

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 tree ancestral to our present-day redwood and giant sequoia grew throughout the Northern Hemisphere. Since then, the natural habitat of these trees has progressively diminished.

Today the giant sequoia grows in a 400 kilometer- (250 mile-) long area of the western slopes of the Sierra Nevada, in Sequoia and Yosemite National Parks. The redwood, *Sequoia sempervirens*, grows only in a belt 869 kilometers (540 miles) long and 48 kilometers (30 miles) wide 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 prevails. Some specimens exceed 73 meters (240 feet) in height. In Humboldt County, farther north, a few trees soar to more than 110 meters (360 feet)—the tallest living things.

The ability of the redwoods to grow large and live long results from their high resistance to fires, insects, and fungi. They resist fire by having a large amount of water in their wood, almost no flammable pitch, and a thick, asbestoslike bark. The last significant fire in Muir Woods occurred about 1845. Chemicals in the wood provide very effective protection from insects and fungi.

The roots of neither the redwood nor the giant sequoia penetrate much deeper than 2 meters (6 feet), but their lateral root systems radiate as far as 46 meters (150 feet) from the trees. Giant sequoias reproduce only from seeds; redwoods reproduce mainly by sprouting from root buds. Trampling destroys these root buds. Please stay on trails.

OTHER PLANTS IN THE WOODS

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 top heavy and fall, but they 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;

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

ANIMAL LIFE IS DIVERSE

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

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

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 Muir Woods. 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 Muir Woods is fully protected.

NAMED FOR NOTED NATURALIST

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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Muir Woods National Monument comprises about 200 hectares (500 acres) and is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Mill Valley, CA 94941, is in immediate charge.

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, park and recreation areas, and for the wise use of all those resources. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

National Park Service
U.S. DEPARTMENT OF THE INTERIOR

A PARK FOR HIKING

Muir Woods is 27.4 kilometers (17 miles) north of San Francisco and is reached by U.S. 101 and Calif. 1. The entrance gate opens at 8 a.m. and closes at sunset.

This park is for hiking—its 10 kilometers (6 miles) of trails join those of other public lands—for days of enjoyment. Bridges along Redwood Creek make short loops possible. Trailside exhibits, signs, and markers will help guide your visit. Weather is often cool or wet, so jackets are advisable. Park rangers are on the trails and at the visitor center for your help.

Snacks and souvenirs are sold by the concession shop near the visitor center.

No picnicking or camping sites are maintained; facilities for both are provided by adjacent State parks (see map).

HELP PROTECT YOUR PARK

- Trails are for hikers only; no motorized equipment, horses, or bicycles are permitted.
- Trampling of plants and soil causes severe damage; please stay on the park trails.
- Flowers, trees, and other natural features must not be marred or removed.
- Pets are not permitted in the park (except for seeing-eye dogs).
- Do not climb on or over fences.

FOR YOUR SAFETY

Stay on trails. Poison oak and nettles are common. Watch your children.

Do not pick berries, roots, or mushrooms. Several plants found in Muir Woods are poisonous.

Watch your step. Trails can become slippery when wet.

WE'RE JOINING THE METRIC WORLD

The National Park Service is introducing metric measurements in its publications to help Americans become acquainted with the metric system and to make interpretation more meaningful for park visitors from other nations.

