

Coast Redwood (*Sequoia sempervirens*)



Summary:

Coast redwoods range from southern Oregon to central California extending not more than fifty miles inland. This is because the coastal climate plays a key role because of the fog which protects them from the summer drought conditions. It is an evergreen long-lived tree and this species includes the tallest trees on Earth, reaching up to 380 feet in height and 26 feet diameter at breast height. These trees have shallow root systems that extend over one hundred feet from the base, intertwining with the roots of other redwoods. This increases their stability during strong winds and floods. Their thick, reddish, pithy bark also provides protection and insulation for the tree.

Redwood trees flower during the wet and rainy months of December and January. They produce cones that mature the next fall. Redwood cones are about an inch long and they produce tiny seeds, about the same size as a tomato seed. While each tree can produce 100,000 seeds annually, the germination rate is very low. Most redwoods grow more successfully from sprouts that form around the base of a tree, utilizing the nutrients and root system of a mature tree. When the parent or mother tree dies, a new generation of trees rise, creating a circle of trees that are often called fairy rings.

Fire effects:

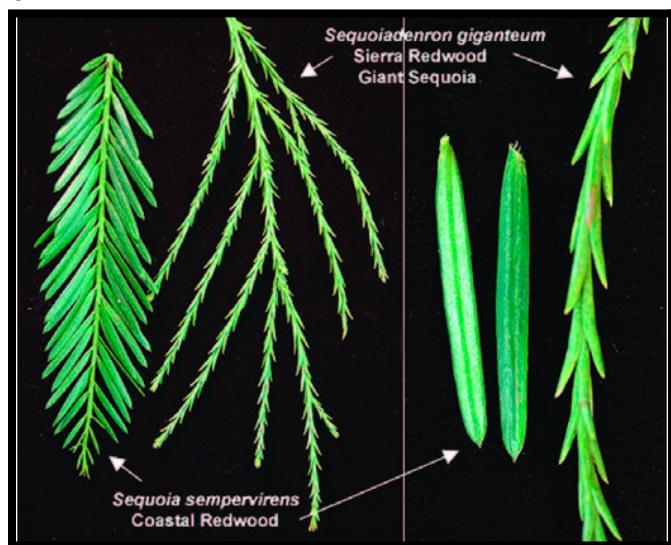
Mature redwoods are considered very resilient to fire. The thick bark, height, and ability to sprout from the root crown are adaptations that allow redwood to survive fires. After fires that destroy all aboveground portions, both mature and young redwoods will sprout from the root crown.

Differences between Giant Sequoia and Coast Redwood:

Natural habitat.—The giant sequoia is found growing scattered along the western slopes of the Sierra Nevada in central California at elevations of 4,000 to 8,000 feet. The redwood grows near the Pacific Ocean along the northern California coast.

Method of reproduction.—Both species reproduce from seed, but the redwood is one of the few conifers that is also able to develop sprouts from cut stumps, roots, and burls.

Foliage.—The foliage of the giant sequoia is scalelike and somewhat resembles that of the junipers; redwood foliage is in the form of two-ranked needles like the hemlock.



Shape and size.—The giant sequoia is the largest tree in the world in volume and has an immense trunk with very slight taper; the redwood is the world's tallest tree and has a slender trunk.

Cones and seed.—The cones and seed of the giant sequoia are about three times the size of those produced by the redwood.

Woody structure.—The wood of the giant sequoia is much coarser in texture than that of the redwood, and growth rings of the redwood are wider. Both woods are highly resistant to decay.

Color of bark.—The bark of the giant sequoia is bright reddish brown, whereas that of the redwood is a dull chocolate brown.

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