

# Pines

## Genus Characteristics

**Leaves:** All pine trees bear their needles in bundles bound by a piece of tissue called a fascicle. The number of needles per fascicle can help determine species identification. Needles are usually slender. Texture, length, color, and stomatal banding are all clues to



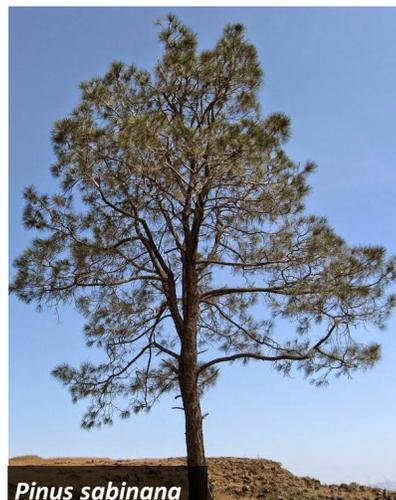
**Fruit:** Pines bear pine cones with woody scales protecting seeds. Size, shape, and texture of scales varies widely by species. Cones typically mature over two seasons. Sometimes they are found readily on the ground beneath a tree; sometimes they can only be seen in the top of the tree.



**Bark:** Bark can also vary widely across species. Some fire-evolved pines have very thick, grooved bark. Bark can be plated with small or large plates or furrowed. Color can vary from dull grey to bright red. Pine bark is often resinous and fragrant. Bark can be a great clue to species ID.



**Form:** *Pinus* is the most widespread genus of conifers in the world. Pines can be small, medium, or large trees. They can be multistemmed and shrubby, or tall and conical. Most large pines have a single leader and a round crown. We will not inventory dwarf or shrub varieties like mugo pine.



## 2-needed Pines

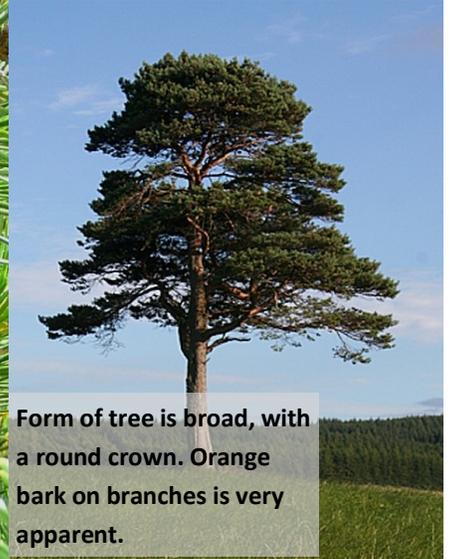
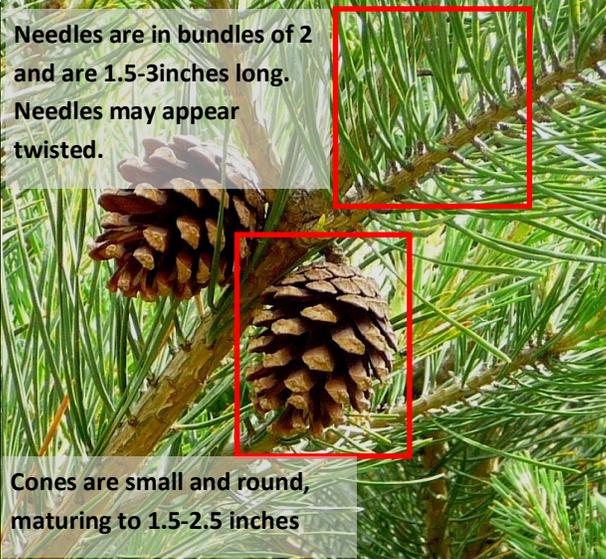
### *Pinus sylvestris*—Scotch pine



Flaky, plated bark is orange-red, especially on branches.

Needles are in bundles of 2 and are 1.5-3 inches long. Needles may appear twisted.

Cones are small and round, maturing to 1.5-2.5 inches



Form of tree is broad, with a round crown. Orange bark on branches is very apparent.

### *Pinus thunbergii*—Japanese black pine



Needles are 4-5 inches long.

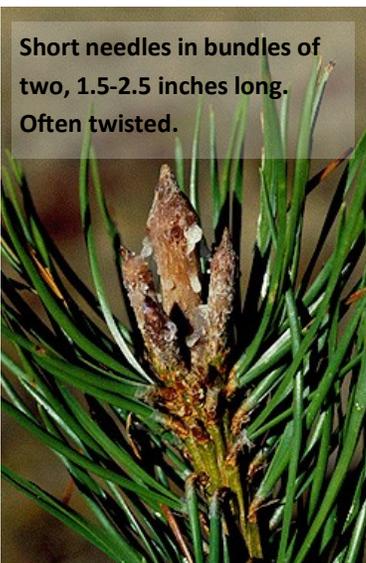


Cone is 2-3 inches long and egg-shaped. No prominent bristles on tips of scales



Tree usually appears windswept. Trunk is rarely straight. Bark is dark grey-black.

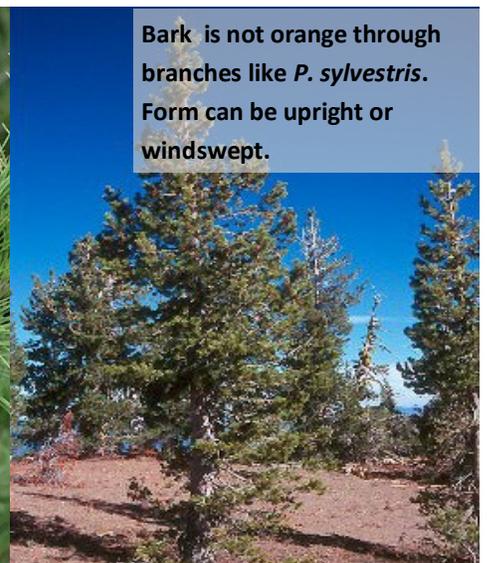
### *Pinus contorta*—Shore pine, Lodgepole pine



Short needles in bundles of two, 1.5-2.5 inches long. Often twisted.

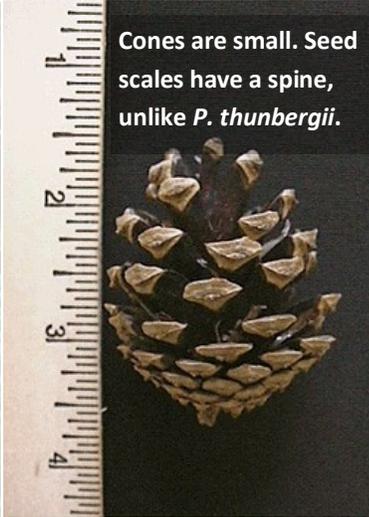
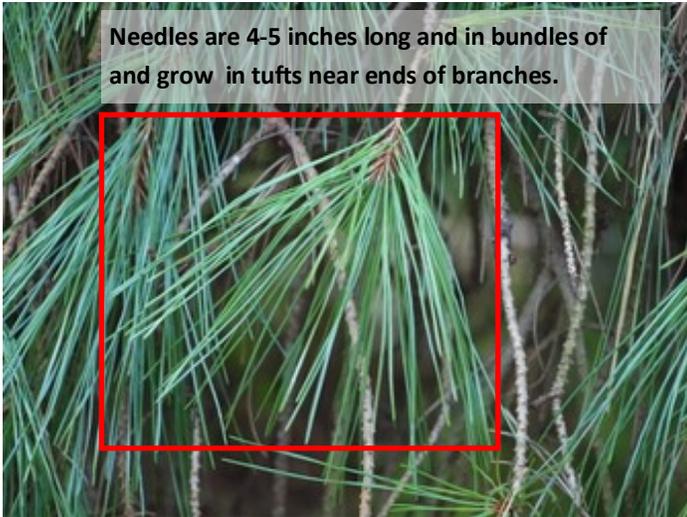


Cones are small and asymmetrical. Often point backwards on tree. Cones do not have stalks, unlike *P. sylvestris*.

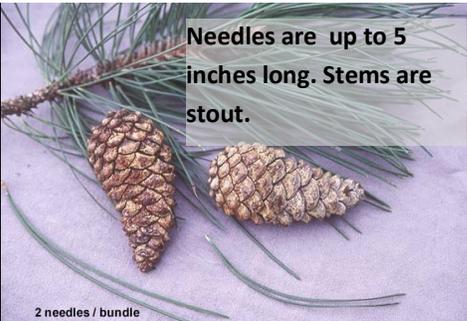
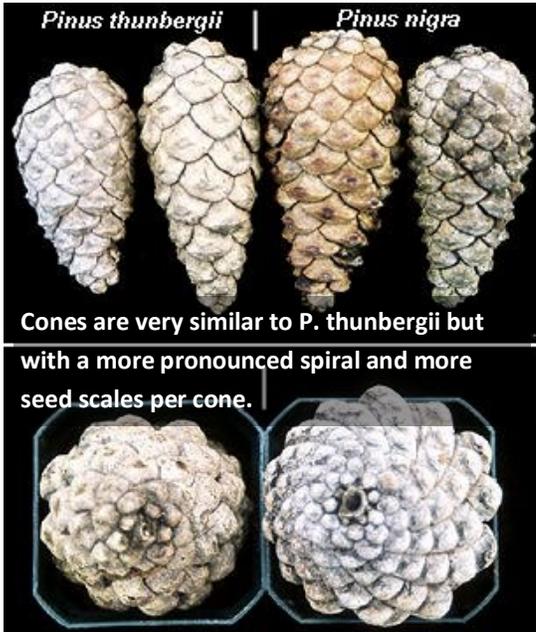


Bark is not orange through branches like *P. sylvestris*. Form can be upright or windswept.

*Pinus densiflora*—Japanese red pine

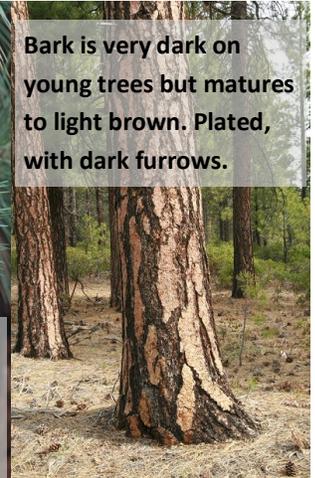


*Pinus nigra*—Austrian black pine

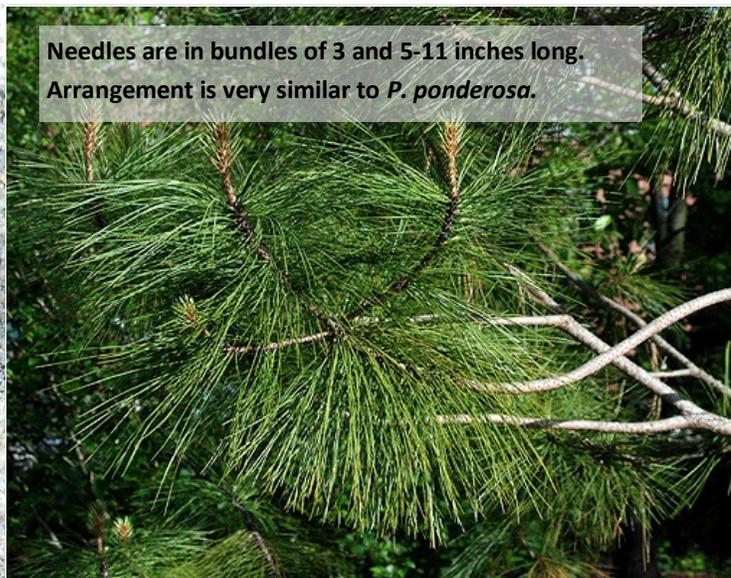
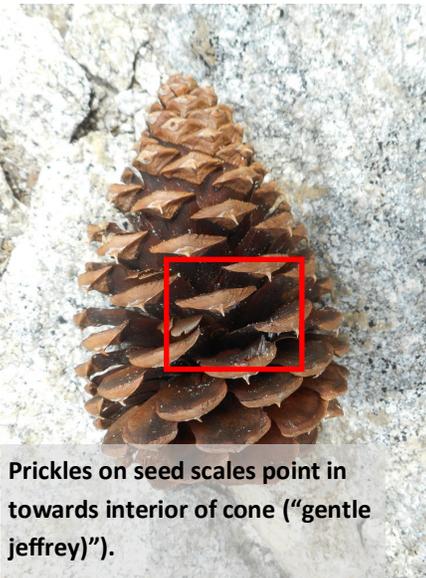


### 3-needled Pines

#### *Pinus ponderosa*—Ponderosa pine



#### *Pinus jeffreyi*—Jeffrey pine



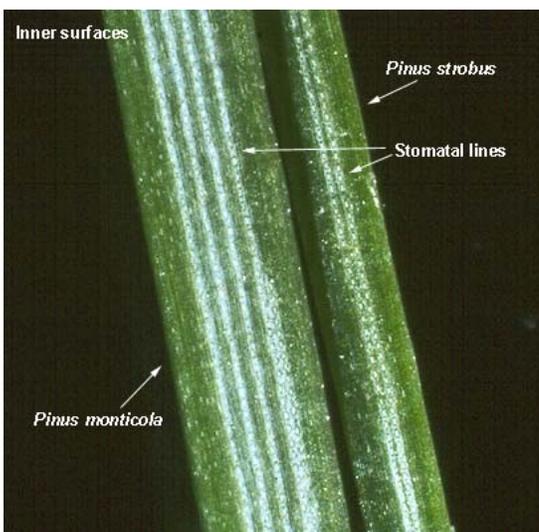
Ponderosa pine and Jeffrey pine look very similar and are easily confused. Trees and cones can be variable within each species. Ponderosa pine is far more common in Portland, but if you aren’t sure, please take a sample! If Urban Forestry staff is stumped, we’ll ask the experts at Hoyt Arboretum.

## 5-needled Pines

### *Pinus monticola*—Western white pine



### *Pinus strobus*—Eastern white pine



Western white pine and eastern white pine look extremely similar. Stomatal lines can be used to distinguish between the two but can only be seen with a magnifying glass. Western white pine tends to be more common in Portland. If you aren't sure, take a sample! If Urban Forestry staff doesn't know, we'll ask the experts at Hoyt Arboretum.