



Common native deciduous trees and shrubs of eastside Cascades riparian, dry forests, and shrub-steppe habitats

Photos (unless noted) by Susan Ballinger

Sources for text include:

<http://biology.burke.washington.edu/herbarium/imagecollection.php>

Flora of the Pacific Northwest by C. Leo Hitchcock & Arthur Cronquist

Plants of Southern Interior British Columbia and the Inland Northwest by Roberta Parish, Ray Coupe, and Dennis Lloyd



Indicates a “Learn 10” species

Adopt a systematic way of looking



Get an Overall impression of plant

- How big?
- How many stems? Are they clumped together?
- Are the stems stiff & strong (woody)
- Are there spines, prickles, or hairs on the stem?

Woody plant: Is it a Tree or a Shrub?

Tree:

- One main stem at least 3 inches in diameter at 4.5 feet above ground (breast height)
- A crown of foliage
- Over 20 feet tall at maturity
- Yes- some exceptions!

Shrub – as compared to trees:

- Tend to be shorter
- Have multiple, narrower stems

Subshrubs

- woody only at the base of plant, sometimes only underground
- Above ground stems may die back to the soil surface every year.

Expect some overlap- some trees look like big shrubs...some shrubs look like small trees!



Shrub: bitterbrush



Shrub: Douglas maple



Tree: Quaking aspen



Subshrub: kinnikinnick



Subshrub: snow buckwheat

Adopt a systematic way of looking: Leaves

Examine the leaves:

- Are they mostly on the ground (basal) or do they grow along the stem? Or both?
- What shape are the leaves?
- Are the stem leaves opposite, alternate, or whorled (spirally placed) on the stem?
- How do the leaves attached to the stem?
- Is the leaf broken up into leaflets? If so, how many? How are they arranged?
- Texture of leaf: soft, leathery, hairy, spiny?
On both sides?



Opposite leaves



Alternate leaves



leaflets

Adopt a systematic way of looking: Observe the habitat



riparian



Eastside Mesic forest



Eastside Low elevation dry forest



Shrub-steppe

Populus trichocarpa black cottonwood

WILLOW family

Habitat: moist to wet lowlands & along waterways. Withstands periodic flooding.
Shade intolerant. **Up to 130 feet tall**

Bark: young-smooth & green-gray. Becomes deeply furrowed on lower trunk with age



Fruits: smooth, green, & bead-like-split into 3 parts releasing seeds with fluffy white hair

Leaves: triangular to heart shaped. Dark green above, silvery green below; pointed tips; Stalk round in cross-section. Turns yellow in fall.



Populus tremuloides aspen (quaking aspen)

WILLOW family

Habitat: wide ranging elevations from moist forest to edge of grasslands & shrub-steppe in soils with lateral water flow, but not saturated. Shade intolerant. **Up to 100 feet tall**



Leaves: nearly round, pointed tip, finely toothed, deep green above, paler below, stalk flattened in cross-section. Turns yellow in fall

Bark: smooth green-gray to white, becoming rough and black-scarred with age. Does not peel- lacks horizontal lenticels

Fruits: slender, cone-shaped capsules filled with tiny brown seeds with white fluffy hairs



Acer macrophyllum bigleaf maple

MAPLE Family

Habitat: along waterways in shrub-steppe and montane forests, low to-mid elevations on east-side Cascades. Common on west-side of Cascades. **60-80 feet tall**



Bark: brown-grey with furrows on older trees

Leaves: Deciduous, opposite, simple & 5-lobed with terminal lobe. Often 3-lobed, green above, pale below. Leaf 8-12 inches long with stalk 10-12 inches long.



Fruits: a “maple key” with wings 1-2 inches long, & a hairy seed covering.

Cornus occidentalis (formerly *C. stolonifera*) redbrier (red-twig) dogwood DOGWOOD family

Habitat: wet soils in riparian, wetlands and moist forests. Widespread and abundant at low-to-mid elevations.
6-20 feet tall



Flowers: small, white, in dense flat-topped clusters

Fruits: clusters of berry-like white (often blue-tinged)



Leaves: Opposite, oval, sharp-pointed 5-7 prominent parallel veins, curving up near the margins.

Many stemmed deciduous shrub, spreading; layering branches on ground often root

Thin, young stems bright red; older stems brown



Ceanothus velutinus snowbrush (snowbrush ceanothus, buckbrush)

BUCKTHORN Family

Habitat: Dry to moist forests and rocky slopes, preferring open sunny sites and burned areas at low to subalpine elevations. **2-10 feet tall**



Flowers: tiny, white; borne in dense pyramidal clusters along side branches

Seeds: small, shiny. Can remain viable in Soil for at least 200 years. Germination stimulated by fire.

Bacteria in root nodules fixes nitrogen.



Stems: green & Smooth. Shrub is spreading & heavily scented

Leaves: Evergreen, alternate broadly oval with finely toothed edges. Upper leaf sticky & glossy (appearing varnished), underside paler & velvety below. 3 main veins.



Amelanchier alnifolia serviceberry (Saskatoon)

ROSE Family

Habitat: In moister shrub-steppe gullies and ravines and at edge of talus slopes, up to dry open forests and rocky sites from low to subalpine elevations. **Up to 30 feet tall**

Leaves:

Deciduous, thin, round to oval, and toothed above the middle. Finely hairy on underside



Flowers: 5 petals, white, showy, linear to oblong petals. In short leafy clusters of 3-20 flowers at branch tips

Stems: Smooth with bark grey to red. Spreads with underground stems forming dense colony



Fruits: purple to nearly black, apple-like, with a whitish film (glaucous).



Holodiscus discolor oceanspray

ROSE Family

Habitat: In open dry forests and clearings, often on sandy or rocky soils at low to subalpine elevations.

3-12 feet tall

Re-sprouts after wildfire



Leaves: Deciduous, alternate, 1-3 inches long. Broadly triangular with lobed or toothed edges. Hairy on both sides. Dull green

Flowers: tiny, cream-colored in dense Terminal clusters that persist over winter, Turning brown with age

Stems: clustered and arching upward & outward from base. Bark is gray-red and strongly ridged on young stems.



Purshia tridentata bitterbrush

ROSE Family

Habitat: in hot dry environments. Most abundant on sandy soils up to 4,000 feet.

Usually killed by Summer & Fall wildfires, but some can sprout after being burned in a light spring fire

2-6 feet tall.



Leaves: Deciduous, alternate. Wedge-shaped with 3-toothed tip. Hairy to wooly. Silver-green on upper leaf, grey-wooly below. Commonly, edges rolled under

Flowers: Bright yellow & numerous. Funnel-shaped. Solitary on short, leafy branches. 5 petals.



Fruits: Seeds are pyramid-shaped. Small rodents cache seeds for later food use.



Stems: Rigidly branched with grey or brown bark and twigs covered in dense hairs.



Rosa nutkana Nootka rose

ROSE Family

Habitat: Open habitats, seepage areas, along waterways & in floodplains at low to mid-elevations.
3-7 feet tall



Leaves: Alternate & pinnately compound with an odd number of leaflets (5-7). Leaf edges both single & double serrated & often gland-tipped. Green above, paler below.



Fruits: round, purplish-red, with persistent sepals

Stems armed with large pair of straight (to somewhat curved) thorns at each branch node.



Flowers: usually solitary (sometimes in groups of 2-3). Our largest common rose: flowers 2-3 inches across



Sambucus cerulea blue elderberry

ADOXA Family

Habitat: Moist to dry sites in valley bottoms, along rivers & streams, on in open forests.

7-10 feet tall.

Fruit: clusters of juicy, round, powder-blue, berry-like (edible)



Multi-stemmed, grows singly, does not form stands.

Flowers: small, white, in flat-topped clusters, up to 10 inches across

Leaves: opposite, compound with 5-9 sharply serrate leaflets. Smooth & hairless; 2-6 inches long



Ribes cereum wax current (older name, squaw current) CURRANT Family

Habitat: lowest zone of dry forest in open, hot, & rocky sites.

Up to 6 feet tall



Stems: new branches finely hairy, becoming gray-brown with age

Very branched, no prickles (un-armed) deciduous.



Fruits: small red berries



Leaves: numerous & small, fan-shaped, weakly 3-5 lobe. Sparsely hairy and often glandular on both sides. At branch tips



Flowers: green-white to pink, urn-shaped. In clusters of 2-8 hanging on a drooping stalk. All are sticky & finely hairy

Arctostaphylos uva-ursi kinnikinnick

HEATH Family

Habitat: widespread & common at low to alpine elevations on sandy well-drained sites, dry rocky slopes, & dry forest clearings. Trailing evergreen shrub

<5 inches tall

Leaves:
alternate,
oval to
spoon
shaped,
smooth
edged,
leathery,
dark-green
& somewhat
shiny above,
paler below,
hairless



Brownish-red bark on long flexible rooting branches.



fruits: bright red berries



flowers: small, urn-like, pinkish-white drooping in few-flowered clusters

Ericameria (formerly *Chrysothamnus*) *nauseosus* rubber rabbit brush ASTER Family

Habitat: widespread & common in shrub-steppe, especially in sandy soils, & low-elevation dry forests.
up to 3-4 feet tall

ID tip: If you scrape any stem, a brighter green shows, distinguishing it from the similar species, green rabbitbrush, *Chrysothamnus viscidiflorus*.

Leaves:
long,
narrow, &
linear.
Stems &
leaves
covered
with dense
gray velvety
hairs on
both sides.



Fall blooming deciduous
Re-sprouts vigorously after wildfire



Flowers: small, yellow, born in small composite heads of 5 disk flowers at branch tips. Blooms in late summer.



Artemisia tridentata big sagebrush

ASTER Family

Habitat: widespread and common in deep soiled (>12 in.) shrub-steppe up to 7 feet tall

Prior fall's flowering stalks.

Leaves: wedge-shaped, most with 3 toothed-tip. Dense gray hair on both sides. **Most leaves persist through winter.**



Yellow in photo are long thin leaves, that dry up & die in summer. Smaller hairy, thick leaves remain year-round



Flowers: small, yellow, born in composite heads of 3-5 disk flowers. Very small.

Evergreen aromatic shrub. Grayish shredding bark on older branches.



Flowers in fall. Does not resprout after wildfire but regenerates from seed.



Artemisia tripartita three-tip sagebrush

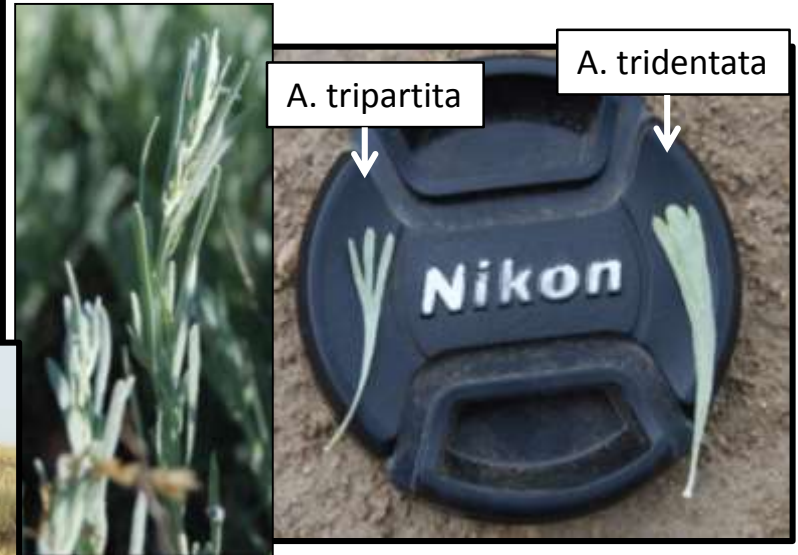
ASTER Family

Habitat: Generally smaller shrub than big sagebrush, growing in slightly moister areas. **2-4 ft. tall**

Flowers in fall, evergreen
1-2 feet tall. Vigorous sprouter after wildfire.



Leaves: deeply cleft into narrow linear divisions, which may themselves be 3-cleft



Flower buds appear brown



Artemesia rigida rigid sagebrush

ASTER Family

habitat: dry, rocky, thin soils in shrub-steppe. **Less than 2 feet tall**

Small, often spreading outward on ground.
Older bark is very black.



Flowers in fall

Leaves: 1-4 cm. long, narrow, deeply divided into 3-5 narrow segments. All **deciduous** leaves



Flowers: heads or clusters of heads sessile in the axils, surrounded by longer leaves. Inconspicuous & hard to see.



Ribes aureum golden current

CURRENT Family

Habitat: shrub-steppe floodplains of rivers & streams, talus slopes.
Up to 10 feet tall

Deciduous rounded shrub



Branches: multi-stemmed, reddish when young, turning dark gray



Flowers: 5 golden-yellow petals fused into a tube, fragrant
Early spring bloomer.



Leaves: alternate, bright green, 3-lobed, somewhat leathery

Fruits: orange, round berry

Acer glabrum var. *douglasii* Douglas maple

MAPLE Family

Habitat: In shrub-steppe in seeps and moist gullies; in dry to moist open forests, openings, & clearings at low to subalpine elevations. **Up to 30 feet tall**



fruits: a pair of winged-seeds, joined at base in a sharp "V" angle. Wrinkled & indented.

Leaves: Deciduous, opposite, divided into 3-5 coarsely toothed lobes. Dark green above, gray-green below

flowers: In clusters of 10 at ends of braches with leaves. Usually male & female "flowers" on different trees.



Deciduous, multi-stemmed



Crataegus columbiana black hawthorn

ROSE family

Habitat: Widely scattered and locally common at low to mid-elevations in riparian and open deciduous forests.
Up to 26 feet tall



Fruit: clusters of dark-red apple-like, with a large seed. Wither soon after ripening



Flowers: white, showy, saucer-shaped. In flat-topped clusters at branch tips. 5 round petals



Leaves: oval, thick, leathery, dark green above, paler below. 5-9 lobes at top of leaf



Stout, straight thorns 1-2.5 inches

Prunus virginiana chokecherry

ROSE family

Habitat: along watercourses in grasslands, & shrub-steppe. In open low elevation forests, often in exposed dry sites & in rocky outcrops. **Up to 13 feet tall.**



Flowers: small, white, saucer-shaped, 5 rounded petals; in long clusters at branch tips, pendulous



Fruits shiny, red to purple to black
In hanging clusters.

Deciduous, straggly shrub, trunks crooked, smooth bark (red to gray brown) without horizontal lenticels



Leaves: Alternate, thin, broadly oval, finely sharp-toothed, sharp-pointed tip, dull green above, paler below.



Prunus emarginata bitter cherry

ROSE Family

Habitat: low-to-mid elevations. Somewhat moist sites in shrub-steppe and in moist forest soils.
Up to 50 feet tall.



fruits: downward hanging fleshy fruit, dark red to almost black. Very bitter



flowers: the inflorescence is a few-flowered, flat-topped cluster. Cup-shaped calyx with 5 oblong petals white



leaves: Alternative, elliptic to oblong or tear-drop shaped, finely serrate, 3-8 cm. long. Hairs on lower surface of leaf.

Deciduous multi-stemmed straggly spreading to upright shrub. Young twigs a deep red-purple.

Philadelphus lewisii mockorange (syringa)

HYDRANGEA Family

Habitat: In shrub-steppe gullies and waterways, and around talus slopes and in dry open forests at low elevations. **3-10 feet**



Fruit is a wood capsule, ovate-elliptic, pointed at the ends, 6-10 mm. long, 4 celled.



Erect loosely branched shrub.
Bark is checkered and becomes shredded with age

Leaves: Deciduous, opposite, oval to elliptic with 3 major veins from leaf base. Hairs on leaf edges



Flowers: 4 oblong white petals and many stamens. Large- up to 2 inches across born in clusters of 3-15 flowers at branch tips.



Ceanothus sanguineus redstem ceanothus

BUCKTHORN Family

Habitat: moist to dry open woods, moderate-high elevations.

3-10 feet tall.

Deciduous shrub, alternate leaves , erect stems, glabrous (smooth-without hair). Purplish stems.

Leaves: ovate to elliptic, thin with fine round serrations & glands

Fruits: capsules, deeply 3-lobed



Flowers: in dense panicles on short lateral branches, white.



Rosa woodsii woods rose

Habitat: moist sites in lowlands and foothills.

Up to 10 feet tall

Leaves:

Divided into 5-9 oblong single-toothed leaflets. The serrated teeth are not gland-tipped



Flowers: Pink, rather small with 5 broad petals, usually in clusters of 3 or more, on short branches.

Stems: 1 pair of straight prickles at each branch node; often many smaller weaker prickles between nodes.

Fruits: round, red, 6-12 mm. in diameter with persistent sepals



Rubus parviflorus western thimbleberry

ROSE family

Habitat: cool and moist forests, clearings, seepage areas at low to subalpine elevations.

2-7 feet tall



Flowers: white, large, 5 broad petals, crinkled; in long-stemmed clusters of 3-7 at branch tips



Fruits: shallowly domed, dull, juicy, hairy, bright red, raspberry like.



Leaves: large, soft, maple-leaf-shaped with 3-7 toothed lobes. Finely fuzzy on both sides; on long stalks.



Deciduous, un-armed shrub; often forms dense thickets

Berberis aquifolium tall Oregon grape

BARBERRY Family

Habitat: open forests, shrub-steppe; often in sunny areas, lowland to montane.
0.5 – 7 feet



Flowers: racemes with bright yellow in many-flowered erect clusters. Flower parts in 6s



Leaves: Evergreen, leathery, alternate, pinnately compound,, with 5-9 leaflets, with spiny teeth & pointed tips. glossy on upper side, underside duller



Erect, stiff-branched evergreen woody shrub. Often scraggly. Can be rhizomatous

Fruits: Dark blue, glaucous (whitish film coating); each with several large seeds, in elongated clusters



Sorbus scopulina Western mountain ash

ROSE Family

Habitat: moist forests, openings, & clearings, low - high elevation
3-16 feet tall

Multi-stemmed
Deciduous shrub



Fruits: orange-scarlet; berry-like



Flowers:
small, white,
up to 200 in
flat-topped to
rounded
clusters



Leaves: divided into 9-13
narrow leaflets with
sharp-pointed tips; sharply
toothed edges on most of
leaf length



***Paxistima* (formerly *Pachistima*) *myrsinites* pachistima**
(OR boxleaf False boxwood)

BITTERSWEET Family

Habitat: In mixed conifer forests, rocky openings from low to high elevation.
Up to 3 feet



Leaves:
Evergreen,
opposite, oval to
elliptic, shiny,
thick, leathery
with slightly
serrated edges,
slightly rolled
under



Stems: reddish-
brown & 4-ridged.
Erect or prostrate.
Dense.

Flowers:
numerous, very
small, maroon. In
small clusters along
branches.



Physiocarpus species ninebark

ROSE Family

Habitat: Canyons and hillsides, grasslands, ponderosa pine and Douglas fir forests
Up to 6.5 feet tall



flowers: numerous in flat-topped clusters at branch tips. Saucer-shaped flower with 5 rounded petals, stamens about 30, equaling the petals. Showy.

fruits: clusters of small black-purple apple-like fruits. Not juicy-wither quickly after ripening



Deciduous

leaves: Alternate, oval, thick, leathery. Dark green hairless above, paler below with star-like hairs. 3-5 lobed, the lobes bi-serrate




Symphoricarpos oreophilus mountain snowberry

Honeysuckle Family


Habitat: open forests, dry rocky slopes, & grassy openings at low to mid-elevations.

1-3 feet tall

Leaves: Opposite, oval to egg-shaped, entire, edges smooth, tips pointed. Mostly 0.5-1.5 inches long.



Erect deciduous shrub- one of earliest shrubs to leaf out in spring.



Fruit: clusters of spongy, white berry-like; persist through winter

Flowers: pink to white, bell shaped, longer than wide.

Stems hollow



Spirea beautifulia birch-leaved spirea

ROSE Family

Habitat: widespread & common at low-mid elevations in dry to moist forests, on open dry rocky slopes.

Up to 2.5 feet tall

Deciduous shrub, spreading from underground rhizomes



flowers: white, showy; in short leafy clusters at branch tips

leaves: oval to oval-oblong, but wider toward tip. Leaf base tapered to stalk. Usually coarsely double-toothed above the middle. Dark green above, pale green below.