

The Mineral Tree

By Stephen Arno and Carl Fiedler

Douglas-fir is the most widespread conifer in western North America. The range for both the coastal (*Pseudotsuga 1 menziesii* var. *menziesii*) and inland varieties (*Pseudotsuga menziesii* var. *glauca*) extends 2,500 miles from central British Columbia to tropical southern Mexico, and from the California coast to Colorado's Front Range.

The first scientific name for Douglas-fir was proposed in 1803 based on foliage collected in 1791 during a voyage along the Northwest coast. Incredibly, 17 more names were submitted over the next 150 years before botanists formally agreed on a name. Its genetic diversity exceeds that of all other conifers in the Northern Hemisphere (13 pairs of chromosomes compared to 12 pairs or fewer in other species), and Douglas-fir occupies more kinds of forest habitats than any other tree in its domain.

In moist coastal environments, the species depends on fires, logging, and other disturbances to avoid replacement by shade-tolerant western hemlock and other evergreens. In drier inland environments, it is often the most shade-tolerant tree, replacing ponderosa pine, western larch, and sagebrush-grassland.

Douglas-fir was prized by native peoples for crafting specialized fishing-related implements and for fuel. They used the bark, resin, and pine needles to make herbal treatments for various diseases. Native Hawaiians built double-hulled canoes from coastal Douglas-fir logs that had drifted ashore. Today, the species is valued for its strength, hardness, and durability, and is widely used for timber frame construction and timber trusses, and in veneer and plywood.

The coastal variety can reach 330 feet in height. The tallest Douglas-fir measured, and repeatedly photographed, by foresters was located near Mineral, Washington. The Mineral Tree was 393 feet tall and more massive than any other known Douglas-fir, as reported by canopy researcher Dr. Robert Van Pelt. Located southwest of Mount Rainier, it was 1,020 years old when felled in 1930. It was about 13 feet taller than the tallest coastal redwood. Van Pelt explains that the Mineral Tree and even 400-plus-foot Douglas-firs, measured by loggers where they fell, were logged in the early 1900s, while redwoods have been protected by Save the Redwoods League since 1918.

Stephen Arno was a retired forest ecologist with the U.S. Forest Service. Carl Fiedler is a writer. This article is from their book Douglas fir: The Story of the West's Most Remarkable Tree (Mountaineers Books, 2020).

The Mineral Tree was cut down in 1930.

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