ATTACHMENT 4 - Tree Species Identification & Description

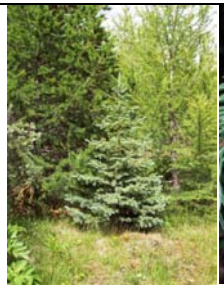
Subalpine fir (needles soft to the touch)
Subalpine fir needles are single (1) on the twig, blunt or notched at the tip, flattened (two-sided), white-grayish spores on undersides, soft to the touch, and are up to ¾ inches long. Buds are round, almost globe-shaped, and orange-brown. Tree bark is smooth and grayish white with pitch blisters. Trees are spire-shaped and grow at upper elevations in combination with Engelmann spruce.






Engelmann spruce (needles prickly to the touch)
Engelmann spruce needles are single (1) on the twig, pointed, sharp to the touch, four-sided, same color on all sides, and are up to 1 inch long. Needles radiate in all directions on twig. The older twigs from which needles have fallen have stubby pegs on them. Tree bark is scaly. They grow at upper elevations in combination with Subalpine fir.

Blue spruce (please do not cut)




Lodgepole Pine

Lodgepole pine needles are clustered in groups of two (2) on the twig, flat or two-sided, and are about 2-3 inches long. Tree bark is scaly.

Douglas-fir

Douglas-fir needles are single (1) on the twig, tips are blunt or slightly rounded, flat and two-sided, same color on both sides, soft to the touch, needles are ¾ to 1 ¼ inches long, and very fragrant. Unlike subalpine fir needles, Douglas-fir needles narrow before joining the twig. Bark on young trees look very much like Subalpine fir, becoming more grayish and rigged as tree matures.

Ponderosa Pine

Ponderosa pine needles are clustered in groups of three (3) on the twig, flat and two-sided, and range between 5 to 10 inches in length (longest needles of any conifer in Colorado). Cones are the largest of any tree species in the Rocky Mountains. Bark on young trees are black and (small) platy, turning orange/brown (large) platy as trees mature.




Pinyon Pine

Pinyon pine needles are grouped together in twos (2) on the twig, flat and two-sided, and are about 1 ½ inches long. They typically grow in the lower elevations, near the boundary of the National Forest.




Juniper

Juniper needles are small green scales. Cones are small bluish berries. Junipers occur at lower elevations in conjunction with Pinyon pine.



Bristlecone pine

Needles in bundles of five, commonly 1 to 1 1/2 inches long, curved; glossy and dark green. Trees grow near treeline at high elevations.




Natural Tree versus a Commercial Christmas Tree

Natural trees generally have less dense branching than commercially grown and human-sculpted Christmas trees.

Natural

Commercial

Artificially Planted and Natural Regeneration versus Commercial Christmas Tree Plantations

Artificial Planting – used where local seed source is removed as a result of a human-caused or natural environmental disturbance, or to improve species diversity on the landscape. Left hand figure shows seedlings growing in a nursery awaiting outplanting. Center figure shows individual hand tree planting. Trees are planted in areas that are most favorable for their survival, referred to as micro-siting. This planting technique results in seedlings being very irregularly spaced, to simulate a natural forest. Right hand figure shows a 15-year old planted stand (i.e. plantation), which also demonstrate natural gaps that exist in every forest.


Natural Regeneration – used where an onsite seed source is available to naturally regenerate an area, resulting from a human-caused or natural environmental disturbance, on the landscape. Center figure shows Lodgepole pine naturally regenerating from a natural landscape (stand-replacing) fire. Right hand figure shows Douglas-fir trees naturally regenerating under a Shelterwood seedcut system.



Private Industrial Land - Commercial Christmas Tree Farms are designed for a single purpose, to grow and sculpt trees to be sold to private individuals during the Christmas holiday season. Note the long evenly spaced rows of a Christmas tree plantation.