



# FORESTRY FACTS

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## Oregon's native pines

Pines are among the most abundant cone-bearing trees on the planet, growing from near the Arctic to the tropics. Worldwide, more than 100 pine species are known. Seven species are native to Oregon.

There is a pine adapted to almost every part of the state, from sandy coastal shores to desert sands, and from seasonally wet valley floors to treeline in the Cascades. In cities, native pines are increasingly valued for their drought tolerance, for slowing rainfall runoff, and for reducing noise and air pollution all year long.



Above: A mighty ponderosa pine growing at Sunriver.

### Oregon's most abundant pine

Oregon boasts having the nation's second largest area of **ponderosa pine** forest, after California. Some 4.7 million acres of the state are covered in ponderosa pine.

The species was first scientifically documented by Scottish plant hunter David Douglas. In 1829, three years after he returned to England from the Pacific Northwest, Douglas recognized samples he'd collected of this tree as a new species.

Capable of growing more than 200 feet tall, ponderosa pine is the world's second tallest pine species. The tallest ponderosa in the world grows in a grove southwest of Grants Pass. A group of arborists with Ascending the Giants climbed this pine and measured it at 268'.

The puzzle-piece pattern of yellow to orange or orange-brown bark is an attractive feature of mature ponderosa pines. This thick bark helps the trees survive the frequent, low-intensity wildfires that were a natural feature of eastern and central Oregon before effective wildfire suppression.

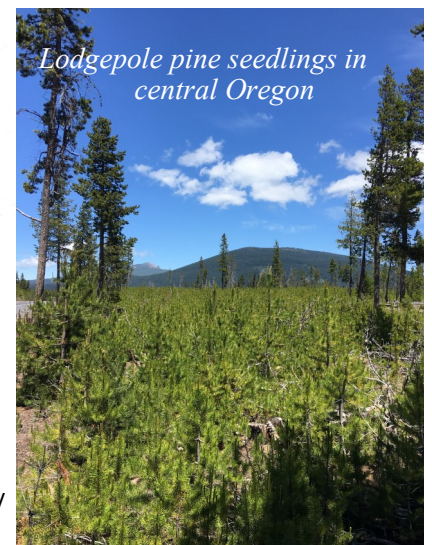
Ponderosa pine timber has been important to eastern and central Oregon's economy. Projects to thin overcrowded stands are an important source of logs for mills in that part of the state.

Very similar to ponderosa pine is **Jeffrey pine** (*P. jeffreyi*). The best way to tell the difference is in the cones. Those of Jeffrey pine have prickles at the end of the cone scales that point inward, and those of ponderosa point straight down.

### From shore to high desert

Picturesque **shore pines** (*P. contorta* ssp. *contorta*) brave storms off the Pacific Ocean, often developing lopsidedly where salt spray stunts their growth seaward.

Inland, the **lodgepole pine** (*P. contorta* ssp. *latifolia*) grows straight and tall, making perfect supports for tepees traditionally used by Plains Indians.



Lodgepole pine seedlings in central Oregon



After age 80, lodgepole pines tend to be attacked by bark beetles. Dead and dying pines create perfect conditions for a high-intensity canopy fire. Thus, wildfire in a lodgepole pine stand tends to kill all the trees, which have thin bark and shallow roots,. These burned areas are quickly recolonized by new seedlings, creating a new lodgepole pine forest in just a few years.

**Pines of southern Oregon**

Southern Oregon is the only place outside California that is home to the **knobcone pine** (*P. attenuata*). Growing 30-50' tall or rarely to 70', the hard, knobby cones of the latter pine remain attached to the tree for years, only opening after heating by wildfire.

Southern Oregon is also the northernmost limit of **sugar pine** (*P. lambertiana*) and **jeffrey pine** (*P. jeffreyi*), which grow elsewhere only in California, with a few stands in Nevada and Mexico's Baja California.

Sugar pine is the tallest pine in the world. It also has the longest cones, from a foot to 20 inches long. The tree's high-grade timber is easily worked and stable, and has been used for everything from organ pipes to piano keys but mostly for doors, window and door frames, and window sashes.

**Below: The world's tallest pine species also has an enormous cone, as seen by this example in Klamath County.**



**The five-needled white pines**



*Above: Cones of western white pine are gently curved.*

Also highly valued as a timber tree is **western white pine** (*P. monticola*). It grows from sea level to mid-elevation in the Cascades and Willows. The wood is lightweight, straight grained and takes nails without splitting.

At treeline high in the Cascades, **whitebark pines** (*P. albicaulis*) endure long winters and blasting winds. Small, stunted trees buried in the snow may be hundreds of years old. Their pine nuts are an important source of food for birds and other wildlife.

Five-needled pines are all affected by white pine blister rust. A pathogen from Asia introduced around 1910, the rust has been killing white, whitebark and sugar pines. The latter is the most susceptible, with sugar pines in Oregon and northern California more affected than those in drier areas to the south. Breeding programs are showing promise in increasing resistance to the rust in western white pine.



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