

Muir Woods

NATIONAL MONUMENT • CALIFORNIA

Here the rare and beautiful redwood can be seen growing in lordly splendor, towering 200 feet over the shaded forest floor.

One hundred and fifty million years ago a species of redwood, ancestral to our present-day *Sequoia* grew throughout the northern hemisphere. Since then, the natural habitat of *Sequoia* has progressively declined.

The ability of redwoods to grow large and live long results from their high resistance to fires, insects, and fungi—the principal enemies of forest trees.

Today, the redwood, *Sequoia sempervirens*, grows only in a 540-mile-long, 30-mile-wide belt along the Pacific coast from just south of Monterey to the southwestern corner of Oregon. Here the ocean produces abundant fog in selected areas; one of these is the V-shaped valley of Muir Woods, in which the damp climate needed for this species is provided. Some specimens exceed 230 feet (70 meters) in height. In Humboldt county, farther north, a few trees soar to more than 360 feet (110 meters)—the tallest living things.

Redwoods resist fire successfully by having a large amount of water in their wood, almost no inflammable pitch, and a very thick, asbestoslike bark: chemicals in the wood provide very effective protection from insects and fungi. The last significant fire in Muir Woods occurred more than 150 years ago.

The roots of neither the redwood nor the giant sequoia penetrate much deeper than 6 feet, but their lateral root systems radiate up to 100 feet from the tree. Giant sequoias reproduce only from seeds, while redwoods reproduce mainly by sprouting from root buds.

OTHER PLANTS

The forest is more than simply a collection of trees; it is a community of plants living together and as an ecosystem (a habitat). Each plant is dependent upon the others.

In this plant community, tall redwoods dominate the scene, but red alder and western azalea successfully compete for light by stretching out over the stream. Tanoak succeeds here because of its high tolerance to shade.

California-laurels bend and curve as they grow from shade to sunlight. As they grow in height they become topheavy and fall, but will continue to live if enough of their root system remains in the ground. On the forest floor grow shade-loving wildflowers.

Ferns may be regarded as true associates of the redwood. Where the rich humus soil is deep, large areas of the forest floor may be covered

by them; the most common in the redwood grove is the evergreen swordfern. The ladyfern favors the banks of the stream, while the western bracken thrives in shaded forest.

ANIMAL LIFE

Black-tailed deer are the only large mammals of Muir Woods. Western gray squirrels and Sonoma chipmunks are plentiful, as are night prowlers such as raccoons and skunks. Birdlife is numerous, varied and most active during the morning hours. Harmless varieties of snakes, lizards, and salamanders are present, though they usually go unnoticed.

Muir Woods has an abundance of animal life supported by rich plant growth, a plentiful water supply, and many breeding sites. The forest also affords protection from predators.



One noted animal exhibition is provided by silver salmon and steelhead trout. When Redwood Creek is swollen by winter rains, these fish leave the ocean and fight their way upstream to spawning beds in the monument. Soon after the high water subsides, it is sometimes possible to observe the spawning behavior of the mature fish. From spring through autumn young salmon and trout can be seen in the creek.

All animal life in the monument is fully protected.

HISTORY

Congressman William Kent of Marin County, realizing the beauty and uniqueness of the trees and the value of their preservation, made a gift of this area to the people of the United States by donating the land to the Federal Government. He asked that it be named in honor of John Muir (1838-1914), the noted writer, naturalist, and conservationist. By proclamation in 1908, President Theodore Roosevelt established Muir Woods National Monument for all to enjoy.

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ADMINISTRATION

Muir Woods National Monument, established on January 9, 1908 and comprising about 500 acres, is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Mill Valley, Calif. 94941, is in immediate charge.

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources." The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

U. S. Department of the Interior

National Park Service



