorgeous tree, you will need to protect it from hot sun. Heat reflected off a parking lot or direct afternoon summer sun can sunburn the leaves and damage the bark. Pacific dogwood needs good drainage and may not tolerate regular irrigation. Once it is established, give it no summer water. The ideal soil mimics the humusy forest duff of its home.

Showy white bracts of the Pacific dogwood flower

Unfortunately, Pacific dogwood is susceptible to anthracnose, an introduced fungal disease that is killing Eastern dogwoods. Symptoms are dead edges and lesions on leaves and flowers. To minimize the chance of infection, plant the tree in open or part shade where there is good air circulation. Maintaining a pattern of open branches can also reduce infection rates. Finally, planting seed-grown trees maximizes genetic diversity and increases the chances of disease resistance.

Pacific Yew - *Taxus brevifolia*

Pacific yew is an unusual northwest evergreen with an almost legendary reputation. Its wood is fine grained, hard but elastic, and contains orange to red heartwood highly desired for woodworking. Generations of Native Americans as well as European immigrants sought out this wood for everything from bows and canoe paddles to furniture and fence posts. More recently, a popular cancer-fighting drug known as taxol was discovered in the bark of the tree.

Berry-like arils on a long-living Pacific yew

Unlike many of our fast growing northwest forest giants, Pacific yew grows extremely slowly and appears primarily in deep shade,

where it may linger for hundreds of years, imperceptibly expanding, perhaps reaching 50 feet in height in 3 centuries. Pacific yew is not hard to grow in the garden, although it is unlikely to reach actual tree size in a single human lifetime. It is best to locate it in full shade. Although Pacific yew grows primarily on well-drained sites in the wild, it may tolerate poorly drained soils in the garden. Keep this slow-growing tree well watered for 5 to 10 years until it is fully established. Unlike most conifers that bear cones, the yew's fruit is a bright red, berry-like aril.

Gardeners are most likely to plant Pacific yew as a curiosity or out of personal emotional attachment to this magical plant. It is one of the few native, shrub-sized garden plants that is green in midwinter. Given time, it can grow large enough to function as a year round privacy screen in a woodland garden. Because yews can leaf out from old wood, pruning can produce interesting topiary subjects for those with a whimsical fancy.

Western Red Cedar - *Thuja plicata*

Western red cedar is a handsome, large conifer with a broadly pyramidal form. Its lush, dark green foliage droops gracefully from wide branches.

Western red cedar cones

In the wild, red cedar occurs only in wet, cool locations. In the Willamette Valley, it is found along river and stream edges and lower slopes of the Cascades and Coast Range. In these riparian zones, it will often establish itself in the shade of faster growing alders and black cottonwoods.

In the landscape, red cedar can be cultivated in a wide range of conditions. It is unusually tolerant of poorly drained, heavy clay soils as well as dry, well-drained sites. However, red cedar will experience burn and heat stress in exposed, hot, afternoon-sun locations. It is much happier in cool, protected sites with just a few hours of sun. In fact, red cedar will grow happily, albeit more slowly, in full shade. Whatever the conditions, this tree will need regular water until fully established.

With its graceful, drooping branches, red cedar makes a fabulous backdrop to both formal and wild gardens. Its dense, shade-tolerant foliage also makes it an excellent privacy screen in locations where sun-loving hedge plants are ineffective. Such sites might include a property line underneath large deciduous trees or a shady corridor between tall buildings. Ideally, the tree should be situated to accommodate its beautiful natural shape. This tree will, however, respond well to any pruning that may be needed to help it fit its site.

Although a number of horticultural cultivars of red cedar can be found in the nursery trade, we recommend that whenever possible you grow cedars cultivated from native Willamette Valley seed. This will create a disease-resistant population of trees that will help preserve the local gene pool.

Western Hemlock - *Tsuga heterophylla*

This large conifer can grow to 200 feet tall. The trees have soft, fine foliage, a dense pyramidal crown, and a gracefully drooping leader. Clusters of small one-inch cones droop from branch tips; cones are purplish-green when young and light brown when mature. In the Coast Range and Cascade forests, the tree grows on moist sites, usually establishing in the understory of other conifer species. Few understory plants will grow under the dense canopy of a mature hemlock forest.

The small cones of western hemlock

In the garden, western hemlock may need water during hot summer months, and it does best in sites without direct, hot sunlight or reflected heat. Pioneers used hemlock bark as a tanning agent and pigment. Native Americans used the hemlock extensively for medicine, dyes, and bedding material.

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Friends of Hendricks Park exists for the purpose of...assisting with public education regarding restoration and preservation of natural areas.

Friends of Hendricks Park
P.O. Box 3784
Eugene, OR 97403-0784
www.friendsofhendrickspark.org

Among the goals of the Native Plant Garden at Hendricks Park are... to provide educational opportunities for the community.

Hendricks Park Native Plant Garden
1800 Skyline Blvd.
Eugene, OR 97403-1810
www.ci.eugene.or.us/parks/hendricks

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P.O. Box 902
Eugene, OR 97440
http://emerald.npsoregon.org