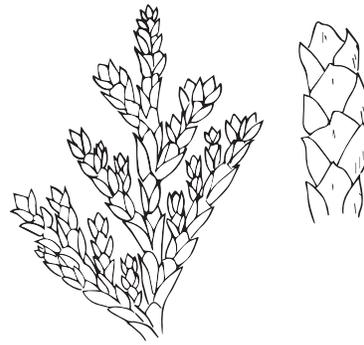


Western Hemlock
Tsuga heterophylla
TSUHET

Needles are short, flat, blunt and are arranged in feathery flat spray (should feel soft). Needles are yellowish-green on top and are whitish with 2 fine stomata below

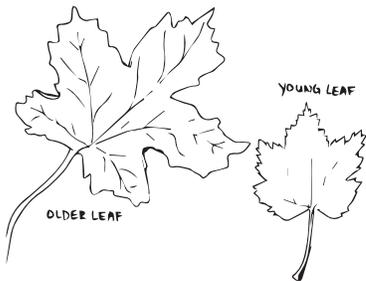
You'll know it's a hemlock if it looks as though it is drooping. Douglas firs and Grand firs stand more upright and have generally tougher-feeling needles



Western Red Cedar
Thuja plicata
THUPLI

Leaves are scale-like, closely pressed to the stem in an overlapping shingled arrangement

Bark is grey to reddish brown and peels off in strips on mature trees

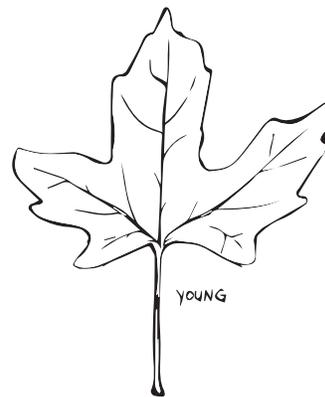


Rocky Mountain Maple
Acer glabrum
ACEGLA

Leaves are 3-5 lobed and coarsely toothed

On young shoots, the leaves may be fully divided into three parts rather than simply lobed

Twigs are a reddish grey color



Bigleaf Maple
Acer macrophyllum
ACEMAC

Opposite leaving structure

Deeply 5 lobed

Young bark is green and smooth

Unlike Rocky Mountain Maple, it is not toothed (even when young)

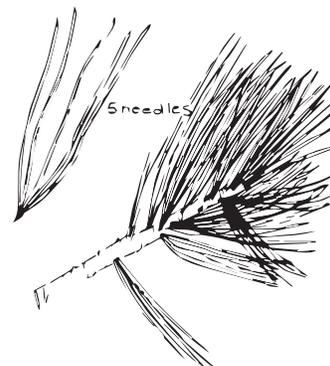


Douglas Fir
Pseudotsuga menziesii
PSEMEN

Needles are spirally arranged around the whole branch

Needles are flat and yellowish-green (with 2 white bands of stomata on underside), have pointed tips

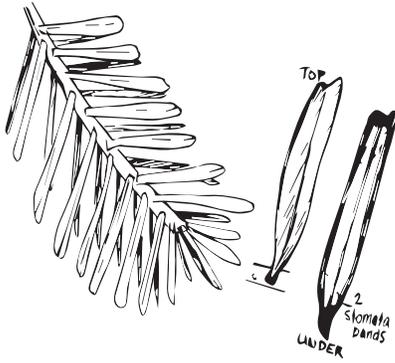
Cones look as if it has little mouse tails peeking out of it (3 bracts that extend beyond scales)



Western White Pine
Pinus monticola
PINMON

Needles are in bundles of 5

Needles are blue-ish green, slender and flexible, and 5-10 cm long (much longer than the other conifer species in the reservoir)

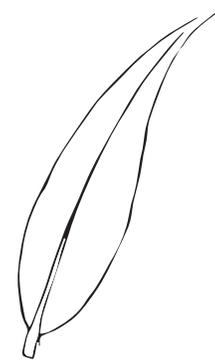


Grand Fir
Abies grandis
 ABIGRA

Flat needles, tips rounded and notched, dark green when mature (yellow/orange when distressed)

2 distinct, light colored stomatal lines underneath the needle

More sturdy and shiny than hemlock and Douglas fir

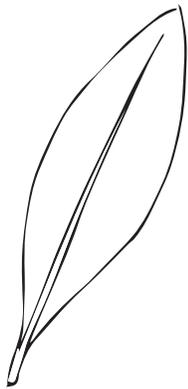


Pacific Willow
Salix lucida
 SALLUC

Leaves are lance shaped, tapering to a long tip, margins are finely toothed. Young leaves are densely hairy, but older leaves are not hairy and whitish underneath

Prominent kidney shaped stipules (wart like glands near the leaf base)

Twigs are usually hairless and brittle at the base



Hooker's Willow
Salix hookeriana
 SALHOO

Leaves are blue-green to silver and very hairy when young

With age, the leaves get more smooth

Leaves are pointed or round at the tip

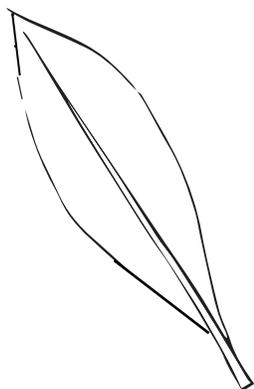


Scouler's Willow
Salix scouleriana
 SALSCO

More tolerant in dry spots on terraces than the Sitka Willow

Leaves are alternate, broad and widest above the middle
 Leaves are dark green with underside that is hairy, but not reflective like the Sitka

Bark is dark brown and gray and does not have lenticels

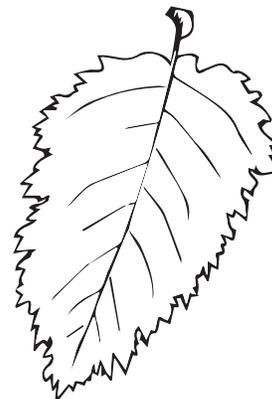


Sitka Willow
Salix sitchensis
 SALSIT

Alternate leaf pattern

Leaves are wider above the middle (taper to the base). Upper side of leaf is bright green and underside is velvety with short hairs that are pressed flat and are highly reflective of light

Bark is dark brown and gray and does not have lenticels



Slide Alder
Alnus viridis
 ALNVIR

Leaves are more finely toothed than *Alnus rubra* and lack the rolled-under edge that is characteristic of *Alnus rubra* leaves

Leaves also feel less substantial/thinner

Leaves are shiny and slightly sticky beneath

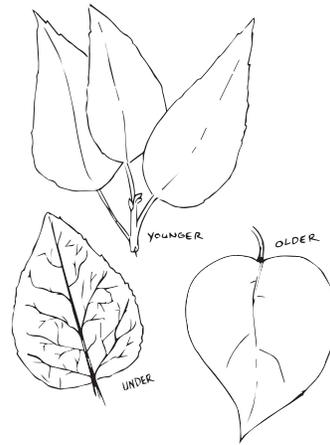


Red Alder
Alnus rubra
ALNRUB

Leaves are alternate, broadly oval, and pointed at the tip and base. Leaf margins are wavy and irregularly toothed

Underside of leaf looks like the leaf's edge is slightly rolled over

In summer, alder leaves may be sticky on the top surface



Black Cottonwood
Populus balsamifera
POPBAL

Bark is dark grey with white spots (lenticels)

Hairless leaves, shiny dark green above, underside whitish with rusty specks

No stipules

Many black cottonwood leaves also have an engorged yellow spots from fungus.



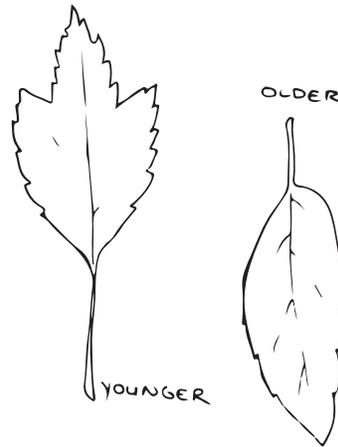
Red Osier Dogwood
Cornus sericea
CORSER

Opposite, oval leaves, mostly sharp pointed

Many stems and opposite branches

Bright red stem

5-7 parallel veins on leaf that converge at the tip



Pacific Crab Apple
Malus fusca
MALFUS

Leaves are irregularly lobed, generally are oval at the base with a pointed tip and finely toothed margins

Dark green leaves and paler underneath

Twigs and branches sometimes look like they have thorns, but these are the places where fruits/flowers are produced

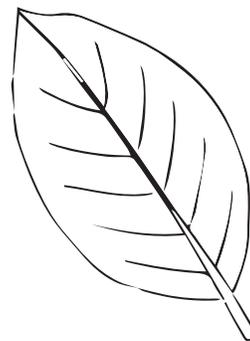


Indian Plum
Oemleria cerasiformis
OEMCER

Branches grow from central root system

Brighter green leaves in an alternate pattern that are not toothed, have cucumber smell when crushed

Flowers in clusters, fruits are small and hard, dark purple



Pacific Madrone
Arbutus menziesii
ARBMEN

Oval shaped leaves in alternate pattern, leathery and shiny above with whitish-green surface below

Leaves do not have teeth except when young

Young bark is soft yellowish beige and older bark is dark brownish red (maroon) and looks as if it is peeling off



Bitter Cherry
Prunus emarginata
 PRUEMA

Reddish-purple bark on younger stems

Finely toothed leaves 1-3 inches long, rounded at the tip

Multi-stemmed

Pair of glands at the base of the leaf

Bark is a shiny reddish-brown with horizontal rows of lenticels/pores



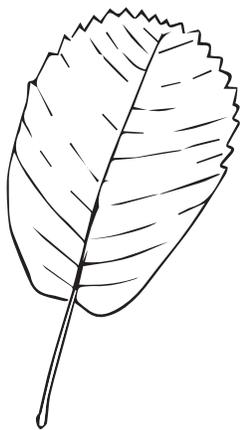
Twinberry
Lonicera involucrata
 LONINV

Opposite leaves

Young twigs are greenish and 4-angled in cross-section

Leaves are elliptical to broadly lance shaped, pointed at end, with some hairs

Shiny black “twinberries” cupped by purplish bracts



Saskatoon
Amelanchier alnifolia
 AMEALN

Dark grey to reddish bark

Leaves are alternate, thin, and round to oval shaped

Leaves tend to be toothed in the upper third/ top half



Hardhack, Spiraea
Spiraea douglasii
 SPIDOU

Alternate leaves, oval shaped and toothed above the middle

Dark green leaves and sometimes woolly-grey underneath

Young growth is a reddish-brown color
 Flowers are clustered and pink

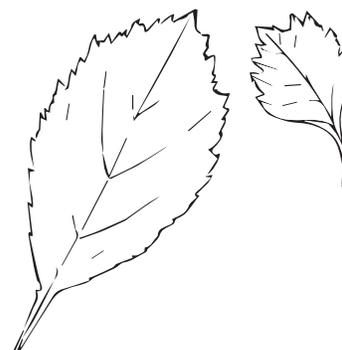


Redstem Ceanothus
Ceanothus sanguineus
 CEASAN

Alternate leaves, oval, 3-10 cm, finely toothed

Smooth, reddish-purplish stalks and bark

3 main veins from base of leaf



Black Hawthorn
Crataegus douglasii
 CRADOU

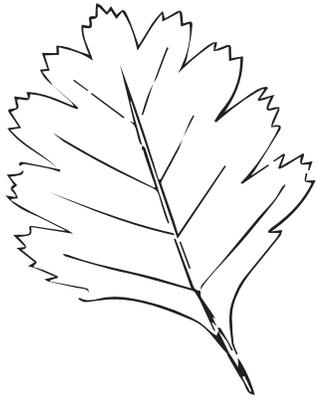
Thick, leathery leaves

Leaves are oval but broadest at tip, saw-toothed margins

Top end of leaf has 5-9 lobes

Alternate leaf structure

Thorned grey bark that is rough and scaly

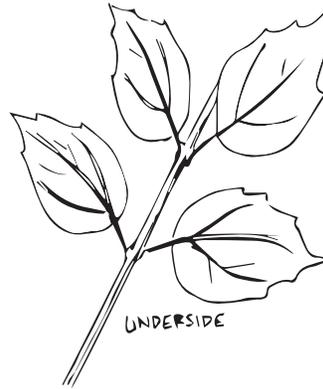


Ocean Spray
Holodiscus discolor
HOLDIS

Stressed leaves can be red, yellow, or orange colored

Densely packed leaves, alternate, dull green, hairy, broadly egg shaped to triangular. Lobed or coarsely toothed

Leaves have variation but retain unique general shape of deep lobes



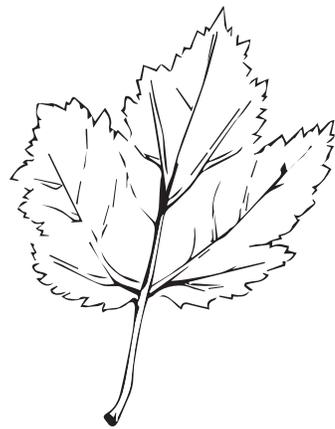
Mock Orange
Philadelphus lewisii
PHILEW

Opposite leaves, wide ovals

Distinguishable by 3 well-defined veins from leaf base underneath

Short-stalked leaves

Flowers are aromatic when trees are large



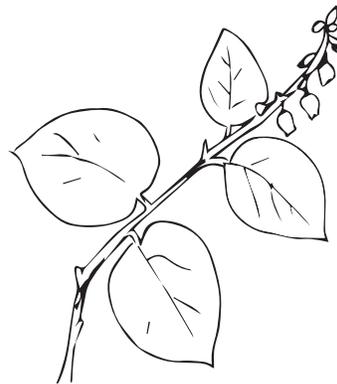
Pacific Ninebark
Physocarpus capitatus
PHYCAP

Leaves alternate on the branches

Lobes of leaves are toothed and deeply veined

Leaves are shiny green with hairs underneath

Brown, shredding bark



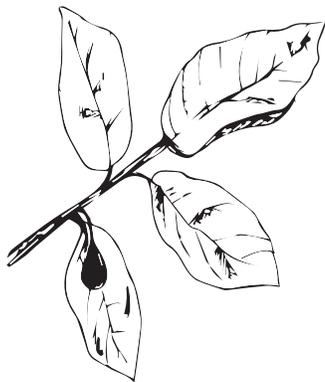
Salal
Gaultheria shallon
GAUSHA

Leaves are alternate, leathery, thick, egg shaped, sharply and finely toothed

Leaves are evergreen, 5-10 cm long

Hairy branched stems

Reddish-blue "berries"



Cascara
Rhamnus purshiana
RHAPUR

Silver-gray bark

Shiny green leaves clustered near the end of twigs, egg shaped to oblong

Veins indent the leaves, making them wavy (feels like a washboard)

Sometimes reddish young stalks



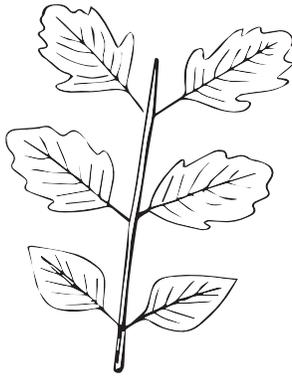
Yerba buena
Satureja douglasii
SATDOU

Pink-red flexible stalk

Stems of the Leaves wrap around the main stalk

Smells like minty pine-sol (can be made into a tea that tastes just like it smells)

Leaves sometimes slightly shiny on top



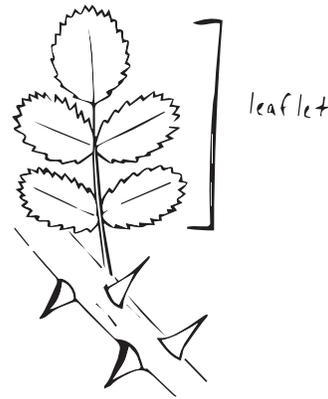
Opposite leaves that are incredibly variable in shape: can be elliptical to oval with margins that are smooth to wavy-toothed

Erect, hairless branches

Twigs are very fine

Pink and white flowers, white berries

Common Snowberry
Symphoricarpos albus
SYMALB

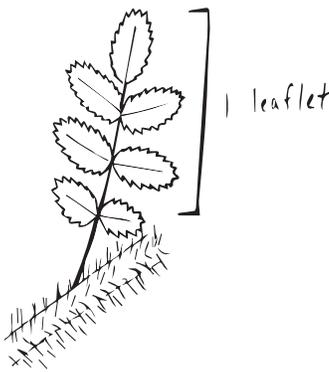


Large prickles at the base of each leaf

Alternate, compound, toothed leaflets (5-7 leaves/leaflet)

Leaves have more or less rounded tips

Nootka Rose
Rosa nutkana
ROSNUT

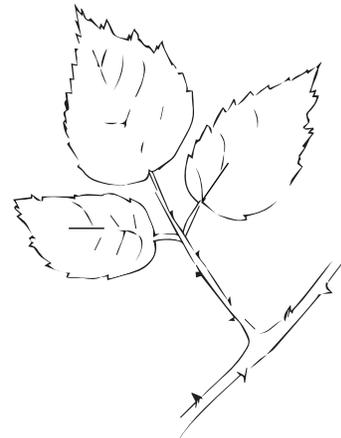


Numerous soft, straight prickles covering stems

Distinguishable from Nootka rose by dense prickles on stem

Alternate, compound, toothed leaflets (5-9 leaves/leaflet)

Baldhip Rose
Rosa gymnocarpa
ROSGYM



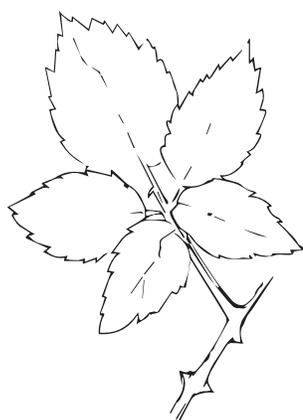
Trailing stem along ground, sometimes white/green/purple with curved prickles

Leaves are alternate with 3 leaflets 3-7 cm long

Leaflets are 3 lobed, dark green and toothed

Flowers are white to pink, fruits are black berries

Trailing Blackberry
Rubus ursinus
RUBURS



Alternate leaves

Trifoliate to 5-foliate

Leaflets toothed and covered with white hairs below leaf

Stout, recurved prickles

White to pink flowers

Himalayan Blackberry
Rubus armeniacus
RUBARM

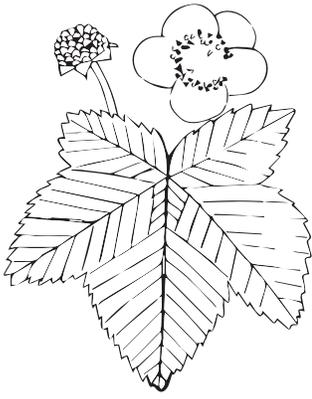


3 (sometimes 5) egg shaped, crinkly, sharp-toothed leaflets with shiny white undersides

Erect, arching stems with a whitish hue, curved but flattened prickles

Berries are dark purple/black raspberries

Blackcap Raspberry
Rubus leucodermis
RUBLEU



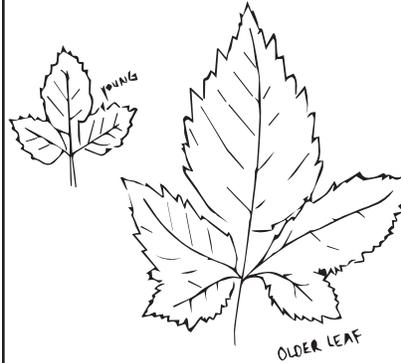
Thimbleberry
Rubus parviflorus
 RUBPAR

Erect, unarmed stems
 (young stems can have
 glandular hairs)

Leaves are LARGE, soft,
 maple-leaf shaped, 3-7
 lobed, and fuzzy on both
 sides

Red berries that resemble
 raspberries

Form dense thickets



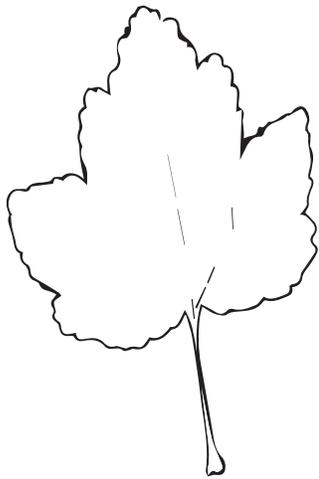
Salmonberry
Rubus spectabilis
 RUBSPE

3 leaflets that are sharp-
 ly toothed (the two
 bottom leaflets look like
 butterflies)

Erect, with scattered
 prickles (does not have
 as defined thorns as
Rubus ursinus or *Rubus*
leucodermis)

Bark is golden brown
 and looks shredded

Berries are orange/red



Red Flowering Currant
Ribes sanguineum
 RIBSAN

Erect, unarmed, reddish
 brown bark

Young growth stem is
 finely hairy

Alternate, 5-lobed leaves

Blue/purple berry

Distinguishable from the
 other gooseberries
 by its lack of spines/thorns



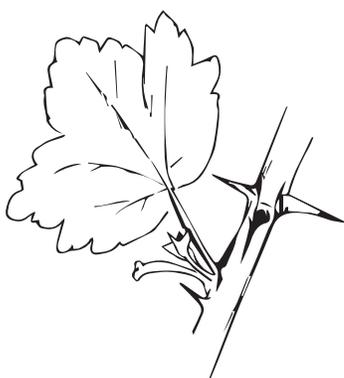
Black Gooseberry
Ribes lacustre
 RIBLAC

Leaves have toothed margins,
 with the upper side of the leaf
 dark green and glossy (not
 hairy)

Large thick spines
 at leaf nodes, hairy
 thorns on stalk

Bristly, purple berries

Alternate leaves, most
 with 5 deeply indented
 lobes



Wild Gooseberry
Ribes divaricatum
 RIBDIV

1-3 spines only where
 leaves are attached

Smooth berries

Leaves are alternate and
 somewhat maple shaped,
 with a heart shaped base,
 and toothed margins

This guide was created in the summer of 2017 by
 Lydia Petroske and Olivia Won using Illustrator and
 InDesign. The information and drawings included in
 this guide are based on their experience doing plant
 transects in the Mills reservoir, supplemented with
 notes from *Plants of the Pacific Northwest Coast* by
 Pojar and Mackinnon.