



## 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



Subshrub: kinnikinnick



Tree: Quaking aspen



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 leaves opposite, alternate, as they attach 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 on a  
single  
compound  
leaf



# Adopt a systematic way of looking: Observe the habitat





# *Populous 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 serica* (formerly *C. stolonifera*) redbow (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.



**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

**Fruits:** round, purplish-red, with persistent sepals





## *Sambucus cerulea* blue elderberry

**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



**fruits:** bright red berries



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

Brownish-red bark on long flexible rooting branches.



# *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 re-sprout after wildfire but regenerates from seed.



# *Artemisia tripartita* three-tip sagebrush

**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.

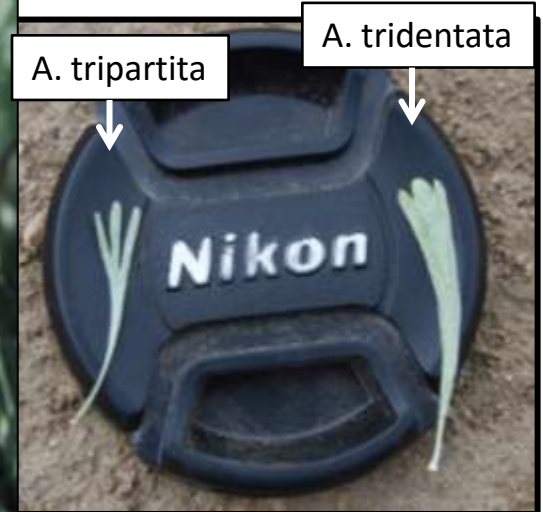


Flower buds  
appear brown



## ASTER Family

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





# *Artemesia rigida* rigid sagebrush

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

**ASTER Family**

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

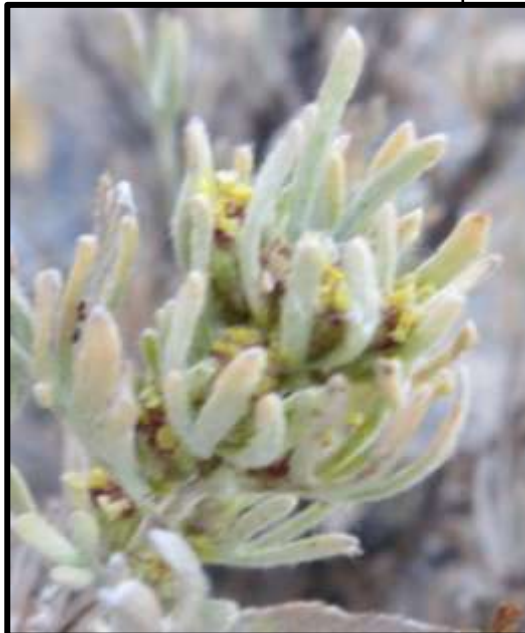


Flowers in fall

**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**

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

## **CURRENT Family**

Deciduous rounded shrub



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



**Fruits:** orange, round berry



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



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



## ***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

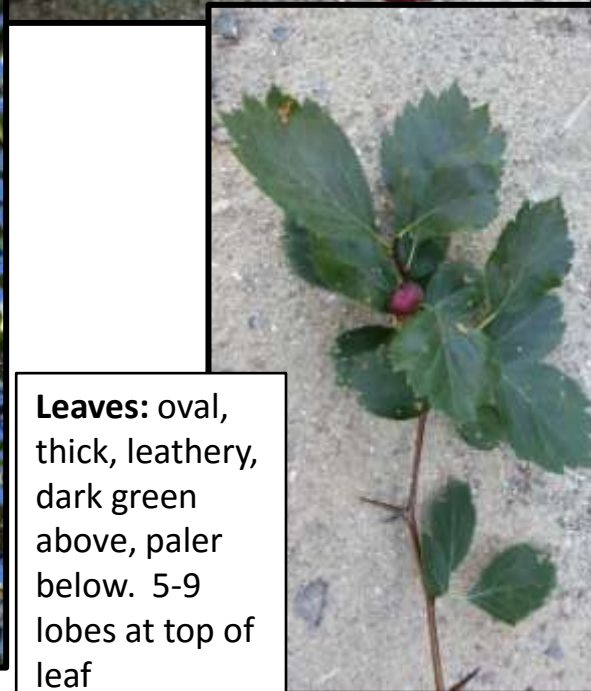
**Habitat:** Widely scattered and locally common at low to mid-elevations in riparian and open deciduous forests.  
**Up to 26 feet tall**



**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* Rocky Mountain (Cascade 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 petalsstamens 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.

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

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

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.