

Key to Identifying Native Conifers on the Front Range of Colorado

To use this key, start at the top and follow directions to the next number until you make a positive identification. This is designed for most of the common conifers found along the Front Range.

1. a. Needles attached to branch in bundles of 2 or more needles; cone scales thick and woody, with scale tips swollen. **Pines—go to 2**
b. Needles attached to branch separately; cone scales papery **go to 4**
c. Leaves are short and needle-like or scale-like, cones are berry-like **go to 7**

2. a. Needles are fairly soft, 4 or 5 per bundle; no spines at tips of cone scales **Limber Pine**
b. Needles 2 or 3 per bundle; spines at tips of scales on cones **go to 3**

3. a. Needles long, 3-4 inches, usually 3 per bundle; cones large, 2.5 to 5 inches **Ponderosa Pine**
b. Needles shorter, less than 3 inches, bunches of 2; cones shorter than 2.5 inches **Lodgepole Pine**

4. a. Needles with 4 sides; older twigs rough from bases of fallen needles; Needle tips sharp **Spruce, go to 5**
b. Needles with 2 sides (flattened); older twigs smooth, needles not sharp **Fir and fir-like, go to 6**

5. a. Cones 2 inches or less in length; needle points sharp but not painful to touch **Engelmann Spruce**
b. Cones 3 inches or more in length, needle points very sharp **Blue Spruce**

6. a. Cones with 3 toothed paper bracts; cones hang down; stems with pointed buds **Douglas Fir**
b. Cones without bracts, cones erect; stems with rounded buds; found at high altitudes **Subalpine Fir**

7. a. Low spreading shrub with sharp needle-like leaves, whiteish above, dark green beneath; cones on female berry-like, dark blue **Common Juniper**
b. Upright shrub to tree with scale-like leaves; cones on female berry-like, dark blue **Rocky Mountain Juniper**

Also keep in mind what the elevation is and other factors. Blue Spruce can be found at elevations as low as 6500 feet, while Engelmann Spruce usually begin to show up around 8000 feet. Douglas fir show up at lower elevations, while Subalpine Fir are definitely a high-altitude tree. Lodgepole pines are straight and tall and often grow close together, while Ponderosa Pine are more spread out and have thick, orange-tinted bark.

To help you and others make basic identification between pines, fir, and spruce trees, here's an easy jingle:

Firs are Flat and Friendly (individual needles are flat, soft, and slide between your two fingers)

Spruce are Square and Spiky (individual needles are 4-sided, roll between your two fingers, and the needle tips are very pointy and sharp)

Pines are Plural (needles come in bunches instead of individually attached to the branch)