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Mariposa Grove of Big Trees

By C. A. Harvill, Park Naturalist

As you enter the Mariposa Grove of Big Trees you will find the trees and exhibits pointed out to you by specially designed redwood signs with burned letters. This inscription, written by Colonel Thomson, superintendent of Yosemite National Park, furnishes an excellent key to the understanding of the trees:

These Sequoia Giganteae represent the only living things that bridge humanity back through eons to the age of Reptiles.

Here live venerable forest kings in reveries that carry back a thousand years before Jesus Christ walked the shores of Gallilee.

In their majestic shadows fretting men may well pause to ponder values—to consider the ironic limitations of three-score years and ten.

Here, through a compelling humility, men may achieve a finer integrity of soul.

Could these Sequoias but hand down to us a few generations of their history, each lasting from two to four thousand years, what a story they might tell. Present growing trees were flourishing in this

grove when Christ was born; the solid wood of massive tree trunks buried deep in the earth's surface span back other thousands of years, while from nature's age-old history written in fossils and in solid rock we can trace their story back millions of years.

FORMERLY WIDESPREAD

We know Sequoias once flourished and spread over all continents of the northern hemisphere. They grew in Greenland, in Europe, in Asia, in Alaska, in Yellowstone and east of the Mississippi river. More than a dozen species of Sequoias were represented in those forests of long ago. At the present time only two species remain. The Redwoods (*Sequoia sempervirens*) grow in the humid region from southern Oregon to Monterey county in California. The Big Tree (*Sequoia gigantea*) grows in some 71 groves along the western slope of the Sierra in California. They extend from a grove of six trees in Placer county to the large and extensive forests of Sequoia National Park and Sequoia National Forest. Three groves are in Yosemite National Park—the Merced, Tuolumne and Mariposa groves.

Mariposa Grove is one of the best known of all the groves. It contains approximately 200 trees measuring over 10 feet in diameter 10 feet from the ground. The grove

covers one square mile. It was "discovered" by Galen Clark in 1837 and was set aside as a State park in 1864 as part of Yosemite State Park.

WHAT TO SEE IN THE GROVE

TEXAS TREE—267 feet high, 20.4 feet base diameter.

FALLEN MONARCH.

A veteran of other days. This tree has been down for centuries, yet its wood is solid though darkened in color. Sequoia is almost as enduring as stone due to the tannin which it contains. Decay scarcely affects more than the outer rim of sapwood even in buried trees.

The tree at the tip of Fallen Monarch leans 48 feet.



The Corridor Tree

CORRIDOR TREE — 214 feet high, 21.6 feet base diameter.

A wonderful example of this tree's self-healing powers. Fires of long ago ate deeply into the heart-

THREE GRACES—254 feet high, 18.9 feet base diameter; 258 feet high, 13 feet base diameter, and 219 feet high, 16 feet diameter.

BACHELOR TREE — 241 feet high, 21.9 feet base diameter. wood, leaving a shell of little more than sapwood separated into six pillars. A wide base has been built by the root system and new bark and new layers of trunkwood are being supplied to repair the great damage.

GRIZZLY GIANT—200 feet high, 30 feet base diameter.

The largest and best known tree in the grove and surely one of the oldest living things. With an estimated age of over 3000 years it was a sturdy sapling when Moses led the Israelites out of Egypt. A Sequoia never dies standing. Fire, wind or man must cause its downfall. The Grizzly Giant now leans 24 feet.

CALIFORNIA TREE—234 feet high, 228 feet base diameter.

A tunnel was cut through this tree about 1895. There are now four tunneled Sequoias — three in Yosemite National Park, one in Calaveras Grove.

ALABAMA TREE—231 feet high, 17.4 feet base diameter.

The most perfect and symmetrical tree in the grove. It has fewer

fire scars, best branch development and most perfect dome-shaped top.

FAITHFUL COUPLE — 232 and 244 feet high, 30.5 feet base diameter.

A thousand years ago these trees fought each other for food and sunlight. Now they stand united. A thousand years from now the two trees across the road may also be one.

MATHER TREE—25 feet high, approximate age 30 years.

Officially dedicated July 4, 1930, to the late Director Stephen T. Mather, organizer of the National Park Service. Compare the conical top of the young tree with the dome-shaped top of the older Alabama tree. Note differences between Sequoia and yellow pine, sugar pine and white fir in this group

CLOTHESPIN TREE — 293 feet high, 22.2 feet base diameter.

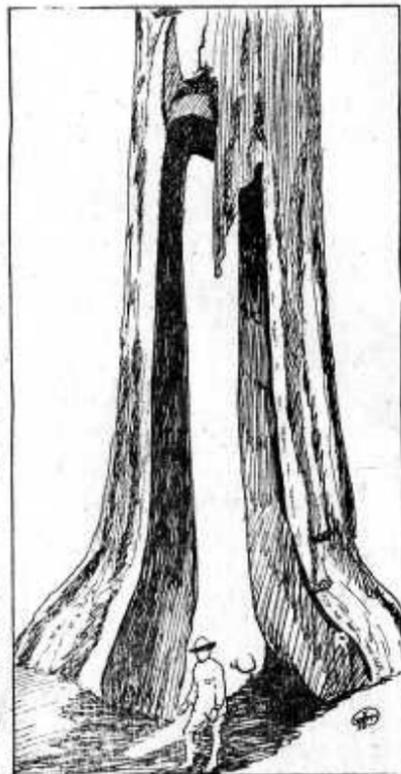
Tallest tree in the grove. Very severely burned by fires of past centuries but not discouraged. The top evidently died because of this injury. This perhaps accounts for all dead Sequoia tops. Lightning seems never to strike them while their tops are green. The heartwood burned out to a height of 70 feet.

MARIPOSA TREE — 245 feet high, 25.4 feet base diameter.

ELEPHANT'S FOOT—

After the age of about 10 years the root growth of a Sequoia is lateral only. Some roots reach massive size. They seldom penetrate more than six or eight feet below the surface. A great system of small feeding roots, but a few inches below the surface, extend up to 300 or 400 feet in every direction from base of tree.

AMERICAN LEGION TREE—250 feet high, 27.3 feet base diameter.



The Clothespin Tree

WINDOW TREE—245 feet high, 26.2 feet base diameter.

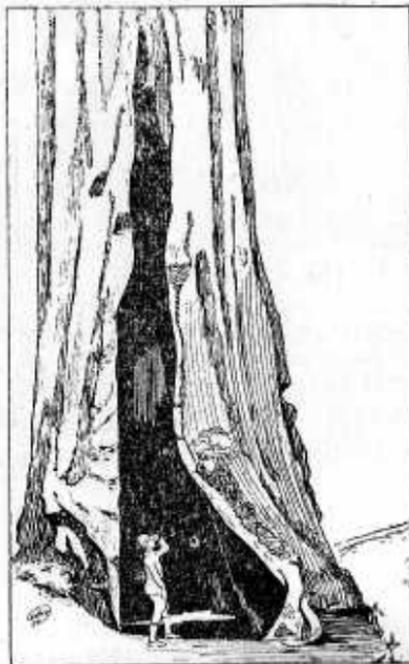
Clearly shows last stages of healing over an old fire wound.

HAVERFORD TREE — 266 feet high, 29.3 feet base diameter.

One of the most photographed of fire-scarred trees. The three great openings expose a cavity measuring 28 feet from east to west and 35 feet from north to south. As many as 15 horses have been sheltered here during a sud-



The Massachusetts Tree



The Telescope Tree

den storm of early days, hence it is also called the Shelter tree.

LOG CABIN MUSEUM — Here you will find exhibited the story of big trees. There is no admission charge. Galen Clark's "Hospice" once stood here. The State replaced it with a larger cabin, 1885. This present reproduction was built in 1930.

LAFAYETTE TREE — 267 feet high, 30.6 feet base diameter.

COLUMBIA TREE — 290 feet high, 28 feet base diameter.

This is the second tallest and most beautiful nature tree in the grove.

MASSACHUSETTS TREE — 280 feet high, 28 feet base diameter.

Sequoias have never learned how to die. They are remarkably free from insect pests and harmful fungi. Fire and man are their greatest enemies. When weakened, storms may blow them down. Fire burned away two-thirds the great bulk of the base of this tree, then in the early '70s road-builders cut through the few remaining anchoring roots. Gravity did the rest. This great giant fell during the early spring of 1927. No one heard its mighty crash. It forms a wonderful exhibit of the secret of the Big Trees.

TELESCOPE TREE — 199 feet high, 23.5 feet base diameter.

Fire, the arch enemy has run his black magic clear through this tree's heart. Stand inside and as if lookin through the small end of a telescope see the blue of the sky and the green of new leafy branches. Ax marks show where the road-builders of the '70's started to cut a tunnel.

MARK TWAIN TREE—274 feet high, 17.7 feet base diameter.

This tree is leaning 35 feet due south.

WAWONA TREE—231 feet high, 27.5 feet base diameter.

One of the best known trees in the world. The tunnel, more than 8 feet wide and 27½ feet long, was cut by two brothers in 1881 for the Yosemite Stage and Turnpike Company, at a cost of only \$75.

VERMONT TREE — 253 feet high, 16.9 feet base diameter.

GALEN CLARK TREE—240 feet high, 21.5 feet base diameter.

Galen Clark discovered and named the Mariposa Grove in 1857, though other whites had certainly made unrecrded visits to these trees at an earlier date. This is his discovery tree. The cairn nearby was built by him.

WAWONA POINT — Elevation 6950 feet.

A marvelous view out over the canyon of the South Fork of the Merced river. Especially fine for sunset effects.

LINCOLN TREE—249 feet high, 23.2 base diameter.

WASHINGTON TREE—238 feet high, 29.7 feet base diameter.

SUNSET TREE—203 feet high, 23.1 feet base diameter.

With top and branches torn away by storms and base badly mutilated by fire this tree gives mute evidence of Sequoia's stubborn resistance to misfortune.



Haverford Tree



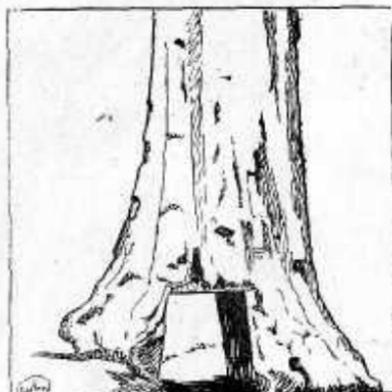
Sunset Tree

TUNNELED BIG TREES

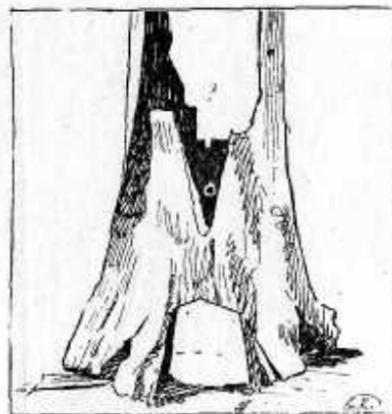
By William C. Godfrey

The mode of travel has changed since the first vehicle was driven through a California Big Tree, and the several popular Big Tree groves are more accessible now than they were during the days of the horse stage.

The experiences of those appre-



The Wawona



The Tuolumne

ciative people whose good fortune permitted them to travel from all parts of the civilized world to visit these natural wonders have been recorded in books to be found today on the shelves of libraries throughout the country.

Among the authors of such volumes is W. G. Marshall, who in 1878 visited the Big Tree groves and the Yosemite valley. In his book entitled "Through America, or Nine Months in the United States," he refers to his journey into the Sierra during the month of June, 1878.

From a chapter of his book we quote the following:

"After remaining a couple of days at the Calaveras grove, we set out on the evening of June 23 for Yosemite valley. We obtained extensive, glorious views over forest-clad valley and mountain; till at length we came to the Tuolumne Big Tree grove, and at the same time upon a novelty such as one does not come across every day. This is a tunnel through the stump of one of the largest sequoias in the grove, through which the road passes, and the stage coach is driven: The stump so standing—the trunk has been severed about ninety feet from the ground—is entirely barked and measures 30 feet 8 inches in diameter; but, the diameter of the trunk with its bark is said to have been over 40 feet. In height, the tunnel measures 12 feet, and it is 10½ feet wide at the top. When we reached the middle of it, we pulled up, of course, for here we were with

coach and four horses standing inside one of the mammoth trees of California. We waited a considerable time within the tree. The tunnel had only been completed a week before our visit to the grove, the first coachful having passed through the stump on the afternoon of Tuesday, June 18."

Four of Them Now

Since that time three living trees have had tunnels chopped through their hearts, making a total of four tunnel trees in the groves of sequoia gigantea throughout their range in the Sierra. Of these four tunnel trees, three are within the boundaries of Yosemite National Park—namely The Dead Giant in the Tuolumne grove and the California and Wawona trees in the Mariposa grove.

The other tunnel tree, known as the Pioneer, is in the Calaveras grove. It is located near the center of the grove, and measures thirty-two feet in diameter near the base.

In that section of the Mariposa grove located about one hundred yards east of the ancient Grizzly Giant is to be found the California tree. A tunnel was cut through the heart of this tree about 1895.

A roadway was built so that passengers of the horse stages might be carried through a big tree in the Mariposa grove during that part of the season when snow and mud kept the road in a condition preventing travel into the upper grove and through the famous Wawona tree.

Gets the Publicity

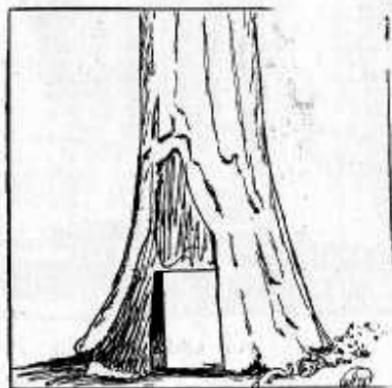
The Wawona tree is the most conspicuous of all the big trees of its species; it is the most perfect specimen of the *Sequoia gigantea*

through which a tunnel has been cut, and is probably the most famous tree in the world today, as it has had wider publicity than any other individual tree.

The tunnel was cut through the Wawona tree by two brothers named Scribner, who were paid \$75 for their labor by the Yosemite Stage and Turnpike Company shortly after completion of the first road into the Mariposa grove.



The Pioneer



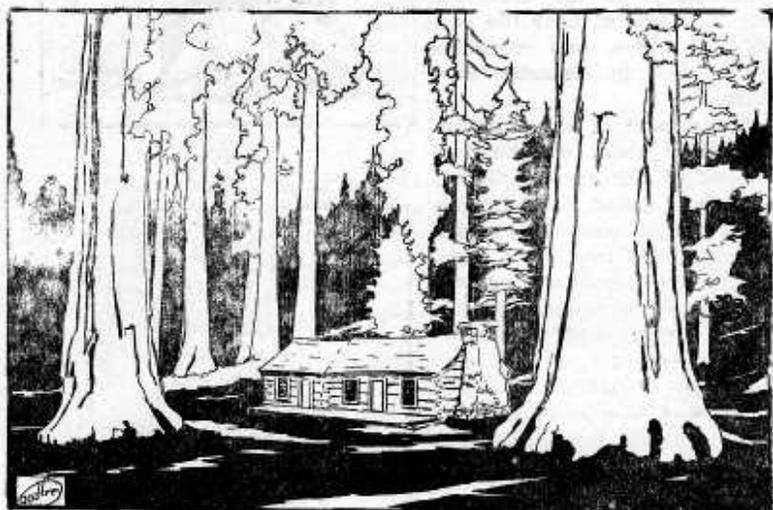
The California Tree

Frank Strausser of San Diego, Calif., in a letter to Chief Naturalist Hall, claims to have entered the Mariposa grove with a party of Knight Templars from Philadelphia during the month of August, 1880. Upon arriving at the Wawona tree, the stage upon which he was riding was held until the workmen removed the blocks of freshly shopped heartwood from the roadway so that this stage might be the first vehicle to pass through the new tunnel tree. Mr. Strausser states further that he remained with the driver on the stage, after the other passengers had alighted, and as the stage was moved carefully through the new opening on

a test, he claims the distinction of being the first passenger to have ridden through the Wawona tree.

Photographs of this tree with a troop of cavalry, four horses abreast, passing through its aperture, or the old coach and six horses drawn up at the exit to be photographed, are found displayed throughout the civilized world. It has been painted by the foremost artists, and in some cases these paintings have been used commercially in advertising.

The name "Wawona" was appropriately selected from the language of the Miwok Indians—Wah-wo-nah—meaning Big Tree.



An Old Cabin In The Mariposa Grove

In 1930 a replica of the original cabin was built on the same site, and now houses the Mariposa Grove Museum.



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Dan Anderson