

Central Oregon Common Native Plant Dichotomous Key

What is a Dichotomous Key?

A dichotomous key is a tool that helps you figure out what plant you're looking at by asking a series of questions. Each question has two choices. You pick the one that matches your plant, then follow the arrow to the next question or the plant's name!

How to Use This Key:

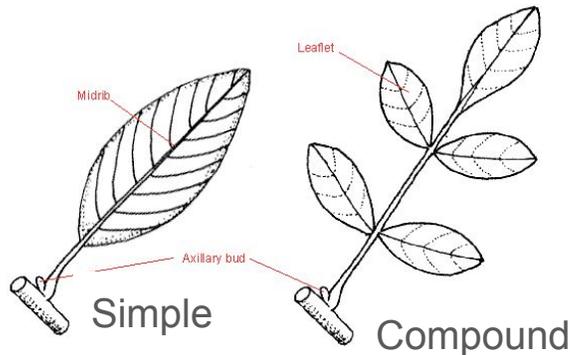
1. **Find a plant** you want to identify.
2. **Look at your plant closely.**
3. **Start at the top** of the key and read the first question.
4. **Choose the answer** that best matches your plant.
5. **Continue answering questions** until you reach the plant's name.
6. **Check** the plant's page to see if your plant matches.
7. Congrats—you've identified it!

Reminder: Many plants look alike! This tool is to help you practice noticing details and learning more about native plants in Central Oregon. Not all plants you see will be in this key. Be sure to review some key terms to help with your identification!

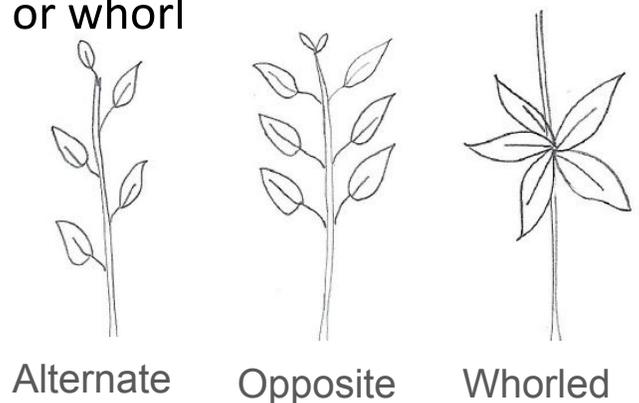
Key Terms

(Look for underlined words in each plant description)

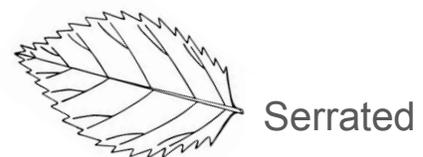
- Simple - a leaf with a single blade attached to a stem
- Compound - a leaf with several leaflets joined to a single stem



- Opposite Leaves - two leaves that grow directly across from each other at the same node (the point on a stem where leaves attach)
- Alternate - leaves that are arranged singly at different points (nodes) along a stem, with each leaf appearing on alternating sides of the stem as you move up
- Whorled - having three or more leaves arising from the same point or node on a stem, forming a circle or whorl



- Serrated (toothed) - has an edge that looks like a saw blade, with small, sharp teeth pointing forward



- Lobe - rounded or pointed projection that extends from the main part of a leaf



Start Here:

1. Is it a tree (tall with a trunk and branches)?

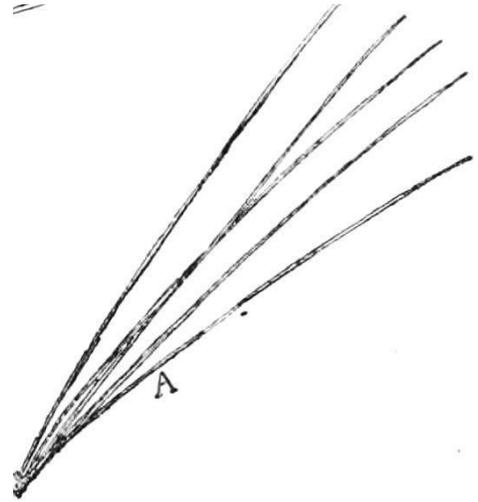
→ Yes: Go to 2

→ No: Go to 10

2. Does it have needles (not leaves)?

→ Yes: Go to 3

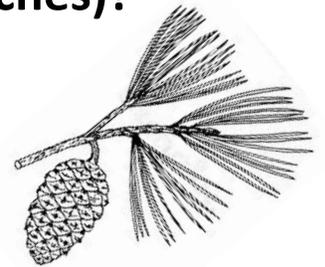
→ No: Go to 6



3. Are the needles in bunches of 3 and long (5+ inches)?

→ Yes: **Ponderosa Pine** (pg. 7)

→ No: Go to 4



4. Are the needles in pairs (2 per bundle)?

→ Yes: **Lodgepole Pine** (pg. 8)

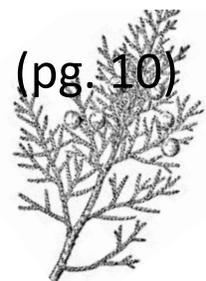
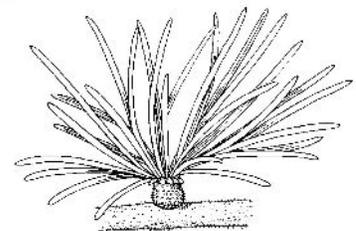
→ No: Go to 5



5. Are the needles soft and grow in tufts?

→ Yes: **Larch** (pg. 9)

→ No: **Juniper** (has tiny scale-like needles) (pg. 10)



6. Are the leaves heart-shaped and flutter in the wind?

→ Yes: **Aspen** (pg. 11)

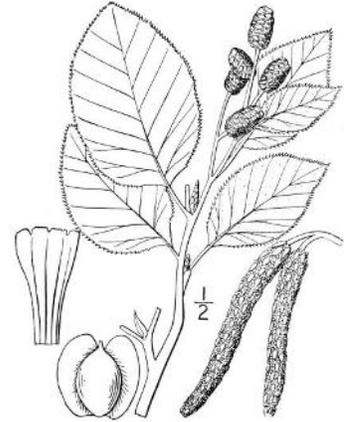
→ No: Go to 7



7. Are the leaves oval with jagged edges?

→ Yes: **Mountain Alder** (pg. 12)

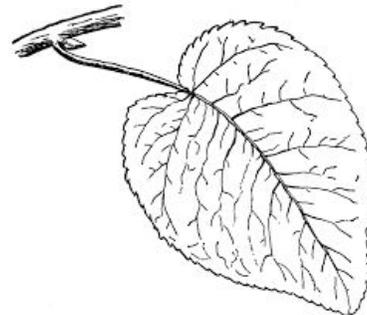
→ No: Go to 8



8. Are the leaves are triangular, does the bark have deep cracks?
Is it growing near the water?

→ Yes: **Cottonwood** (pg. 13)

→ No: Go to 9



9. Your plant might not be a tree.

→ Go to 10

10. Is the plant a shrub (woody, but smaller than a tree)?

→ Yes: Go to 11

→ No (grassy or low-growing): Go to 19



11. Does the plant grow in or near water?

→ Yes: Go to 12

→ No: Go to 15

12. Does the plant have red stems and white flowers or berries?

→ Yes: **Red Osier Dogwood** (pg. 14)

→ No: Go to 13

13. Does the plant have long bendy branches?

→ Yes: **Willow** (pg. 15)

→ No: Go to 14



14. Does the plant have thorns on the stems?

→ Yes: **Woods' Rose** (pg. 20)

→ No: **Douglas Spiraea** (pg. 16)

15. Does the plant have flowers or berries?

→ Yes: Go to 16

→ No: Go to 17

16. Take a closer look at the leaves and stems of the plant.

→ Leaves are smooth & smell spicy: **Wax Currant** (pg. 17)

→ Leaves are fuzzy with toothed ends: **Serviceberry** (pg. 18)

→ White, squishy berries or pink flowers: **Snowberry** (pg. 19)

→ Leaves are soft and fuzzy, yellow flowers: **Rabbitbrush** (pg. 22-23)



17. Do the leaves have smooth edges? Are the stems reddish-brown?

- Yes: **Greenleaf Manzanita** (pg. 21) (pink flowers in late spring)
- No: Go to 18

18. Does the plant have gray-green leaves, smell strong, and grow in dry spots?

- Soft and fuzzy leaves, yellow flowers: **Rabbitbrush** (pg. 22-23)
- Spicy-smelling and very gray: **Sagebrush** (pg. 24)
- Dark green leaves, gray-brown bark: **Snowbrush** (pg. 25)
- Scraggly with dull green leaves and yellow flowers: **Antelope Bitterbrush** (pg. 26)

19. Is the plant grass-like with no woody stems?

- Yes: Go to 20
- No: Double-check your plant or ask an expert!



20. Are the stems round and smooth like green straws?

- Yes: **Rushes** (pg. 27)
- No, it has sharp edges (like a triangle): **Sedges** (pg. 28)

Ponderosa Pine (*Pinus ponderosa*)



Identifying Characteristics:

- *Size:* Up to 180 ft. tall
- *Bark:* Light-orange brown; puzzle-shaped plates
- *Needles:* **Bundles of 3**; up to 8 in. long; flexible; slender
- *Cones:* 3-5 in. long; prickly scales
- *Fun Fact:* The bark of ponderosa pines often smells like vanilla! The tallest known ponderosa pine (268.5 ft) is in Oregon!

Lodgepole Pine (*Pinus contorta*)



Identifying Characteristics:

- *Size:* Up to 100 ft. tall; skinny; straight
- *Bark:* Thin; orange-brown to gray; covered with small loose scales
- *Needles:* **Bundles of 2**; short (1-3 in.)
- *Cones:* Small with prickles; often remain closed
- *Fun Fact:* Lodgepole pine cones are *serotinous*, meaning they need fire to open their cones to spread seeds!

Western Larch (*Larix occidentalis*)



Identifying Characteristics:

- *Size:* Up to 180 ft. tall
- *Bark:* Gray or brown flaky plates
- *Needles:* **Bundles of 15-30**; soft; bright green; yellow in the fall
- *Cones:* Small and oval with whiskers that stick out
- *Fun Fact:* They are one of the world's only deciduous conifers (they lose their needles every year)! They can live more than 500 years!

Western Juniper (*Juniperus occidentalis*)



Identifying Characteristics:

- *Size:* Up to 60 ft. tall
- *Bark:* Shaggy; reddish
- *Needles:* Scale-like in whorls of 3
- *Cones:* Blue “berries” (they are actually cones)
- *Fun Fact:* Juniper “berries” are a popular spice. The wood is strong and resistant to rotting - great material to put in the stream to create fish habitat!

Quaking Aspen (*Populus tremuloides*)



Identifying Characteristics:

- *Size:* Up to 80 ft. tall
- *Bark:* Smooth and white; marked with black scars
- *Leaves:* Alternate; simple; nearly round or heart-shaped; deep green above, paler below; yellow, maybe orange in fall
- *Fun Fact:* Aspens spread primarily through their root system. When you see a grove of aspens, it is likely they are all the same organism! The white dust on bark can be used as sunscreen.

Alder (*Alnus incana*)



Identifying Characteristics:

- *Size:* Up to 30 ft. tall
- *Bark:* Smooth; gray-brown
- *Leaves:* Alternate; simple; double serrated (jagged) edges
- *Flowers:* Long catkins (male) in fall; tiny pinecone catkins (female) in spring
- *Fun Facts:* They're nitrogen fixers - their roots contain bacteria that convert nitrogen from the air into a form that is nutritious for it and other plants. Many caterpillars use alder as a food source.

Cottonwood (*Populus trichocarpa*)



Identifying Characteristics:

- *Size:* Up to 150 ft. tall
- *Bark:* Gray; deeply furrowed (deep grooves)
- *Leaves:* Alternate; simple; silvery-white undersides
- *Flowers:* Fluffy “cotton” catkins which develop seeds that descend like snow
- *Fun Facts:* Largest hardwood trees in the West! Indigenous Peoples use them for canoes, bedding, baskets, and sweat lodges. The bark can be used to treat headaches and wounds (it contains salicin).

Red Osier Dogwood (*Cornus stolonifera*)



Identifying Characteristics:

- *Size:* 5-20 ft. tall
- *Bark/Stems:* Bright red
- *Leaves:* Opposite; simple; oval with pointed tips
- *Flowers:* Whitish and appear in clusters
- *Fruit:* Small; white; berry-like
- *Fun Fact:* Indigenous uses include using the flexible stems for basket weaving, eating berries to stop colds, and the inner bark for dyes!

Willows (*Salix spp.*)



Identifying Characteristics:

- *Size:* 3-40 ft. tall
- *Bark/Stems:* Gray to brown; new growth can be yellow
- *Leaves:* Alternate; simple; long; shaped like canoes
- *Flowers:* Catkins, also referred to as “pussy willows”, are white and fluffy
- *Fun Facts:* Ancient peoples discovered chewing willow leaves and bark helps reduce aches and fever. When willows are cut, they resprout from their trunks!

Douglas Spiraea (*Spiraea douglasii*)



Identifying Characteristics:

- *Size:* 2-7 ft. tall
- *Leaves:* Alternate; simple; oval; serrated edges above the middle
- *Flowers:* Pink to rose in color; clusters; like cotton candy on a stick
- *Fruit:* Small brown clusters that stay on after leaves have fallen
- *Fun Facts:* Belongs to the rose family. Indigenous peoples use the strong stems to make brooms. Also known as hardhack.

Wax Currant (*Ribes cereum*)



Identifying Characteristics:

- *Size:* 2-5 ft. tall
- *Leaves:* Alternate; simple; small with 3-5 lobes; shaped like a catcher's mitt
- *Flowers:* Bell-shaped; white to pinkish; grow in clusters
- *Fruit:* Orange-red to bright red berries
- *Fun Facts:* The berries are edible, but don't taste very good and can be toxic in large amounts. Leaves secrete a waxy like substance. Fermented berries can make one feel loopy if eaten.

Western Serviceberry (*Amelacnhier alnifolia*)



Identifying Characteristics:

- *Size:* 3-20 ft. tall
- *Leaves:* Alternate; oval with teeth across the ends
- *Flowers:* Small; white; star-shaped; 5 petals
- *Fruit:* Red-to-black berries
- *Fun Facts:* Delicious berries. Used by Indigenous peoples for medicinal purposes. Also known as juneberry, saskatoon, chuckley pear, and pigeon berry

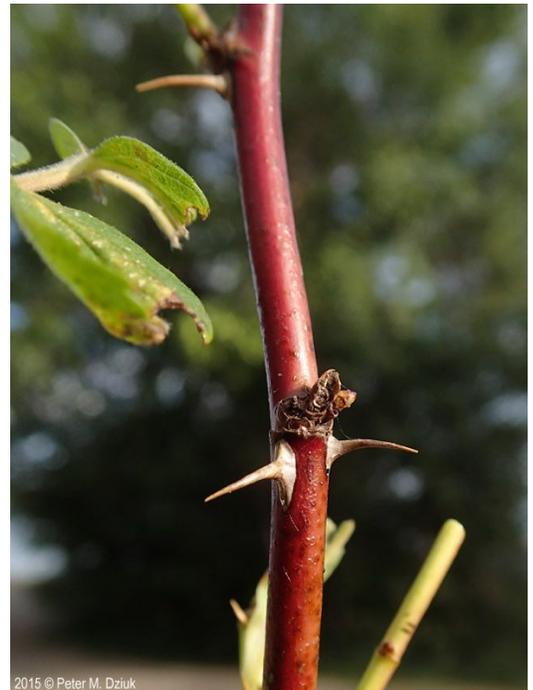
Snowberry (*Symphoricarpos albus*)



Identifying Characteristics:

- *Size:* 1.5-10 ft. tall
- *Leaves:* Opposite; oval; can be smooth, lobed, or wavy-toothed; hairy underside
- *Flowers:* Bell-shaped; pink and white
- *Fruit:* White berries in small clusters; remain through winter
- *Fun Facts:* Fruits contain *saponin*, a naturally soapy substance with antioxidant and antimicrobial effects - they also heal rashes and burns. Indigenous uses include using berries to clean hair, soaking roots to make tea to treat stomach disorders, and making tea from twigs to treat fevers.

Woods' Rose (*Rosa woodsii*)



Identifying Characteristics:

- *Size:* 2-7 ft. tall
- *Stems:* Branched with thorns
- *Leaves:* Opposite; serrated
- *Flowers:* Pink; saucer-shaped; appear late spring
- *Fruit:* Deep-red; round to oval; appear late summer and stay all winter
- *Fun Fact:* One rose hip (fruit) contains more vitamin C than an entire orange! The roots, stems, leaves, flowers, and fruits can all be used for food and medicinal purposes.

Greenleaf Manzanita (*Arctostaphylos patula*)



Identifying Characteristics:

- *Size:* 3-10 ft. tall
- *Stems:* Reddish-brown; crooked; smooth
- *Leaves:* Alternate; smooth-edged; 1-2 in. long
- *Flowers:* Bell-shaped; pinkish (in May and June)
- *Fruit:* Dark-brown or black berries
- *Fun Fact:* Patula means “wide-spreading”. Manzanita seeds are *serotinous* - they depend on fire to crack their hard coats and germinate.

Gray Rabbitbrush (*Chrysothamnus nauseosa*)



Identifying Characteristics:

- **Size:** .5-8.5 ft. tall
- **Stems:** Silvery (differentiates it from green rabbitbrush)
- **Leaves:** Narrow; non-lobed; grayish, velvety hairs
- **Flowers:** Yellow; clusters; bloom late summer when little else is blooming
- **Fun Fact:** Also known as “rubber rabbitbrush” since the leaves and stems contain a rubber-like property called *chrysil* that can be used to create rubber.

Green Rabbitbrush (*Chrysothamnus viscidiflorus*)



Identifying Characteristics:

- *Size:* 1-4 ft. tall
- *Stems:* Similar to gray rabbitbrush but shorter and greener
- *Leaves:* Narrow; non-lobed; green; sticky to the touch
- *Flowers:* Yellow; not as showy as gray rabbitbrush
- *Fun Fact:* Can be used to treat colds. The leaves can also be mashed into a poultice to treat cavities and toothaches.

Big Sagebrush (*Artemisia tridentata*)



Identifying Characteristics:

- *Size:* 1-10 ft. tall
- *Stems:* Woody; often peeling
- *Leaves:* Gray-green; hairy; usually 3 deep notches
- *Flowers:* Small yellow blossoms in late summer and early fall
- *Fun Facts:* There are about 250 species of sagebrush. They have very deep roots to help them pull water from the ground. Be sure to sniff their leaves - they smell great!

Snowbrush (*Ceanothus velutinus*)



Identifying Characteristics:

- *Size:* 2-10 ft. tall
- *Stems:* Gray-brown
- *Leaves:* Opposite; thick; dark green; 3 prominent veins
- *Flowers:* Small; white; appear late spring to early summer
- *Fun Fact:* Snowbrush is a nitrogen fixer which benefits it and other plants. The flowers can be used to make soap! Its leaves smell spicy & fragrant!

Antelope Bitterbrush (*Purshia tridentata*)



Identifying Characteristics:

- *Size:* 3-8 ft. tall
- *Stems:* Stiff; brittle; often sticking straight up
- *Leaves:* Three to five lobes; dull-green
- *Flowers:* Yellow; appear in the spring
- *Fun Facts:* Can live up to 100 years! Can be used for a variety of medicinal purposes. They're nitrogen fixers - their roots contain bacteria that convert nitrogen from the air into a form that is nutritious for it and other plants.

Rushes (*Juncus*)



Identifying Characteristics:

- *Size:* 1-3 ft. tall
- *Stems:* “Rushes are round” - round; smooth; hairless; form in clumps
- *Leaves:* Will have just a few if any; clustered around base; cylindrical or grass-like
- *Flowers:* Small; clusters; green, brown, or yellowish; wind pollinated
- *Fruit:* Produce fruit called *capsules* which open to release seeds
- *Fun Fact:* Can be used for basket weaving. They can go dormant for years to survive dry spells.

Sedges (*Carex*)



Identifying Characteristics:

- *Size:* .5-3 ft. tall
- *Stems:* “Sedges have edges” - triangular, solid (not hollow); tough; wiry
- *Leaves:* Similar to grass; blades; flat; shape varies between species
- *Flowers:* Florets grouped into cylindrical or oval clusters called *spikes*
- *Fruit:* Small, one seeded fruit called a *nutlet*
- *Fun Fact:* Over 5,500 species of sedges. Some species are extremely efficient at storing carbon. Sedges are critical wetland plants, stabilizing soil, providing habitat, and removing toxins from water.