Trees and Shrubs

*Abies grandis*Grand fir

Exposure: full sun to shade
Soil moisture: moist to dry
Transplanting success: high
Growth rate: moderate
Form: coniferous evergreen to 260 feet; deep, extensive root system

Grand fir is adapted to a wide range of habitats and is drought tolerant. It has deep, wide-spread roots and is a good choice for binding soil at the top or base of a slope. Provides seeds, cover, and nesting sites for wildlife. Click here for photographs of this species on the University of Washington Herbarium website.

*Acer circinatum*Vine maple

Exposure: partial shade to deep shade, full sun if ample soil moisture
Soil moisture: moist to dry
Transplanting success: high
Growth rate: moderate
Form: deciduous small tree or large shrub to 20 ft; moderately deep root system

Vine maple is relatively slow to establish, especially in the full sun, but it usually is a survivor. Provide mulch and/or irrigation for best results. Click here for photographs of this species on the University of Washington Herbarium website.

*Acer macrophyllum*Big leaf maple

Exposure: full sun to shade
Soil moisture: wet to dry
Transplanting success: high
Growth rate: rapid
Form: deciduous large tree to 110 feet; deep, wide spreading roots

Big leaf maple is an excellent pioneer species that tolerates poor soil conditions and grows as much as a few feet a year. Its deep roots are good for stabilizing steep slopes, especially on stream ravines and marine shorelines. It re-sprouts vigorously from cut stumps. Click here for photographs of this species on the University of Washington Herbarium website.

***Alnus rubra*Red alder**
Exposure: full sun to light shade
Soil moisture: wet to moist
Transplanting success: medium
Growth rate: rapid
Form: deciduous tree to 90 feet; branching, fibrous, moderately deep root system with taproot

One of the best species for high-speed revegetation–alder will grow several feet a year, even in poor soil. Alder roots are associated with nitrogen-fixing bacteria that improve the soil. If there are mature red alder near the site, we suggest not planting alder because seedlings will usually move in on their own. Click here for photographs of this species on the University of Washington Herbarium website.

***Amelanchier alnifolia* Serviceberry**
Exposure: full sun to shade
Soil moisture: moist to dry
Transplanting success: medium
Growth rate: moderate, may be slow to establish
Form: deciduous large shrub or small tree to 20 feet; tap root, may spread by suckers

Berries and foliage are favored by wildlife; it is common along woodland margins and is drought tolerant. Click here for photographs of this species on the University of Washington Herbarium website.

***Arbutus menziesii*Pacific madrone**
Exposure: sun to partial shade
Soil moisture: dry and well-drained
Transplanting success: very low
Growth rate: slow
Form: broadleaf evergreen tree to 75 feet; deep taproot

This Pacific Northwest favorite grows on dry sites, usually near salt water. Seeds germinate easily, but it is very difficult to transplant successfully; saplings are susceptible to sunburn and various diseases. We recommend small material and several plants for every one you want to succeed. Success may be higher if you place the plant in the same orientation that it grew in the nursery (we mark the south side of each container). Madrones can die from over-watering, so don't plant it in an area that will receive frequent irrigation. Click here for photographs of this species on the University of Washington Herbarium website.

***Cornus sericea (stolonifera)* Red osier dogwood**
Exposure: full sun to partial shade
Soil moisture: saturated to moist

Transplanting success: high for container-grown, low or medium for live stakes
Growth rate: rapid
Form: deciduous large shrub or small tree, 5-20 feet depending on site conditions; fibrous, shallow root system, spreads by layering and suckers

Typically found in fairly wet sites, such as ditches, streambanks or lake shores. It can tolerate dry conditions in summer as long as it receives adequate water in the early growing season. Fast growing, vigorous, and spreading; however, deer love to chomp on it (though this rarely kills it). Red osier dogwood can be grown from live stakes and other cuttings with variable success; we've heard that installing them in shade or part shade gives the best results. Click here for photographs of this species on the University of Washington Herbarium website.

***Corylus cornuta* var. *californica* Beaked hazelnut**
Exposure: sun to deep shade
Soil moisture: moist and well-drained to dry
Transplanting success: medium-high
Growth rate: moderate
Form: deciduous shrub 4-12 feet; branching, roots, suckers occasionally

This species grows on moist but well-drained soils, typically in shade to part sun. Can be transplanted into full sun if irrigation is provided during first few years. Nuts are coveted by wildlife. Click here for photographs of this species on the University of Washington Herbarium website.

***Crataegus douglasii* Black hawthorn** or **Douglas hawthorn**
Exposure: sun to partial shade
Soil moisture: wet to very moist
Transplanting success: high if adequate moisture
Growth rate: moderate to rapid
Form: deciduous shrub or small tree to 30 feet; branching, moderately deep root system

Black hawthorn grows well when planted into wet meadows and water edges, such as streambanks. It provides good forage and cover for wildlife. It is so much favored by deer, that it may not be a good choice if deer will be frequenting the site. When strategically placed, it can also be a deterrent against unwanted trespassers. Click here for photographs of this species on the University of Washington Herbarium website.

***Frangula (Rhamnus) purshiana* Cascara**
Exposure: full sun to shade
Soil moisture: wet to dry

Transplanting success: high
Growth rate: rapid
Form: deciduous tree to 30 feet; fibrous, moderately deep root system with taproot

Cascara transplants well, thrives in a range of conditions, and grows fairly quickly, making it useful for revegetation in a variety of situations. It is a small tree with relatively open growth and may be a good choice for slope plantings where view preservation is important. It is not a good species for sites with bad air quality as it is sensitive to pollution. Cascara is very common in western Washington, often mistaken for red alder–they look very similar when full-grown. Click here for photographs of this species on the University of Washington Herbarium website.

Fraxinus latifolia Oregon ash

Exposure: full sun to partial shade
Soil moisture: wet to very moist; will tolerate standing water early in growing season
Transplanting success: high
Growth rate: rapid given adequate moisture
Form: deciduous tree to 80 feet; branching, moderately deep root system

We select this hardy, fast growing tree for plantings on flood plains and wet meadows. It is also found on the banks of lakes and streams on highly organic substrate. It prefers saturated soil, making it one of our wettest trees. Click here for photographs of this species on the University of Washington Herbarium website.

Gaultheria shallon Salal

Exposure: partial shade to deep shade
Soil moisture: moist to dry
Transplanting success: medium to high if shaded, low if not
Growth rate: slow until established
Form: evergreen shrub 2-5 feet, sometimes more; very shallow and fibrous root system, spreads vigorously by underground stems once well established

We've all seen salal growing in the full sun, but *transplanting* salal into full sun on bare mineral soil is a recipe for failure. It is not a pioneer species and suffers from severe transplant shock. If it survives, it generally takes at least a few years before its typical, rampant growth begins. For somewhat better results, plant into shade or partial shade and add woody mulch. It can survive full sun if irrigated and mulched, but growth is usually meager. Click here for photographs of this species on the University of Washington Herbarium website.

Holodiscus discolor **Oceanspray**
Exposure: full sun to shade
Soil moisture: moist to dry
Transplanting success: high
Growth rate: rapid
Form: deciduous large shrub to 12 feet; branching, fibrous, moderately deep root system, sometimes spreads by root suckers

Oceanspray tolerates a wide range of environmental conditions and generally does well on all but very wet or very hot and dry sites. It is widespread across the Puget Sound lowlands in habitats ranging from ocean bluffs to forest understory. Oceanspray can be a good choice for erosion control plantings. Click here for photographs of this species on the University of Washington Herbarium website.

Lonicera involucrata **Black twinberry**
Exposure: full sun to partial shade
Soil moisture: saturated to moist
Transplanting success: high
Growth rate: rapid
Form: deciduous shrub to 10 feet; branching, fibrous, shallow roots

This hardy species will grow like gangbusters in the right situation; with plentiful moisture it will put on several feet a year; it is less vigorous in drier spots, but tends to be a survivor. Berries are favored by birds. Click here for photographs of this species on the University of Washington Herbarium website.

Mahonia (Berberis) aquifolium **Tall Oregon grape**
Exposure: full sun to partial shade
Soil moisture: moist to dry
Transplanting success: medium to high
Growth rate: moderate
Form: evergreen shrub to 8 feet; moderately deep taproot, spreads by underground stems

Tall Oregon grape is typically found on rocky soil in the open sun or partial shade. It can suffer from transplant shock, but is very drought tolerant and may survive on sites that will not be irrigated. Birds love the berries. Click here for photographs of this species on the University of Washington Herbarium website.

Mahonia (Berberis) nervosa **Low Oregon grape**
Exposure: shade
Soil moisture: moist to dry

Transplanting success: medium
Growth rate: slow
Form: evergreen shrub to 2 feet; taproot, spreads by underground stems

The common names “long-leafed”, “low”, and “dull” all apply to this one species of Oregon grape! Its needs are very different from tall Oregon grape. It requires shade to survive transplanting, and on drier or nutrient-poor soils, organic mulch such as wood chips is advised. We have found this species difficult to establish except as an understory planting—it is best suited for enhancement projects. Click here for photographs of this species on the University of Washington Herbarium website.

Malus fusca (Pyrus fusca) Western or Pacific crabapple

Exposure: full sun to shade
Soil moisture: wet to moist
Transplanting success: high
Growth rate: moderate to rapid
Form: deciduous tree or shrub up to 35 feet

Western crabapple provides excellent cover and food for wildlife. It has dense, thicket-like growth that deters predators and produces abundant crabapples. Twigs are also favored by browsing animals, so much so that you may need to use a deer-repellant or other protection to avoid losing young plants. Transplants tolerate a relatively wide range of soil and light conditions. Click here for photographs of this species on the University of Washington Herbarium website.

Myrica californica Pacific wax-myrtle

Exposure: full sun to shade
Soil moisture: moist but well-drained
Transplanting success: high
Growth rate: moderate to rapid
Form: broadleaf evergreen shrub to 15 feet

Pacific wax myrtle is typically found on the coast in sandy soils. It can do well inland with similar soil conditions. Given enough water, it is the fastest growing evergreen shrub in our inventory. Click here for photographs of this species on the University of Washington Herbarium website.

Oemleria cerasiformis Indian plum

Exposure: partial shade to shade
Soil moisture: moist to dry
Transplanting success: high
Growth rate: moderate to rapid
Form: deciduous shrub to 15 feet; branching, fibrous, shallow root system

This species does fine in poor soil conditions with shade. Planted in the sun, it may scrape by-provide mulch and irrigation or expect high mortality. The "plums" are sought after by birds. It grows well on slopes and is a good candidate for erosion control plantings where shade is available. Click here for photographs of this species on the University of Washington Herbarium website.

Philadelphus lewisii **Mock orange**
Exposure: full sun to partial shade
Soil moisture: moderately moist to dry
Transplanting success: medium to high
Growth rate: rapid
Form: deciduous shrub to 10 feet; moderately deep, branching roots

Mock orange favors dry, rocky soils and is common only in the southern part of western Washington. However, its tolerance for dry conditions (and probably it's heavenly fragrance) have meant that it is commonly used for revegetation projects throughout western Washington. It may grow slowly if the soil is extremely dry or poor in nutrients, but in most cases this species grows by leaps and bounds. Mock orange is a nectar plant for butterflies. Click here for photographs of this species on the University of Washington Herbarium website.

Physocarpus capitatus **Pacific ninebark**
Exposure: full sun to shade
Soil moisture: wet to moist
Transplanting success: high
Growth rate: rapid
Form: deciduous shrub to 12 feet; fibrous, shallow root system, spreads by suckers

Pacific ninebark is abundant along wet roadsides in our area. It favors moist to very wet soils, but also can sometimes be found on drier sites. It does fine with "flashy" hydrology–alternatingly wet and dry–which makes it useful for planting stormwater ponds and other fluctuating water edges. The twigs and greenery provide browse for wildlife. Click here for photographs of this species on the University of Washington Herbarium website.

Picea sitchensis **Sitka spruce**
Exposure: full sun to partial shade
Soil moisture: moderately wet to moist
Transplanting success: high
Growth rate: moderate to rapid
Form: coniferous evergreen tree shrub to 200 feet; shallow, branching, shallow roots

Sitka spruce is most abundant on the wet, sandy soils of the coast and associated rainforests. In Puget Sound it is found only along the major rivers. It prefers moist or wet well-drained soils and transplants fine. Along with shore pine, Sitka spruce can be a good choice over western hemlock and western red cedar for transplanting into sunny sites. Click here for photographs of this species on the University of Washington Herbarium website.

***Pinus contorta* var. *contorta* Shore pine**
Exposure: full sun to partial shade
Soil moisture: wet to dry
Transplanting success: high
Growth rate: rapid
Form: coniferous evergreen tree to 60 feet; tap root

Shore pine is common in coastal bogs and Puget Sound wetlands. It accepts an extraordinary range of moisture–from wet or even saturated to dry, rocky soil. It also will tolerate bare mineral soil under full sun, which means it can survive open, unimproved sites. Give it fluffy loam and mulch, and it will thrive all the more. Click here for photographs of this species on the University of Washington Herbarium website.

***Populus balsamifera (trichocarpa)* Black cottonwood**
Exposure: full sun to partial shade
Soil moisture: saturated to moist
Transplanting success: high (both container-grown & live stakes)
Growth rate: rapid
Form: deciduous tree to 160 feet; roots are fibrous and branching, shallow or deep, and extensive

Cottonwood grows along lakeshores and streams and anywhere else the soil is wet enough. It is tolerant of nutrient-poor soil, but does not do well with drought until established. Keep it wet, and it will grow a dozen feet a year. Live stakes of this species have a very high success rate. Cottonwood may out-compete other native plantings. It is the tallest deciduous tree species in North America.Click here for photographs of this species on the University of Washington Herbarium website.

***Prunus virginiana* Choke cherry**
Exposure: full sun to partial shade
Soil moisture: moist to dry
Transplanting success: high
Growth rate: moderate
Form: deciduous shrub or small tree to 20 feet; spreads from suckers

Choke cherry is found in clearings and edges on well-drained soils of western Washington. It is more common east of the Cascades. Provides food for wildlife; nearly all parts of the plant are favored by some creature or another.

***Pseudotsuga menziesii*Douglas-fir**
Exposure: full sun to light shade
Soil moisture: moist to dry
Transplanting success: high
Growth rate: moderate to rapid
Form: evergreen tree to 200 or 300 feet; tap or modified taproot, shallow or deep, widespread root system

Doug-fir prefers open sites and grows well in mineral soil. It is also drought tolerant and fast growing, which means it can accept harsh conditions that might make other plants wither. Also an excellent species for anchoring steep slopes; planted at the top or toe of a rise, its root system provides far-reaching stability. While we've seen this species transplant very well from one and two gallon pots, we've heard that larger specimens can suffer from severe transplant shock. Click here for photographs of this species on the University of Washington Herbarium website.

***Quercus garryana* Garry oak**
Exposure: full sun to partial shade
Soil moisture: moist to dry, well-drained
Transplanting success: medium to high
Growth rate: slow to moderate
Form: deciduous tree to 80 feet; deep taproot

Garry oak is typical of well-drained, rocky prairie soil in the Puget Trough and, once established, withstands drought very well. Also found on flood plains where it can tolerate winter flooding along with summer drought. Transplanting success is highest in partial shade or with part-shade screens. Oaks grow slowly on top and quickly below; we grow our oaks in tall pots, since even a two-inch seedling will have a taproot eighteen inches long. Acorns are coveted food for wildlife. Click here for photographs of this species on the University of Washington Herbarium website.

***Rhododendron macrophyllum* Pacific rhododendron**
Exposure: partial shade to shade
Soil moisture: moderately moist to dry
Transplanting success: low to medium
Growth rate: slow
Form: evergreen shrub to 20 feet; fibrous, massive, and shallow roots

Like other native species in the heath family (*Ericaceae*), Pacific rhododendron is tricky to establish successfully. With an organic mulch and part shade, transplanting success may be high, but even so, it is slow growing. Not a plant for quick results. It is the state flower of Washington state! Click here for photographs of this species on the University of Washington Herbarium website.

Ribes divaricatum **Straggly gooseberry**
Exposure: partial shade to shade
Soil moisture: wet to moist
Transplanting success: medium
Growth rate: moderate
Form: thorny, deciduous shrub to 8 feet; branching root system

Gooseberries are important for wildlife as hedgerows or individual plantings. The berries provide food and the dense, prickly growth is excellent cover. This species is also called wild gooseberry and wax currant (usually "currants" are thornless). Click here for photographs of this species on the University of Washington Herbarium website.

Ribes sanguineum **Red-flowering currant**
Exposure: sun to part shade
Soil moisture: dry
Transplanting success: medium
Growth rate: moderate
Form: deciduous shrub to 10 feet; branching root system

The trick with red-flowering currant is not *over* watering, as it is susceptible to root rot. Make sure it is planted in well-drained soil and do not irrigate unless the soil is very dry. This species is scattered in many dry habitats throughout western Washington; it is widely planted for its sun and drought tolerance and its ornamental qualities. The flowers are magnets for hummingbirds, and the fruit food for many other birds and mammals. Click here for photographs of this species on the University of Washington Herbarium website.

Rosa gymnocarpa **Bald-hip rose**
Exposure: partial shade to shade
Soil moisture: moist to dry
Transplanting success: medium
Growth rate: moderate
Form: deciduous shrub to 6 feet; spreads by suckers

This is the driest and shadiest of our three native roses; it is typically found in dry to moist native forests. Bald-hip rose can be transplanted into the open successfully if adequate moisture and mulch are provided, but full sun is definitely not its preferred condition. Rose

hips are eaten by wildlife. Click here for photographs of this species on the University of Washington Herbarium website.

Rosa nutkana **Nootka rose**
Exposure: full sun to partial shade
Soil moisture: wet to moist, dry okay if shaded
Transplanting success: high
Growth rate: rapid
Form: deciduous shrub to 10 feet; branched, fibrous, shallow roots, spreads vigorously by suckers

Nootka rose is a workhorse of a plant. It is successful in a range of sun and moisture conditions and spreads easily. We have monitored harsh restoration sites where Nootka rose was not only surviving but spreading. It is also one of the few species that can compete with Himalaya blackberry. Nootka rose likes it wetter than bald-hip rose but not as wet as swamp rose. Click here for photographs of this species on the University of Washington Herbarium website.

Rosa pisocarpa **Swamp rose**
Exposure: full sun to partial shade
Soil moisture: saturated to moist
Transplanting success: high
Growth rate: rapid
Form: deciduous shrub to 8 feet; branched root system, spreads vigorously by suckers

In wet soils, swamp rose grows quickly and spreads to create thickets, even holding its own against the aggressive Douglas spirea. It transplants well and is one of the most dependable plants for wetland revegetation. It prefers the wettest conditions of our three native roses. It will do okay in merely moist soils as long as they don't dry up entirely during the summer. Click here for photographs of this species on the University of Washington Herbarium website.

Rubus parviflorus **Thimbleberry**
Exposure: full sun to shade
Soil moisture: moist
Transplanting success: high
Growth rate: rapid
Form: deciduous shrub 3-8 feet; spreads vigorously by suckers

This common species grows very well planted into moist soils–it quickly becomes established, spreading to form thickets. It also can do well in relatively dry soil if initial irrigation, shade, or mulch is provided. Wet soils are fine, if well drained. Thimbleberry is

often a good choice for erosion control plantings, since it is drought tolerant and spreads by underground stems. We have found this species to be a good survivor! Click here for photographs of this species on the University of Washington Herbarium website.

Rubus spectabilis **Salmonberry**
Exposure: partial shade to shade
Soil moisture: wet to moist
Transplanting success: medium to high
Growth rate: moderate to rapid
Form: deciduous shrub to 12 feet; fibrous shallow roots, spreads by suckers

Salmonberry is a frequent choice for mitigation sites, but some practioners have reported high mortality. This may be due to droughty conditions that salmonberry seedlings cannot tolerate. In our experience, given adequate moisture or shade during establishment, this species grows vigorously and spreads to form thickets. May be planted in full sun if soil remains moist through the summer. Click here for photographs of this species on the University of Washington Herbarium website.

Salix hookeriana **Hooker's willow**
Exposure: full sun to partial shade
Soil moisture: saturated to moist
Transplanting success: high (both container-grown & live stakes)
Growth rate: rapid
Form: deciduous tree or shrub to 20 feet; fibrous, moderately deep root system

Hooker's willow is generally found within a few miles of salt water. All native willows are excellent for stabilizing slopes and bluffs, as long as there is plenty of moisture. This species is also be known as Piper's willow (*Salix piperi*). Click here for photographs of this species on the University of Washington Herbarium website.

Salix lucida (lasiandra) **Pacific willow**
Exposure: full sun to partial shade
Soil moisture: saturated to moist
Transplanting success: high (both container-grown & live stakes)
Growth rate: rapid
Form: multi-stemmed deciduous tree to 60 feet; fibrous, moderately deep and widespread root system

Pacific willow is the tallest of the native willows. Given ample moisture, it grows abundantly and can quickly become established to anchor soil at the base of a slope. Pacific willow grows very well from cuttings, although the wood is somewhat brittle and live stakes may split if pounded vigorously. Click here for photographs of this species on the University of Washington Herbarium website.

Salix scouleriana **Scouler's willow**
Exposure: full sun to partial shade
Soil moisture: moderately dry to moist
Transplanting success: high (both container-grown & live stakes)
Growth rate: moderate to rapid
Form: deciduous tree or shrub to 40 feet; fibrous, moderately deep and widespread roots

Scouler's willow is drought tolerant and prefers drier sites than the other western Washington willows. This makes it a good choice for planting on moderately dry slopes or at the top of stream banks. Also the most shade tolerant of our willows and may work for shady wetland plantings. Planted from live stakes, this species root more slowly and may not leaf out until late spring, but the success rate is still generally high. Click here for photographs of this species on the University of Washington Herbarium website.

Salix sitchensis **Sitka willow**
Exposure: full sun to partial shade
Soil moisture: saturated to moist
Transplanting success: high (both container-grown & live stakes)
Growth rate: rapid
Form: deciduous shrub to 25 feet; fibrous, moderately deep and widespread roots

Sitka is the most common native willow in south Sound wetlands. This species is a shrubby willow, but can still attain heights of twenty-five feet or more. To maintain a view, you can cut them down by half their height without significant harm to the plants. Sitka willow is our favorite choice for live stakes, because it has a very high success rate and the wood stays sound when pounded with a mallet. Click here for photographs of this species on the University of Washington Herbarium website.

Sambucus cerulea **Blue elderberry**
Exposure: full sun to light shade
Soil moisture: moderately moist to dry, must be well-drained
Transplanting success: medium
Growth rate: moderate
Form: deciduous shrub to 20 feet, thick taproot

This species is generally found in open sites with rocky or gravelly soil, primarily in the Puget Sound prairies and further south; it is much more common east of the Cascades. Blue elderberry must be planted into well-drained soil or will likely suffer high mortality Berries are important food for wildlife and come later in the season than berries of most other natives. Click here for photographs of this species on the University of Washington Herbarium website.

Sambucus racemosa **Red elderberry**
Exposure: full sun to shade
Soil moisture: moist to dry
Transplanting success: medium
Growth rate: rapid
Form: deciduous shrub to 20 feet; fibrous, branching, shallow root system

Red elderberry does best in moist, well-drained soil. Occasionally it does not survive transplanting, but once it lives through transplant shock it grows vigorously even in its first growing season. Stems that are damaged or die back have an amazing ability to regenerate from the roots. Click here for photographs of this species on the University of Washington Herbarium website.

Symphoricarpos albus **Snowberry**
Exposure: full sun to shade
Soil moisture: very moist to dry
Transplanting success: high
Growth rate: rapid
Form: deciduous shrub to 2-6 feet; fibrous, shallow root system, spreads vigorously by suckers

Snowberry is an incredible survivor, flourishing in situations that would slay a lesser plant. It transplants well, tolerates sun or shade, withstands drought and/or occasional flooding, and spreads quickly even in poor soil or on steep hillsides. Another plus for snowberry is that it is one of the few native shrubs that stays small–it averages about four feet tall–and thus is a good choice for areas where view corridors are important. Hooray snowberry! Click here for photographs of this species on the University of Washington Herbarium website.

Thuja plicata **Western red cedar**
Exposure: partial shade to deep shade
Soil moisture: wet to moist, tolerates seasonal flooding
Transplanting success: medium
Growth rate: moderate
Form: coniferous evergreen tree to 200 feet with buttressed base; shallow, widely spreading root system

Western red cedar does not do well planted in open sites; the foliage sunburns easily and transplants often do not survive. With mulch and ample moisture, success in the sun will be higher, but this species is better suited to shady, nutrient rich sites. If the site is somewhat dry, provide mulch and shade. If the site is wet, plant the cedar where it will not be saturated during the growing season. Click here for photographs of this species on the University of Washington Herbarium website.

***Tsuga heterophylla*Western hemlock**
Exposure: partial shade to deep shade
Soil moisture: wet to moist
Transplanting success: medium
Growth rate: moderate
Form: coniferous evergreen tree to 200 feet; shallow, slow-growing roots becoming wide-spread

Like western red cedar, western hemlock transplants best into shaded sites; seedlings are often dried up by sun. This species is not tolerant of drought after transplanting, but will accept a fairly wide range of soil moisture if mulch and/or shade are available. At the nursery, we have seen best root growth with very low levels of fertilization. Click here for photographs of this species on the University of Washington Herbarium website.

***Vaccinium ovatum*Evergreen huckleberry**
Exposure: partial shade to shade
Soil moisture: moist to dry
Transplanting success: medium
Growth rate: slow until established
Form: evergreen shrub to 12 feet; fibrous, shallow root system

Like other natives in the heath family, Evergreen huckleberry can be difficult to establish, although it may be the easiest of the lot! Success is higher with shaded plantings, but with rich soil or an organic mulch and sufficient moisture, sun plantings can work. Evergreen huckleberry seems to grow most gloriously on well-drained marine bluffs and shorelines. Click here for photographs of this species on the University of Washington Herbarium website.

***Vaccinium parvifolium*Red huckleberry**
Exposure: shade to deep shade
Soil moisture: moist to dry
Transplanting success: low to medium
Growth rate: slow until established
Form: deciduous shrub to 12 feet; deep and spreading, woody roots

Typically, red huckleberry favors rotting wood as a substrate, a difficult preference to satisfy at a restoration site. Certainly, if there is rotten wood available, plant directly into it or break it up and mix it into the soil. Otherwise, provide an organic mulch such as wood chips. This species is shade dependant–do not plant it in the full sun, as it will shrivel and die.