

Plant Propagation
Field Guide

SYMBOL KEY

Best Season
for Propagation

Propagation
Method



Autumn



Seed



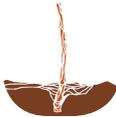
Winter



Hardwood cutting



Spring



Live staking



Summer



Layering

VINE MAPLE

Acer circinatum



Best grown from salvaged plants or by layering. Two-leaf seedlings growing around trees in urban settings may be dug up and potted immediately. Water sparingly for the first summer after potting; after planting out the young seedlings, water only as necessary. Even mature specimens can be successfully salvaged given sufficient care. Layering can be used to multiply plants you already have. It can also be grown from seed, but seeds are difficult to germinate. Collect seeds September to October as they begin to dry out and turn brown, and sow immediately. Water seedlings sparingly for the first summer.



Seed



Form

BIGLEAF MAPLE

Acer macrophyllum

Easy to grow from seed. Collect seeds September to October, and sow as soon as possible, as they do not store well. Seedlings under three feet tall can be salvaged.



2

SERVICEBERRY

Amelanchier alnifolia

Can be grown from seed or salvaged seedlings. Collect fruit when ripe (in late summer) and separate seeds from pulp. Seed not sown in the fall should not be allowed to dry out, and needs to be cold-stratified for 3–6 months to break seed dormancy. Seedlings under three feet tall can be salvaged.



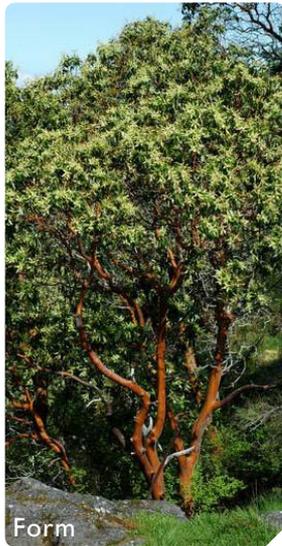
4

PACIFIC MADRONE

Arbutus menziesii



Can be purchased from nurseries, but plants should be under one foot tall as they quickly grow deep taproots. Can be grown from seed. Collect fruit October to December, and remove pulp before sowing. To reduce transplant trauma to roots, sow each seed into its own small container. Seeds not planted in the fall may need to be cold-stratified 1–2 months to break seed dormancy. Seedlings should be transferred into larger containers until they are two feet tall before planting out. Can be grown from hardwood cuttings or layered. Seedlings under six inches can be salvaged, but should be kept in deep containers until they are two feet tall.



5

RED ALDER

Alnus rubra



Seeds germinate easily. Collect seeds September to October. Seed can be planted in the fall but the best time to sow seeds is in the spring. Due to their size, seeds should not be covered or they will not germinate. Seedlings under four feet tall can be salvaged; when digging them, notice the nitrogen-fixing bacteria nodules on the roots! Layering may also work.



3

RED-OSIER DOGWOOD

Cornus sericea

Easiest to propagate from hardwood cuttings, including live stakes. Cuttings taken in the spring will also root readily and grow rapidly, but must be well-watered over the summer. Can also be grown from seed collected August to September. Plant the whole berries (you don't need to clean them) in flats, one-gallon pots, or garden beds (if the berries are dry, soak them for 24 hours before planting). Some of the seeds will germinate soon after sowing, and should be transplanted into gallon containers. The rest of the seeds will germinate the following spring. Transplant seedlings or rooted cuttings before roots grow too large. Can also be propagated by layering, but hardwood cuttings are generally preferred.



Form



Twig



Fruit

OREGON ASH

Fraxinus latifolia

Best grown from seeds or salvaged seedlings. Collect seed from August to October, and sow as soon as possible in trays or garden beds. Mulch in the fall, and carefully rake off mulch in the spring. Plant out seedlings in 1–2 years. If seeds must be stored, air-dry them thoroughly. Seed not sown in the fall require three months' cold stratification to break seed dormancy. Seedlings under four feet tall can be salvaged.



Form



Seed

ORANGE HONEYSUCKLE

Lonicera ciliosa



Easy to grow from hardwood cuttings. Can also be grown from seed. Collect seed as soon as ripe (August to September), before birds eat them all. If sown immediately, fruits can be sown whole. However, if you plan to store the seeds, the fleshy fruit should be removed. Stored seeds may be slow to germinate unless cold-stratified for three months. May also be salvaged, but may be slow to establish after transplanting.



BEAKED HAZELNUT

Corylus cornuta



Grows best from seed, though they can be difficult to find. Collect seed August through September once the nuts are nearly ripe, but before squirrels harvest the entire crop. Before sowing, allow the nuts to ripen and dry until the husk turns brown; husks can be left on or removed. Sow nuts in trays. Nuts not sown in the fall need two to three months' cold stratification to break seed dormancy. Suckers can be transplanted, and plants under five feet tall can be salvaged. Plants can also be layered to produce new offshoots.



OCEANSPRAY

Holodiscus discolor

Best grown from hardwood cuttings, salvaged plants, or seed. Collect seed between September and November when they are dried out as seen below. Seed can be planted in the fall in trays or garden beds, or simply shaken around your restoration site. They should be sown thickly, as only a small percentage of the seed typically germinates. However, because the seeds are so numerous, this is not a serious problem. Seeds not sown in the fall need 4 1/2 months' cold stratification to break dormancy.



CASCARA

Rhamnus purshiana

Nursery grown seedlings work best. Can also be grown from seed. Collect berries in early August when ripe (they should be purplish-black), before they are eaten by birds. Remove pulp and sow seeds in pots in the fall, making sure they do not touch, and cover with mulch. Seed not sown in the fall requires three months' cold stratification to break seed dormancy. Seedlings under four feet tall may be salvaged.



INDIAN PLUM

Oemleria cerasiformis



Easy to grow from seeds. Fruits should be collected in June as soon as they ripen, before birds eat them. Dry the whole fruit and sow in the fall. Seed stored for later sowing needs to be cleaned before storing and, if not sown in the fall, cold-stratified for four months to break dormancy. During cold stratification sporadic germination may occur, and sprouting seeds should be removed and potted biweekly. Propagates well from hardwood cuttings. Plants under five feet tall salvage well. Can be grown from root cuttings, and plants already in your yard can be layered to produce new offshoots.



Fruit



Seed



Form

BLACK TWINBERRY

Lonicera involucrata



Extremely easy to propagate from cuttings at any time of the year, and can be live-staked. Keep plants growing from cuttings moist over the first summer. Can also be grown from seed, but seeds are often difficult to find. Collect seeds when berries are ripe (they should be purple-black), from early July to August.



Twig



Fruit



Form

TALL OREGON-GRAPE

Mahonia aquifolium

Best grown from seed. The fruit turns a deep glaucous blue when ripe, from late July to early August. Collect by hand picking or flail onto cloths or other receptacles. Extract and clean the seeds by macerating with water and screening out or floating off the pulp. Dry the seeds superficially and sow immediately or store in sealed containers at temperatures slightly above freezing. Seed not sown in the fall requires cold stratification for three months to break seed dormancy. Plants rarely survive salvaging.



MOCK ORANGE

Philadelphus lewisii

Easy to grow from hardwood cuttings. Can be grown from seed, which are so numerous they can be sown directly on-site. Seed not planted in the fall can be sown without any pretreatment, or cold-stratified for eight weeks at 41°F. Can also be grown from rooted suckers transplanted from salvage sites. Most of the mock-orange sold by nurseries is not native to western Washington. Since many nurseries do not use the variety name, make sure the nursery's stock originally came from this region before buying.



BITTER CHERRY

Prunus emarginata



Grows best from seed. Collect fruit from July to September when fully mature. Remove pulp, keep soaking time to a minimum to avoid damage to seeds. Sow liberally in the fall. Seed not sown in the fall must be cold-stratified for 3–4 months to break seed dormancy. Seedlings under six feet tall can be salvaged.



Seed 5 mm



Bark



Form

17

PACIFIC CRABAPPLE

Malus fusca



Can be grown from seed. Separate seeds from pulp, and plant immediately in flats or directly in the ground. Seed not planted in the fall needs to be cold-stratified for three months to break seed dormancy. Seedlings are small and start slowly. Plants in your yard can be layered to produce new offshoots, but it may take two years for sufficient roots to develop.



Flower



Fruit



Form

15

GARRY OAK

Quercus garryana

There can be two to three years between acorn crops. When they do appear, they must be harvested early to beat the squirrels and birds. Collect acorns from September to November by shaking onto canvas sheets or picking off the ground and sowing immediately. Because acorns do not store well, they should be planted soon, in a soil that has plenty of organic matter and will drain well. Given sufficient moisture, acorns will germinate almost immediately after falling and require no pretreatment to break seed dormancy. If planted in containers, do not plant out until about two feet tall. Due to its deep taproot, only seedlings under six inches tall should be salvaged.



BLACK COTTONWOOD

Populus trichocarpa

Hardwood cuttings are very successful—either root in beds or containers, or plant them in the field as longer (3–4 foot) live stakes. Rooting can be enhanced by soaking the cuttings or live stakes in water for 48 hours prior to planting (though they usually do fine regardless). Seedlings under three feet tall can be salvaged. It can also be grown from seed, but seeds are very short-lived and must be planted immediately. Collect seeds late-May to mid-July and sow them on the surface—do not cover them or press them into the medium. Keep seedbed saturated for the first month.



STINK CURRANT

Ribes bracteosum



Follow same propagation methods as with Red-flowering currant (*Ribes sanguineum*). Seed should be collected as soon as ripe, usually from July to late August. If propagating from hardwood cuttings or by live staking, twigs should be cut and planted from late October through February.



Twig



Fruit



Form

21

PACIFIC NINEBARK

Physocarpus capitatus



Grows best from hardwood cuttings, is easy to propagate from cuttings at any time of the year, and can be live-staked. Can also be grown from seed (collect late August to September), but germination is spotty. Seed not sown in the fall may need 2–3 months' cold stratification to break seed dormancy. Plants under six feet tall salvage well.



Bark



Form



Seed

19

RED-FLOWERING CURRANT

Ribes sanguineum

Can be grown from seed, which should be collected as soon as ripe (blue to black), mid-July to late August. Seed can be stored for long periods, but seed not sown in the fall requires 3 to 5 1/2 months' cold stratification (at 32°–36°F) to break seed dormancy. Can also be grown from hardwood cuttings, and plants in your yard can be layered.



NOOTKA ROSE

Rosa nutkana

Nootka rose reaches sexual maturity at two to five years of age with good seed crops every other year. It flowers from May through June and the fruit ripens in early fall and remains on the plant through winter. Collect the fruit from August through September and either dry and crush or soak in water and macerate to remove the seed. Seeds require a period of after-ripening, but can be sown fresh in the fall. Seed not planted in the fall needs to be cold-stratified for five months at 40°F to break seed dormancy.



Clustered rose (*Rosa pisocarpa*) requires a similar propagation technique from seed. Also, try to live-stake these species.



THIMBLEBERRY

Rubus parviflorus



Seed germinates readily, but should be separated from the pulp. Seed not planted in the fall needs three months' cold stratification to break seed dormancy. Hardwood cuttings grow easily. Small plants salvage well, but are somewhat slow to establish. Can also be grown from rhizome cuttings or divisions.



BALDHIP ROSE

Rosa gymnocarpa



Hand pick the hips in August and September after the green color turns reddish. Clean the seed by macerating the fruit in water and recovering the seed by flotation. Germination is greatest if seeds are sown immediately after cleaning. Cover seed with shallow layer of soil and then apply thin mulch to keep in place. Can also be propagated from semi-hardwood cuttings. Cuttings should contain three to four nodes each.



SALMONBERRY

Rubus spectabilis

Easily grown from root cuttings and hardwood cuttings. Suckers under four feet tall can be transplanted, or can be cut into pieces for hardwood cuttings or live stakes. Branches that touch the ground tend to root, and they can be separated from the parent plant and planted in one-gallon pots. Can also be grown from fresh seed. Collect fruit when ripe (it should be orange or red) and remove the pulp. Seed not planted in the fall needs 90 days' cold stratification at 36°–41°F to break seed dormancy. Some authors also recommend a 90-day warm/moist stratification before the cold stratification. Grows very rapidly in moist, shady conditions.



Form



Twig

Fruit

RED ELDERBERRY

Sambucus racemosa

Very easy to grow from hardwood cuttings, including live stakes. Cuttings should be taken October to December for best success; however, cuttings can be successful all year. Cuttings root quickly and vigorously. Can also be grown from seed, though this is more difficult. Collect seed August to September and remove pulp. Seed not planted in the fall requires 2–3 months cold stratification to break seed dormancy. Seedlings can be planted out by the end of the first year. Can be layered to multiply plants in your yard. Plants under six feet tall can be salvaged, but be sure to get as much of the long, fleshy root system as possible. Notice also that this resembles the blue elderberry.



Form



Leaf



Bark

SPIREA/HARDHACK

Spiraea douglasii



Easily grown from hardwood cuttings, live stakes, and seed. Seed not planted in the fall requires 1–3 months' cold stratification to break dormancy. Can also be grown from root cuttings, or divided.



Twig



Flower



Form

WILLOWS

Salix spp.



There are several species of willow found in Western Washington, and many are difficult to tell apart. The three most common species are Pacific Willow (*Salix lucida*), Scouler Willow (*Salix scouleriana*), and Sitka Willow (*Salix sitchensis*). Willows are easiest to grow from hardwood cuttings, including live stakes. Plants can also be layered.



Bark



Bud

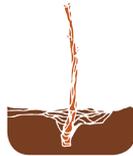


Form

COMMON SNOWBERRY

Symphoricarpos albus

Grows easily from hardwood cuttings; you can use any branch but the thinnest (outermost). Small to even full-grown plants can be salvaged. Can also be grown from seed. Collect seed mid-October through winter, and separate seeds from fruit before sowing. Seed sown in the fall should germinate in the second spring. If stored, seeds should be kept in a moist mixture of peat and sand, and given 60–90 days' warm stratification at room temperature, followed by 90–180 days' cold stratification at 40°–50°F to break seed dormancy.



WESTERN REDCEDAR

Thuja plicata

Easily grown from seeds or by layering. Collect cones early September to October, and dry to remove seeds. Do not de-wing the seeds. Seeds can be sown right away, or in the spring without any pretreatment. Seedlings under three feet tall salvage well. Hardwood cuttings can also be used.



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WESTERN YEW

Taxus brevifolia



Can be grown from hardwood cuttings or seeds. Fruits ripen August to October, and should be collected as soon as ripe, before birds get them. Remove fleshy coat from seeds before sowing. Germination is very slow, and may take two years. Pretreating seeds with hot water or scarification may speed up germination.



Fruit



Twig



Form