

muir woods

“This is the best tree-lover’s monument that could be found in all of the forests of the world. You have done me great honor and I am proud of it. . . . Saving these woods from the axe and saw, from the money changers and water changers (dam builders) is in many ways the most notable service to God and man I have heard of since my forest wandering began.”

—John Muir, upon learning that the national monument was to be named for him

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-long (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 them 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 redwoods’ great size and long life are attributed to 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. Natural chemicals in the wood provide very effective protection from insects and fungi.

The oldest known coast redwood was 2,200 years old. The usual life span ranges from 400 to 800 years.

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, so please stay on trails.

The Woods Are More Than Trees

The forest is more than simply a collection of trees; it is a community of plants living together, each dependent upon the other. 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 flowers.

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.

The Park’s 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.

Blacktail 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 varied and most active during the morning hours. Harmless varieties of snakes, lizards, and salamanders are present, though they usually go unnoticed.

When Redwood Creek is swollen by winter rains, silver salmon and steelhead trout 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.

Under ideal conditions, redwoods can grow more than 30 centimeters (12 inches) each year during the first hundred years, but at a much slower rate thereafter.

Redwood bark may be 15 to 20 centimeters (6 to 8 inches) thick, and is more fibrous and less stable than the bark of other trees. Moss will seldom grow on it because of the presence of unfavorable chemicals. Not uncommonly, and for unknown reasons, the bark may be formed in a beautiful wave pattern. An excellent example of such a tree is located on the park's braille trail.

Unlike its inland cousin, the coast redwood has properties which make it especially valuable for use in construction, fencing, water tanks, lawn furniture, and interior finishing. Many of the valleys surrounding San Francisco Bay were once covered with redwoods, nearly all of which were early used to build the growing city of San Francisco and nearby communities. Present-day redwood logging begins about 160 kilometers (100 miles) north of San Francisco, near Ukiah, California.

About Coast Redwoods

Muir Woods receives about 100 centimeters (40 inches) of rain a year, occurring mostly between November and April. The summer or dry period sees about 130 days of evening and early morning fog.

The trees' heavy overhead canopy and elegant form provide a setting of tranquility and quiet dignity, even in the presence of thousands of visitors.

Nearly always a dominant tree where environmental conditions are correct, a redwood can endure long years of suppression, in some cases as much as several centuries. Conversely, when released from competition, growth can be accelerated by several hundred percent. Size is no indicator of a redwood's age. Trees of the same age can vary by an amount two to three times their diameters.



**Muir Woods
National Monument**

“Wandering along the trail among the Muir trees, most visitors have a sense, even among these giants, of kinship and friendliness.”

—Freeman Tilden,
The National Parks

A Place for Walking

Muir Woods is a park for walking. Its 223 hectares (550 acres) include 10 kilometers (6 miles) of trails that join those of other public lands. Bridges along Redwood Creek make short loops possible.

Trailside exhibits, signs, and markers help guide you, and rangers on the trails or at the visitor center will assist you, too.

Weather is often cool or wet, so jackets are advisable.

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

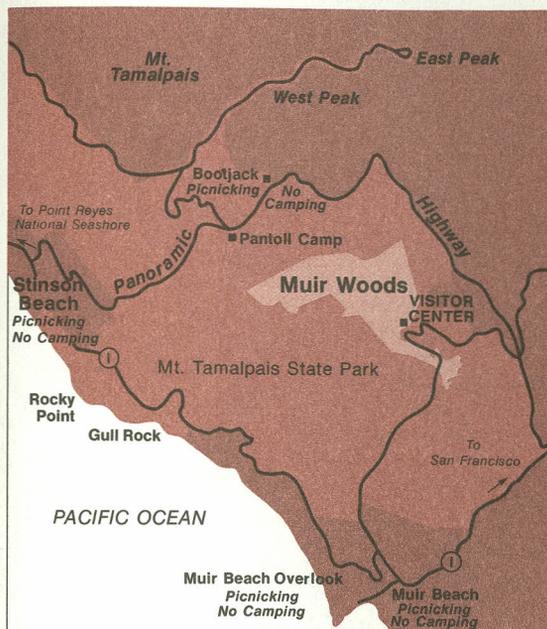
No picnicking or camping is permitted. Picnic facilities are provided at nearby park areas (see map).

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.



How to Reach the Park

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.

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.

Muir Woods National Monument

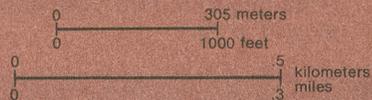
Mt. Tamalpais State Park

REDWOOD CANYON TRAILS

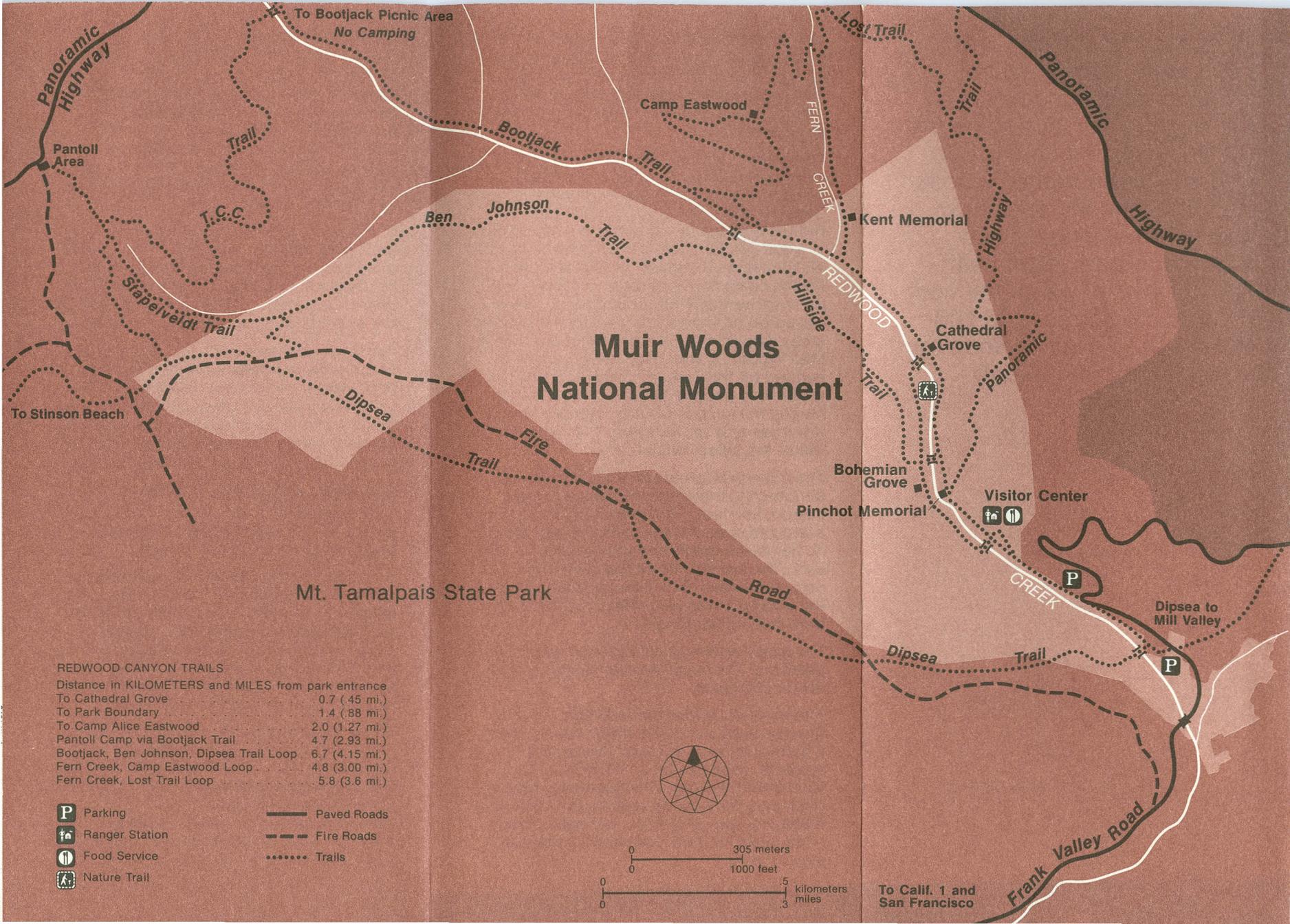
Distance in KILOMETERS and MILES from park entrance	
To Cathedral Grove	0.7 (.45 mi.)
To Park Boundary	1.4 (.88 mi.)
To Camp Alice Eastwood	2.0 (1.27 mi.)
Pantoll Camp via Bootjack Trail	4.7 (2.93 mi.)
Bootjack, Ben Johnson, Dipsea Trail Loop	6.7 (4.15 mi.)
Fern Creek, Camp Eastwood Loop	4.8 (3.00 mi.)
Fern Creek, Lost Trail Loop	5.8 (3.6 mi.)

-  Parking
-  Ranger Station
-  Food Service
-  Nature Trail

-  Paved Roads
-  Fire Roads
-  Trails



To Calif. 1 and San Francisco



The park is administered by the National Park Service, U.S. Department of the Interior, and the superintendent's address is Mill Valley, CA 94941.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. 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