

Fort Collins Tree ID Test Study Guide

2011



White Fir Whole Tree

Conical to pyramidal
growth habit.



White Fir Needles

Curving upwards and outwards. Bluish green to silvery blue in color. Soft to the touch



White Fir Cone

Cones are upright,
stalked cylindrical.

Photo from [wikimediafoundation.org](https://www.wikimediafoundation.org)



Rocky Mountain Juniper Whole Tree

Narrow to pyramidal tree.
May have more than one
stem.



Rocky Mountain Juniper Needles

Scale-like. Varying in color
from dark green or bluish
grey.



Rocky Mountain Juniper Fruit

Cones are nearly globular, to 1/3 inches across. Dark blue in color.



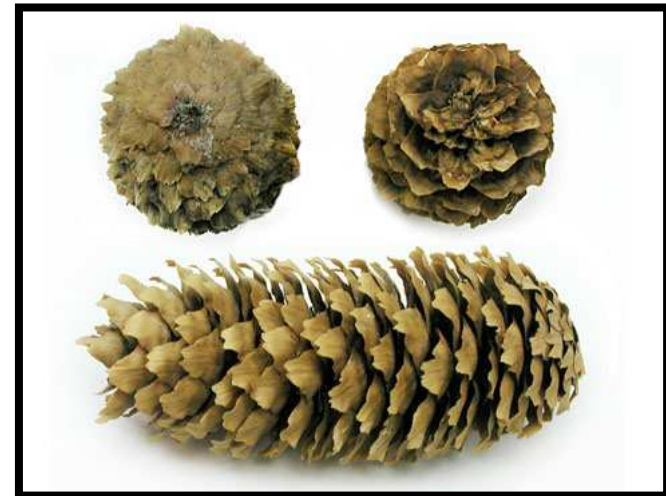
Blue Spruce Whole Tree

*A dense, broad pyramidal crown,
with horizontal branches.*



Blue Spruce Cones

Oblong and cylindrical, 3-4 inches long. Light brown.





Blue Spruce Needles

Blue or green in color, sharp
to the touch.



Bristlecone Pine Whole Tree

Dwarf, shrubby
growth habit.



Bristlecone Pine Needles

Dark green with
white resinous
exudations. Needles
in fascicles of five.
Branches look like a
foxtail.



Bristlecone Pine Cone

Sessile and cylindrical in shape, and 2-4 inches long. Cones have bristle like prickles at the end of each scale.

Photo from www.palojono.com



Pinyon Pine Whole Tree

Crown broad to
irregularly shaped.



Pinyon Pine Needles

Dark green, 1-3 inches long,
in fascicles of two.

Pinyon Pine Cone

2- 4 inches in diameter
and round or egg shaped.
Contains the edible pinyon
nut.





Austrian Pine Whole Tree

Large, broad, pyramidal tree with low stout spreading branches.



Austrian Pine Needles

3.5 -5 inches long and dark shining in color. Needles in fascicles of two. Buds light colored.

Austrian Pine Cone

Stout, 2.5- 3.5 inches
tall.





Ponderosa Pine Whole Tree

Pyramidal crown when young
forming a broad more open crown
at maturity.

Ponderosa Pine Needles



5-11 inches long. Dark to yellowish green in color.
Needles in fascicles of 2-3.

Ponderosa Pine Cones

3- 6 inches long. Sharp
prickly points on the cone.





Douglas Fir Whole Tree

Open, pyramidal growth habit
with horizontal branching.



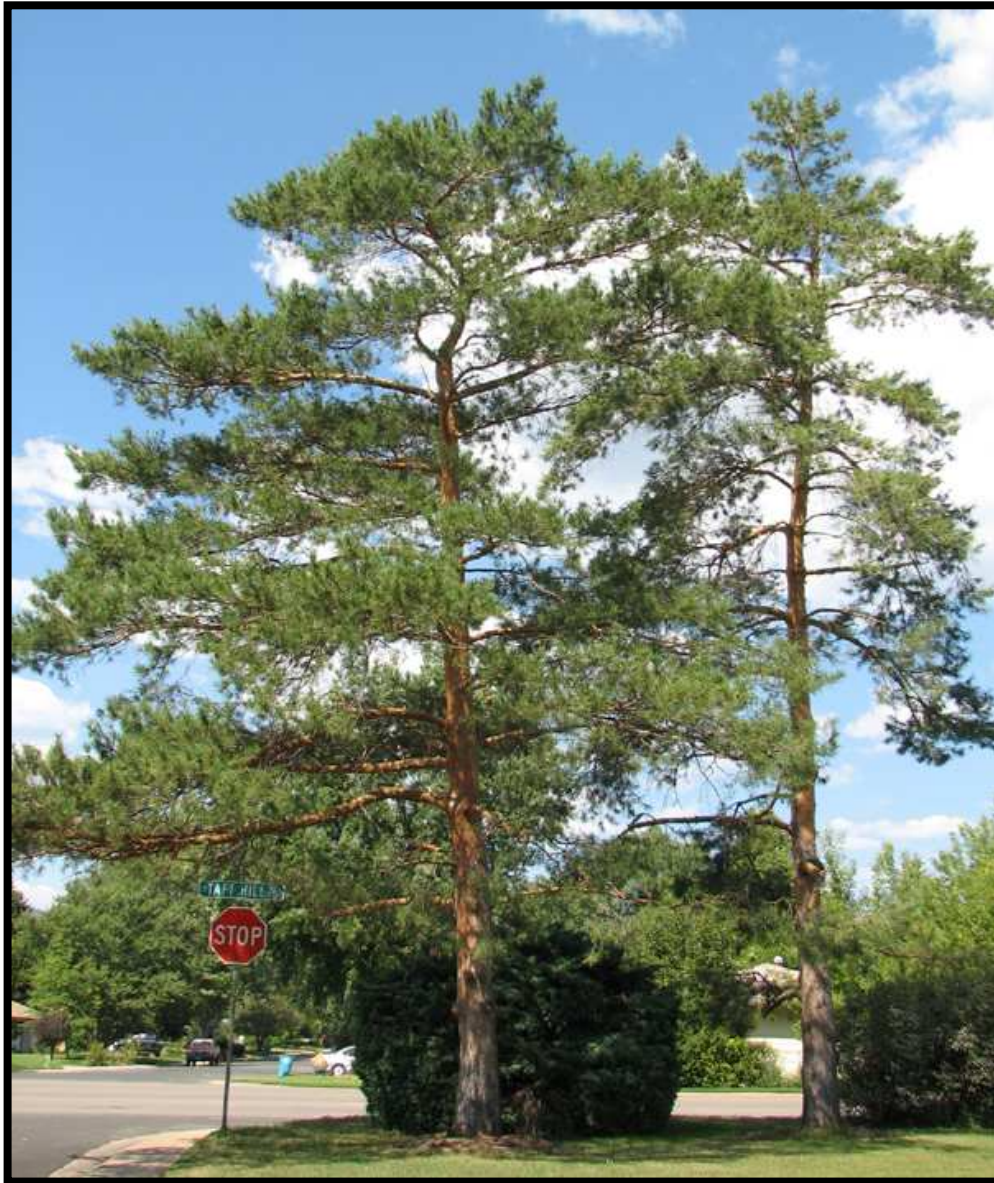
Douglas Fir Needles

Horizontal, straight, $\frac{3}{4}$ to $1\frac{1}{2}$ inches long, shining dark green to blue-green. Blunt and soft to the touch. Buds pointed long and brown.



Douglas Fir Needles and Cones

Pendulous, 3-4 inches long. Bracts straight and exerted.(similar to rat tails)



Scotch Pine Whole Tree

Round topped and irregular when old. Open and pyramidal when young.



Scotch Pine Needles

1-4 inches long.
Green in color.
Needles in clusters
of two and twisted.



Scotch Pine Bark

Orangish bark on upper portions of older specimens.



Scotch Pine Cone

1.5 to 2.5 inches long.



Amur Maple Whole Tree

Multi stemmed large
shrub to small tree.

Amur Maple Fruit



2 winged samara, reddish in color.



Amur Maple Leaves

1.5-3 inches long, 3 lobed, with the middle lobe much longer than the 2 lateral lobes. Light to dark green in color.



Serviceberry Whole Tree

Large multi stemmed
shrub to small tree
with a sometimes
rounded form.

Serviceberry Flower



Abundant white flowers
in Spring. Flowers
before leaves emerge.

Serviceberry Leaves and Fruit



Fruit an edible berry like pome. Leaves serrated only on the upper portion of leaf.

Eastern Redbud Whole Tree in Flower



Usually a small tree divided into multiple stems at ground level. Crown is generally flat topped to rounded.



Eastern Redbud Leaves and Fruit

Leaves: Simple,
broadly heart shaped
with dark green
foliage.

Fruit: True pod
(legume). 2-3 inches
long.

Eastern Redbud Flowers



Brilliant pink all along the stem. Pea-shaped flowers appear before leaves emerge.



Eastern Redbud Bark

Brownish and scaly with
orange inner bark.



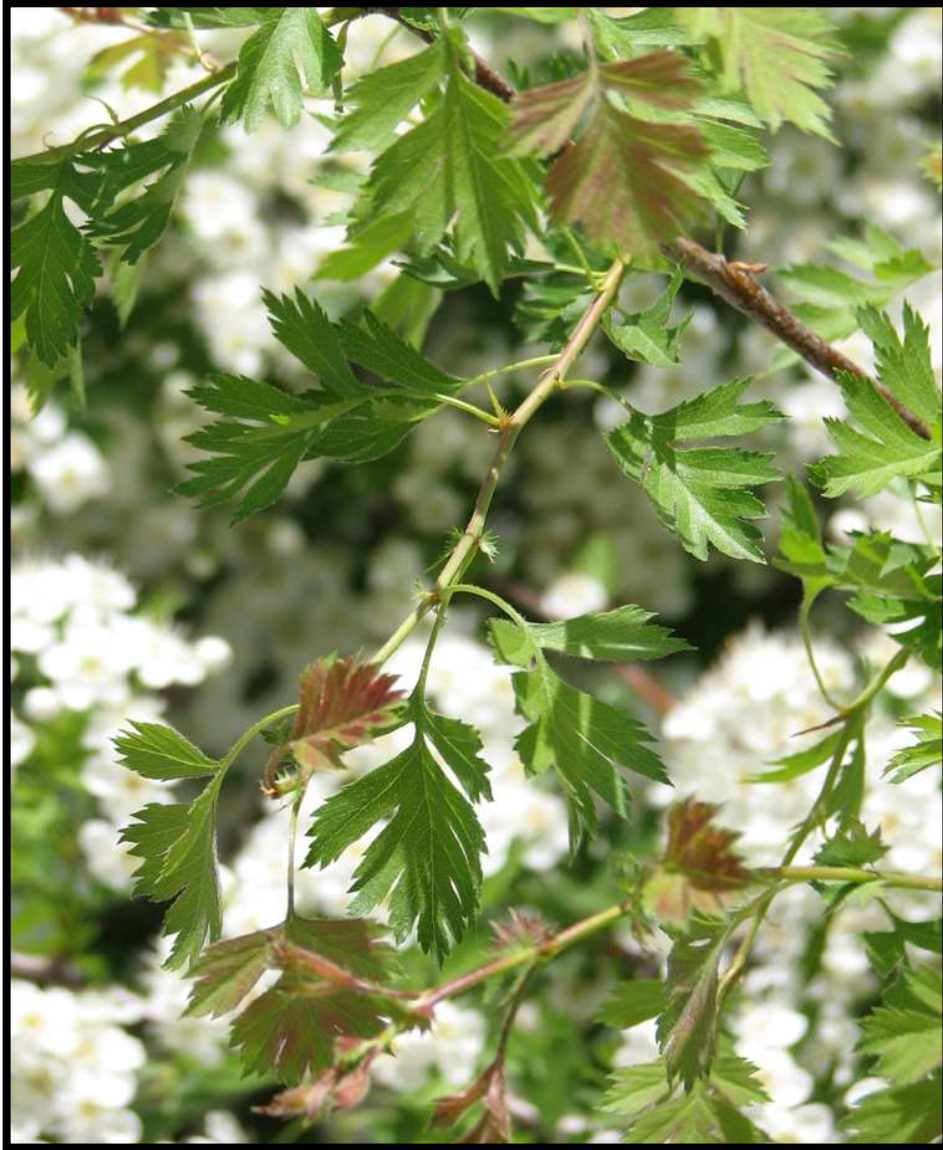
Hawthorn Whole Tree

Small tree, though can reach heights of over twenty feet tall. Usually has a broad rounded growth habit with horizontal branches. Most varieties have thorns. Good fall color.

Hawthorn Flowers



Spring flowers in clusters. Flowers are white in most varieties, although some are pink. Flowers have an unpleasant odor.



Hawthorn Leaves

Sharply serrate and 3-5 lobes with dark green foliage. Lobe depth varies with different species



Crabapple Whole Tree

Small tree 20-30 feet tall with a rounded growth habit Many varieties are planted. Flower color varies from white to pink-red.



Crabapple Leaves

Leaves are oval shaped with small serrations on the margins. Tip of leaf has a long point.



Aspen Whole Tree

Pyramidal habit when young maturing to a rounded crown. Often with multiple stems.



Aspen Leaves

Broad oval in shape.
Leaves flutter in the
wind making a quaking
sound.



Aspen Bark

White and smooth when young.
Older bark tends to furrow.



Callery Pear Whole Tree

Moderately conical (pyramidal) in youth, becoming broader over time.



Callery Pear Leaves and Fruit

Leaves: *Glossy*,
2-3 inches long.

Fruit: Small
rounded
pome, 1/2 inch or
less across,
brownish in color.



Callery Pear Flowers

White $\frac{3}{8}$ to $\frac{3}{4}$ inches
across.



Mountain Ash Whole Tree

Upright in youth forming a more open shape at maturity.



Mountain Ash Fruit

Small berry like pome usually orange to red in color. Fruit often abundant in hanging clusters.



Mountain Ash Leaves and Flower

Leaves pinnately compound, and usually 5-9 inches long. Flowers in spring with terminal clusters. Flowers have an unpleasant odor.



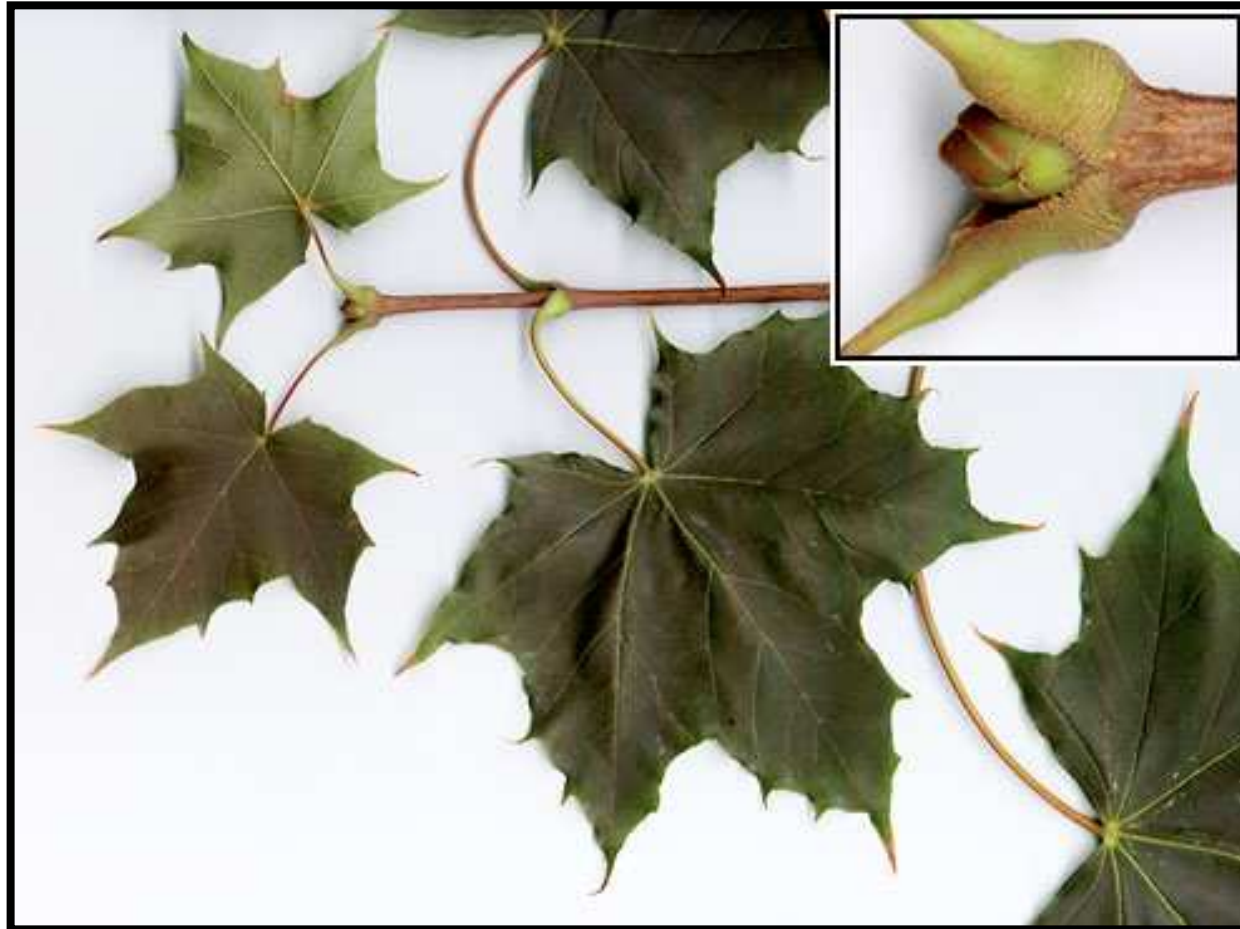
Mountain Ash Bark

Light grey to brown usually
smooth with lenticels.



Norway Maple Whole Tree

Uniform round shape with many branches. Dense canopy.



Norway Maple Leaves and Buds

Leaves: Dark green and glossy.
Attached opposite on twigs. Yellow fall color.

Buds: Exude a milky sap when removed as do leaves.



Norway Maple Bark

Grayish brown with ridges and shallow furrows.



Silver Maple Whole Tree

Oval to rounded crown.
Upright with strong
spreading branches.



Silver Maple Fall Color

Gold to yellow.



Silver Maple Leaves

4 to 6 inches in diameter. Deeply palmate with 5 lobes. Attached opposite on the twigs.



Silver Maple Bark

Ridged, furrowed and often peeling off in long strips. Grey in color.



Catalpa Whole Tree

Narrow, open, irregular
crown. 40 to 60 feet in
height.



Catalpa Leaves and Fruit

Leaves: Simple, 6-12 inches long. Light green. Fruit a long pod 12-24 inches.



Catalpa Bark

Grayish brown often exhibiting a ridged and furrowed character.



Catalpa Flower

White, 2 inches long and
wide, bell shaped.
Flowers in June.



Hackberry Whole Tree

Broad and arching. May have drooping branches. 40 - 60 feet in height.



Northern Hackberry Fall Color

Yellow to gold fall color.



Hackberry Leaves

Alternate, simple, 2-4 inches long. Prone to Hackberry nipple gall as seen in this photo.



Hackberry Bark

Narrow corky ridges and very rough. Bark on larger trees is a good identification characteristic.



Green Ash Whole Tree

Upright spreading habit. Oval to round in form.



Green Ash Fall Color

Yellow to gold.



Green Ash Leaves

Opposite, bi-pinnately compound. 5 to 9 leaflets 1-2 inches long and 1 inch wide. Leaves attached opposite on twigs.



Green Ash Bark

Grey to grey brown
furrowed into
diamond shapes.



Honeylocust Whole Tree

Oval to round shape with open and spreading crown. Fine texture imparted from the small leaflets.



Honeylocust Leaves

Alternate, pinnately or bi-pinnately compound 6 to 8 inches long. Leaflets are small, which allows good light penetration through the canopy.



Honeylocust Thorns and Bark

New cultivars are both pod less and thornless. Some seed grown trees produce prominent sharp thorns.

Bark is scaly with small furrows between scales.



Honeylocust Fruit

Pod, reddish brown, 8
to 18 inches long.



Kentucky Coffeetree Whole Tree

Usually develops vertical,
ascending branches which
form narrow oval crown.
Coarse texture.



Kentucky Coffeetree Fruit

Reddish brown leathery pod
5 to 10 inches long. Pods
produced only on female
trees.

Kentucky Coffeetree Leaves

Alternate, bi-
pinnately compound
30 to 36 inches long.
Leaflets are 1 to 3
inches long. Produces
few twigs that are
large and stout.





Kentucky Coffeetree Bark

Rough, with hard,
thin, firm and scaly
ridges curling
outward along the
edges.



Plains Cottonwood Whole Tree

Broad vase shaped native tree with open branch structure. Very large tree up to 100 feet in height. Female trees produce cotton.

Plains Cottonwood Leaves



3 to 7 inches long and 3 to 5 inches wide.

Triangle shaped leaf with a flat base and a flat petiole.



Plains Cottonwood Bark

Ash gray divided into thick, flattened ridges separated into deep fissures.



Bur Oak Whole Tree

Oval to irregular in shape with large stout branches and a massive trunk. 70 to 80 feet in height.



Bur Oak Acorn

Nut large 1-2 inch long
with a conspicuous
fringe on the margin of
the acorn cap.



Bur Oak Leaf

An oblong leaf 6 to 12 inches long with 2 deep sinuses near the base that almost reach the midrib. Lobes are rounded and not pointed.



Bur Oak Bark

Rough, grey-brown with deep
ridges and furrows.



American Linden Whole Tree

Tall cylindrical tree with narrow drooping branches. Becomes more round headed with age. Dense canopy with tight branch connections.



American Linden Leaves

Heart shaped leaf 4 to 8 inches wide and long. Simple leaf that is dark green and shiny on the upper surface. Twigs are gray to silver in color. Buds appear polished.



American Linden Fruit and Flower

One inch wide flower in clusters, white in color, hangs below a bract which gives rise to a small nut like structure. Flowers are fragrant and appear in mid-summer. Bract looks like a shoe horn.



American Linden Bark

Gray to brown broken into many long, narrow, flat-topped scaly ridges.



Littleleaf Linden Whole Tree

Pyramidal and densely branched. 50 to 60 feet tall.



Littleleaf Linden Fruit and Flower

One inch wide flower in clusters, white in color, hangs below a bract which gives rise to a small nut like structure. Flowers are fragrant and appear in mid-summer. Twigs are brown in color.



American Elm Whole Tree

Vase shaped form in which the trunk divides into 3 or 4 large branches.



American Elm Fall Color

Yellow or gold in color.



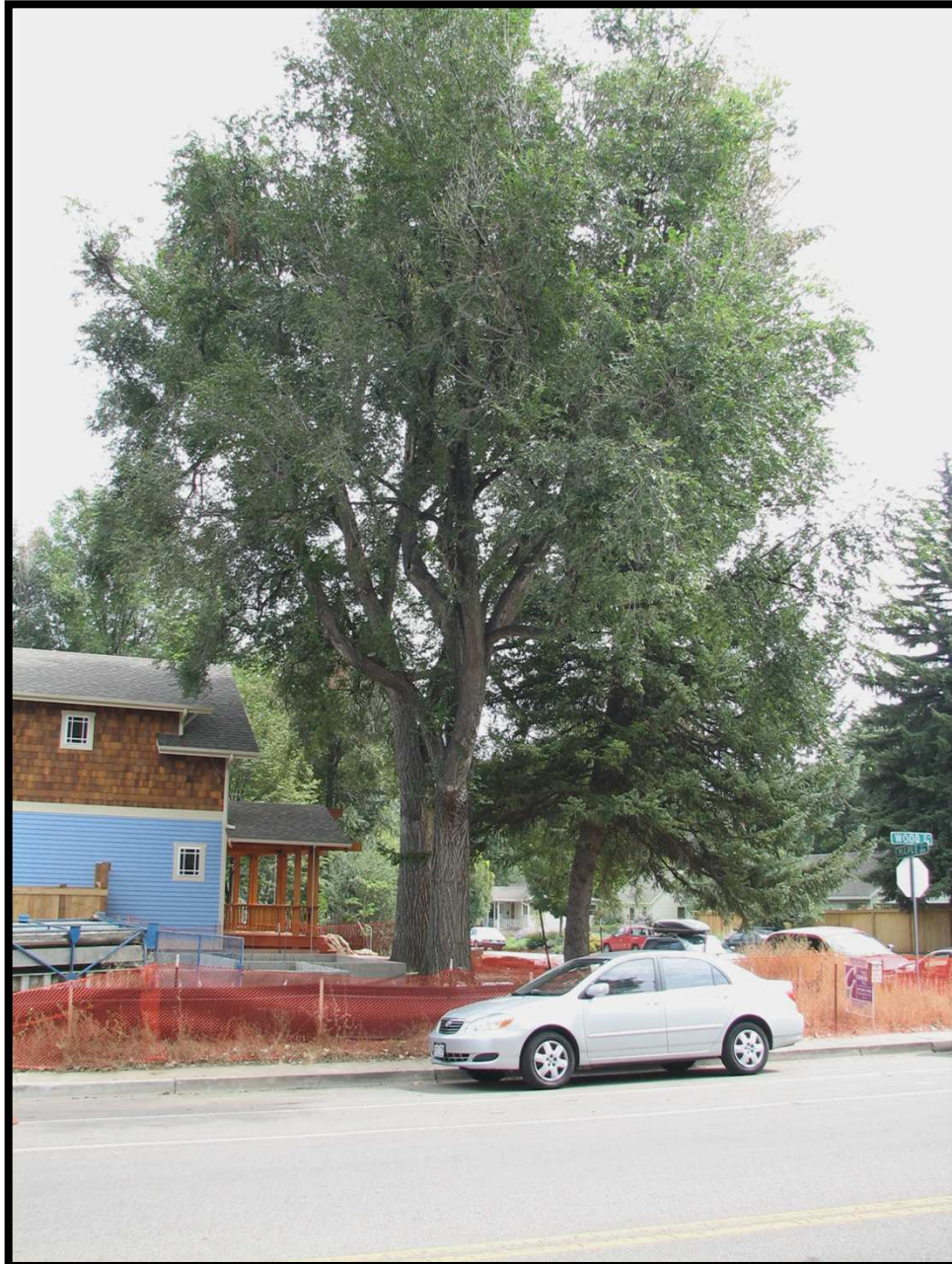
American Elm Leaves

Simple leaf 3 to 6 inches long with a obvious uneven base. Rough in texture and many teeth on the margins.



American Elm Bark

Dark gray with
broad, deep,
intersecting ridges.
Color alternates
between dark and
light.



Siberian Elm Whole Tree

Open habit, 60 to 75 feet tall. Usually has 3 to 5 large branches making up the main stem. Fast growing and easily breaks.



Siberian Elm Leaves

Simple, alternate
leaf 1 to 3 inches
long.



Siberian Elm Bark

Gray to brown
irregularly furrowed.