

Overview

Western Juniper is found in savanna or steppe communities in dry environments that are characterized by hot dry summers, cold winters, and low precipitation. These trees are shorter and slow growing, often not exceeding 60 feet, with extensive roots spreading over three times the height of the tree. Individuals can be very long lived, often able to reach 1000 years old. Historically, Western Juniper was typically found in shallow rocky soils, often less than 20 inches deep, adjacent to shrub and bunchgrass steppes or coniferous forests, and were usually restricted to rocky outcrops. Currently, they are no longer restricted to these areas and have moved into much deeper soils.

Importance

Western Juniper is not all bad. It is a native species and when its population is in check, through frequent fire, it serves important functions. Many different species depend on Juniper as important shelter and for food. Additionally, Juniper wood is durable and rot resistant making it an increasingly marketable wood product.

Links to the National Champion Tree Program website and the references used





Western Juniper Juniperus occidentalis



Threats

Currently, Western Junipers pose more of a threat to other plants, like Sagebrush, than they face themselves. The suppression of fires across the West in the last century, combined with grazing pressures, has facilitated the rapid expansion of Western Juniper. In Eastern Oregon, Western Juniper woodlands covered 456,000 acres in 1936, by 2010 Juniper woodlands had grown to 6 million acres. This is more than a 13 fold increase in coverage! Historically, a frequent fire regime kept Junipers confined to relatively unproductive sites that were fuel limited, slowing the spread of fires. With the suppression of fires in the last century, Junipers have been allowed to expand into areas where they historically would have been killed by fire.

This unchecked expansion has had major consequences for the area. A mature Juniper in the heat of summer can easily pull 25 gallons of water out of the desert. This extensive water usage out competes other native flora for water, ultimately killing them and leaving large areas of exposed soil that are highly susceptible to erosion. Additionally, many animals depend on intact Sagebrush habitat, which is in direct competition with Junipers, and are facing challenges as these areas are overtaken by Junipers. Western Juniper woodlands also have significant impacts on the local hydrology. Juniper woodlands have reduced subsurface water, impacting both the plant available water as well as the amount of water that makes it into local streams and rivers.

Current Champion Tree Statistics

- Nominated in 2014
- Circumference 233 inches
- Height 68 feet
- Crown Spread 44 feet
- Located in Lake County, OR

