

## Douglas-fir

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

**Description:** This massive (100-250 feet tall), elegant, fast-growing conifer is a common and familiar tree in Western Washington. It can be identified by its tall, straight trunk and corky, brown bark which becomes deeply furrowed on older trees. The 3-4 inch cones consist of woody, brown scales with protruding, papery, three-pointed seed bracts.

**Habitat:** Throughout the Pacific Northwest in all but the wettest and driest sites, often growing in mixed stands with hemlock and redcedar. Does best in deep, moist, sandy loams; poorest on gravelly soils. Prefers full sun.

**Advantages/Disadvantages:** An excellent ornamental. The cone and needle-drop makes great humus and mulch for acid-loving plants. Can be used for stream-side or buffer zone plantings. Seeds are eaten by numerous birds and small mammals. Deer and grouse eat new shoots. Plants also provide many species of wildlife with shelter, nest sites, and insects (food). Due to its fast growth, it should not be planted near homes or buildings.

**Suitable Growing Environment:** partial shade or sun and well-drained soils (canopy)

## Western redcedar

*Thuja plicata* Pacific redcedar, giant arborvitae

**Description:** This evergreen conifer can grow over 200 feet tall, with a massive (3-10 feet in diameter) tapering trunk that flares at the base to form buttresses. Bark is thin, shaggy, reddish, and easily peels off into long strips. Needles are flat, overlapping like scales, and are shiny bright-green above, and paler on the underside with white markings. The needles form flattened sprays on drooping branches that turn up at the tips. Cones are clustered near the ends of branches, and are bluish-green when young, becoming brown, half-inch, tulip-shaped cones with woody scales.

**Habitat:** Prefers moist to swampy soils. Full sun to full shade, though seedlings require some shade. Tolerates seasonal flooding and perennially-saturated soils.

**Advantages/Disadvantages:** Aromatic, long-lived (up to 1000 years), and fairly rot-resistant. An excellent choice for wetland and riparian sites, as it thrives in wetter soils better than other evergreens. Forms a shallow, widely-spreading root system, and creates exceptionally durable, large woody debris in streams and on the forest floor. Though it naturally becomes a massive tree, it responds to pruning by sprouting new foliage along the trunk (unlike many conifers), and so can be made into a hedge. Seeds are eaten by numerous species of birds. Deer and elk browse seedlings. Provides nesting sites and cover for many species of birds and small mammals. Plants host butterfly caterpillars. Despite its shallow roots, it tends to be windfirm except in very wet sites.

**Growing Environment:** deep shade or sun and moist soils, partial shade and well-drained soils

## Grand fir

*Abies grandis* lowland white fir, white fir, balsam fir

**Description:** This tall (100-250 feet), straight evergreen tree can be identified by its flat, shiny, dark-green needles; its green to yellow-green or greenish-purple cones; and its bark, which is grayish with light-colored mottling. Needles are 1-1½ inches long, have two white lines on their undersides, and look like they are on opposite sides of each branch. Cones are cylindrical, 2- 4 inches long, held upright, and are found only on higher branches, where they remain through autumn as they gradually fall apart. The bark on young trees is smooth with resin blisters; with age, the resin blisters disappear and the bark becomes somewhat ridged.

**Habitat:** Dry to moist coniferous or mixed forests, from dry mountain slopes to river valleys. Prefers deep, well-drained, alluvial soils. Full sun to partial shade: although seedlings are shade-tolerant, older trees require full sun.

**Advantages/Disadvantages:** An excellent species for restoration, due to the broad range of habitats to which it has adapted, and its drought-tolerance. Though a large tree, its deep, widespread roots make it windfirm. Provides cover and nesting sites for wildlife. Seeds are eaten by numerous birds, Douglas squirrel, and Townsend chipmunk. Not a good choice for most urban yards due to its size.

**Suitable Growing Environment:** partial shade or sun and well-drained soils

## Shore pine

*Pinus contorta* var. *contorta* beach pine, coast pine

**Description:** This pine, together with *P. contorta* var. *latifolia* (lodgepole pine, a variety more common to Eastern Washington) is our only native two-needled pine. In exposed areas near the Pacific coast, it grows 15-50 feet tall, often with a crooked trunk, bushy form, and windblown crown. Slightly further inland, it can have a similar form, or grow as a straight tree to a height of 100 feet with an irregular, pillowy crown. With age, the bark becomes dark-brown and deeply furrowed into flaky plates. Needles are deep green, stiff, sharp-pointed, 1-3 inches long, paired, and often twisted into a spiral. Cones are numerous, small (1-2 inches long), egg-shaped, usually covered with sharp prickles, attached to the branch in a lopsided manner, are slow to open and sometimes remain on the branch for several years.

**Habitat:** A highly-adaptable species found in saturated to excessively well-drained soils. Occurs along the coast and on lowlands, especially on marshy or gravelly sites, where Douglas-fir and western hemlock can't grow well enough to exclude it. Also found in sphagnum bogs in some areas of Western Washington. Tolerant of low-nutrient soils. Full sun.

**Advantages/Disadvantages:** A beautiful, fairly open, small tree with an attractive branching pattern. Its tolerance of salt and low nutrient conditions makes it an especially good choice for seaside plantings. Grows rapidly, and is easy to train to produce various shapes. Used by numerous species of wildlife, some of which eat the seeds, others eat the insects attracted to it, and some use the tree for cover. Porcupines eat the bark.

**Suitable Growing Environment:** sun and well-drained soils (canopy)

## Noble Fir

*Abies procera* Rehd.

**Description:** In the wild, the trees are tall, beautifully symmetrical and grow to over 200 feet in height. The bark is smooth with resin blisters when young and changes to brownish-gray plates with age. The needles are roughly 4-sided (similar to spruce), over 1 inch long, bluish-green but appearing silver because of 2 white rows of stomata on the underside and 1-2 rows on the upper surface. The needles are generally twisted upward so that the lower surface of branches are exposed. The pollen cones are reddish and the seed cones are large (often over 5 inches long), heavy cones concentrated in the tree tops. They are erect and the cones scales are nearly concealed by shaggy-edged, sharp pointed bracts. The cones dissipate in the fall to release their seeds.

**Habitat:** Nobles are native to the Cascade and Coastal ranges of Oregon and Washington. It closely resembles the shasta fir (*Abies magnifica* var. *shastensis*) that is grown in some Pacific Northwest Christmas tree plantations. Nobles grow in middle- to upper-elevation coniferous forests and is often associated with *Abies amabilis* (or "silver fir") and other conifers. The best stands are found in moist, middle elevation areas with deep, rich soils. Middle-elevation stands are usually more open than low-elevation forests and occur on poorer, thinner, rockier soils in areas more frequently disturbed by wind, snow and sometimes fire.

**Uses:** Long considered an excellent Christmas tree because of its beauty, stiff branches and long keepability, the species is growing in popularity (between 25% and 30% of the fresh tree market in the Pacific Northwest). It is also widely used in the greenery business to make wreaths, door swags, garland and other Christmas products. Its lumber is sometimes marketed as "Oregon larch" - possibly after the Larch Mountains because they were covered with towering stands of noble fir. The wood is moderately strong and light weight. It is valued for its light color and uniform straight grain. The earlywood (spring wood) is creamy white to light brown and the latewood (summer wood) gradually changes to reddish brown or lavender tinged. The heartwood is indistinct. The wood is easy to work. Its warm, light color and straight grain makes ideal interior finish material for siding, paneling and doors. It is often sold separately for appearance applications and as Hem-Fir (Hemlock-Fir) for construction applications.

## Vine maple

*Acer circinatum*

**Description:** This deciduous native often grows to 25 feet tall, taking the form of an erect tree (often with multiple stems) or a tangle of branches creeping vine-like along the ground before turning upward. Branches are usually green or slightly reddish. Leaves are 2-4 inches in diameter, opposite, round in form with 5-9 (usually 7) shallow, fan-like and finely-toothed lobes, and palmate veins. In the fall, leaves turn gold or bright red before falling. Like other maples, it has "helicopter" seeds. However, its paired seeds are held wide apart, almost in a straight line, while those of most other maples form a "V". In winter, look for small (less than ¼ inch), opposite buds and a pair of terminal buds.

**Habitat:** Common understory plant in coniferous forests, and in clear-cut or burnt-over areas. Dry to moist sites. Full sun to full shade; prefers some shade, but becomes leggy in deep shade.

**Advantages/Disadvantages:** Has excellent soil-binding qualities, is shade-tolerant, and produces beautiful fall color. Provides valuable forage for deer and elk, and cover for deer, elk, birds, and small mammals. Flowers attract butterflies. Several species of birds and mammals eat the seeds.

**Suitable Growing Environment:** deep shade or sun and moist soils, partial shade or sun and well-drained soils

## Cascara

*Rhamnus purshiana* cascara buckthorn, cascara sagrada

**Description:** This deciduous tree rarely grows over 35 feet tall. Its bark is thin and smooth, becoming scaly on relatively rare, mature trees. Leaves are alternate, 2-6 inches long, dark glossy-green, egg-shaped to oblong, with smooth or finely-toothed margins. Leaf veins are distinctive, being very visible, recessed, and pinnately-arranged. Flowers are tiny and greenish, with minute petals. Berries are small (under ½ inch long), and yellow or red, ripening to black. In winter, look for alternate, naked buds (the tiny, new leaves are not protected by bud scales).

**Habitat:** In moist, well-drained soils. Prefers south-facing aspects with conifers, or swampy clearings. Full sun to full shade.

**Advantages/Disadvantages:** Possesses good soil-binding qualities, grows well on disturbed sites, and tolerates shade. The leaves and berries are attractive. Berries are eaten by birds, raccoons, and small mammals. Provides cover for wildlife, and insects for insect-eating birds. Deer browse on foliage and twigs. Flowers are pollinated by yellow jackets and related insects. The bark contains a laxative that is toxic in excess. It is fairly sensitive to pollution.

**Suitable Growing Environment:** partial shade and well-drained soils

## Paper Birch

*Betula papyrifera* Canoe Birch, Silver Birch

**Description:** Medium sized, single or multiple stemmed, deciduous tree. In forests a slender trunk with a narrow crown, but in openings a wider crown spreading out from near the base. Multiple-stemmed trees commonly occur as a result of browsing by deer. Height at maturity 70'-80' and 10"-12" in diameter, sometimes to 30". Height growth ceases at about 60-70 years of age; few live more than 140 years. Shallow-rooted: few roots deeper than 24" below the soil surface.

**Habitat:** Grows best on deep, well-drained to moderately well-drained, sandy or silty soils common on glacial deposits. It grows on a wide range of soil textures from gravels to silts, and grows on organic bog and peat soils.

**Advantages:** Young stands of paper birch and associated species provide prime browse and cover for deer. Numerous birds and small mammals eat paper birch buds, catkins and seeds. Numerous cavity-nesting birds nest in paper birch, including woodpeckers, chickadees, nuthatches, and swallows. A favorite feeding tree of yellow-bellied sapsuckers, which peck holes in the bark to feed on the sap. Hummingbirds and red squirrels also feed at sapwells in paper birch created by sapsuckers. Ruffed grouse eat the catkins and buds. Redpolls, siskins, and chickadees obtain a considerable portion of their annual diet from birch seeds.

## **Red-osier dogwood**    *Cornus sericea ssp. Occidentalis* creek dogwood, red-twig dogwood

**Description:** This many-stemmed, deciduous shrub grows up to 15 feet tall. Leaves are opposite, 2-6 inches long, elliptical, pointed, with 5-7 distinct, curving veins that merge at the smooth or wavy leaf margin. In autumn, leaves turn a deep red before falling. Twigs and stems are often reddish or purple. Small, greenish-white flowers grow in dense, flat-topped clusters at the ends of branches, and produce bluish-white berries in the fall.

**Habitat:** In moist, well-drained soils, especially along stream banks and in swamps. Full sun to partial shade. Tolerates seasonal flooding.

**Advantages/Disadvantages:** Possesses excellent soil-binding qualities. Red stems make it attractive with or without foliage. Provides excellent wildlife cover, and is browsed by rabbits, deer, and elk. Hosts butterfly caterpillars. Buds and fruit provide food for numerous birds, small mammals, and black bear.

**Suitable Growing Environment:** deep shade and moist soils

## **Pacific ninebark**    *Physocarpus capitatus* ninebark

**Description:** This multi-stemmed, deciduous shrub grows 6-13 feet tall, with thin, reddish-brown or yellowish-brown bark that flakes away in thin strips. Leaves are alternate, 1½ - 3½ inches long, and serrated, with 3-5 toothed lobes. Flowers are small, white, and are borne in dense, round pompom clusters about 1-3 inches in diameter. Fruits form inconspicuous, reddish clusters, each fruit being about ¼ inch in diameter.

**Habitat:** Moist to wet sites, in somewhat open areas (e.g., wooded edges bordering meadows and along water). More often in wetlands than in dry, brushy areas. Full sun to partial shade.

**Advantages/Disadvantages:** Has excellent soil-binding qualities, attractive leaves, and beautiful flowers. Provides cover, nesting sites, and food for birds and small mammals. Deer browse on the twigs, foliage, and buds. Bears eat the berries.

**Suitable Growing Environment:** sun and moist soils

## **Red elderberry**    *Sambucus racemosa ssp. pubens var. arborescens* coast red elderberry

**Description:** Similar to blue elderberry, differing only in the number of leaflets (5-7, rather than 5-9), the shape of the flower clusters (pyramidal, rather than flat-topped), and the color of the berries (bright red). It is difficult to distinguish between the two elderberries in winter, though the wart-like lines on red elderberries are more pronounced than those of the blue.

**Habitat:** Moist to dry soils. In clearings and open forest, and on stream banks. Full sun to partial shade.

**Advantages/Disadvantages:** Eating raw berries may cause nausea. Relatively short-lived, but reseeds easily.

**Suitable Growing Environment:** deep shade or sun and moist soils

## Peafruit rose

*Rosa pisocarpa* clustered wild rose, swamp rose

**Description:** Like Nootka rose, this rose grows up to 8 feet tall, and has a pair of large prickles at the base of each leaf or bud. Leaves are deciduous, alternate, and contain 5, 7, or 9 toothed, sharply-pointed leaflets. Flowers are usually smaller than those of Nootka rose (less than 1½ inches across), pink, and appear in clusters of several flowers. The bright-red hips, with sepals attached, can stay on the plant well into the winter and are the best clue for winter identification.

**Habitat:** Edges of marshes and streams, roadside ditches, and other wet areas. Full sun to partial shade. Fairly tolerant of dry conditions and infertile soils.

**Suitable Growing Environment:** sun and moist soils

## Mock-orange

*Philadelphus lewisii* var. *gordonianus* Lewis mock-orange, syringa

**Description:** This multiple-stemmed, loosely-branched shrub grows 5-10 feet tall, and can be distinguished from similar shrubs by its showy, fragrant, white flowers; thin, scaly bark; and pairs of opposite branchlets. Leaves are opposite, deciduous, oval, 1-3 inches long, with short stems, smooth or sparingly toothed edges, and 3-5 conspicuous veins originating near the leaf base. Flowers appear May through July in showy clusters of 3-15 flowers at the ends of branches. Fruits are oval, woody capsules about ¼ inch long. In winter, plants can be recognized by the light, somewhat reddish-orange color of younger twigs, opposite bud scars, and the absence of any noticeable buds.

**Habitat:** Grows in moist, well-drained soils to dry soils. Full sun to partial shade.

**Advantages/Disadvantages:** It is highly prized as an ornamental due to its showy and fragrant blooms. Deer browse on twigs and foliage. Flowers attract butterflies and bees.

**Suitable Growing Environment:** partial shade or sun and well-drained soils

## Snowberry

*Symphoricarpos albus* var. *laevigatus* common snowberry, waxberry

**Description:** This low-growing (2-6 feet tall) deciduous shrub has very slender, opposite-branching stems, and a dense system of rhizomes. Leaves are deciduous, opposite, small (¾ - 2½ inches long), dull green in color, and have smooth or lobed edges. While roughly oval, leaf shape varies greatly, and leaves on new growth may be deeply lobed. Flowers are small (¼ inch or less), pink to white, bell-shaped, and appear in short, dense clusters. Berries persist through winter and are white, up to ½ inch in diameter, and grow in tight clusters. In winter, look for white berries and small, opposite buds on very slender twigs.

**Habitat:** Dry to wet sites. In forests, shrub thickets, open slopes, dense woods, along roadsides, on sandy river banks, in deciduous uplands, and under Pacific madrones. Full sun to partial shade.

**Advantages/Disadvantages:** Excellent for binding soil and forming thickets. Plant is particularly attractive when in fruit. Tolerates some flooding when dormant. Deer browse foliage. Flowers attract butterflies. Fruits are eaten by many birds, and may be an important food source for wildlife at winter's end.

**Suitable Growing Environment:** sun and moist soils, sun or partial shade and well-drained soils