

Sitka Spruce

Picea sitchensis



“A quick way to identify Sitka spruce is to grab a branch in your hand: The stiff, sharp needles [of old growth] pointing out on all sides of the branch hurt!”

-Pojar & MacKinnon, Plants of the Pacific Northwest Coast

More than a century of logging has left only a remnant of the ancient spruce forest that once covered much of the northwest coast. The largest trees were cut long before careful measurements could be made. Nevertheless, in the old growth forests of the Olympic Peninsula, you can still find 500 to 700 year old Sitka spruce that are over 300 feet tall and with trunk diameters measuring 16 feet.

Native to the west coast of North America, Sitka spruce are found only within 50 miles of the Pacific Ocean and its inlets, where their growth is aided by humid conditions of moist maritime air and summertime fog. Their bark is thin, grayish or brownish, breaking up into scales.

It is by far the largest species of spruce and one of only 5 species of trees that can lift sap more than 300 feet. Because it grows rapidly under favorable conditions, large size may not indicate exceptional age.

The Queets Spruce, near Queets River in the Olympic National Park, is the largest in volume in the world with a trunk volume of 11,900 cu ft and a height of 248 ft. It has been estimated to be 350 to 450 years old, and adds more than 35 cubic feet of wood each year.

Sitka spruce have been helpful to humans for centuries. The sharp needles were believed to give it special powers for protection against evil thoughts. First Nation people have used its roots to create waterproof hats, baskets, ropes and fishing lines. The inner bark, sap and young shoots are high in Vitamin C. Spruce beer can be crafted using essential oils from the tree's leaves and branches.

The wood is very light and, pound for pound, is stronger than steel, which made it a valuable resource to airplane manufacturers during World Wars I and II. Vast numbers of Sitka spruce were cut in Washington and Oregon to meet this demand; however only unflawed wood was used, so as much as 90% of the cut was wasted.

— — —

Pojar, Jim and MacKinnon, Andy. [Plants of the Pacific Northwest Coast](#)

Saling, Ann, [Great Northwest Nature Facebook](#)

Wikipedia, https://en.wikipedia.org/wiki/Picea_sitchensis