Redwood National & State Parks

Donald F. Anthrop

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PREFACE

This handbook is designed for people who want to learn something of the living history of California's magnificent coastal redwood forests and want to know how to explore Redwood National Park and the three northern California state redwood parks in which some superlative stands of redwood have been preserved.

The book is organized into three chapters. The first chapter provides some background in redwood ecology—the nature of redwood plant communities and why they grow where they do, characteristics of the species, and fossil history.

In the second chapter I have attempted to present a concise account of the effects of human occupancy on California's coastal redwood forests, dating from the earliest inhabitants to the present. A discussion of preservation efforts is included.

The final chapter is a guide to Redwood National Park and the three northern California redwood state parks (Jedediah Smith, Del Norte Coast, and Prairie Creek Redwoods state parks). The most significant features in each park along with the roads and trails which provide access to these features are described. Maps of each park are included.

It is my sincere hope that through a fuller understanding of the impact of human activities on the redwood forests, people will recognize the need for conservation efforts to preserve this unique resource for our children to enjoy.

> Donald F. Anthrop Berkeley, California

ACKNOWLEDGMENTS

For the sketches of the redwood, Sitka spruce, and Douglas fir cones, I am indebted to Mrs. Barbara Meschi.

I am especially grateful to Mr. Gordon Robinson, a consulting forester with the Sierra Club, for the stimulating ideas and philosophy on forestry which he has provided over the years.

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Fern on south fork of Lost Man Creek

1

THE REDWOODS

LIVING HISTORY OF THE REDWOODS

THE TALLEST TREES

The redwood forests of the California coast contain the tallest trees on earth. Thrusting their lofty crowns toward the sky, many individual trees rise more than 300 feet. Towering 367.8 feet above Redwood Creek in Redwood National Park, the tallest living tree is higher than a 35-story building, taller than a city block is long.

Two thousand years of recorded history have passed since the oldest living trees in these forests began as tiny seed-lings on the forest floor. These ancient sentinels were already reaching for the sunlight through the forest canopy when Pompeii was destroyed by Vesuvius in A.D. 79. By the time the Pilgrims landed on the shores of Massachusetts in 1620,

these monarchs of the forest had already lived through sixteen centuries! In his article, "A Living Link in History," published by the Save-the-Redwoods League, John C. Merriam observes: "With whatever turn of fancy one views this forest, it must always be recognized as a living link in an epic of history. No one who knows the outlines of its story can look down the long vistas, between gigantic columns, with the mystery of their changing shadows beyond, without feeling that he has seen through a window into the deeper reaches of time, and has come to a fuller understanding of the stream of life as it has followed through the years."

SPECIES

Today, botanists recognize three separate genera of redwoods, each of which consists of a single species. Two of these, Sequoia sempervirens (commonly called coast redwood) and Sequoiadéndron giganteum (Sierra redwood or giant Sequoia) are native to California. Coast redwood appears along the coastal mountains of California from the Oregon state line to the Santa Lucia Mountains south of Monterey. Sierra redwood, on the other hand, grows only in isolated groves on the western slopes of the Sierra Nevada, generally between 5000 and 8000 feet. These groves extend from Placer County west of Lake Tahoe, on the north end of the range, to Sequoia National Park on the south.

There are marked differences between these two species. Although coast redwoods are taller, Sierra redwoods exceed them in total volume of wood because they attain greater diameters. Measured at breast height (approximately 5 feet above the ground) the largest coast redwoods have diameters

of 14 to 20 feet, while the largest Sierra redwoods show breastheight diameters of 28 to 36 feet. A coast redwood with a base diameter (measured at ground level) of 27 feet, located on private land on the north fork of the Mad River, appears to be the record for that species. In contrast, the General Grant Tree in Kings Canyon National Park has the greatest base diameter (40.3 feet) of any known Sierra redwood. The world's tallest tree, a coast redwood in Redwood National Park, and the world's largest tree in terms of total volume, a Sierra redwood, are compared in the following table.

	World's Tallest Tree	World's Largest Tree
Name	The Tall Tree	General Sherman Tree
Species	coast redwood	Sierra redwood
Height	367.8 feet	272.4 feet
Diameter		
(at breast-height)	14 feet	32.2 feet
Volume	121,480 board feet	600,120 board feet
Location	Redwood National Park, California	Sequoia National Park, California

For many years the Sierra redwoods, some of which are nearly 4000 years old, were believed to be the oldest living things on earth. Recently, however, it has been discovered that some bristlecone pines (*Pinus aristata*) high in the White Mountains on the California-Nevada border, and on Wheeler Pcak in eastern Nevada, date back more than 4600 years. Despite their age, the bristlecone pines generally do not exceed 25 to 30 feet in height because of the harsh climate and adverse soil conditions of their environment.

Thought to be extinct for millions of years, a third genus of redwood, *Metasequoia glyptostroboides* (dawn redwood), was found growing in valleys of central China in 1944. Unlike the coast redwood and Sierra redwood, *Metasequoia* is deciduous, shedding its leaves every autumn and sending out buds every spring, like the oaks and maples which grow along with it. *Metasequoia* is smaller than the coast redwood and the Sierra redwood, rarely exceeding 100 feet in height.

FOSSIL HISTORY

When early pioneers reached the California coast, the redwood forest covered nearly two million acres. There it had grown for thousands of years, as outstanding an example of a climax forest as one could ever hope to find.

Earlier still in geologic time, redwoods were much more widely distributed. The fossil history of the redwood dates back to the Cretaceous period, which began approximately 135 million years ago and lasted 60 to 75 million years. (Estimates of geologic time eras vary widely among authoritative sources.) At the beginning of the Cenozoic era, about 60 million years ago, the climate was warmer and more humid than today, and coast redwoods thrived in much of western North America. Fossil records indicate their presence at least as far east as Yellowstone, as well as in Wyoming, Idaho, Oregon, and British Columbia. Fossil records have also been found in western Europe, and parts of Asia.

When subtropical forests covered much of the western United States, parts of Alaska, Canada, Siberia, Greenland and the arctic islands were probably mild enough to permit temperate forests of oak, maple, walnut and other deciduous trees.

Fossil foliage and cones of dawn redwoods, embedded in rocks along with fossil records of deciduous hardwoods, bear mute testimony to forests in regions now too cold to support trees of any kind. *Metasequoia* fossils have also been found in eastern Oregon and other western states.

During the Miocene epoch, which began about 28 million years ago, the climate turned cooler and drier, and great mountain-building forces were at work. The Sierras, Rockies, Himalayas, Alps. and Andes were further elevated. Because of the drying trend in North America, redwoods retreated from the Rocky Mountain and Great Basin states. With the glacial advances of the Pleistocene epoch, which began about one million years ago, coast redwoods retreated from British Columbia and Oregon, and dawn redwoods disappeared from this continent. In Europe, coast redwoods retreated toward the Mediterranean and ultimately vanished.

REDWOOD ECOLOGY

CLIMATE

Because of the influence of Pacific marine air, California's north coastal region is characterized by relatively warm winters and cool summers. Throughout most of the area, mean temperatures in January, the coldest month, vary between 44° and 48° F. In July, the warmest month, mean temperatures range from 56° to 72° F. Temperatures rarely exceed 100° F in summer and seldom drop below 20° F in winter. Heavy annual precipitation occurs in the winter months while summers are dry. Precipitation averages more than 115 inches annually at the higher elevations in the northern part of the

range, but only 20 inches annually at the southern extremity of the range. Fog is a predominate feature along the coast during the summer months and appears to play a significant role in the geographical distribution of coast redwoods. Within this general pattern, numerous micro-climates show striking differences. On a summer day, one often finds warm, sunny valleys just a few miles inland from the cool, foggy coast.

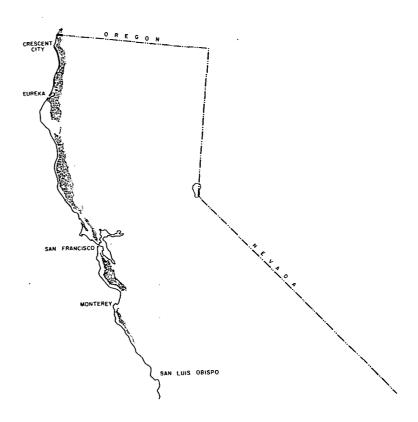
DISTRIBUTION AND GROWING RANGE

Today the coast redwood is restricted to a narrow belt along the California coast extending from just south of Monterey to just north of the Oregon border, and never exceeding about 25 miles in width.

Moisture and temperature appear to be the principal factors governing the distribution of the coast redwood. Annual precipitation of 40 inches is usually set as the minimum for this species, but the tree does grow in areas which receive only about 20 inches per year. In such cases, summer fog or water supplied to the roots from nearby streams compensates for the reduced precipitation. The correlation between the coastal fog belt and the growing range of coast redwoods is often noted. Although this relationship is not fully understood, redwoods apparently require a very favorable precipitation-to-transpiration ratio. "Spike-tops" (dead tops) in old growth stands are believed to be the result of moisture stress: the inability of the tree to resupply water to the top as fast as it is lost through transpiration.

Although the coast redwood is essentially a warm-climate tree, and would undoubtedly prefer the warmer climate of

ORIGINAL DISTRIBUTION
OF
COAST REDWOOD



Santa Barbara to that of the north coast, it is unable to extend its range southward because of the moisture factor. Between the end of the winter rains and the onset of summer fog in the Santa Lucia Mountains, the dry period apparently causes an intolerable moisture stress. Similarly, the eastern limit of the coast redwood's range is set by the lower rainfall inland from the coast and the hot winds that come from interior areas in the autumn. Although the western limit is set by the Pacific Ocean, redwoods do not ordinarily reach the shoreline. The reason for this is not clear, but several factors appear to be responsible. Usually, rainfall is not as heavy right on the coastline as it is a few hundred yards inland. The soil near the shoreline does not retain moisture as well as soils closer to the interior. Redwoods are not tolerant of salt spray and in unprotected locations they are subject to wind-throw, which probably explains their absence from high blufftops overlooking the ocean. While snow occasionally falls at higher elevations during the winter months with no visible damage to redwoods, young trees do seem susceptible to frost damage. Coast redwood could grow much farther north of its present range in a noncompetitive situation, but the real situation at the northern end of its range is a highly competitive one in which redwood grows inter-mixed with Douglas fir (Pseudotsuga menziesii). Frost damage reduces the redwood's ability to compete successfully with Douglas fir.

REDWOOD PLANT COMMUNITIES

An old-growth redwood forest is a climax community: it is a complex ecosystem containing a wide representation of age and size classes as well as diversity of species. In the absence of man's activities or major natural changes, it could perpetuate itself indefinitely.

In the northern part of its growing range, coast redwood occurs in association with Douglas fir and Sitka spruce (Picea sitchensis). Farther south, near Willits, redwood grows with ponderosa pine (Pinus ponderosa), and near the southern end of its range, redwood is found with Coulter pine (Pinus coulteri). Associated with the conifers is a variety of hardwoods, most commonly tan oak (Lithocarpus densiflora) and madrone (Arbutus menziesii). Redwood is able to compete with these species because of its resistance to insects, disease, fire, and periodic flooding, as well as its high seed production and its unique ability to sprout from the roots if the top is killed or removed.

Fire appears to have been an important factor in maintaining the climax redwood forest. Because of its thick, ropy bark and absence of resin, the coast redwood is quite resistant to fire. Scars on the trunks of old trees attest to this ability to survive periodic burning. Of course, especially hot fires can kill even the older trees, but the principal effect of past periodic burning has been the removal of hardwoods as well as the resinous and more susceptible Douglas fir.

Another mechanism of survival is the fact that redwood trees situated along alluvial stream beds can withstand periodic flooding and silt deposition by sending out vertical roots from which new horizontal root systems are produced. Since Douglas fir and hardwoods cannot tolerate silt deposits over their root systems, periodic flooding favors the redwoods.

The coast redwood is a prolific seed producer, but its seed is generally of low viability and limited natural dispersal. Initially the seedlings are very dependent upon the soil. Mineral soil seems necessary for early survival, apparently because

the young seedlings are highly susceptible to a root fungus present in the organic material in soil. For this reason few, if any, seedlings survive the first year in undisturbed soil on the forest floor. However, where a tree falls and exposes mineral soil, or where a fire burns the litter on the forest floor and sterilizes a thin layer of soil, seeds promptly germinate and grow.

The more important method of regeneration is the unusual and highly developed ability of redwood to sprout. Indeed, were it not for this feature, logging would have permanently erased redwoods from many places.

Because of the continual processes of death and renewal, the primeval redwood forest contains a wide representation of age and size classes. However, on alluvial flats one often finds even-age stands of pure redwood. The even-age stand is the result of silt deposition followed by seed germination and the growth of redwood seedlings on the silt deposit in the year following the flood. Because redwood is tolerant of periodic flooding, subsequent floods maintain the pure redwood stand by eliminating other species.

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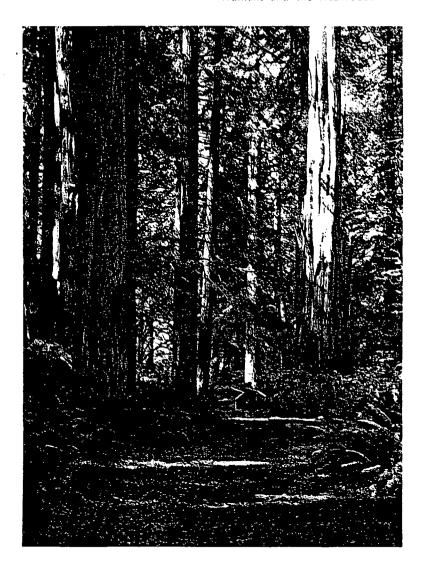
HUMANS AND THE REDWOODS

THE EARLIEST INHABITANTS

Archeological excavations indicate that the fringes of the redwood groves around San Francisco Bay, and in Marin County north of the Golden Gate, were inhabited by primitive people as early as 2000 B.C. At Trinidad Bay, north of Eureka, there is evidence of early cultures which date back to about A.D. 1000.

Artifacts recovered around San Francisco Bay indicate that the earliest inhabitants of the area belonged to a culture known as Middle Horizon in central California archeology. After an undetermined interval of time, the Middle Horizon people evolved into—or were replaced by—a culture that developed greater specialization and perfected toolmaking skills while retaining many Middle Horizon traits. Marking the Late Horizon, mortars increased in size and number and the pointed

Large redwoods with ferns in foreground



Trail with wooden bridge in Prairie Creek Redwoods State Park

arrow appeared. Acorn-gathering activities became more organized and consolidated, and the use and variety of shell ornaments grew. These Late Horizon people subsequently developed into the Indians, and the Coast Miwok were possibly the first California Indians to encounter Europeans when Sir Francis Drake landed on the western shore of what is now Point Reyes National Seashore in Marin County in 1579.

Both these very early inhabitants and the Indians who succeeded them avoided building their homesites in the dark, damp redwood forests. Instead, habitation usually occurred on surrounding meadows, on the open grassy hills near the coast, along sheltered bays, and along the coastal rivers which furnished both food and transportation.

When white people arrived, California's Indian population is estimated to have been around 200,000. Perhaps 40,000 Indians lived along the strip of coastline between Monterey and the Oregon border—essentially the redwood region. Within this region there were several tribes; besides the Coast Miwok, the principal ones were the Yurok, Karok, Hupa, and Pomo.

Part of the totem culture that flourished in the Pacific Northwest and southeastern Alaska, the Yurok attained the most advanced civilization of any Indians in California. They are famous for their white deerskin dance, a ceremony to promote good hunting, and for the perfection exhibited in their arts and crafts. Living along the lower Klamath River, they made the most extensive use of redwood of any Indian tribe. They built their dwellings out of redwood planks and fashioned dug-out canoes from redwood logs. Instead of felling redwood trees, the Yurok collected logs along the water and burned and carved them into canoes.

The Hupa tribe lived near the confluence of the Trinity River and the Klamath, while the Karok dwelled a little farther upstream where the Salmon River joins the Klamath. Although displaying many traits similar to the Yurok, both of these tribes had their own distinctive characteristics and language.

The Pomo Indians, who inhabitated the lower Navarro, Gualala, and Russian rivers and nearby coast, and their neighbors to the south, the Coast Miwok, were central California people culturally. They hunted deer, but were largely dependent upon acorn-gathering and clam-digging for their food. They used clamshell discs for money and are especially famous for their basketry. Some authorities consider them to be among the finest basketmakers in all the world. Although they lived in huts made from slabs of redwood bark or of willow sticks thatched with reeds, redwood was not as important a source material for them as for the northern tribes.

Of all of California's 117 tribal cultures, the Yurok, Karok, and Hupa remained relatively untouched the longest. But the tendency of all of these tribes to live on open lands and along major streams through the otherwise almost impenetrable coastal redwood forest eventually led to their undoing. In 1850, after discovery of gold on the Trinity, gold seekers broke into the upper Klamath and the Indian tribes were soon overwhelmed.

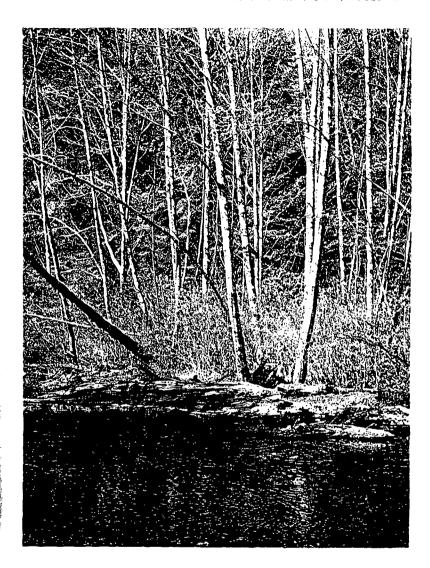
DISCOVERY AND EXPLORATION

DISCOVERY BY EUROPEANS

We do not know with certainty who was in the first ship



Rhododendron



White-barked trees along Prairie Creek

to appear off California's north coast. Legends persist that Chinese seafarers in a junk appeared two centuries before the Christian era. The first recorded coastal explorations are Spanish, and the records are sketchy. In 1542, Juan Rodriguez Cabrillo sailed north from Mexico and, after a journey through fog and storms, sighted a mountainous headland above the 40th Parallel which he called Cape of Perils. Sixty years later this rocky promontory was renamed Cape Mendocino. Although Cabrillo landed at a harbor that is today San Diego, the first European to land on the north coast was Sir Francis Drake, an Englishman. Looking for a safe harbor in which to repair his leaky ship, the Golden Hind, Drake sighted the Marin County coastline in 1579 and beached his ship on what is today Point Reyes National Seashore. Although Drake claimed the land for the Queen of England, he did not venture far inland, and apparently did not encounter the redwoods at close range.

In 1565 Spanish galleons had begun to sail across the Pacific to tap the wealth of the Indies. On their return voyage from the Philippines to Acapulco, the galleons followed the wind north and east across the ocean until the California Coast was sighted. Cape Mendocino became a well-known landmark on the Manila-to-Acapulco crossing. On one such crossing, the San Augustin was wrecked off Point Reyes in 1595; and her master, Sebastian Cermeno, was the first Spaniard to come ashore on the north coast.

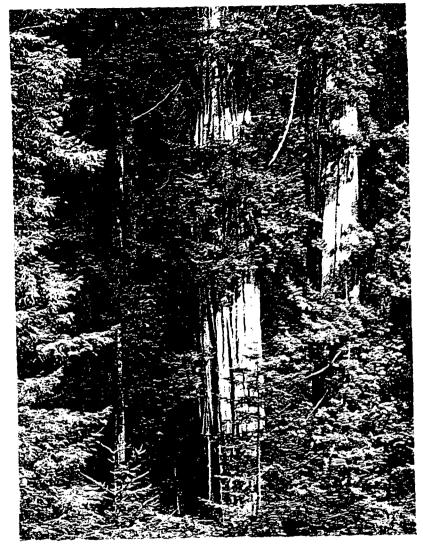
In the years that followed, other Spanish expeditions sailed north from Mexico to explore the California coast by sea, but the great redwood forests stood unknown and untouched by the white man for almost another two centuries. In 1769 a Spanish expedition under the leadership of Don Gaspar de Portola pushed north from Baja, and after establishing the

first California mission at San Diego under the guidance of Padre Junipero Serra, the group stumbled on northward to discover San Francisco Bay. They became the first white explorers to meet the redwoods at close range. The diarist for the expedition, Franciscan missionary Fray Juan Crespi, recorded that on October 10, 1769, the party left camp on the Pajaro River (near the present site of Watsonville) and traveled "over plains and low hills, well forested with very high trees of a red color, not known to us. They have a very different leaf from cedars, and although the wood resembles cedar somewhat in color, it is very different, and has not the same odor; moreover, the wood of the trees that we have found is very brittle. In this region there is a great abundance of these trees and because none of the expedition recognizes them, they are named redwood from their color."

THE REDWOODS UNDER SPANISH RULE

Following reports of the Portola expedition, a colonizing party under the leadership of Juan Bautista de Anza left the Spanish settlements in Arizona for San Francisco Bay. In his diary of that expedition, another Franciscan missionary, Fray Pedro Font, recorded on March 26, 1776, that they saw "a few spruce trees which they call redwood, a tree that is certainly beautiful; and I believe that it is very useful for its timber, for it is very straight and tall, as I shall show later on."

Soon thereafter, an increasing number of expeditions moved northward from Mexico and settlements spread up the coast. The twenty-first and last mission was established at Sonoma in 1823. But the Spanish colonists had an adobe culture, and made very little use of the redwood. Furthermore, since their interests centered largely on cattle and crops,



Trunks of large redwoods in sunlight



Coastline in Del Norte County



Skunk cabbage

they sought grasslands suitable for grazing and planting, and avoided the dark redwood forests.

THE GOLD RUSH

Discovery of gold on January 24, 1848, by James W. Marshall on the American River ushered in a new era which was to have a profound impact on the redwood forests. San Francisco came alive with hungry gold-seekers as gold fever spread to the eastern seaboard. In July, 1848, just six months after James Marshall's epochal strike at Coloma, gold was discovered at the headwaters of the Trinity River. The great influx of Anglo-Saxons which followed created a considerable demand for lumber. Within the five years after the start of the Gold Rush, 150,000 people passed through San Francisco. California's population quadrupled in the decade between 1850 and 1860.

Because of the inaccessibility of the gold strike on the Trinity, many miners preferred to take the shorter sea route to Trinidad Bay and cut overland to the diggings. In April, 1850, with the Trinity gold rush in full swing, the first boatload of miners slipped over the sandbar into Humboldt Bay and founded the town of Eureka. Three years later Eureka had grown into a port of 3000 people.

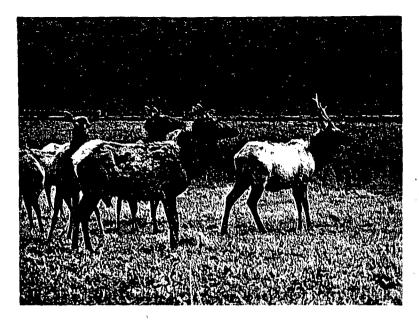
CUTTING OF THE REDWOODS AND THE TIMBER INDUSTRY

EARLY LOGGING ACTIVITIES

Although cutting had started in the Oakland hills in the

early 1820s and in Monterey County in 1834, the great redwood forests of the California coast remained essentially untouched until the start of the Gold Rush in 1848. With the Gold Rush, however, came the first real opening of the north coast redwood forests. In September, 1850, just five months after the first shipload of settlers had arrived in Humboldt Bay, a tiny sawmill was operating in Eureka. Three years later, nine sawmills were running at full capacity on Humboldt Bay, one of them cutting 30,000 board feet a day. (Lumber is measured and sold by the board foot. A board foot is the volume of wood in a board 1 foot x 1 foot x 1 inch.) Initially this lumber was used locally, but as the attractiveness and rot-resistant qualities of redwood became known, redwood lumber flowed to San Francisco and to markets throughout the world. In 1853, a hundred ships sailed from Humboldt Bay loaded with a total of 20 million board feet. By 1860, there were about 300 sawmills operating in the redwood region, the largest being in Mendocino and Humboldt counties. For the most part, the Oakland hills were logged by 1860 and the east side of the Santa Cruz mountains was logged soon afterward. By 1870, most of the timber in the immediate vicinity of Humboldt Bay had been cut and the hills behind Eureka and Arcata were left deforested.

Yet, even at this early date, there was recognition of the value of redwoods for purposes other than lumber, and some people realized the forests were not inexhaustible. The first efforts to preserve some of the redwood forests came in 1852, only to fail—the conditions necessary for a consensus that coastal redwood forests were a unique national asset had not yet materialized. On April 13, 1884, the San Francisco Chronicle editoralized, "Soon the whole neighborhood will be cleared of growing timber. Already the fairest and largest trees



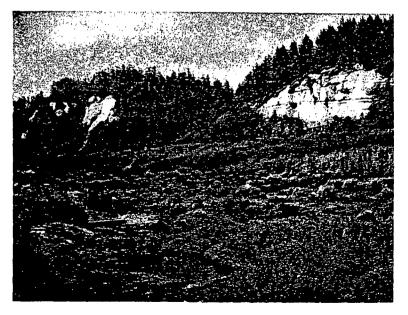
Elk in Elk Prairie



Redwood Creek from Elam Creek



Ferns and oxalis at the base of tree



Gold Bluffs with lupine

have fallen before fire, axe, and saw. Those magnificent pillars which form so strange a crown to the mountains, when seen from San Francisco and the Bay, are slowly disappearing."

CHANGES IN THE TIMBER INDUSTRY

In the early days, logging progressed into the redwood forests at a reasonably slow rate due to the immense size of the trees and the difficult terrain. Felling a large redwood might take two experienced choppers five days.

But during the 1880s and 1890s, a series of changes revolutionized redwood logging. John Dolbeer, a Eureka man, invented the steam donkey engine. A powerful device which logging crews would haul into the woods on skids, it could snake logs out in a fraction of the time required by teams of oxen. It was a very destructive system because the logs knocked down other trees which had not been cut. However, it permitted logging on more inaccessible terrain. Also of great importance was the introduction of railroads into the north coastal area, which allowed logging operations to move away from coastal areas and stream beds, and into the interior forests.

These changes were accompanied by a growing concentration of timber ownership—a trend which had begun in the 1860s as lumbermen concluded fortunes could be made if their saws could be assured a supply of timber. Much of this accumulation occurred as a result of flagrant abuse of the Federal Land Disposition Act of 1820 and the Homestead Act of 1862. Representatives for the timber barons would recruit idle sailors from the docks and take them to the local

government land office where they would file homestead claims on 160 acres of timberland. Each sailor would then be paid about \$50 to deed his claim over to a waiting timber corporation.

Although accurate statistics on redwood logging prior to the turn of the century do not exist, by 1890, after about 40 years of logging activity, roughly 15 percent of the redwood forest had been cut.

ROADS AND RAILROADS

Improved transportation facilities greatly accelerated logging operations on the north coast in the first two decades of this century. Completion of the railroad-line between Sausalito and Eureka in 1914 ended the isolation of Humboldt County from the rest of California, which until then had been primarily accessible only by ship. It not only made railroad logging feasible along the main Eel River and its upper tributaries, but also provided the first direct rail link between the redwood forests of the north coast and eastern markets.

The rail-line stimulated construction of road networks radiating out from each railhead. By 1911, a precarious auto trip was possible between Sausalito and Eureka in dry weather. These early roads generally followed the coast southward from Eureka past Cape Mendocino and then proceeded up the Mattole River Valley and southeastward to Laytonville in order to avoid the sheer cliffs of the Eel River. Daring motorists could make the trip from San Francisco to Eureka in four days. By 1918 the road was paved from Sausalito almost to

Ukiah, and the remaining segment north along the Eel River was undergoing continuous improvement.

THE REDWOOD FORESTS AND THE FUTURE OF THE TIMBER INDUSTRY

As a result of these developments, cutting accelerated. From 1900 until 1929, the annual rate of cut averaged about 520 million board feet. It dropped during the years of the Great Depression and World War II, then climbed dramatically during the postwar boom. From 1953 through 1975, the annual cut averaged about 1 billion board feet. By 1970, the commercial forest land (excluding land in the national and state parks) containing old growth redwood had dwindled to about 150,000 acres containing 14 billion board feet of redwood timber. On January 1,1976, there remained only about 8 billion board feet of virgin redwood timber growing on some 85,000 acres of commercial forest land.

It is no wonder that California's redwood lumber industry faces a difficult and uncertain future. At the current rate of cut, all of the original redwood forest not protected in parks will have been cut by 1984. To make matters worse, in Humboldt County, which accounts for about 40% of the total redwood cut, the annual cut of redwood timber has, in recent years, been more than twice the annual growth. When the stands of old growth redwood are exhausted, there will have to be a sharp reduction in the annual cut to levels sustainable by regrowth. The basic problem is simply that since the start of logging in the redwoods more than one-and-a-quarter centuries ago, the timber industry as a whole has behaved as though the redwood forests were an inexhaustible

resource to be exploited. While a few companies began practicing sustained yield management before the turn of the century, the industry for the most part has simply been liquidating the virgin timber. Now the unaffordable bill is about to become due.

PRESERVATION

EARLY EFFORTS

The first attempt to preserve coast redwoods came in 1852, preceding by more than a decade the first legislation to set aside Yosemite Valley and the Mariposa Grove of Big Trees. It took the form of a joint resolution introduced in the California State Assembly which requested Congress to prohibit settlement of public lands on which redwood was growing, and to make such timber common property of the citizens of the state, not subject to trade or traffic. The resolution was never adopted.

In 1899 Gifford Pinchot, of the U.S. Department of Agriculture, initiated a study of the redwoods to provide a basis for federal action, but again, the necessary legislation did not materialize.

The first success came in 1902, when the Sempervirens Club of San Jose induced the California Legislature to purchase one of the few remaining virgin redwood stands in the Santa Cruz Mountains. This first park preserving coast redwoods subsequently became Big Basin Redwoods State Park.

The first federal protection came in 1906 when President

Theodore Roosevelt established the Monterey Forest Reserve. Two years later, he established Muir Woods National Monument, a 503-acre parcel in Marin County which had been donated to the Federal Government by William Kent.

SAVE-THE-REDWOODS LEAGUE

While completion of the railroad and continuing improvements in the auto road between Sausalito and Eureka during the first two decades of this century accelerated logging of redwoods, these developments also brought people into the area. Many of them measured the value of redwoods in terms other than board feet, and were appalled at the devastation they saw-charred and blackened mountain slopes which had been clear-cut, skid trails running at steep angles down eroded slopes, and debris-filled stream beds. In fact, the present system of state redwood parks is the result of an auto trip up the Redwood Highway in 1917 by Dr. John C. Merriam of the University of California, Dr. Fairfield Osborn, president of the American Museum of Natural History, and Madison · Grant, chairman of the New York Zoological Society. Their observations of logging encroaching on the great virgin forests along the Eel River were detailed in the June, 1920 issue of National Geographic magazine. Even before publication, their reports had led Stephen T. Mather, director of the National Park Service, to discuss the desirability of a redwood national park in his 1919 Annual Report to Congress. In that same year, Congress authorized a federal study of the feasibility of acquiring a typical stand of primeval redwoods for a national park. The study committee recommended a 64,000acre national park on the lower Klamath River and an 1800acre unit on the Eel River. These proposals, incorporated

into Congressional bills, passed the House but were defeated in the Senate.

Even before these proposals had been formulated, the efforts of Merriam, Osborn and Grant had led to the formation of the Save-the-Redwoods League in 1918. With contributions from private individuals, the League began purchasing redwood lands for parks the following year. The League's efforts received a boost in 1921 when the state legislature appropriated funds for park acquisition and, at the same time, established the principle of using state funds to match funds provided by the League for redwood park land purchases. The League's program was further helped by passage of the State Park Bond Act in 1927, which made additional matching state funds available for acquisition of land for parks, and the California State Park Act, passed at the same time, which established an agency to manage these parks. As a result of this program, there are now 26 California redwood state parks containing about 55,000 acres of virgin coast redwoods.

During the 1920s and 1930s, several other proposals for a redwood national park were advanced, but no action was taken. In 1946, Congresswoman Helen Douglas introduced legislation to establish a 2.5-million-acre Roosevelt Memorial Forest, including 5 units totaling nearly 180,000 acres in Humboldt and Del Norte counties to be preserved as federal parks. These proposals also died.

A REDWOOD NATIONAL PARK AT LAST

Redwood National Park originated with a grant from the National Geographic Society to the National Park Service in 1963 to finance a special study of the coast redwoods. This study was primarily concerned with an analysis of the remaining virgin redwood forests, the significance of such forests for preservation, and what, if any, additional preservation should be undertaken. During the course of these investigations, a joint National Park Service - National Geographic Society research team discovered the world's tallest tree (as well as the second, third and sixth tallest trees) along Redwood Creek approximately 9 miles upstream from Highway 101.



Aerial of Tall Trees Grove

In its report published in September, 1964, as a result of their study, the National Park Service concluded that opportunities to set aside complete watersheds of virgin timber no longer existed except for a few small subdrainages. Substantial concentrations of old-growth redwood having significant park value were found only in the following three locations: the Mill Creek drainage south of Jedediah Smith State Park; the Redwood Creek and Lost Man Creek drainages near Orick; and the Yager Creek drainage approximately 20 miles southeast of Eureka. The report recommended establishment of a 53,600-acre redwood national park in the Redwood Creek, Lost Man Creek and Prairie Creek drainages-included were Prairie Creek State Park, 22,580 acres of privately-owned virgin timber, and a grant to the state to finance acquisition of the upper Mill Creek basin for inclusion in Jedediah Smith and Del Norte Coast state parks.

What followed was a tragic delay caused by a lack of leadership in the federal and state administrations and a failure of the conservation movement to unite divergent groups behind a single park proposal. Not until February, 1966, did President Johnson send a park proposal to Congress. In the Administration's proposal, Redwood Creek had been abandoned in favor of a park at Mill Creek. That would have authorized the purchase of only about 25,000 acres, of which only 7800 were virgin-forested. The 89th Congress adjourned with no action on bills in either house. When the 90th Congress convened in January, 1967, proposals to establish a redwood national park were reintroduced, but passage of the necessary legislation did not come until September, 1968.

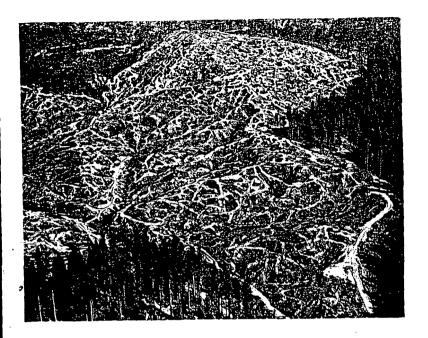
The final bill was written in a joint Senate-House conference committee and provided for a two-unit Redwood National Park comprising 55,275 acres. Of this total, 27,807 acres, containing 11,000 acres of virgin redwood stands, were taken largely from private owners. The three existing state parks (Jedediah Smith, Del Norte Coast, and Prairie Creek) comprise the balance of the acreage. Thus far, the State of California has elected to retain ownership of its state parks.



Clear-cut on north fork of Lost Man Creek

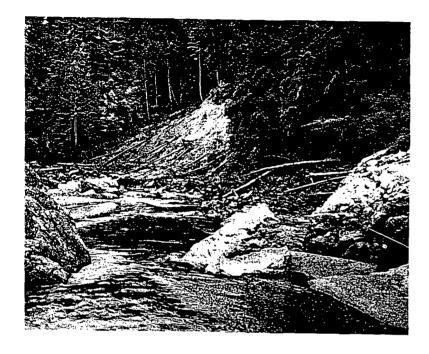
FUTURE PROBLEMS AND PROSPECTS

After a little more than 125 years of logging and a half-century of preservation, what is the actual situation? Of the original 1.97 million acres of coast redwoods, about 66,000 acres, or 3.4%, are in the Redwood National Park and state redwood parks. On January 1, 1976, approximately 4.3%, or 85,000 acres, of old-growth redwood on commercial forest land were left. The other 92.3% had been cut.



Aerial of clear-cut on north fork of Lost Man Creek

Although Redwood National Park is now a reality, the virgin redwood stands along Redwood Creek, including the Tall Trees Grove, face an uncertain future. Because of soil erosion on the logged-over watershed upstream from the park, Redwood Creek carries a heavy sediment load during the winter months. As this sediment load moves through the park, it can cause severe bank-cutting and stream-side erosion. During a storm in March, 1974, the sediment discharge of Redwood Creek at Orick reached 145,000 tons per day. These erosion problems have been seriously exacerbated by the fact that since the park's establishment, lumber companies which own the adjacent land have clear-cut right up to the boundary of the stream-side corridor in many locations. From a park management standpoint, the stream-side corridor makes little



Bank-cutting on Redwood Creek above Bridge Creek

sense, and another act of Congress may be necessary to protect the land. Unless the upper slopes are protected and erosion is checked, the redwood stands in the stream-side corridor will probably not survive continued buffeting by wind and erosion.

Despite its shortcomings, Redwood National Park is a landmark in conservation legislation. At an authorized cost of \$92 million, it is the nation's most expensive park. It repossessed a unique national asset that had fallen into private hands and was nearly lost, and it was established over the most monumental opposition that ever stood against a park.

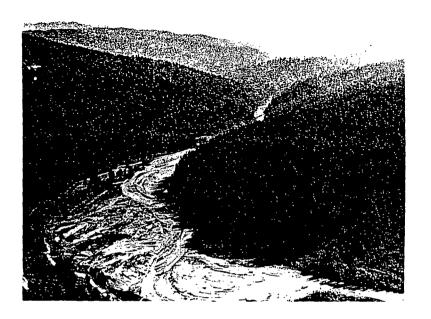
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A GUIDE TO THE REDWOOD PARKS

REDWOOD NATIONAL PARK

On October 2, 1968, President Lyndon Johnson signed legislation authorizing a redwood national park of 58,000 acres in northern California. Of this total, 27,807 acres were taken largely from private owners; approximately 11,000 of these acres are covered with virgin coast redwood. As authorized by Congress, the national park boundaries also encompass three long-established state parks—Prairie Creek Redwoods, Del Norte Coast Redwoods, and Jedediah Smith Redwoods—totaling 27,468 acres at the time Redwood National Park was established. Under the terms of the authorizing legislation, these three state parks may be donated by California to the U.S. Government for inclusion in Redwood National Park. However, since the state has elected to retain control, these parks remain completely separate units under the jurisdiction of the California Department of Parks and Recreation.

REDWOOD NATIONAL PARK STATE PARK Crescent City LEGEND Paved Roads DEL NORTE COAST REDWOODS Unpaved Roads STATE PARK Trails Z Streams ⋖ **Authorized National** Lagoon Creek Park Boundary ပ Ranger Station State Parks within National Park Klamath Boundaries PRAIRIE CREEK REDWOODS STATE PARK - Scenic Roads ⋖ Bald Hills Road Davison Road Coastal Drive Howland Hill Road Freshwater Lagoon Stone Lagoon Trails Redwood Creek Trail Lost Man Creek Trail Coastal Trail Enderts Beach Trail



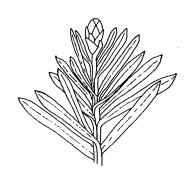
Aerial of Redwood Creek Valley

FEATURES

Although Redwood National Park has many outstanding features, it is perhaps best known for being the site of the world's tallest tree. Towering 367.8 feet above a flat on Redwood Creek, the Tall Tree can be reached only by trail. From the trailhead off Bald Hills Road, a nearly level trail extends 8.2 miles up Redwood Creek to the Tall Trees Grove (which also contains the third and sixth tallest trees). The trail crosses Redwood Creek in two places. Footbridges are installed at these locations around Memorial Day and removed after Labor Day, because of high water during the winter. In late spring, when the water has receded, it is usually possible to wade across Redwood Creek, but this undertaking is extremely hazardous if attempted while the water is high.

Because of Redwood National Park's varied topography and climatic conditions, there is a great diversity of vegetative types. At lower elevations, particularly on alluvial flats along streams, we find pure redwood stands. At higher elevations, redwood usually grows intermixed with Douglas fir and, in especially damp locations near the coast, redwood is sometimes found with Sitka spruce as well.





Coast redwood, Sequoia sempervirens







Sitka spruce, Picea sitchensis





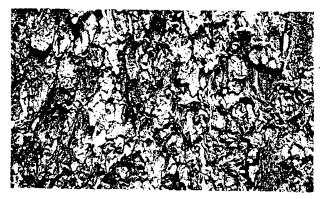


Douglas fir, Pseudotsuga menziesii

Coast redwood (Sequoia sempervirens) is readily distinguished from other conifers by its red, ropy bark and small cones. The cones are usually only three-fourths of an inch to an inch long and comprise 14 to 24 scales. The narrow leaves are one-half to three-fourths of an inch long, borne on the branch in such a way as to form flat sprays. Douglas fir (Pseudotsuga menziesii) and Sitka spruce (Picea sitchensis) are slightly more difficult to differentiate. Whereas the bark on old Douglas fir trees tends to be thick and deeply furrowed, the bark on Sitka spruce has a less rugged, scaly appearance. Needles on Douglas fir have rounded, blunt ends, while those on Sitka spruce are pointed and very prickly to the touch. Douglas fir cones are bearded while those of Sitka spruce are not. Finally, as Sitka spruce trees mature, they have a tendency to develop large buttresses at the base of the trunk.

Visitors can readily view these different types of trees from Bald Hills Road. Beginning one mile north of Orick at Highway 101, Bald Hills Road follows Redwood Creek for a short distance and then climbs the ridge northeast of the creek to an elevation of more than 1900 feet at the park boundary.

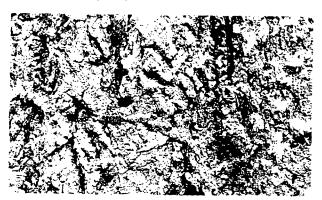
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Bark of Sitka spruce



Bark of coast redwood



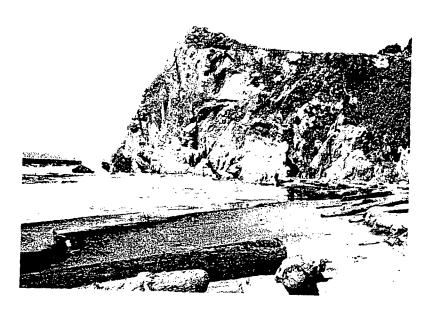
Bark of Douglas fir

At the top of the steep grade out of Redwood Creck (2.6 miles from Highway 101) is the parking area for the Lady Bird Johnson Grove, where the then First Lady dedicated the park on November 25, 1968. There are restrooms at the parking area, and an overpass across Bald Hills Road permits easy walking to the grove of redwoods. However, no water is available.

A few miles beyond the park boundary a series of grassy meadows along Bald Hills Road afford excellent viewing of the Redwood Creek Valley. Bald Hills Road eventually descends to the Klamath River near the town of Weitchpec, but since this road is largely unpaved and traveled by logging



Bridge over Bald Hills Road to Lady Bird Johnson Grove



Mussel Point

trucks, motorists would be well advised not to proceed beyond the lookout tower on Schoolhouse Peak, about 18 miles from Highway 101.

Together, Redwood National Park, Prairie Creek State Park and Del Norte Coast State Park encompass some 30 miles of spectacular coastline, stretching from Freshwater Lagoon south of Orick almost to Crescent City. Visitors can reach this coastline from several points. A few miles south of Orick, Highway 101 provides direct access to Freshwater Lagoon. From there, one can walk along the beach at least as far as the mouth of Redwood Creek.

Two and one-half miles north of Orick, Davison Road (also called the Beach Access Road) leads from Highway 101 to Gold Bluffs Beach in Prairie Creek State Park. This area is described under "Features" in the section "Prairie Creek Redwoods State Park" on page 57.

Between the north end of Prairie Creek State Park and the Klamath River is an 8-mile-long scenic road called the Coastal Drive, with fine coastal scenery. This road is reached from the Coastal Drive exits on Highway 101 between the north end of Prairie Creek State Park and the Klamath River. Since the road is partially unpaved and contains numerous curves, motorists should allow one-half hour for the trip. A gravel road loop provides access to the fishing camps near the mouth of the Klamath River. Motorists traveling north on the Coastal Drive from Prairie Creek Park will reach the intersection with this loop 4.4 miles from Highway 101. Motorists traveling south, who enter the Coastal Drive immediately after crossing the Klamath River, will reach the intersection with this loop 1.3 miles from Highway 101.

One and one-half miles north of the town of Klamath. Requa Road leads from Highway 101 to a point on the coastal bluffs from which one can see the mouth of the Klamath River and the fishing boats gathered there during salmon season. The trailhead for the Coastal Trail is also in this location, and picnic tables and restrooms are provided.

Lagoon Creek, located 5.3 miles north of Klamath on Highway 101, is the northern trailhead for the Coastal Trail. The Yurok Loop Trail begins here. Restrooms, drinking water, and picnic tables are provided. The setting is majestic, but since it is very close to the ocean, winds are sometimes overbearing.



Mouth of Klamath River

A few miles south of Crescent City on Highway 101 is the Enderts Beach Road turnoff, which leads to the trailhead for Enderts Beach. Along the way are picnic tables and a pleasant view of Crescent City.

HIKING AND NATURE TRAILS

In Redwood National Park itself, there are essentially four trails. Each of the state parks also has a network of trails, and the reader should refer to the appropriate sections on the state parks for a description of these.

In Redwood National Park, the Enderts Beach Trail leads

from the trailhead at the end of Enderts Beach Road to the beach, a distance of one-half mile. Enderts Beach Road is described in the preceding section.

The Coastal Trail winds along the top of the coastal bluffs from the trailhead at the end of Requa Road northward to Lagoon Creek on Highway 101, a distance of about 4 miles. There are panoramic views of the coastline and the mouth of the Klamath River to the south. At the north trailhead at Lagoon Creek is the Yurok Loop Trail, a 0.5 mile self-guiding loop trail which affords spectacular sights of False Klamath Cove from the bluffs overlooking the ocean. Hikers can walk the short loop trail and return along the west side of the lagoon - once used as a mill pond for a plywood millto the parking area; or continue on the 4-mile Coastal Trail. Leaflets explaining points of interest on the Yurok Loop Trail are available at the trailhead for fifteen cents.

From the parking area on Bald Hills Road, 2.6 miles from Highway 101, an easy trail leads to the Lady Bird Johnson Grove. This half-mile trail is nearly level, and the return section is a self-guided nature study trail.

The only real backpacking trail in the park is the Redwood Creek Trail, which leads from the trailhead just off Bald Hills Road to the Tall Trees Grove 8.2 miles up Redwood Creek. The turn-off for the trailhead is located on Bald Hills Road four-tenths of a mile from Highway 101. (Redwood Creek Trail was described earlier under "Features" in this section.) Camping and campfires are permitted beside Redwood Creek Trail on streambars only. Dogs are prohibited. Backpackers are expected, of course, to pack out all trash.

Although not a designated trail, the old logging road which parallels Lost Man Creek offers a pleasant experience in the redwoods. The road is not steep. Noise from Highway 101 does not intrude, and there are superlative stands of virgin redwoods on this drainage. The logging road intersects Highway 101 3.2 miles north of Orick at the highway bridge across Little Lost Man Creek. The fish hatchery is 0.3 miles north of this intersection. By the summer of 1977, the National Park Service plans to open at least the lower portion of this logging road to passenger cars so that visitors may have the experience of driving slowly through a virgin redwood forest. Visitors who wish to enter the Lost Man drainage should check with a National Park Service ranger station to ascertain the status of this road.

FISHING

Fishing is permitted in both Redwood National Park and the three state parks. A California fishing license is required for both freshwater and ocean fishing. Fishing regulations, including open seasons and catch limits, are established annually by the California Fish and Game Commission, and these regulations apply in Redwood National Park as well as in the state parks. This area is well known for salmon and steelhead fishing in the winter and trout fishing in the summer. The various streams in the area have different open seasons, and since these seasons are set annually by the Fish and Game Commission, they may vary from year to year. Visitors intending to fish should first get a copy of the California Sport Fishing Regulations, which can be obtained at most sporting goods stores.

CAMPGROUNDS AND RANGER STATIONS

Headquarters for Redwood National Park, located at Second and K Streets in Crescent City, serves a dual role as park headquarters and visitor center. There are plans for additional visitor centers elsewhere in the park. During the summer there are evening programs at the Crescent City facility which feature native craft demonstrations, history, wildlife and native culture. Ranger stations are also located 3.5 miles north of Klamath and at Orick, and National Park Service personnel at these stations are always very helpful.

There are no campgrounds in Redwood National Park itself. However, all three of the state parks have attractive, well-maintained campgrounds. (See "Campgrounds" in sections for each of the three state parks.)

PRAIRIE CREEK REDWOODS STATE PARK

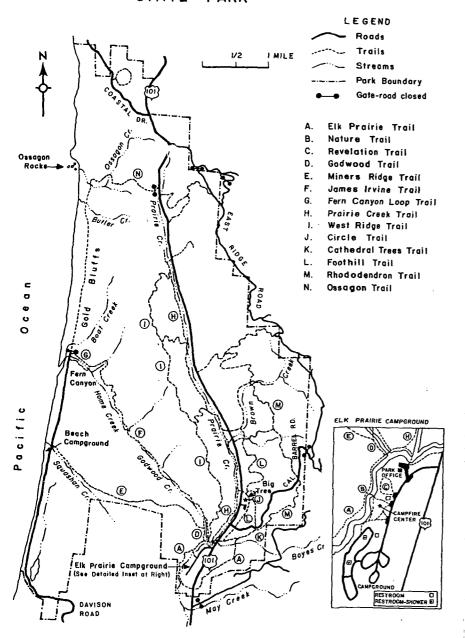
FEATURES

Established in 1923, Prairie Creek Redwoods State Park is both the oldest and the largest of the three northern state redwood parks. Its 12,321 acres, encompassing the upper Prairie Creek drainage, form an almost complete ecological unit. Magnificent stands of primeval redwood forest combine spectacularly with the Pacific's coastline. The redwoods, many of which are more than 300 feet tall, can be viewed from hiking trails as well as from Highway 101, which runs through the park.

Along the coast, silent bluffs rise high above the rumbling

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PRAIRIE CREEK REDWOODS STATE PARK





Fern in Prairie Creek State Park

beach. Named Gold Bluffs and Gold Bluffs Beach, they are reminders of the gold rush in 1851, when fortune seekers flocked to the beach in a futile attempt to mine the bluffs and sand for gold. Today, the beach can be reached by car via Davison Road (also called the Beach Access Road). From its junction with Highway 101 2.5 miles north of Orick (or slightly over 3.5 miles south of Prairie Creek State Park Headquarters), proceed west on Davison Road. This is a narrow dirt road with many curves. Watch out. Trailers are definitely not recommended. In wet weather, motorists should check the condition of this road at Prairie Creek Park Headquarters before attempting to drive to the beach. The road is frequently closed in the winter months. Hikers can reach the beach via

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Miners Ridge Trail or the James Irvine Trail, both of which originate at Park Headquarters. Distance to the beach on either trail is 4.5 miles, and the hiking is relatively easy.

Near the west end of the James Irvine Trail lies Fern Canyon, a natural gorge formed by the waters of Home Creek cutting through the bluffs. The 50-foot-high walls of the canyon are covered with five-fingered ferns, and lush green moss carpets the nurse-logs and other downed wood. Fern Canyon can be reached from Park Headquarters by following the James Irvine Trail to its intersection with the Fern Canyon Loop Trail, about one-half mile from Gold Bluffs. From the beach, proceed up the Fern Canyon Loop Trail or directly up the canyon formed by Home Creek.



Elk on Gold Bluffs

Prairie Creek State Park is home for two herds of Roosevelt Elk. One herd can usually be found grazing on Elk Prairie, the large meadow which flanks both sides of Highway 101 near the park entrance. The other herd normally stays on Gold Bluffs and the meadows near the base of the bluffs. While the elk appear tame, they should not be approached on foot. The bull elk sometimes reach nearly 1000 pounds and, particularly during the autumn rutting season, can be quite dangerous.

Visitors who wish to see the rhododendrons and azaleas in bloom should come in late spring. Particularly during May and June, the rhododendrons produce a profusion of scarlet to rose-purple flowers. Since both shrubs like some filtered sunlight, they are not ordinarily found on the forest floor beneath heavy stands of timber. Instead, they prefer openings along streams, trails, roads, and the forest edge. In Prairie Creek State Park, rhododendrons are usually abundant around Elk Prairie, along the Rhododendron Trail on the east side of Highway 101, and along the Prairie Creek Trail.

HIKING AND NATURE TRAILS

More than 43 miles of hiking trails afford the visitor a wide variety of opportunities to experience the redwoods. These vary from short nature trails of less than one-half mile to the 6-mile-long Prairie Creek Trail.

The Revelation Trail, located between Park Headquarters and the picnic area at Elk Prairie, is a short (0.2 mile in length) nature trail designed specially for use by blind people. Wood and rope handrails run the length of the trail, and fea-



Trillium

tures along the way are described on signs and in a Braille handbook available at Park Headquarters.

A self-guided nature trail a little more than one-half mile long begins at park headquarters and terminates at the parking area between the campfire center and the restrooms just south of Park Headquarters. For most of its length, the trail follows Prairie Creek. A pamphlet obtainable ar Park Headquarters explains the flora found along the trail.

About 0.8 mile north of the entrance of Park Headquarters on Highway 101 is the parking area for the Prairie Creek Big Tree. With a breast-height diameter of 17.7 feet, it is the largest known tree in the park. A short trail leads from

the parking area to the tree, a distance of about 100 yards. Since the Foothill Trail, Circle Trail, and a trail leading to the Prairie Creek Trail all converge at the Big Tree, the parking area also provides access to these trails. The Cathedral Trees Trail, which can be reached by following the Circle Trail for a short distance south, leads to a campground accessible only to backpackers.

FISHING

Although the open season for trout in Prairie Creek may vary from year to year, it usually begins the Saturday before Memorial Day and ends September 30. However, Prairie Creek is subject to special regulations, and anglers should ascertain the season and catch limit before fishing. Prairie Creek is not usually open for salmon and steelhead fishing in the winter. (See page 54 for general fishing regulations.)

CAMPGROUNDS

There are two campgrounds in the park. Elk Prairie campground, located near the Park Headquarters, has 75 campsites, and Gold Bluffs Beach has 25 campsites. Each site has a picnic table, fireplace, and cupboard. Piped water is available nearby. Both campgrounds have restrooms with flush toilets, and hot showers are available at Elk Prairie. Gold Bluffs Beach campground is reached via Davison Road from Highway 101. (See p. 57 for directions and cautions.) Because of heavy visitor use during the summer months, overnight campers should make advance reservations from June through September. Picnic tables are also available for day use at both Elk Prairie and Gold Bluffs Beach.



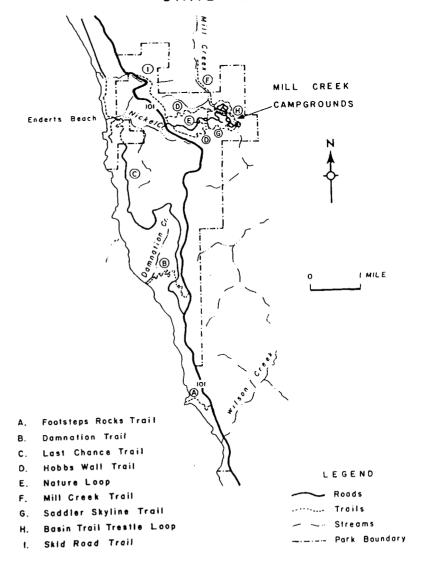
Campsite in Prairie Creek State Park

DEL NORTE COAST REDWOODS STATE PARK

FEATURES

Del Norte Coast Redwoods State Park combines many outstanding redwood groves with a rain forest understory. This 6375-acre park is especially beautiful in May and June when the many rhododendrons and azaleas are in full bloom. While Highway 101, which winds through the park, is a scenic drive, many of the park's most interesting features can best be seen from trails.

DEL NORTE COAST REDWOODS STATE PARK



HIKING TRAILS

The Damnation Creek Trail is one of the prime features of the park. Beginning at the Henry Solon Graves Memorial Grove along Highway 101, 4.3 miles south of the Mill Creek campground turn-off, this trail winds through dense stands of virgin redwood forest to a small beach at the mouth of Damnation Creek.

The Last Chance Trail, the longest in the park, begins approximately one-half mile south of the Damnation Creek Trail on Highway 101. It parallels Highway 101 to the headwaters of Damnation Creek, then turns west and runs along the tops of the bluffs overlooking the Pacific Ocean, affording fantastic views before descending to Enderts Beach. This trail is the old highway, and during the summer months it is normally open to cars as far as the boundary with Redwood National Park, which is essentially at the top of the bluffs above Enderts Beach. Beyond the gate at the boundary, the road becomes very steep, and several slides have destroyed sections of it. Although the road is closed to motor vehicles at the gate, hikers can continue all the way to Enderts Beach. The turn-off at Highway 101 is neither marked nor obvious. It is located about one-half mile south of the Damnation Creek Trail, where Highway 101 emerges from the forest and traverses the tops of the bluffs.

FISHING

Fishing is permitted in Mill Creek during the regular trout season. (See p. 54 for general fishing regulations.)

CAMPGROUNDS

The park has one campground containing 142 campsites. Located on Mill Creek, about two miles east of Highway 101, the campground is warmer and drier than the coast because of the effects of intervening mountains on weather patterns.

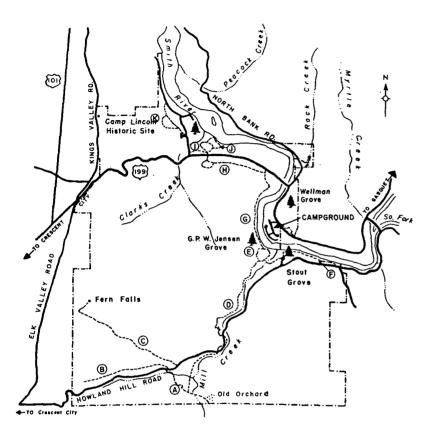
Each campsite has a picnic table, food cupboard, and fireplace. About two-thirds of the campsites will accomodate trailers, although no trailer hook-ups are provided. Restrooms in the campground have flush toilets and hot showers.

JEDEDIAH SMITH REDWOODS STATE PARK

This park, established in 1929, and the Smith River on which it stands, derive their names from Jedediah Strong Smith. He led the first party of white men on an overland route through the region in 1828. A mountain man and fur trader, Smith had worked his way northward up the Sacramento River Valley, heading for Oregon. Blocked by the Cascade Range, he turned west across the Coast Range to the Pacific. Three years after crossing the Smith River, Jedediah Strong Smith was killed by Comanche Indians, far to the east.

FEATURES

Pure virgin redwood stands of great stature highlight this 9139-acre park. At the confluence of Mill Creek and the Smith River is the Frank D. Stout Memorial Grove, noted for the park's largest known tree. Called the Stout Tree, it boasts a diameter of 20 feet and a height of 340 feet.





In marked contrast to the cool, foggy coastal weather just a few miles to the west, summer days along the Smith River are frequently warm and sunny. Sandy river beaches afford the visitor many recreational opportunities.



Smith River at Mill Creek in Jedediah Smith State Park

The principal access to the park is from Crescent City via Highway 199, which traverses the northern end of the park. Visitors can also reach the park via North Bank Road, which intersects Highway 101 about 10 miles north of Crescent City. Motorists who have plenty of time may prefer Howland Hill Road. From Crescent City, it climbs steeply over the ridge separating the Mill Creek watershed from the coast, then descends to Mill Creek, which it follows to the Smith River. It winds its way among towering trees with a lush understory of rhododendron, azalea, huckleberry, oxalis,

and ferns. Since this is a narrow dirt road containing sharp curves and steep grades, trailers are definitely out of place. It is rough even in good weather and often impassable in the winter months. Howland Hill Road is reached from Elk Valley Road, which intersects Highway 101 about one-half mile southeast of Crescent City. From this intersection, follow Elk Valley Road about a mile northeast to the junction (Howland Hill Road).

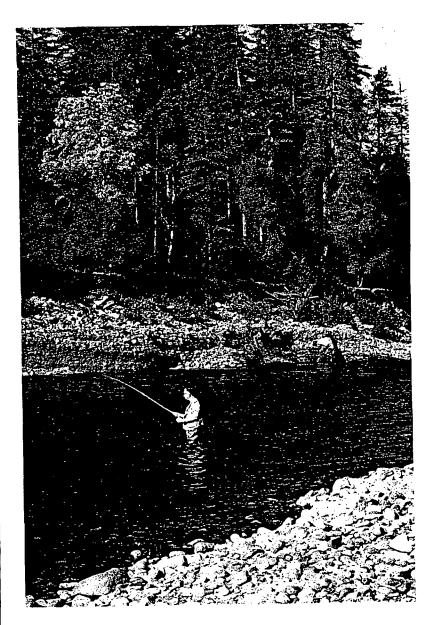
HIKING TRAILS

A variety of trails, permit anything from a short stroll to more strenuous hikes of several miles. Most of the park's larger redwoods grow on the flats along the Smith River. From nearby parking areas, a number of short, easy trails lead to the Frank D. Stout Memorial Grove and other major groves.

Much of the south portion of the park is quite rugged. Although Howland Hill Road provides the only vehicular access to this region, several trails afford good views. Situated farther from the coast than either Prairie Creek or Del Norte Coast state parks, Jedediah Smith Redwoods State Park contains a wider variety of trees and shrubs. In addition to redwood, Douglas fir, tan oak and madrone, one finds some scattered hemlock, incense cedar and even ponderosa pine.

FISHING

The Smith River normally affords good salmon and steelhead fishing during the winter months and fly fishing for trout in the summer. Although fishing seasons vary from year to



Fishing the Smith River

year, the portion of the Smith River through the park is usually open to fishing all year. The normal trout season in both the Smith River and Mill Creek usually begins the Saturday preceding Memorial Day and ends November 15. During the rest of the year Mill Creek is closed, but the Smith River is open for trout, steelhead, and salmon. (See p. 54 for general fishing regulations.)

CAMPGROUNDS

The park's only campground, located on the Smith River, has 107 campsites, each with table, cupboard, and fireplace. June through August, advance reservations are advisable. Trailers up to 26 feet in length and motorized recreational vehicles up to 30 feet can be accommodated. Although trailer hook-ups are not available, the park does have a trailer sanitation station. Restrooms have flush toilets and hot showers.

