The following is a key to the identification of some of the more common trees in Colorado. This guide does not include all tree species which may occur in Colorado.

**To Identify a Tree:**

- Select some typical leaves or needles, and if possible, some cones and bark.
- Read the first leaf description below.
- Select the choice that best describes the leaf or needle.
- Go to the number instructed, continuing in the same manner until a tree name is given.

If the tree has needle- or scale-like leaves go to **1**

If the tree has ordinary leaves, go to **13**

1. If the leaf is a needle, go to **2**
   - If the leaf is a scale, go to **8**
2. If the needles are surrounded by a sheath at the base, go to **3**
   - If the needles are not in bundles not surrounded by a sheath at the base, go to **9**

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**Glossary**

**Lanceolate** - narrow leaf, broadest toward the base. Lance-shaped, about 5 times as long as wide.

**Ovate** - egg-shaped with the broadest area toward the base.

**Obovate** - reverse ovate: oval, with the broader end at the tip.

**Racemes** - an unbranched flower cluster, consisting of a single central stem, along which individual flowers grow on small stems.

**Node** - place along the stem where leaves, buds, or branch stems arise.

**Pinnate** - arranged with leaflets or veins arising at opposite sides of a central axis.
23 This tree is a...

RIVER BIRCH (*Betula occidentalis*) Leaves are 1-2 inches long, thin, and oval or obovate shaped. They are also dark green on top and yellow-green on bottom. Bark is a reddish-brown and is shiny. Fruit is a light brown cones, about 1 inch long.

Or a...

CHOKECHERRY (*Prunus virginiana melanocarpa*) Leaves are broadly obovate, 2-4 inches long and 1-2 inches wide. Flower is white and .5 inches in diameter, in racemes 3-6 inches long. Cherries are .3 inches in diameter. Bark smells bad and is lustrous-brown and later becomes scaly.

24 This tree is a...

GAMBEL OAK (*Quercus gambelii*) Leaves are 2-7 inches long and 1.5-3.5 inches wide with 7-11 lobes. The fruit is an acorn.

3 If needles are borne singly, go to 4

If the needles are mostly in bundles of two, go to 5

If the needles are mostly in bundles of three, go to 6

If the needles are in bundles of five, go to 7

4 This tree is a...

SINGLELEAF PIÑON (*Pinus monophylla*) Needles are 1-1.5 inches long. Cones are round and about 2 inches long. Needles are borne singly. (*Occurs rarely in SW Colorado.*)

5 This tree is a...

PIÑON PINE (*Pinus edulis*) Has large edible seeds. Needles are 1-1.5 inches long. Cones are round, resinous, and about 2 inches long. The tree is fairly small, 20-50 feet tall, with a rounded crown and short trunk.
PONDEROSA PINE (*Pinus ponderosa*) Needles are 3-6 inches long, dark yellow-green, and form tufts near the end of the branches. Cones are 3-6 inches long with the scales tipped by a stiff prickle. Bark on mature trees is reddish orange and sometimes smells like vanilla. Bark on young trees is dark.

LIMBER PINE (*Pinus flexilis*) Needles are 2-3.5 inches long, slender, and blue-green in color. Cones are columnar and 3-8 inches long. Branches are fairly bendable.

SANDBAR WILLOW (*Salix exigua*) Leaves are narrowly lanceolate leaves, 2-6 inches long and .3-.5 inches wide. Bark is reddish-brown and scaly. Fruit is cottony.

PEACHLEAF WILLOW (*Salix amygdaloides*) Leaves are broadly lanceolate, 2-5 inches long and .8-1.3 inches wide. Bark of large trunks is black, ridged, and furrowed.

NARROWLEAF COTTONWOOD (*Populus angustifolia*) Leaves are 2-3 inches long and .5-1 inches wide, with teeth on the edge and a nearly round stem.

There many other species of native willows and willow hybrids in Colorado. These naturally occur primarily in riparian areas.
ROCKY MOUNTAIN JUNIPER (*Juniperus scopulorum*)

Has scale-like, wispy branches that are grayish-green in color and may be reddish in the winter. Berries are .2 inches in diameter. Usually grows as a multi-stemmed shrub on very poor sites.

ONE-SEED JUNIPER (*Juniperus monosperma*)

Branches are stout with yellow-green, glandular foliage. Berries are a 1/4 inch, dark blue, and juicy. Usually grows as a multi-stemmed shrub on very poor sites.

BRISTLECONE PINE (*Pinus aristata*)

Needles are 1.5 inches long, stout, and dark green in color with white dots of sap on them. Cones scales are tipped with a long, stiff, incurved prickle.

QUAKING ASPEN (*Populus tremuloides*)

Leaves are nearly round, 1-3 inches in diameter with slender, flattened stems. They are green on top and silverish below. In the fall, the leaves turn golden-yellow. The bark is smooth, greenish-white, and marked by black, warty patches.

HACKBERRY (*Celtis occidentalis*)

Leaves are ovate to ovate-lanceolate and are 2.3-4 inches long and 1.5-2 inches wide. Fruit is dark-red to purple and .3 inches in diameter. Bark is warty and gray to brown.

THINLEAF ALDER (*Alnus tenuifolia*)

Leaves are 2-4 inches long and 1.5-2.5 inches wide with toothed edges. Tree has “minature cones.” Grows along creeks or other moist areas.
If the needles are four-sided, sharp on the end and grow from woody, peglike bases, go to 10

If the needles are two-sided, rounded on the end and grow directly from the branch, go to 11

10 This tree is a...

**ENGELMANN SPRUCE**

*(Picea engelmannii)* Needles are plump to 4-sided in cross-sections and sharp. Twigs are minutely hairy. Cones are cigar shaped, 1-2.5 inches long, light chestnut in color. Scales are papery thin and ragged along the outer edge. Tree grows to be 100-125 feet tall. Bark of mature tree is “flaky.”

19 This tree is a...

**GREEN ASH**

*(Fraxinus pennsylvanica)* Leaves are 6-9 inches long with leaflets 3-4 inches long and 1-1.5 inches wide. The bottom of the leaflets are smooth to hairy. Bark is thin, brown-tinged with red, and furrowed with ridges.

20 This tree is a...

**FREMONT COTTONWOOD**

*(Populus fremontii)* Leaves are triangular, 2-2.5 inches long and 2.5-3 inches wide. Seeds are capsules that are usually 3, sometimes 4 valved. Bark in young trees is thin, smooth, and gray-brown. Bark on mature trees is thick, deeply-furrowed, and dark-reddish brown.
If seeds and/or flowers are white...

**REDTWIG (OR OSIER) DOGWOOD** (*Cornus stolonifera*)
The leaves are rough on the top and fuzzy on the bottom. They are also large and oval. Flowers and fruit are white. The twigs and branches are reddish.

If the fruit is twin, black berries...

**TWINBERRY HONEY-SUCKLE** (*Lonicera involucrata*)
Leaves are large, opposite, and 2-4 inches long. Fruit is twin blackberries about 1/4 inch in diameter. Stems are gray.

This tree is a...

**BOXELDER** (*Acer negundo*)
Leaves are pinnately compound. They are 6-15 inches long with 3-7 coarsely toothed or shallowly lobed leaflets. Seeds are winged and 1.5-2 inches long. Bark on young trees is gray-brown and slightly ridged. Bark on mature trees is heavily furrowed.

If the cones hang down, this tree is a...

**DOUGLAS-FIR** (*Pseudotsuga menziesii*)
Needles are 1-1.5 inches long. Cones hang down and are 3-4 inches long. They have 3-pointed bracts sticking out from the scales. Bark of young trees is gray and smooth with resin blisters. Needle bases consist of little stalks or “pegs.”

If the leaf scars resemble “suction cups,” the needles are soft with rounded tips, and the cones sit upright on the branch falling apart at maturity, falls apart on the tree, go to 12

**COLORADO BLUE SPRUCE** (*Picea pungens*)
Needles are 1-1.5 inches long, diamond-shaped in cross sections, stiff, and very sharp. Cones are similar to Engelmann spruce but 3.5 inches long. Tree grows to be 80-100 feet tall. Bark of mature tree is gray and furrowed.

Or a...
ROCKY MOUNTAIN MAPLE (Acer glabrum) Leaves are 3-5 inches in diameter with 3-5 lobes. Wings of the seeds only spread slightly, are .75-1 inch long and about .3-.5 inch wide and slightly rose colored.

12 This tree is a...

WHITE FIR (Abies concolor) Needles are flat, 1.5-3 inches long, blue-green or silvery, and tend to point up. The cones are oblong, olive-green to purple, and 3-5 inches long.

15 If the seeds look like this go to 18

If the seeds look like this go to 19

16 If the leaves are triangle-shaped, go to 20

If the leaves are ovate, ovate-lanceolate, or ovate-oblong, go to 21

If the leaves are lanceolate, go to 22

If the leaves are obovate, go to 23

If the leaves are broad and lobed, go to 24

13 If the leaves are simple, go to 14

If the leaves are compound, go to 15

14 If the leaves on the branch are alternate, go to 16

If the leaves on the branch are opposite, go to 17

17 If the seeds have wings...

SUBALPINE FIR (Abies lasiocarpa) Needles are flat, 1-1.8 inches long, dark blue-green, with silvery lines of stomata on both surfaces. Cones are 2-4 inches long, purple, and cylindrical. (Corkbark fir is a subspecies of subalpine fir also occurring in Colorado).

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