



The Three Redwoods



All in the Subfamily

Though we often simply refer to the world’s tallest living trees on California’s North Coast as “redwoods,” there are in fact three distinct redwood species: dawn redwood, giant sequoia, and coast redwood. Much like the members of your family, the species in this subfamily (Sequoioideae) share a common ancestry and many similar characteristics while maintaining their own unique identities (see reverse side for more info.).

An Ancient Lineage

Fossil evidence suggests that redwoods descended from a group of conifers that thrived across Europe, Asia, and North America when dinosaurs roamed the Earth—in the Jurassic period more than 145 million years ago. As Earth’s climate gradually and generally became cooler and drier, redwoods became restricted to three distinct geographic regions and evolved into the three species we know today.

All redwoods are cone-bearing trees and get their common name from their reddish-brown bark and heartwood. By whatever name, these magnificent trees have the uncanny ability to inspire mystery and awe. It’s a subfamily tradition!

See all three redwood species via a short, self-guided walk at the Hiouchi Information Center, 9 miles northeast of Crescent City on U.S. 199.

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Dawn Redwood

Metasequoia glyptostroboides

Thought to have been extinct for millions of years, the dawn redwood was rediscovered in 1944 by a forester in the Sichuan-Hubei region of China. Also popular as an ornamental today, the tree is easily distinguished from its California relatives by its smaller size and deciduous leaves.

Distribution: Central China.

Height: To 140 feet (43 m).

Diameter: To 6 feet (2 m).

Age: Indeterminate.

Leaves: Deciduous; needle-like with small stalk, arranged opposite each other.

Cone size: Like a large olive; shed yearly.

Seed size: Like a tomato seed.

Reproduction: By seed.

Habitat/climate: Indeterminate.



Giant Sequoia

Sequoiadendron giganteum

Quick-growing and long-lived (some over 3,000 years), no tree is more massive than the giant sequoia. The General Sherman Tree in Sequoia National Park is the most massive living thing on Earth, with an estimated total volume of over 50,000 cubic feet.

Distribution: Western slopes of Sierra Nevada Mountains in Central California.

Height: To 314 feet (96 m).

Diameter (DBH): To 30 feet (9 m).

Age: To more than 3,000 years.

Leaves: Evergreen; awl-shaped, attached at base.

Cone size: Like a chicken egg; can stay on tree for two decades.

Seed size: Like an oat flake.

Reproduction: By seed only.

Habitat/climate: Seedlings require abundant light, are frost tolerant, and drought-resistant.



Coast Redwood

Sequoia sempervirens

Coast redwoods are the tallest trees in the world. Dense forest stands grow on nutrient-rich river bars and flood plains, protected from the wind. Heavy winter rains and fog from the Pacific Ocean keeps the trees continually damp, even during summer droughts.

Distribution: Northern California coast, and into southernmost coastal Oregon.

Height: To 379 feet (115 m) or more.

Diameter (DBH): To 26 feet (8 m).

Age: To more than 2,000 years.

Leaves: Evergreen; both needle- and awl-shaped, attached at base.

Cone size: Like a large olive; shed after 1-2 years.

Seed Size: Like a tomato seed.

Reproduction: By seed or sprout.

Habitat/climate: Seedlings are shade-tolerant but frost sensitive; require abundant moisture.

