

# CRATER LAKE

## NATIONAL PARK

### OREGON

*The Sinnott  
Memorial  
on the Rim  
of Crater  
Lake*



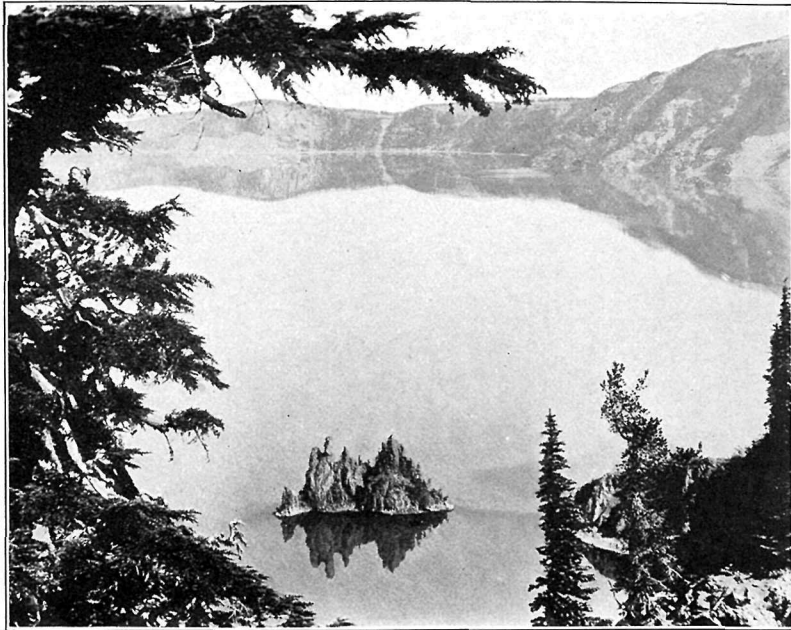
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UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

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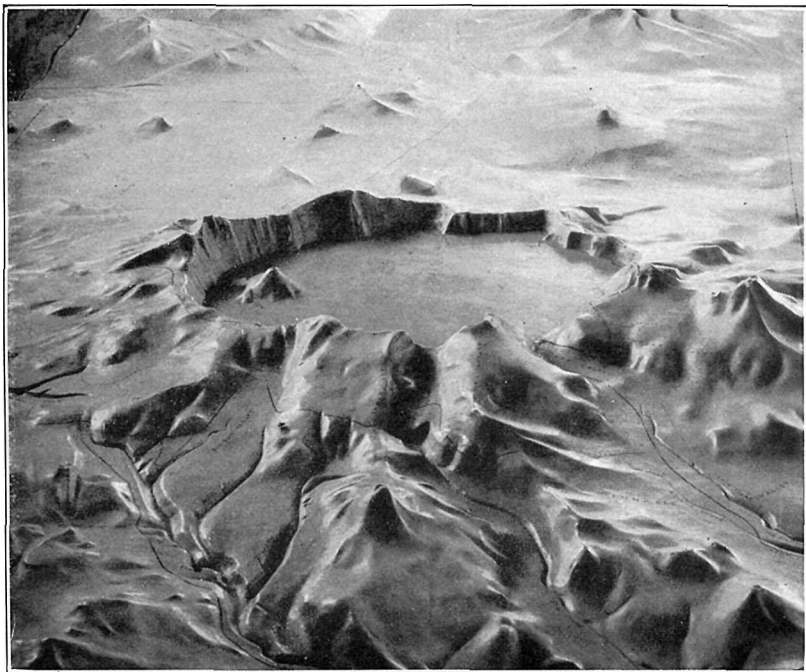
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THE LAKE WITH PHANTOM SHIP IN FOREGROUND

"It lies 2,000 feet under your feet, and reflects its walls so perfectly that you can not tell the wall from the reflection in the intensely blue water."—Joaquin Miller



RELIEF MODEL OF CRATER LAKE AND THE SURROUNDING REGION

UNITED STATES DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

NATIONAL PARK SERVICE

HORACE M. ALBRIGHT, Director

GENERAL INFORMATION REGARDING

# CRATER LAKE NATIONAL PARK

OREGON



OPEN EARLY SPRING TO LATE FALL

UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1933

## RULES AND REGULATIONS

### BRIEFED

The park regulations are designed for the protection of the natural beauties and scenery as well as for the comfort and convenience of visitors. The following synopsis is for the general guidance of visitors, who are requested to assist the administration by observing the rules

**Fires.** Light carefully and in designated places. Extinguish **completely** before leaving camp, even for temporary absence. Do not guess your fire is out—**Know it.**

**Camps.** Use designated camp grounds. Keep the camp grounds clean. Combustible rubbish shall be burned on camp fires and all other garbage and refuse of all kinds shall be placed in garbage cans or pits provided for the purpose. Dead or fallen wood may be used for firewood.

**Trash.** Do not throw paper, lunch refuse, kodak cartons or paper, chewing-gum paper, or other trash over the rim, on walks, trails, roads, or elsewhere. Carry until you can burn in camp or place in receptacle.

**Trees, Flowers, and Animals.** The destruction, injury, or disturbance in any way of the trees, flowers, birds, or animals is prohibited.

**Noises.** Be quiet in camp after others have gone to bed. Many people come here for rest.

**Automobiles.** Careful driving is required at all times for protection of yourself and other visitors. Your car must be equipped with good brakes, horn, and lights. Passing on curves is prohibited. Obey traffic rules. A gasoline and oil station is maintained on the main highway at Government Camp. Gasoline and oils may also be secured at rim area. No other gasoline stations are available in the park.

**Park Rangers.** The rangers are here to help and advise you. When in doubt ask a ranger. Rangers at the Information Bureau, Park Headquarters, and the several stations will be glad to help you plan your activity while in Crater Lake and to explain the regulations.

**Warning About Bears.** Do not feed the bears from the hand; they will not harm you if not fed at close range. Bears will enter or break into automobiles if food that they can smell is left inside. They will also rob your camp of unprotected food supplies.

**Fishing.** Five fish are the limit for a day's catch from the lake and 20 from streams in the park. No license is required for fishing within the park. Complete rules and regulations are available at Park Headquarters.

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## IMPORTANT EVENTS IN THE HISTORY OF CRATER LAKE

1853. John Wesley Hillman and a group of prospectors discovered the lake and named it Deep Blue Lake.
1862. Chauncey Ney and party of prospectors, unaware of the previous discovery, accidentally visited the lake.
1865. Soldiers from Fort Klamath, without knowledge of the previous discoveries, visited the lake and named it Lake Majesty.
1869. Jim Sutton, accompanied by David Linn and family, of Jacksonville, visited the lake and named it Crater Lake.
1873. J. S. Diller, geologist, and Everett Hayden, of the United States Geological Survey, visited the lake.
1884. First photograph, a daguerreotype, taken of Crater Lake by Peter Britt.
1885. William Gladstone Steel, with Prof. Joseph Le Conte, Capt. Clarence E. Dutton, J. M. Beck, jr., and others, visited Crater Lake. Mr. Steel suggested that a national park be established and a petition was sent to President Cleveland.
1886. The President issued a proclamation withdrawing 10 townships, including Crater Lake. Lake surveyed and sounded by the United States Geological Survey.
1888. First fish planted in Crater Lake by William Gladstone Steel.
1896. Mazamas visited Crater Lake and christened the ancestral mountain, of which only the caldera remains, Mount Mazama.
1902. Crater Lake National Park, created by congressional action, approved by President Theodore Roosevelt. First superintendent, W. F. Arant, appointed.
1907. First automobile driven to the rim of Crater Lake by Charles True, from Medford, Oreg. The *Wocus*, the first boat used in rendering a launch service to visitors, placed on the lake.
1912. First congressional appropriation passed for developing a highway system in the park. Crater Lake Lodge, the oldest structure now existing in the rim area, was built. Visitors, 5,235.
1916. National Park Service act passed October 25.
1919. Rim Road around Crater Lake completed. Visitors, 16,645.
1925. Plaque in honor of John Wesley Hillman, the discoverer, placed at Discovery Point. Visitors, 65,018.
1926. Utility area and residence development at Government Camp started. Mount Scott Fire Lookout constructed. Naturalist activity inaugurated by Dr. Loye Miller. Visitors, 86,019.
1927. Crater Lake Ski Club organized and first annual ski races held.
1928. Crater Wall Trail completed. Housekeeping cabins and cafeteria constructed. Visitors, 113,323.
1930. Park roads cleared of snow by snow plow, hastening access to the lake by two to three months. Visitors, 157,693.
1931. Beginning of new standard-grade Rim Road. Sinnott Memorial and Museum completed and dedicated. Visitors, 170,284.
1932. The Watchman Observation Station completed. A combined fire lookout and museum on top of the Watchman. Elevation, 8,025 feet. A donation by William Gladstone Steel of a collection of photographs of the pioneers identified with the discovery and development of Crater Lake National Park.

## CRATER LAKE NATIONAL PARK

**L**OCATED in the very heart of the Cascade Range of southern Oregon, Crater Lake National Park takes its place among the Nation's scenic wonderlands. It is a treasure box of incomparable scenery where visitors long to linger. The park was established May 22, 1902, and now embraces an area of 250.52 square miles or 159,360 acres. Breath taking when first viewed, awe inspiring when its immensity is realized, mystifying in its strange silence, unique in its blue color, Crater Lake is truly a wonder of the world.

Six miles across and 2,000 feet deep, Crater Lake, encircled by unbroken lava cliffs over 1,000 feet high, is unequalled in its grandeur, unchallenged in its beauty. Of it the poet Joaquin Miller wrote in the *Sunset Magazine*:

The lake? The Sea of Silence? Ah, yes; I had forgotten—so much else; besides, I should like to let it alone, say nothing. It took such hold on my heart, so unlike Yosemite, Yellowstone, Grand Canyon, when first seen, that I love it almost like one of my own family. But fancy a sea of sapphire set around by a compact circle of the great grizzly rock of Yosemite. It does not seem so sublime at first but the mote is in your own eye. It is great, great; but it takes you days to see how great. It lies 2,000 feet under your feet and as it reflects its walls so perfectly that you can not tell the wall from the reflection in the intensely blue water you have a continuous unbroken, circular wall of 24 miles to contemplate at a glance, all of which lies 2,000 feet, and seems to lie 4,000 feet, below. Yet so bright, so intensely blue is the lake, that it seems at times, from some points of view, to lift right in your face.

Mountain trails lead to the summits of high points about the rim and down a thousand feet to the shores of the sea of silence. At the water's edge, motorboats and rowboats are available for those who wish to see more of the lake or try their hand at trout fishing. Regular boat trips are planned to Wizard Island, the perfect little crater rising above the surface of the lake. For those who do not descend the trail to the water's edge there is a motor drive around the rim of the lake. Every turn presents a different view. The constantly changing color and the contrasts of lava cliffs and blue water are beautiful beyond description.

### THE GEOLOGICAL STORY OF CRATER LAKE<sup>1</sup>

What is the origin of the great caldera in which Crater Lake is located? The complete answer to this question is as yet unknown to science. There are, however, two theories which help to explain the geologic history, and these are outlined in the following discussion.

As the visitor approaches Crater Lake he must make a long ascent in order to reach the rim 2,000 feet above the broad summit of the Cascade Range and 8,000 feet above the level of the sea. Unlike

<sup>1</sup> By Wallace R. Atwood, based on field studies in 1931.

most bodies of water, Crater Lake is located in the top of a mountain. One naturally wonders how such a lake was formed. The rim surrounding the lake rises 500 to 2,000 feet above the water's edge. The cliffs are frequently perpendicular lava walls impossible of ascent. In certain places the water reaches a depth of nearly 2,000 feet. Truly Crater Lake is one of the unique phenomena of this country and the interpretation of its origin is a challenge to scientists.

If we are to understand the story of Crater Lake we must study carefully the geologic history of the region prior to the formation of the lake. What did the country look like? What processes were active?

The entire Cascade Range, in which Crater Lake National Park is located, is volcanic in origin. There are no sedimentary rocks to be found anywhere in the vicinity. This means that there was a long period of volcanic activity during which the Cascade Range was formed. Evidence of this activity is found in the mighty volcanoes of the Northwest, Mount Rainier (14,408 feet), Mount Adams (12,326 feet), Mount Baker (10,750 feet), Mount Shasta (14,161 feet), Mount St. Helens (9,697 feet), and Mount Lassen (10,453 feet). These mountains, built up to their present heights by repeated volcanic eruptions, are now landmarks in the Cascade Range. Although somewhat softened by local lava plateaus, they have not changed appreciably since the cessation of volcanism which indicates that the region appeared much the same prior to the formation of Crater Lake as it does to-day.

Upon examination of the cliffs bordering the lake we find layer upon layer of lava and fragmental material. The walls with their bands of lava appear like sections of a layer cake. Although roughly horizontal when viewed from the rim, the layers really slope gently away from the lake. This is true not only at one place, but everywhere around the rim. The bands are not uniform in thickness nor in character. One may be composed of andesitic lava 5 to 10 feet thick, while the next one may be composed of pumice or volcanic breccia 30 to 40 feet in thickness. These layers, numbering as many as 30 at certain localities, represent successive periods of volcanic activity. Each accumulation means a new eruption.

Cutting these layers of lava, frequently at right angles, are certain other bands of dark-colored lava, known as "dikes." These have been produced by the intrusion of molten rock into fractures or fissures in the formations which have already cooled. One of the more easily recognized dikes in the region is known as the "devil's backbone." It is visible from the Sinnott Memorial and may be readily reached from the Rim Drive.

Except for the dikes, the lava formations all slope gently away from the lake. This indicates that there must have been a source for the material somewhere within the area now occupied by Crater Lake. The significance of this statement is paramount, for it suggests the existence of a volcano where Crater Lake now rests. The angle at which the layers of volcanic material slope away from the rim affords an excellent means of determining the former height of this mountain. By careful calculation geologists have arrived at a figure of about 14,000 feet for the elevation of the volcano. This

would indicate that the former mountain, known as Mount Mazama, was on a par with Mount Rainier and Mount Shasta, well-known peaks of the Cascade Range.

This is not all that is known about the Crater Lake region for the geologist has scrambled down the steep inner slopes of the rim and discovered certain very interesting glacial formations. At Discovery Point, buried beneath some 20 to 30 feet of lava, there is a layer of material containing many smooth, polished boulders mixed with finer debris. This layer rests upon a lava surface which has been beautifully polished and striated by the overriding of glacier ice. A little farther down the slope and to the east there is another such boulder layer underlain and overlain by lava.

Besides these deposits of glacial material found interbedded with the lavas at this locality, and in a score of other places around the lake, there is evidence of ice action at the very brink of the crater rim. Those who go to Discovery Point will find that if they venture close to the edge of the rim they will be standing on polished lava. While standing on this striated surface they may peer over the edge and see the aforementioned boulder layer 30 feet below.

Even without examining the rocks in detail the visitor may see clearly the effects of glaciation. From many points on the rim it is possible to look across the lake to the two giant U-shaped notches which cut the rim between Garfield Peak and Cloud Cap. Kerr Valley and Sun Valley, both over a thousand feet deep, are smooth sided and exhibit many of the characteristics of glacier channels. The notches do not represent the head waters of streams but instead are cross sections of valleys which once extended much farther up the slope of the former mountain.

What is the significance of these evidences of glaciation, both on the rim and buried beneath the successive flows of lava? What part do they play in the story of Crater Lake?

In the first place, they definitely prove the existence of the theoretical mountain called Mount Mazama. There must have been a mountain on which the glaciers formed and down whose slopes the ice moved gouging out U-shaped valleys and polishing lava layers. Furthermore, this mountain was a volcano, intermittently active. Periods of glaciation were interspersed with periods of volcanism. Lava flows descended the ice slopes destroying the glaciers and filling the valleys. As proof of this sequence of events we find at Lloa Rock a well-developed U-shaped valley filled with lava. This is best seen from Sun Notch across the lake. Beneath the lava there are polished glacial boulders and striated rock surfaces visible only at close range. The flow which filled the valley is approximately 1,000 feet in thickness and constitutes the upper half of the 2,000-foot cliff of Lloa Rock.

If Mount Rainier, now a dormant volcano, were to erupt and melt the many glaciers on its slopes we would see reenacted one of the episodes in the story of Mount Mazama.

In addition to the story of volcanism and glaciation, the rocks of the rim disclose a record of former vegetation on the slopes of Mount Mazama. A thin soil zone containing an abundance of charred vegetal remains has been found buried beneath lava and pumice. The locality most easily accessible is at Pumice Point where the soil

is overlain by more than 50 feet of pumice. In Cleetwood Cove the vegetal remains are covered to a still greater depth by pumice and lava. The discovery of these charred remains, although the plants have not as yet been identified, is particularly significant in that it introduces another phase in the history of Mount Mazama. At some time in the past the intermittent volcano was clothed in vegetation at least to a moderate height. Volcanism, glaciation, and the invasion of vegetation all played their rôles in the interesting drama.

To complete the story which we have begun, the mighty volcano disappeared. Some geologists believe that the top was blown off in a terrific explosion which would have covered the country for miles around with a shower of fragmental material and ashes. There are many arguments against this theory but the strongest is found in the fact that the surrounding country is not covered with the andesitic material which would have undoubtedly come from a final explosive eruption of the volcano. Furthermore the rim close to the great caldera is remarkably free from fragmental material. Glacial moraines and glacial polish are frequently observed. A terrific explosion destroying Mount Mazama, a mass estimated at 17 cubic miles, would presumably have covered all these relatively superficial features of the landscape.

The second theory regarding the disappearance of the volcano suggests that the mountain collapsed and was engulfed. This would presuppose that something gave way deep in the earth. Perhaps the molten lava withdrew, causing collapse. In the Hawaiian Islands huge calderas are constantly being enlarged by a similar caving-in process. The lava rises and falls sometimes over a thousand feet and the walls cave in and are engulfed. It is possible to conceive of just this process causing the disappearance of Mount Mazama. Although at best we can only theorize as to the exact way in which the mountain disappeared, most known evidence is in favor of engulfment.

Following the formation of the great caldera, toward the close of the ice age or shortly thereafter, there may have been a short period of inactivity but this was soon interrupted by the building of Wizard Island cinder cone and two other smaller cones reported to exist beneath the surface of the present lake. Volcanism had recommenced, but evidently only for a short time, for since the growth of Wizard Island there has been no volcanic activity in the immediate region.

Not long after the collapse of Mount Mazama and the formation of Wizard Island, Crater Lake itself came into existence. Rain and snow fell and a lake was formed. The annual precipitation far exceeded the amount lost each year by evaporation and seepage, and consequently the lake level rose. Crater Lake is now nearly 2,000 feet deep and maintains a relatively constant level throughout the year. A certain amount of water undoubtedly disappears through underground channels but this reappears in numerous springs in the nearby region.

The deep blue color of Crater Lake has never been explained. Some believe it is due to reflection of the sky, but the waters are blue at all times, whether rain or shine. It has been suggested that mineral content might account for the color, but careful chemical

analysis indicates the water is remarkably pure. Certain physicists think that the color is due to the general scattering effect of the light in the water comparable to an intensification of the sky. A small sample of the water does not exhibit the color characteristics and consequently it is very difficult to make worthwhile observations. It is hoped that further study may lead to a more satisfactory explanation of the deep blue color which makes Crater Lake unique among the lakes of the world.

#### PLACES OF INTEREST

*Sinnott Memorial.*—In recognition of great service to Crater Lake National Park and to the State of Oregon, Congress authorized by an act approved May 14, 1930, the construction of a memorial to Representative Nicholas J. Sinnott of Oregon. Following this recommendation an attractive stone building was constructed on Victor Rock just inside the rim of Crater Lake. The structure, with its broad parapet looking over the lake, serves as an orientation point for all park visitors. High-powered field glasses are trained on the important features, helping the visitor to understand the geologic history of the lake and to appreciate the relationship between the scenic and scientific. The glasses are supplemented by numerous specimens of volcanic material on display in the exhibit room maintained in connection with the observation station. A large relief map of the Crater Lake Region is located on the parapet. This particular feature of the Sinnott Memorial display is extremely popular in that it helps the foot traveler as well as the autoist to locate the places of interest he wishes to see. All those who come to Crater Lake should visit the Sinnott Memorial as soon as possible after their arrival in the park. It is located close to the lodge and camp ground and may be reached in a 2-minute walk from the highway.

*Rim Drive.*—An interesting highway encircles the lake, and visitors in their own automobiles are invited to join the party conducted on the rim drive by a member of the park naturalist force. Stops are made at a number of observation points where ranger naturalists review the geologic history of the area and explain different features of the natural history. One of the stops is at Discovery Point, where John Wesley Hillman first saw Crater Lake, June 12, 1853. Other stops are at Llao Rock, the Devil's Backbone, the Wine Glass, Cloud Cap, and Kerr Notch. The starting time for the trip is announced by the park naturalist and posted on the Government bulletin boards. All trips leave from the Sinnott Memorial located on Victor Rock near the lodge and camp ground. The conducted Rim Drive is scheduled daily and requires approximately three hours to complete the 35-mile circuit.

*Wizard Island.*—This is a symmetrical cinder cone rising 850 feet above the surface of the lake. The island may be reached by boat. A trail leads from the shore to the crater, which is over 80 feet deep and 400 feet in diameter.

*Garfield Peak.*—With an altitude of 8,060 feet, this peak is easily reached by trail from the lodge. From the summit there is a gorgeous view of the lake and of the range to the eastward.

*Llao Rock.*<sup>2</sup>—This is an object of interest chiefly as the fabled dwelling place of the Spirit of Llao. According to Indian legend, the shadow being of Llao, who could never be killed, dwells in the rock. He looks out over the lake and at favorable moments, when other spirits dwelling in the air or water are careless or off guard, he comes out of the rock and causes great storms on the lake where he once ruled. Llao Rock rises nearly 2,000 feet above the lake level. As mentioned in the geologic story of the lake, this rock was formed by a lava flow which descended the slopes of Mount Mazama and filled one of the large U-shaped valleys once occupied by a glacier.

*The Watchman.*—On the rim, directly west of Wizard Island, is The Watchman. This peak, deriving its name from its use as one of the observation points during the sounding of the lake in 1886, is of interest not only because of its height, but because of the fire lookout and observation station on its summit. They may be reached after a 15-minute walk over a new trail from the rim road. A rare panorama of the park and surrounding country may be viewed from this point which is 8,025 feet above the level of the sea and 2,000 feet above the lake.

*Cloud Cap.*—Possibly the most comprehensive view of the lake may be obtained from Cloud Cap, on the east rim. Its summit rises over 8,000 feet above the level of the sea and 2,000 feet above the lake. To the east is Mount Scott, and to the north and west wide vistas of the summit of the range. On a clear day, the shining surface of Klamath Lake may be seen far to the south, bordered with vast marsh lands and the dark timber at the foot of the range, while farther south is the crown of beautiful Mount Shasta. The strange coloring of Crater Lake is well observed from Cloud Cap. In the sunlight there is play of clouds and soft shadows upon the surface of the lake. Purple hues, delicate lavender with violet blue, and deep streaks of emerald shading to a silvered green along the shores present a variation of color and beauty one may never hope to see elsewhere.

*Mount Scott.*—East of Cloud Cap is Mount Scott, easily climbed and affording fine unobstructed views. The peak is the highest point within the park, reaching an altitude of nearly 9,000 feet. A fire outlook is located on the summit.

*The Pinnacles.*—Located in Sand Creek near the east entrance of the park are these slender spires of volcanic ash and fragmental material. Some of the needles are 200 feet high. In Wheeler Creek Canyon and Godfreys Glen there are additional spires carved out of the soft volcanic material by the erosion of water. The pinnacles continue to grow in height and new ones are slowly being formed.

<sup>2</sup> *The Indian legend.*—According to the legend of the Klamath and Modoc Indians the mystic land of the Gaywas was the home of the great god Llao. His throne in the infinite depths of the blue waters was surrounded by giant crawfish, his warriors, who were able to lift great claws out of the water and seize too venturesome enemies on the cliff tops.

War broke out with Skell, the god of the neighboring Klamath marshes. Skell was captured and his heart used for a ball by Llao's monsters. But an eagle, one of Skell's servants, captured it in flight, and a coyote, another of Skell's servants, escaped with it; and Skell's body grew again around his living heart. Once more he was powerful and once more he waged war against the God of the Lake.

Then Llao was captured; but he was not so fortunate. Upon the highest cliff his body was quartered and cast into the lake and eaten by his own monsters in the belief that it was Skell's body. But when Llao's head was thrown in the monsters recognized it and would not eat it.

Llao's head still lies in the lake, and white men call it Wizard Island. And the cliff where Llao was quartered is named Llao Rock.

*Union Peak.*—From the highway that mounts the Coast Range from the west, one catches now and then a glimpse of Union Peak, 7 miles to the southwest of Crater Lake. It appears to have been placed on the top of the range to mark the burial place of a giant of Indian legendary lore. This strange towering peak is what remains of a once active volcano which played its part in the building of the Coast Range. It is a landmark of unusual form among the peaks, rising 1,400 feet above the crest of the range and nearly 8,000 feet above sea level. Trail trips to Union Peak are among the finest offered in the Crater Lake area.

*Mount Thielson.*—This great cliff-like formation, rising to an altitude of 9,250 feet, is to the north of Crater Lake and outside of the park. It is a picturesque sight when seen from the heights surrounding the lake and is often referred to as the Matterhorn of the Cascade Range. It is the wreck remaining of a great mountain. The sharp summit of the peak has been shattered repeatedly by lightning producing fulgurite, a rock glass. To reach its sharp heights is difficult and requires experience in mountain climbing. Near the foot of Thielson lies Diamond Lake.

*Llao's Hallway.*—The hallway, a gorge 125 feet deep cut through pumice material by stream erosion, is located on a tributary to Castle Creek just north of the White Horse camp ground on the Medford Road. There are numerous cave amphitheatres and narrow passages along the trail which follows the bottom of the gorge.

#### DISCOVERY AND HISTORY

Legend says that the Klamath Indians believed Crater Lake was once a weird, ghostly amphitheater where the gods were forever embroiled in conflict, sporting in its blue waters and dwelling on its rocky heights and in its mystic depths.

Pioneers came slowly to southern Oregon, its sparse population in the early fifties living in constant dread of Indian wars. Miles of mountain region had never been explored when a party of California prospectors came to the mining village of Jacksonville. This was the only settlement in the region and owed its existence to the discovery of gold near by. The Californians while preparing a journey into the mountains remained secretive regarding their mission. The purpose of their trip, however, was betrayed by a member of the party to a group of Oregon miners who learned that the strangers were searching for a "Lost Cabin Mine," believed to be near the head of the Rogue River. Subsequently the Oregon miners decided to follow the Californians into the wilds, despite persistent efforts of the latter to evade them. Later, when the food supplies of both parties were running low, John Wesley Hillman, leader of the Oregon party, succeeded in uniting the two forces and the search for the mine was postponed in order to hunt for game.

Thus it was on June 12, 1853, that Hillman, who had gone on some distance ahead of the hunting group, happened to ride up a deep canyon which, judging from its depth and width, he thought would lead to a higher slope. Letting his mule pick its way upward, he kept peering through the woods for game. Then suddenly the animal stopped, halting at the very rim of a deep blue lake. As the rider looked down he beheld a scene of unsurpassed beauty. Other

members of the party soon joined their leader, and they agreed to call the body of water, "Deep Blue Lake." This name was changed to Crater Lake in 1869 by visitors from Jacksonville.

In the excitement of gold stories and Indian wars, Crater Lake was forgotten for several years. There were no more visits by white men until 1862 when a party of six unsuspecting miners, led by Chauncey Ney, happened upon the place while on a prospecting trip and believed they had made a new discovery, only to learn afterwards of Hillman's visit. A third "discovery" was made in 1865 by a party of soldiers from Fort Klamath. They called the body of water Lake Majesty.

Some years later, in 1872, William Gladstone Steel came to Oregon. The story is told that when Steel was a schoolboy he had heard of the discovery of Crater Lake and had made a resolution that he would sometime see the western wonder. He spent nine years in Oregon before he could find anyone who had heard of Crater Lake; several more passed before he found a person who had actually seen it. It was not until 1885 that he was able to visit the place which he found to be even more beautiful than he had anticipated. The result was that Judge Steel conceived the idea of setting aside the lake and the region thereabout as a national park. He began an immediate agitation for this. Though the task was not an easy one and there was much opposition for various reasons from certain quarters, Steel was undaunted by the rebuffs and continued his efforts unselfishly over a period of 17 years. Success crowned his work when the park was established by an act of Congress, approved May 22, 1902. Judge Steel thereafter devoted his life to the development of the park and became one of its first superintendents. Later he became park commissioner.

Soon after Steel's first visit, soundings were taken on the lake under the direction of Capt. C. E. Dutton of the United States Geological Survey. Over a month was spent in the work, with the deepest sounding recorded at 1,996 feet. The first survey for a road system within the park was made in 1910 and 1911; two years later the entrance roads from Medford and Klamath Falls were built. Though these roads were very primitive when compared with those now developed, they served the needs of that time when travel was yet dependent principally on horses and wagons.

#### WILD ANIMALS

The park abounds with the smaller game species that are of great interest to the visitor because of their friendly inquisitiveness. Members of the squirrel family have learned that they will not be harmed and so are numerous along roads and trails and at any place where people congregate, knowing that in such surroundings they will find a wealth of tidbits.

The larger mammals, with the possible exception of the bear, are fairly well represented but not numerous. Of the three deer species the Columbia blacktail is most numerous. Also frequently reported is the larger mule deer, and occasionally a band of whitetail deer will be discovered in one of the grassy, watered meadows. Elk have been noted along the eastern side of the park as far north as the base of Mount Scott, the park's loftiest peak.

Bears, while they may be seen by the keen observer in many parts of the park, are most numerous around Government headquarters and may be seen at almost any hour of the day foraging in the garbage pit near by. Excepting a few brown-colored individuals, they are the well-known black variety. The grizzly bear has become extinct in this section.

Sometimes as many as three cubs, attended by their mother, make their appearance. Visitors never tire of watching the antics of these little balls of fur as they frolic and play. An occasional disciplinary cuff administered by a watchful mother always causes much merriment among the spectators.

In the interest of safety, it is prohibited to feed the bears by hand. Too many persons have been painfully clawed doing so. Also it is well to see that one does not get between the mother and her cubs.

Other of the larger animals extant in the park but seldom seen by the casual observer are the cougar or mountain lion, the wolf, the coyote, Baird's yellow fox, and the red fox.

Most common and approachable are the friendly and gluttonous little golden-mantled ground squirrels. They stuff their cheeks with peanuts from the hands of visitors until they can hold no more. Then they scurry away, hurriedly cache the supply for future use, and come scurrying back for more. Numerous also, but not quite so trusting, are the tiny chipmunks, easily distinguished from the golden-mantled squirrel. These little fellows seem charged with electric energy, darting to and fro, seemingly never quiet.

Basking on a warm rock or stodgeily making his way among them, one will frequently see the marmot whose kind is plentiful along all the roads and trails.

The hiker is constantly having his way challenged by the alert and exceedingly saucy little pine squirrel who may be recognized by his very audacity. The porcupine is frequently observed as he waddles clumsily in his search for food which consists chiefly of succulent bark from young pine trees.

His shrill note often heard on rocky slopes, but almost impossible to discover because of his wonderful protective coloration unless he moves, is the cony or pika. These tiny animals are commonly seen at the foot of the Crater Wall Trail.

Not quite as interesting perhaps, but often seen, are badgers, gray squirrels, and rabbits of both the snowshoe and cottontail variety. Other furry little denizens not so frequently seen are the mink, mountain weasels, the flying squirrel, and the marten.

In only one place in the park, and that far off the beaten paths, lives a colony of beaver. These are of the bank beaver type and do not build the big lodge familiarly associated with the name.

#### BIRD LIFE

Great numbers of birds of many varieties have discovered that Crater Lake National Park is a sanctuary for them. There are now more than 70 varieties in the park. Bird notes are heard continuously and the little creatures, especially the brilliantly colored ones, are often observed as they flit about amid the dark foliage of pine, fir, and hemlock.



The Eagle Crags have furnished nesting places for the golden eagle and the American bald eagle; Lloa Rock is the home of a falcon. Ospreys have been seen, and the horned owl forages nightly. California gulls visit the park and black cormorants are known to have nested and raised their young on the lake. There are ravens and half a dozen varieties of hawks. Canvas-back and golden-eyed ducks frequent the lake, and the Sierra grouse the timber lands. Clark's crow, the camp robber, and California, crested, and gray jays make their presence known on the trails and around the camp grounds.

Smaller birds frequently seen are the mountain bluebird, Townsend solitaire, Sierra junco, pine siskin, creeper, nuthatch, flicker, chickadee, and grosbeak. There are golden and ruby-crowned kinglets, robins, wrens, wood and green-tailed towhees, purple and rosy finches, chipping and other sparrows, several varieties of thrushes, and five varieties of warblers. Occasionally a humming bird is seen.

The most noticeable of the small birds of the park is the western tanager, a brilliant streak of gold as he darts and flits in the dark foliage, and equally remarkable in coloring when he rests on twig or branch, where his red head, yellow body, and black wings with yellow bars are unmistakable. The sweetest singer in the park is the hermit thrush—shy, difficult to locate, but making his presence known by his beautiful song.

#### FISHING

Angling amid scenes of towering, multi-colored cliffs in heavily trout-stocked waters of deepest blue, fishermen are provided with an experience unknown to any other spot, though search may be made in the far corners of the earth. Trout bite readily in Crater Lake and are caught in such numbers that even the most inexpert of anglers are never disappointed.

Crater Lake trout are not small nor do they submit easily after they are hooked. They battle desperately to regain their lost liberty, their struggles echoing in singing lines and whirring reels, as fishermen labor to land these coveted prizes. Trout as long as 36 inches have been caught. The average is around two pounds each.

The crystal-clear waters of the lake provide good fly fishing and experienced fly casters have reported success many times, using a wide assortment of lures. During certain hours of the day, fish jump lustily along the shore line, and here flies are placed to effective use. Trolling, however, is the popular method, with results satisfactory in most sections of the lake. Spoons or spinners are principally used, although plugs are occasionally a part of the tackle.

The limit of a day's catch is five per person, extending during the summer season. No fishing license is necessary.

Although to-day Crater Lake literally teems with rainbow and steelhead trout, in addition to a lesser number of silversides, German Brown and speckled trout, less than 50 years ago the lake was devoid of piscatorial life of any kind.

The first fish were planted September 1, 1888, by Judge William Gladstone Steel after a long and arduous task. While en route on one of his early visits to the lake, he stopped at a farmhouse along the

way near the Rogue River. There two farm boys supplied him with minnows, 600 of which he placed in a bucket which he planned to take to the lake by wagon, but rough road made it necessary for him to carry it by hand. He walked 47 miles, changing water repeatedly in the container at every mountain stream he passed. The fish appeared in good condition and it was thought they would be transported safely, but when the lake was reached and the bucket was set down for a short time, most of the fingerlings were in a dying condition.

After another change of water apparently revived them, Mr. Steel hurriedly descended the steep crater wall and at the lake shore released them, but out of the 600 only 37 were able to swim slowly away. A few years later, a California minister succeeded in planting 200, but after that plantings were exceedingly rare for many years. Since the park was established in 1902 annual plantings have increased until now they have reached an annual total of 200,000, assuring good fishing for years to come.

Food for the fish in waters where there is little vegetation puzzled park authorities for some time but a few years ago the problem was solved by planting fresh-water shrimp at places where it was thought they would thrive best. These crustaceans multiplied rapidly and are now providing sufficient food for the trout. As a result, catches are in a wonderfully prime condition and constitute delicacies which have brought anglers back to the lake many times.

Rowboats may be rented at the boat landing at the foot of a wide, comfortable trail from the rim to the water.

#### THE FORESTS

Untouched by the hand of man and carefully guarded against the ravages of fire, the forests of Crater Lake form one of the park's principal attractions, not only from a scenic standpoint and their never failing interest for tree lovers, but also from their vast acres of magnificent stands. Visitors never tire of the melodies of breezes which sigh through branches far above nor of the lure of the solitude of woodlands rich in luxuriant undergrowth of shrubs and smaller trees. Without its forests, Crater Lake would be devoid of an important quality as a vacation spot and scenic attraction. There would be few wild animals and almost no birds.

There are many species of trees within the park, intermingling at the boundaries with species found usually at lower altitudes. Forests of yellow pine, Douglas fir, scrub oak, and madroña are superseded in the park by those species restricted mainly to higher altitudes.

The mountain hemlock (*Tsuga mertensia*) is characteristic of the Crater Lake region, its stately trunks, drooping limbs and evergreen foliage providing woodland beauty that is never forgotten. It is common to the inner rim of the lake, and seeks high altitudes on mountain peaks, where its growth is stunted and its limbs beaten down by storms. An imposing stand of this species greets the visitor at Annie Spring and grows on both sides of the highway to the Rim, their large trunks suggestive of the hundreds of years they have been growing undisturbed in their mountain fastness. They grow along the road around the lake, enhancing the beauty of the

Rim Drive, their trunks crowding each other for floor space beneath the shade of their lofty crowns. Their feathery foliage is a blue green and their reddish-brown bark is always deeply furrowed and roughened.

Other outstanding trees of the park are the white bark pine (*Pinus albicaulis*), short and stunted and the western white pine (*Pinus monticola*) common in the 5,000 and 6,000 foot elevations. The largest western white pine in the park and believed to be one of the largest in existence is located along the middle fork of Annie Creek.

The lodgepole pine (*Pinus contorta*), Alpine fir (*Abies lasiocarpa*), Shasta red fir (*Abies magnifica shastensis*), Engelmann spruce (*Picea engelmannii*) and incense cedar (*Libocedrus decurrens*) also are found within the park boundaries. The lodgepole pine is the most prolific of the different species and can be seen in stands covering thousands of acres. The Shasta red fir has also been known as the Noble fir and has been the object of much discussion in the past. The silver fir, native to northern climes, finds its southernmost limit in the Crater Lake area, favoring spots where winds are the strongest and snow is the deepest.

Further enhancing the beauty of the park woodlands are several broadleaf trees and a large variety of shrubs and undergrowth. Willows, alders, and dogwood fringe streams and marshy meadows in company with the Oregon yew (*Taxus brevifolia*), a small shrubby tree related to the cedars and firs. Huckleberry bushes are not uncommon and in their season are laden with toothsome purple berries. The timid aspens (*Populus tremuloides*) keep company with the larger members of the conebearing species, their small heart-shaped leaves trembling in mountain breezes. The black cottonwoods (*Populus trichocarpa*) also mingle with the firs and pines.

In the upper reaches of the park, shrubs are smaller and include mostly manzanita, buck brush and huckleberry bushes, always lingering near forest growth. A creeping current of restricted distribution often forms green carpets.

Many travelers visit Crater Lake, view the majestic splendor of the world-famed scenic wonder and leave without realizing the beauties of the forest lands about them. A visit to the park is assuredly most complete after pleasant summer nights spent encamped under the spreading limbs of its stately hemlocks, pines, and firs. The sweet aroma of the woods, their heavily carpeted floors, and rustling leaves add much to the joy of a visit to Crater Lake.

#### NOTES ON THE WILD FLOWERS<sup>3</sup>

If one enters the park by the usual gateways and travels the beaten paths he is likely to be disappointed in the flowers, especially when compared with the wonderful display to be seen in some of the other national parks.

The soil is chiefly volcanic and lacking in moisture and so perforce the plant life must be limited to those forms whose peculiar structure adapts them to such environment. Whenever the highway enters the regions of the streams the eye is gladdened by the transformation due to water's magic touch, and if our interest leads us by winding

trail to the mountain meadows beside the singing brooks there will we find a sight as "Fair as the Garden of the Lord."

Soon after entering, the attention is caught by a flash of red, oft repeated, which upon closer examination proves to be the funnel-shaped bells of the mountain gilia, *Gilia aggregata*. The plant is rather tall and loosely branched and occasionally has yellow flowers.

Under the evergreen trees hide the prince's pine or chimaphila, a low plant with several dark green leaves oppositely arranged on the stem and a few waxy white flowers on a single stalk. A common associate of this is the tooth-leaf wintergreen, *Pyrola dentata*. The flower cluster resembles prince's pine, but the leaves form a rosette at the base. In the same locality are found plants without green foliage. One of these is creamy white with a few flowers of the same color, the pine sap; another belonging to the orchid family and having a cluster of reddish green flowers is the coral root; a third has a thick white stem streaked with red, the allotropa. These all are parasites or saprophytes and obtain their food at second hand.

Just before reaching park headquarters is a meadow on the right of the road; here there are immense quantities of the mountain wild onion, *Allium validum*. They are rank growers, reaching a height of 1 or 2 feet, and are readily known by the strong onion odor.

At park headquarters is a veritable mountain garden, a riot of the red Indian paintbrush, *Castilleja*; the tall valerian, *Valeriana sitchensis*, with its flat-topped cluster of white flowers and root with the disagreeable odor of the medicinal valerian; and the false hellebore, *Veratrum viride*, the large elliptical leaves of which are marked with prominent parallel veins, resembling somewhat in form the wild plantain topped with a cluster of green flowers.

At the top, in loose volcanic ash, is the low lupine, *Lupinus minimus*. The beautiful blue flowers catch the eye, and the many-fingered leaves make its identity certain. Another earth-hugging plant is the pussy-paws, *Spraguea umbellata*. Its little leaves form a rosette from which the flower stalks radiate and bear crowded clusters of papery flowers ranging in color from white through pink or rose to purple. The sunflower family has several representatives: A purple aster, *Astercovilli*; yellow arnica, a low plant, with heart-shaped leaves; and the Senecio.

As one descends the trail to the lake one of the first plants to attract attention is the trailing raspberry, *Rubus lasiococcus*. Its leaves form a carpet in the shade while scattered white blossoms, at a hasty glance, give the impression of a strawberry. In similar localities are found the one-sided wintergreen with its greenish flowers all on one side of the stem, *Pyrola secunda*, and often associated with it the dainty two-leaved orchid with its inconspicuous green flowers, the tway-blade, *Listera caurina*. Farther down, the crater's sides are ablaze with the yellow arnica and other sunflowers, and at the very bottom the glory of the mountains, the purple monkey flower, *Mimulus lewisii*, its masses of flowers giving much the impression of the petunia beds of old-fashioned gardens.

Crossing to Wizard Island, near the landing is an abundance of the wild bleeding-heart, *Bikukula formosa*. A little way up the trail one finds the elephant's-head, *Pedicularis racemosa*, its common name suggested from the resemblance of the flower to the head of an

<sup>3</sup> By Albert R. Sweetser, professor of botany, University of Oregon.

elephant with trunk and ears. At the very top, sending its long root straight down toward the water supply, is the rough mountain dandelion, *Hulsea nana*. Within the cinder cone is a considerable variety, some of the most striking being red and yellow paintbrush and beard's tongue, *Pentstemon*.

#### RIM VILLAGE, TRAILS, FACILITIES

A large majority of visitors first reach the rim of the lake at the Rim Village. This is the focal point of park activities. Here are the lodge, post office, cafeteria, general store, studios, a rental cabin group, auto service, emergency mechanical services, ranger station. From the Rim Village a number of the most important trails take off, including the spectacular new trail, down the crater wall to the lake shore, where launches and rowboats are available for pleasure trips and fishing excursions. This fine trail is 6 feet wide and on a holding grade of 12 per cent, permitting its use by people unaccustomed to much physical effort. For those who prefer not to walk, saddle horses and saddle mules are available for this and other trail trips. The trail to the summit of Garfield Peak, directly overlooking the lake and giving a magnificent panorama of the Cascades, also takes off from the Rim Village, as does the trail to the Watchman, and another trail to Annie Spring.

A fine free camp ground, equipped with hot and cold shower baths and modern sanitation, is located here on the rim.

#### CAMPING IN THE PARK

There are five camp grounds within the park, all of them free to the public.

The Rim Camp Ground is located in close proximity to the rim, at the terminus of the highway. The camp is on a slight elevation, in the shelter of a fine stand of mountain hemlock, reminding the visitor that the altitude is over 7,000 feet. Eagle Crags, the jagged pinnacles of Garfield Peak, and Castle Crest tower above to the east. Firewood is available at the camp. The water is pure, and there are sanitary conveniences, including hot water and hot and cold showers.

Located near by is the community house, with its great stone fireplace, where campers and visitors gather at night for recreation. It is open at all times for the pleasure and convenience of the public. Programs of an entertaining and instructive character are provided here every evening, and there is a small dance floor.

The post office is at the lodge, and mail addressed to Crater Lake will reach its destination during the park season. Rental cabins may be secured at the housekeeping-accommodation office. A cafeteria and general store are maintained convenient to the camp.

The lower camp ground is situated near the Annie Spring checking station, on the highway 6 miles south of the Rim Camp. This is a beautiful, well-sheltered, shaded site, and at a considerably lower altitude than the grounds near the rim. The camp has modern sanitation, with running water and wood available.

A camping place is located at Lost Creek, 3½ miles inside the east entrance of the park. This camping place is at the junction of the highway entering the park and the Rim Road, near Sand Creek

Canyon, with its strange pinnacles. It is about 10 miles from Lost Creek Camp Grounds to the rim of the lake, the road skirting the great heights south of the lake.

White Horse Camp, where there is fine water and an abundance of firewood, is situated 3 miles inside the park boundary and about halfway between the west entrance to the park and Annie Spring checking station. At this point the trail to Llao's Hallway, one of the most uncanny and spectral volcanic chasms in the park area, leads from the highway. Except for the near-by road and the cutting of a few trees, the locality of White Horse Camp is as untouched as though one were stepping back to the days of Lewis and Clark and the Oregon pioneers. It is about 9 miles by highway from this camp to the rim of the lake.

Coming into the park from the south by the Fort Klamath Road one finds Cold Spring Camp situated about 5 miles from the south entrance. It is about 3 miles below Annie Spring checking station, and 9 miles distant from the lake rim. The camp is near the wonders of the glacier-carved canyon of Annie Creek, and was one of the earliest regular camping places of the explorers of the Crater Lake region. Not far from this camping place, Godfrey Glen with its colonnades is located deep in the mysterious canyon and extending high up on its walls.

Camp in the park. The officers and members of the Park Service are glad to render any and all assistance and service possible to those who avail themselves of the camping privileges, as well as to others, to make their stay in the park in every way enjoyable. To see what it has to offer of alpine beauty, volcanic wonders, and surrounding scenery of the lake, one should hike the trails, descend into the canyons, and climb the peaks, or travel by saddle horse, as well as visit the many places of grandeur by automobile over the park roads.

#### ADMINISTRATION

The park is administered by the National Park Service of the Department of the Interior, with a superintendent, E. C. Solinsky, in immediate charge. A force of rangers assists this officer, who supervises all activities excepting the post office and the commissioner's court.

The Crater Lake National Park was established by the act of May 22, 1902. (32 Stat. 202.) Exclusive jurisdiction over the park was ceded to the United States by act of the Oregon Legislature of January 25, 1915, and accepted by Congress by act approved August 21, 1916. (39 Stat. 521.) The United States Commissioner is Will G. Steel. The post office located at Crater Lake Lodge is open from date of the opening of the lodge, usually about June 15, to its closing about September 20.

Long-distance telephone and telegraph service are available at the lodge, at Government Camp, and at various ranger stations.

The park is open to visitors during the tourist season from early summer, as soon as the roads are cleared of snow, until late in the autumn when the winter storms set in. Since the acquisition of a powerful snowplow the roads are cleared of snow earlier and kept clear of snow later than was formerly the case.

All requests for information and suggestions for betterment of service should be addressed to the superintendent in person or in writing. His post-office address is Crater Lake, Oreg., during the summer, and Medford, Oreg., in the winter. During the season the superintendent's office is at Government Camp.

Information bureaus are maintained at the Rim and Government Camp, where numerous road maps, etc., are available.

## HOW TO REACH THE PARK

### RAILROAD INFORMATION

Crater Lake National Park is reached by rail via the lines of the Great Northern and Southern Pacific railways, connections being made with automobile stages operated on regular schedules.

The park is midway between Portland and California points on both railway routes. On the east is the joint line of the Great Northern and Southern Pacific over which the principal trains of both railways run, while the Siskiyou line of the Southern Pacific passes to the west. The lake may be reached from any of the lines, thus providing an ideal arrangement whereby the rail traveler may enter from one line and leave via the other. In this way he sees more of the spectacular scenery of this section without retracing his steps or adding to the length of his stay. The automobile stage fare from rail terminals to the park is given on page 29.

The gateway city to Crater Lake Park on the east is Klamath Falls, 62 miles from the lake, while Medford, 80 miles away, serves as a gateway city on the west. Highways leading from these points to the lake are splendidly built and maintained. The stages which make direct connections with the trains are comfortable and modern in every way.

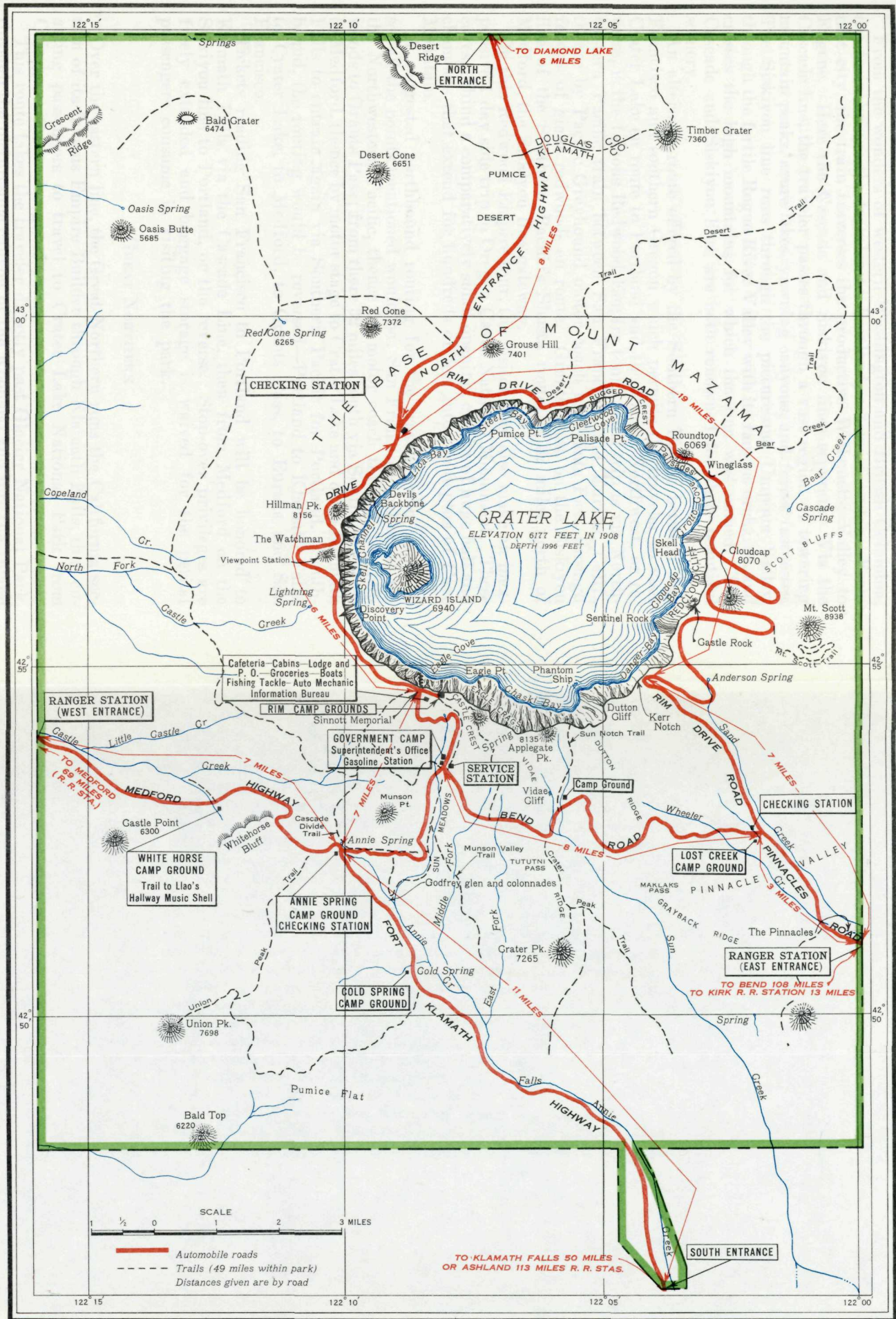
This variety of routes and interlocking of schedules gives the rail traveler an opportunity of seeing a vast amount of this interesting country quickly, comfortably, and economically.

Whether the Great Northern or Southern Pacific routings are followed, the trip will give memories to last a lifetime. The traveler beholds an everchanging panorama of natural grandeur unexcelled in variety and beauty. Glistening snowclad peaks, limpid lakes, vast forests, fertile valleys, rivers and streams are lavishly combined with the mighty works of man to tax the capacity for wonder and delight.

Railroad officials have carefully studied the transportation needs of visitors to Crater Lake and have made liberal concessions in favor of convenience and economy. During the park season, round-trip excursion tickets are sold at reduced rates.

### SOUTHERN PACIFIC

Five swift trains each way operate daily over the two lines of the Southern Pacific between Portland and San Francisco. They include the famous "Cascade" and "Shasta" and others whose names are tradition on the west coast for fast, luxurious travel. These trains have every refinement for travel comfort, with dining, club, and observation cars, standard and tourist sleepers, and reclining



MAP OF CRATER LAKE NATIONAL PARK

PRINTED BY THE U.S. GEOLOGICAL SURVEY

chair cars. Wide windows permit sweeping views of the startling panoramas of beauty which unfold as the train speeds along.

From the wonders of western Washington and British Columbia, the train brings the traveler to Portland, a tourist center. From that city, the train traverses the productive Willamette Valley to Eugene. Here the Cascade and Siskiyou lines separate. Via the Cascade line, the traveler passes through a vast region of towering mountain peaks, azure lakes, yawning canyons, and forest fastnesses. The Siskiyou line runs through the picturesque Umpqua Valley, through the fertile Rogue River Valley with its famous orchards, and crosses the high mountains for which the line was named. The Cascade and Siskiyou lines are both renowned for their beautiful scenery.

An alternate route offered by the Southern Pacific between San Francisco and southern Oregon which permits the traveler to visit Crater Lake en route to Portland and the Pacific Northwest, or reverse, is the famous Redwood Empire tour. This trip is via Northwestern Pacific train between San Francisco and Eureka, Calif., thence by Pacific Greyhound motor coach to Grants Pass, through forests of giant redwoods en route. Grants Pass, on the Siskiyou line of the Southern Pacific's Shasta route, is 32 miles north of Medford, the Siskiyou line gateway.

On this Redwood Empire tour, the visitor may also make an inexpensive 1-day side trip to Oregon Caves National Monument. These caves, behind a comparatively small opening, consist of huge hall and chambers that extend for hundreds of feet into the depths of Cave Mountain.

A suggested northbound routing for the traveler who wants to see all the points mentioned would be: San Francisco to Eureka via the Northwestern Pacific, thence by motor coach through the redwoods to Grants Pass; from there 32 miles south via Southern Pacific to Medford, thence by motor stage to Crater Lake and on to Klamath Falls to entrain again via Southern Pacific for Portland. Southbound, the routing would be reversed—Portland to Klamath Falls, to Crater Lake, to Medford, to Grants Pass, to Eureka and San Francisco.

Tickets reading San Francisco to Portland will be honored to Klamath Falls via the Cascade Line, then from Medford on the Siskiyou line to Portland, or the reverse. Stop-over privileges are freely extended and baggage storage is waived for the period passengers consume in visiting the park.

#### GREAT NORTHERN

Over the eastern line, the Great Northern runs the California section of its famous Empire Builder through Klamath Falls, thus enabling passengers to travel to Crater Lake National Park from Chicago without change of cars.

This route takes the traveler directly past Glacier National Park, through the picturesque canyon of the Kootenai and into the Inland Empire of which Spokane is the hub city. Beyond Spokane the tracks follow the north bank of the Columbia River to Wishram, where they swing to the south and, crossing the Columbia in sight of the Cascades, follow the deep gorge of the Deschutes River to the

plateau country at Bend. Still southbound the route clings to the eastern slopes of the Cascade Mountains down to Klamath Falls, the eastern gateway to Crater Lake.

Continuing on south into California the route passes close to the eastern boundary of Lassen Volcanic National Park, which contains the only recently active volcano in the United States and is reached by stage from Westwood on the new line. Then still farther on, the train enters the beautiful Feather River Canyon before emerging upon the fruitful valley of the Sacramento and the southern termini of the line at Oakland and San Francisco.

Stop-over privileges are extended by the Great Northern and baggage storage is waived during visits in the park.

#### APPROACHES BY AUTOMOBILE

The automobile approaches to the park are exceptionally interesting and pleasant. The Pacific Highway, a fine pavement extending unbroken through Oregon, California, and Washington, is the main artery of travel. Motorists traveling south over the highway should turn off at Medford and follow the 80-mile Crater Lake Highway up through the picturesque Rogue River Canyon and through the splendid Crater National Forest. This is a splendid dustless highway so that the gentle climb to the top of the Cascades is made in two and one-half to three hours; much of the way the road parallels the Rogue River, "the fisherman's paradise," where steelhead, cutthroat, small trout, or salmon may be taken by even inexpert anglers. Comfortable roadside resorts offer their hospitality, and free camp grounds are plentiful.

Usually, to avoid retracing familiar roads, tourists coming in via Medford leave by the southern highway.

This road is oiled throughout its 62-mile length to Klamath Falls and passes along the Annie Creek Canyon through the interesting Klamath Indian Reservation and along the edge of Upper Klamath Lake. The Klamath region offers excellent fishing and hunting, a number of summer resorts, and rugged scenery that, while entirely different from the Medford route, is most engaging. From Klamath Falls the motorist has choice of three routes, two west to Ashland, the third route leading into northern California. The fine highway over the Green Spring Mountain to Ashland is recommended.

Motorists coming in via Klamath usually go out via the Medford route. These two roads, with a portion of the park road system, comprise the loop shown on the Park-to-Park Highway map, and are most enjoyable for lovers of the wild. It is not unusual for motorists to see from their cars such wild animals as bear, deer, coyotes, timber wolves, and occasionally elk.

Crater Lake is also reached from central Oregon points over a fine State highway via Bend. Klamath Falls is reached by fair road from Reno, Nev., on the Lincoln Highway via Susanville, Calif., which is a point of approach to the Lassen Volcanic National Park in northern California.

Requests for road information and road map of Oregon should be addressed to the Portland Chamber of Commerce or Oregon State Motor Association, Portland, Oreg.

The recently completed Mount Hood Loop Highway connects with the Columbia River Highway at the city of Hood River, 65 miles east of Portland, traversing the beautiful pastoral Hood River Valley, thence around the snow-capped Mount Hood and back into Portland along the Sandy River. This lovely drive around Mount Hood is unique among scenic drives.

#### RULES AND REGULATIONS

(Approved December 21, 1932, to continue in force and effect until otherwise directed by the Secretary of the Interior)

#### GENERAL REGULATIONS

The following rules and regulations for the government of Crater Lake National Park are hereby established and made public pursuant to authority conferred by the acts of Congress approved May 22, 1902 (32 Stat. 202), August 21, 1916 (39 Stat. 521), and the act of August 25, 1916 (39 Stat. 535), as amended June 2, 1920 (41 Stat. 732), and March 7, 1928 (45 Stat. 200-235), and shall supersede all previous rules and regulations for this park heretofore promulgated, which are hereby rescinded.

1. *Preservation of natural features and curiosities.*—The destruction, injury, defacement, or disturbance in any way of the public buildings, signs, equipment, or other property, or of the trees, flowers, vegetation, rocks, minerals, animal, or bird, or other life, or other natural conditions and curiosities in the park is prohibited: *Provided*, That flowers may be gathered in small quantities when, in the judgment of the superintendent, their removal will not impair the beauty of the park. Before any flowers are picked, permit must be secured from this officer.

2. *Camping.*—In order to preserve the natural scenery of the park and to provide pure water and facilities for keeping the park clean, permanent camp sites have been set apart for visitors touring the park, and no camping is permitted outside of the specially designated sites. These camps have been used during the past seasons; they will be used daily this year and for many years to come. The following regulations, therefore, will be strictly enforced for the protection of the health and comfort of visitors who come in the park.

(a) Keep the camp grounds clean. Combustible rubbish shall be burned on camp fires and all other garbage and refuse of all kinds shall be placed in garbage cans or pits provided for the purpose. At new or unfrequented camps, garbage shall be burned or buried.

(b) There is plenty of pure water; be sure you get it. There are thousands of visitors every year to each camp site and the water in the streams and creeks adjacent is not safe to drink. The water supply provided is pure and wholesome and must be used. If, however, the water supply is not piped to grounds, consult rangers for sources to use. Contamination of watersheds of water supplies or of any water used for drinking purposes is prohibited.

(c) Campers and others shall not wash clothing or cooking utensils or pollute in any other manner the waters of the park. Bathing in any of the streams near the regularly traveled thoroughfares in the park is not permitted without suitable bathing clothes.

(d) The wearing of bathing suits, scanty or objectionable clothing, without proper covering, is prohibited in automobiles, or around camps, villages, or hotels.

(e) All animals shall be kept a sufficient distance from camp sites and circulation areas in order not to litter the ground.

(f) Campers may use only dead or fallen timber for fuel.

(g) Any article likely to frighten horses shall not be hung near a road or trail.

3. *Fires*.—Fires constitute one of the greatest perils to the park. They shall not be kindled near trees, dead wood, moss, dry leaves, forest mold, or other vegetable refuse, but in some open space on rocks or earth. Should camp be made in a locality where no such open space exists or is provided, the dead wood, moss, dry leaves, etc., shall be scraped away to the rock or earth over an area considerably larger than that required for the fire.

All persons making trips away from established camps are required to obtain fire permits from the nearest ranger before building camp fires.

Fires shall be lighted only when necessary, and when no longer needed shall be completely extinguished, and all embers and beds smothered with earth or water, so that there remains no possibility of reignition.

Permission to burn on any clean-up operation within the park must be first secured from the superintendent's office, and in such cases as is deemed advisable, such burning will be under the Government supervision. All costs of suppression and damage caused by reason of loss of control of such burning operations shall be paid by the person or persons to whom such permit has been granted.

**No lighted cigarette, cigar, match, or other burning material shall be thrown from any vehicle or saddle animal or dropped into any leaves, grass, twigs, or tree mold.**

Smoking or the building of fires on any lands within the park may be prohibited by the superintendent when, in his judgment, the hazard makes such action necessary.

The use of fireworks or firecrackers in the park is prohibited, except with the written permission of the superintendent.

4. *Hunting*.—The park is a sanctuary for wild life of every sort, and all hunting or the killing, wounding, frightening, or capturing at any time of any wild bird or animal, except dangerous animals when it is necessary to prevent them from destroying human lives or inflicting personal injury, is prohibited within the limits of the park.

The outfits, including guns, traps, teams, horses, or means of transportation of every nature or description used by any person or persons engaged in hunting, killing, ensnaring, or capturing birds or wild animals within the limits of the park shall be forfeited to the United States and may be seized by the officers of the park and held pending the prosecution of any person or persons arrested under the charge of violating this regulation, and upon conviction, such forfeiture shall be adjudicated as a penalty in addition to other punishment. Such forfeited property shall be disposed of and accounted for by and under the authority of the Secretary of the Interior. Possession within said park of the dead bodies or any part thereof of

any wild bird or animal shall be prima facie evidence that the person or persons having the same are guilty of violating this regulation.

During the hunting season, arrangements may be made at entrance stations to identify and transport through the park, carcasses of birds or animals killed outside of the park.

Firearms are prohibited within the park except upon written permission of the superintendent. Visitors entering or traveling through the park to places beyond, shall, at entrance, report and surrender all firearms, traps, seines, nets, or explosives in their possession to the first park officer and in proper cases may obtain his written permission to carry them through the park sealed. The Government assumes no responsibility for the loss or damage to any firearms, traps, nets, or other property so surrendered to any park officer, nor are park officers authorized to accept the responsibility of custody of any property for the convenience of visitors.

*NOTE*.—The foregoing regulation is in effect a declaration of the law on this subject contained in sections 4 and 5 of the act of Congress approved August 21, 1916 (39 Stat. 521), accepting cession by the State of Oregon of exclusive jurisdiction of the lands embraced in the Crater Lake National Park, and for other purposes.

This act by its terms applies to all lands within said park whether in public or private ownership.

5. *Fishing*.—Fishing with nets, seines, traps, or by the use of drugs or explosives, or in any other way than with hook and line, or for merchandise or profit is prohibited. Fishing in particular waters may be suspended, or the number of fish that may be taken by one person in any one day from the various streams or lakes may be regulated by the superintendent. All fish hooked less than 5 inches long shall be carefully handled with moist hands and returned at once to the water, if not seriously injured. Five fish shall constitute the limit for a day's catch from the lake and 20 from the other waters of the park. The possession of more than two days' catch by any person at any one time shall be construed as a violation of this regulation.

6. *Private operations*.—No person, firm, or corporation shall reside permanently, engage in any business, or erect buildings in the park without permission in writing from the Director of the National Park Service, Washington, D. C. Applications for such permission may be addressed to the director through the superintendent of the park.

7. *Campers*.—Still and motion picture cameras may be freely used in the park for general scenic purposes. For the filming of motion pictures or sound pictures requiring the use of artificial or special settings, or special equipment, or involving the performance of a professional cast, permission must first be obtained from the superintendent of the park.

8. *Gambling*.—Gambling in any form, or the operation of gambling devices, whether for merchandise or otherwise, is prohibited.

9. *Advertisements*.—Private notices or advertisements shall not be posted or displayed in the park, excepting such as the park superintendent deems necessary for the convenience and guidance of the public.

10. *Mining claims*.—The location of mining claims is prohibited on Government lands in the park.



11. *Private lands.*—Owners of private lands within the park limits are entitled to the full use and enjoyment thereof; the boundaries of such lands, however, shall be determined, and marked and defined, so that they may be readily distinguished from the park lands. While no limitations or conditions are imposed upon the use of private lands so long as such use does not interfere with or injure the park, private owners shall provide against trespass by their livestock upon the park lands, and all trespasses committed will be punished to the full extent of the law. Stock may be taken over the park lands to private lands with the written permission and under the supervision of the superintendent, but such permission and supervision are not required when access to such private lands is had wholly over roads or lands not owned or controlled by the United States.

12. *Grazing.*—The running at large, herding, or grazing of livestock of any kind on the Government lands in the park, as well as the driving of livestock over same, is prohibited, except where authority therefor has been granted by the superintendent. Livestock found improperly on the park lands may be impounded and held until claimed by the owner and the trespass adjusted.

13. *Authorized operators.*—All persons, firms, or corporations holding franchises in the park shall keep the grounds used by them properly policed and shall maintain the premises in a sanitary condition to the satisfaction of the superintendent. No operator shall retain in his employment a person whose presence in the park may be deemed by the superintendent subversive of good order and management of the park.

All operators shall require each of their employees to wear a metal badge, with a number thereon, or other mark of identification, the name and number corresponding therewith, or the identification mark, being registered in the superintendent's office. These badges must be worn in plain sight.

14. *Dogs and cats.*—Dogs and cats are prohibited on the Government lands in the park except that upon written permission of the superintendent, secured upon entrance, they may be transported over through roads by persons passing through the park provided they are kept under leash, crated, or otherwise under restrictive control of the owner at all times while in the park: *Provided, however,* That employees and others may be authorized by the superintendent to keep dogs in the park administrative area, or areas, on condition that they are kept within the confines of these areas, and subject to such further conditions in the interest of good park administration as may be determined by the superintendent.

15. *Dead animals.*—All domestic or grazed animals that may die on Government lands in the park, at any tourist camp, or along any of the public thoroughfares shall be buried immediately by the owner or person having charge of such animals at least 2 feet beneath the ground, and in no case less than one-fourth mile from any camp or thoroughfare.

16. *Travel on roads and trails.*—Pedestrians on trails, when saddle or pack animals are passing, shall remain quiet until the animals have passed.

Persons traveling on the trails of the park either on foot or on saddle animals shall not make short cuts but shall confine themselves to the main trails.

Any and all roads and trails in the park may be closed to public use by order of the superintendent when, in his judgment, conditions make travel thereon hazardous or dangerous, or when such action is necessary to protect the park.

17. *Travel—General.*—(a) Saddle horses, pack trains, and horse-drawn vehicles have right of way over motor-propelled vehicles at all times.

(b) Load and weight limitations shall be those prescribed from time to time by the superintendent of the park and shall be complied with by the operators of all vehicles using the park roads. Schedules showing weight limitations for different roads in the park may be seen at the office of the superintendent and at ranger stations at the park entrances.

(c) All vehicles shall be equipped with lights for night travel. At least one light must be carried on the left front side of all horse-drawn vehicles in a position such as to be visible from both front and rear.

18. *Miscellaneous.*—No pack-train or saddle-horse party shall be allowed in the park unless in charge of a guide or competent leader. Such guides or leaders may be required to pass an examination prescribed by and in a manner satisfactory to the superintendent. At the discretion of the superintendent, guides may be permitted to carry unsealed firearms.

19. *Fines and penalties.*—Persons who render themselves obnoxious by disorderly conduct or bad behavior shall be subjected to the punishment hereinafter prescribed for violation of the foregoing regulations, and/or they may be summarily removed from the park by the superintendent.

Any person who violates any of the foregoing regulations shall be deemed guilty of a misdemeanor and shall be subject to a fine of not more than \$500, or imprisonment not exceeding six months, or both, and be adjudged to pay all costs of the proceedings.

NOTES.—All complaints by visitors and others as to service, etc., rendered in the park should be made to the superintendent in writing before the complainant leaves the park. Oral complaints will be heard daily during office hours.

Persons finding lost articles should deposit them at the Government headquarters or at the nearest ranger station, leaving their own names and addresses, so that if not claimed by the owners within 60 days, articles may be turned over to those who found them.

**The Government is in no way responsible for any kind of accident.**

#### AUTOMOBILE AND MOTOR-CYCLE REGULATIONS

1. *Automobiles.*—The park is open to automobiles operated for pleasure, but not to those carrying passengers who are paying, either directly or indirectly, for the use of machines (excepting, however, automobiles used by transportation lines operating under Government franchise), and any person operating an automobile in contravention of the provisions of this regulation shall be deemed guilty of its violation.

2. *Motor trucks and busses.*—Motor trucks and busses are admitted to the park under the same conditions as automobiles, except

the superintendent will establish limits of size and tonnage capacity which may vary according to the different roads and bridges.

Commercial truck trailers engaged in hauling freight will be required to secure permission from the superintendent before using the park roads.

3. *Motor cycles.*—Motor cycles are admitted to the park under the same conditions as automobiles and are subject to the same regulations, so far as they are applicable.

4. *Permits.*—No motor vehicle may be operated in the park without a Crater Lake National Park permit.

The owner or driver of each motor-driven vehicle entering the park shall secure this permit at the entering ranger station.

This permit authorizes the operation of the vehicle therein described over the public roads in the park throughout the current calendar year. The permit is issued to the vehicle described therein and not to the owner or driver. This permit should be carried in the car and exhibited to park rangers on request.

5. *Fees.*—The fee for automobile or motor cycle permits is \$1.

6. *Roads—Hours.*—The use of automobiles will be permitted at all hours on any of the roads in the park. Automobiles and motor cycles may enter and leave the park by the western or Castle Creek entrance, the eastern or Sand Creek entrance, the southern or Annie Creek entrance, and the northern or Diamond Lake entrance.

7. *Speed.*—Automobiles and other vehicles shall be so operated so as to be under the safe control of the driver at all times. The speed shall be kept within such limits as may be necessary to avoid accidents. At no time shall speed exceed 40 miles per hour. All cautionary signs must be observed. Ambulances and Government cars on emergency trips are the only exceptions to this rule. The speed of all motor trucks over 1½ tons capacity is limited not to exceed 25 miles per hour on all park roads.

8. *Teams.*—When teams, saddle horses or pack trains approach, automobiles shall be so manipulated so as to allow safe passage for the other party. In no case shall automobiles pass animals on the road at a speed greater than 10 miles per hour.

9. *Right of way, etc.*—Any vehicle traveling slowly upon any of the park roads, when overtaken by a faster-moving motor vehicle, and upon suitable signal from such overtaking vehicle, shall move to the right to allow safe passage.

When automobiles going in opposite directions meet on a grade, the ascending machine has the right of way, and the descending machine shall be backed or otherwise handled as may be necessary to enable the ascending machine to pass in safety.

10. *Muffler cut-outs.*—Muffler cut-outs shall be closed at all times within the park boundaries.

11. *Accidents; stop-overs.*—If cars stop because of accident or for any reason, they shall be immediately parked in such a way as not to interfere with travel on the road.

The driver of any motor-driven vehicle who meets with an accident shall report same at the nearest ranger station or to the superintendent of the park.

12. *Lights.*—All automobiles shall be equipped with head and tail lights, the headlights to be of sufficient brilliancy to insure safety

in driving at night, and all lights shall be kept lighted after sunset when automobile is on the roads. Headlights must either be equipped with antiglare devices deflecting powerful beams to a height of not over 36 inches above the road or else must be dimmed whenever meeting other automobiles, motor cycles, driving or riding animals and pedestrians.

13. *Intoxication.*—No person who is under the influence of intoxicating liquor and no person who is addicted to the use of narcotic drugs shall operate or drive a motor-driven vehicle of any kind on the park roads.

14. *Horns.*—The horn shall be sounded before passing other automobiles, motor cycles, riding or driving animals, or pedestrians.

15. *Fines and penalties.*—Any person who violates any of the foregoing regulations shall be deemed guilty of a misdemeanor and shall be subject to a fine of not more than \$500, or imprisonment not exceeding six months, or both, and be adjudged to pay all costs of the proceedings, and/or may be punished by revocation of the automobile permit and by immediate ejection from the park. Such violation shall be cause for refusal to issue a new automobile permit to the offender without prior sanction in writing from the Director of the National Park Service or the superintendent of the park.

#### MAP

The following map may be obtained from the Director of the United States Geological Survey, Washington, D. C. Remittances should be made by money order or in cash.

Map of Crater Lake National Park: 13¾ by 18¾ inches; scale, 1 mile to the inch. Price 10 cents.<sup>4</sup>

The roads, trails, and names are printed in black, the streams and lakes in blue, and the relief is indicated by brown contour lines. On the back of the map is a description of the lake.

#### PANORAMIC VIEW

The view described below may be purchased from the superintendent of Documents, Government Printing Office, Washington, D. C.

Panoramic view of Crater Lake National Park: 16½ by 18 inches; scale, 1 mile to the inch. Price, 25 cents.

This view is based on accurate surveys and gives an excellent idea of the configuration of the surface as it would appear to a person flying over it. The meadows and valleys are printed in light green, the streams and lakes in light blue, the cliffs and ridges in brown tints, and the roads in light brown. The lettering is printed in light brown and is easily read on close inspection, but merges into the other colors when the sheet is held at some distance.

#### LITERATURE

##### GOVERNMENT PUBLICATIONS

Government publications on Crater Lake National Park and a few general park publications may be obtained as indicated below. Separate communications should be addressed to the officers mentioned. The sale publications may be purchased by personal application to the superintendent of the park, but that officer can not fill mail orders. Sale publications regarding the other national parks will be found listed in the circulars on those parks.

<sup>4</sup> May be purchased by personal application to the office of the superintendent of the park, but that office can not fill mail orders.

## DISTRIBUTED FREE BY THE NATIONAL PARK SERVICE

The following publications may be obtained free on written application to the Director of the National Park Service.

## Map of National Parks and National Monuments.

Shows location of all the national parks and monuments administered by the National Park Service and all railroad routes to these reservations.

Glimpses of Our National Parks. 66 pages, including many illustrations. Contains descriptions of the most important features of the national parks.

Glimpses of Our National Monuments. 74 pages, including 34 illustrations. Contains brief descriptions of all the national monuments administered by the Department of the Interior.

The following map is distributed by the superintendent of the park only:

## Automobile road map of Crater Lake National Park.

Shows the park road system, hotel, camps, garages, superintendent's office, routes to the park, etc. Also contains short description of Crater Lake and suggestions for motorists.

Information circulars similar to this for the following national parks:

Acadia National Park.	Mount McKinley National Park.
Carlsbad Caverns National Park.	Mount Rainier National Park.
Glacier National Park.	Rocky Mountain National Park.
Grand Canyon National Park.	Sequoia and General Grant National Parks.
Grand Teton National Park.	Wind Cave National Park.
Hawaii National Park.	Yellowstone National Park.
Hot Springs National Park.	Yosemite National Park.
Lassen Volcanic National Park.	Zion and Bryce Canyon National Parks.
Mesa Verde National Park.	

## SOLD BY THE SUPERINTENDENT OF DOCUMENTS

The following publications may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices given. Remittances should be made by money order or in cash.

The National Parks Portfolio. By Robert Sterling Yard. 274 pages, including 312 illustrations. Bound securely in cloth, \$1.<sup>5</sup>

Contains nine chapters, each descriptive of a national park, and one larger chapter devoted to other parks and monuments.

Contains an account of the formation of Crater Lake.

Forests of Crater Lake National Park, by J. F. Pernot. 1916. 40 pages, including 26 illustrations. Price 20 cents.<sup>5</sup>

Contains descriptions of the forest cover and of the principal species.

## REFERENCES

ALBRIGHT, HORACE M., and TAYLOR, FRANK J. "Oh, Ranger!" A book about the national parks. Stanford University Press, Stanford, Calif. 1928. Illustrated.

DILLER, J. S. Geological History of Crater Lake. An account of the formation of Crater Lake.

DILLER, J. S., and PATTON, H. B. Geology and petrography of Crater Lake National Park. Professional Paper No. 3, U. S. Geological Survey. 1902. 167 p.

EATON, WALTER PRICHARD. Sky-line camps. 1922. 268 pp., illustrated.

A record of wanderings in the northwestern mountains, from the Rockies in Glacier National Park to Crater Lake National Park, and to the Cascades in Washington and Oregon.

<sup>5</sup> May be purchased by personal application to the office of the superintendent of the park, but that office can not fill mail orders.

EATON, WALTER PRICHARD. Boy Scouts at Crater Lake. 1922. 320 pp., illustrated.

A story of Crater Lake National Park in the high Cascades.

KANE, F. J. Picturesque America, Its Parks and Playgrounds. 1925. 521 pp., illustrated. Published by Frederick Gumbrecht, Brooklyn, N. Y.

Crater Lake on pp. 40-46.

KELLEY, EDGEMOND, and CHICK. Three Scout Naturalists in the National Parks.

A book by three Eagle Scouts who made a 12,000-mile field trip through the western national parks. Brewer, Warren & Putnam, 1931. \$1.75.

LAPHAM, STANTON C. The souvenir book. "The Enchanted Lake."

Mazama, The. Bulletin published by the "Mazamas" (Mountaineering Club) of Portland, Oreg.

MCCARTHUR, LEWIS A. Oregon Geographic Names. 450 pp., illus., map. Koke-Chapman Co., Eugene, Oreg. 1928.

MILLS, ENOS A. Your National Parks. 532 pp., illustrated. 1917.

Crater Lake on pp. 137-147; 470-474.

QUINN, VERNON. Beautiful America. 333 pp., illustrated. Frederick A. Stokes Co., New York City. 1923.

Crater Lake on pp. 241-245.

ROLFE, MARY A. Our National Parks, Book Two. A supplementary reader on the national parks for fifth and sixth grade students. Benj. H. Sanborn & Co., Chicago. 1928.

Crater Lake on pp. 109-118.

RUSSELL, I. C. Lakes of North America. 1895. 125 pp.

Crater Lake on pp. 20-21.

——— Volcanoes of North America. 1897. 346 pp.

Crater Lake on pp. 235-236.

STEEL, W. G. The mountains of Oregon. 1890. 112 pp.

Crater Lake on pp. 12-33.

VICTOR, FRANCES FULLER. Atlantis arisen. 1891. 412 pp.

Crater Lake on pp. 179-183.

WILBUR, RAY LYMAN, and DU PUY, WILLIAM ATHERTON. Conservation in the Department of the Interior. Chapter on national parks, pp. 96-112. Government Printing Office, Washington, D. C. 1931. Price \$1.

YARD, ROBERT STERLING. The top of the continent. 1917. 244 pp., illustrated. Crater Lake on pp. 140-160.

——— The Book of the National Parks. 1926. 440 pp., 74 illustrations, 14 maps and diagrams.

Crater Lake on pp. 184-201.

## AUTHORIZED RATES FOR PUBLIC UTILITIES, SEASON OF 1933

All the rates of the authorized public utilities for services within the park are approved by the Government. Employees of the hotels, camps, and transportation lines are not Government employees. Any suggestions regarding service furnished by these public utilities should be made to the superintendent.

The National Park Service has no direct supervision over the rates or the service given outside the park; rates are furnished for the information of the public.

AUTO-STAGE SERVICE FROM RAILROAD POINTS TO CRATER LAKE<sup>6</sup>

The Crater Lake National Park Co. will operate regular daily automobile service from Medford and Klamath Falls, Oreg., to Crater Lake Lodge on the rim of the lake, and return to the same or other entrance gateway as desired; round trip, per person, \$12.

<sup>6</sup> For transportation within the park, see p. 31.

## AUTOMOBILE SCHEDULES

From Medford: Automobile stages leave the Southern Pacific Depot at 11.45 a. m. Stages call at all hotels before starting for park. Stages arrive at Crater Lake Lodge at 2.45 p. m.

Returning to Medford, automobile stages leave Crater Lake Lodge at 3 p. m., arriving in Medford at 6 p. m.

The office of the Crater Lake National Park Co. in Medford is located at the Medford Hotel.

From Klamath Falls: Automobile stages leave railroad depot and call at the principal hotels at 9 a. m., and arrive at Crater Lake at 11.30 a. m.

Returning to Klamath Falls, automobile stages leave Crater Lake Lodge at 3.30 p. m., arriving Klamath Falls about 6 p. m.

NOTE.—Revisions in railroad time schedules may alter slightly the above stage schedules. However, visitors need not be concerned over slight changes, as the stages will meet both the northbound and southbound morning trains arriving in Klamath Falls daily; similarly will meet the northbound and southbound morning trains into Medford; and outgoing stages will depart for Medford and Klamath Falls each afternoon in time to meet outgoing trains at these points.

## HOTEL

The Crater Lake National Park Co. operates a hotel and other appropriate utilities in the park.

Crater Lake Lodge, on the rim of the lake, is of stone and frame construction and contains 105 sleeping rooms, a large number with baths.

## RATES AT CRATER LAKE LODGE

NOTE.—All rates based on American plan only. Under American plan one day constitutes one night's lodging and three meals—breakfast, luncheon, and dinner. Proper deductions for meals will be made where the length of stay is less than one full day.

Room without running water:	
Per person, per day	\$6.00
Per person, per week	36.00
Room with running water:	
Per person, per day	6.75
Per person, per week	40.50
Room with lavatory and toilet:	
Per person, per day	7.50
Per person, per week	45.00
Room with private bath:	
Per person, per day	9.00
Per person, per week	54.00
Four persons in 2 connecting rooms, using 1 bath, per day, each	8.50
Single meals:	
Breakfast	1.25
Luncheon	1.50
Dinner	1.50

It is expressly understood that where connecting rooms have access to private bath, each room is to be considered as having private bath, unless one or more of the rooms are locked off from bathroom. Children under 8 years of age are charged half rates; children 8 years of age or more are charged full rates. Babes in arms, no charge.

## STORES, CAFETERIA, AND HOUSEKEEPING CABINS

A large stone building, housing the cafeteria, store, and studio, where provisions, tourists' supplies, fishing tackle, etc., are sold at reasonable rates, is located on the new village site at the rim.

During the height of the tourist season the cafeteria is open between the hours of 6.30 a. m. and 9 p. m. The same standard of meals may be secured at the cafeteria as at the lodge, and at reasonable rates.

Modern housekeeping cabins may be rented by the day or week and are located in close proximity to the cafeteria and store. Rates for this service are as follows:

Housekeeping cabins, for 2 persons:	
Per day	\$2.50
Per week	15.00
Extra cots, each—	
Per day	1.00
Per week	6.00
Baths (each)	.50

Gasoline and lubricants are available at the service station near Government Camp throughout the season.

## TRANSPORTATION WITHIN THE PARK

## AUTOMOBILES

The Crater Lake National Park Co. operates an automobile service at the lodge available for hire within the park. Regular trips to scenic points in the park are made at the following authorized rates:

Around the rim, with stops at all scenic points, including the Pinnacles, a 41-mile drive, per person	\$5.00
The Sunset Drive, to the summit of the road at The Watchman, a 10-mile drive, per person	1.00

## AUTOMOBILE REPAIR RATES

Rates for automobile repairs: Mechanic's time, per hour, \$1.50; new parts, list price plus transportation charges.

## LAUNCHES AND ROWBOATS

The Crater Lake National Park Co. operates a launch and rowboat service at the lake. Regular trips are made at the following authorized rates:

Around Phantom Ship and Wizard Island, about 15 miles; launches leave boat landing at 9 and 11 a. m. and 2 and 4 p. m.; stop-over at island if desired, per person	\$2.00
Wizard Island and return; launches leave boat landing hourly, beginning at 9 a. m.; stay on island as long as desired; last launch leaves island for return trip at 4.30 p. m., per person	1.00
Rowboats, per hour	.75

(Rowboats are available between the hours 8.30 a. m. and 5 p. m.)

A complete line of suitable fishing tackle is available at boat landing for purchase or rental.

## SADDLE ANIMALS

The Crater Lake National Park Co. maintains adequate saddle-animal service for park trails. Arrangements for this service should be made at the company's office at lodge or housekeeping camp.

## Saddle animals:

Saddle animal and equipment, per hour	-----	\$1.00
Saddle animal and equipment, per day	-----	5.00
Saddle animal and equipment, per half day	-----	3.00
(Day is 8 hours; half day, 4 hours.)		
Saddle animal, round trip to lake	-----	1.50
For feeding privately owned stock, hay only, per day	-----	1.00
For feeding privately owned stock, hay and grain, per day	-----	1.75

## GUIDE SERVICE AND SPECIAL TRIPS

## GARFIELD PEAK

A daily saddle-animal trip from the Crater Lake Lodge to the summit of Garfield Peak and return is available, going via the rim trail and returning via Castle Crest Gardens and Government Camp. This trip, over splendid trails, affords one of the most scenic and spectacular views to be had about the lake. An altitude of 8,060 feet is reached at the summit of Garfield Peak, 2,000 feet above the waters of the lake.

The distance is approximately 7 miles. The charge for this trip with guide service furnished is \$2 per person.

## CASCADE DIVIDE

A daily saddle animal trip from the Crater Lake Lodge to Annie Spring and return is available going via the Cascades Divide Trail and returning via Godfrey Colonnades, Dewie Falls, Munson Valley, and Government Camp. This trip is made over excellent trails following closely along the summit of the Cascade Divide between the Rim and Annie Spring and offers a variety of scenes of flowers, forests, mountains, and interesting formations. The return trip over the Munson Valley Trail is one that will long be remembered for its carved canyons, pinnacles, waterfalls, and flower gardens.

The distance is approximately 10 miles. The charge for this trip with guide service furnished is \$3 per person.

## SPECIAL TRAIL TRIPS BY SADDLE ANIMAL

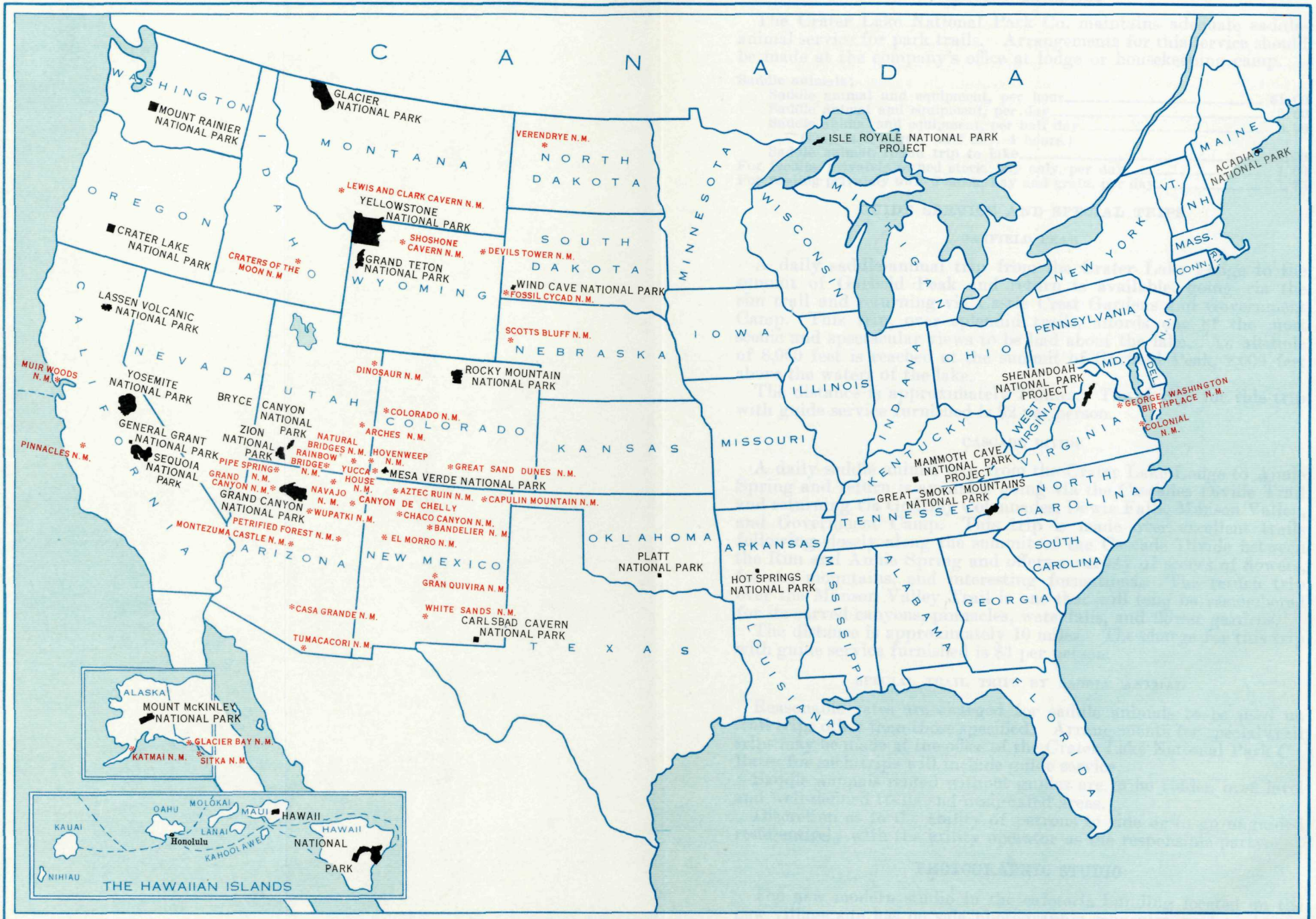
Reasonable rates are charged for saddle animals to be used on trail trips other than those specified. Arrangements for special trail trips may be made at the office of the Crater Lake National Park Co. Rates for such trips will include guide service.

Saddle animals rented without guides are to be ridden over level and well-defined trails and designated areas.

Discretion as to the ability of patrons to ride or to go unguided rests entirely with the utility operator as the responsible party.

## PHOTOGRAPHIC STUDIO

The new modern studio in the cafeteria building located on the new village site has on sale photographic souvenirs, post cards, enlargements done in oil, camera supplies, etc. A quick developing service is also maintained for the convenience of park visitors.



LOCATIONS OF 22 NATIONAL PARKS AND 38 NATIONAL MONUMENTS ADMINISTERED BY THE NATIONAL PARK SERVICE

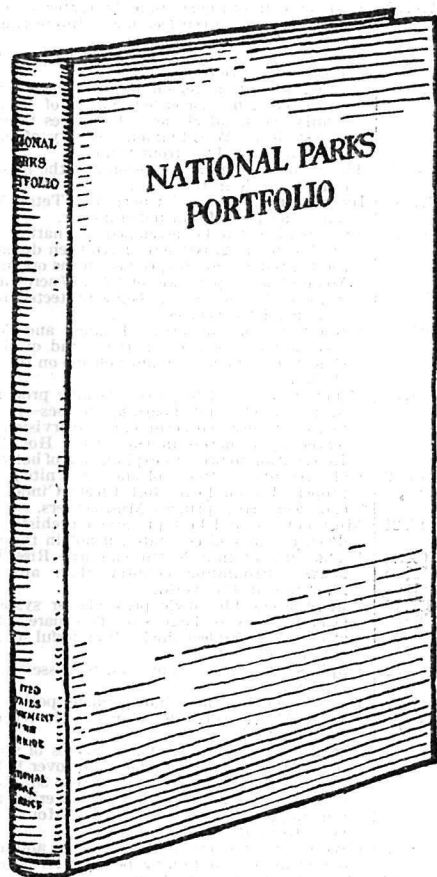
PRINTED BY THE U.S. GEOLOGICAL SURVEY

## THE NATIONAL PARKS AT A GLANCE

[Number, 22; total area, 13,177.20 square miles]

Name of park	Location	Area in square miles	Distinctive characteristics
Acadia 1919	Maine coast	18.74	The group of granite mountains upon Mount Desert Island and also bold point on opposite mainland across Frenchmans Bay—Formerly called the Lafayette National Park.
Bryce Canyon 1928	Southwestern Utah	55.06	Box canyons filled with countless array of fantastically eroded pinnacles—Best exhibit of vivid coloring of earth's materials.
Carlsbad Caverns 1930	Southeastern New Mexico	14.43	Beautifully decorated limestone caverns, believed to be largest yet discovered.
Crater Lake 1902	Southwestern Oregon	250.52	Lake of extraordinary blue in crater of extinct volcano—Sides 1,000 feet high—Interesting lava formations—Fine fishing.
General Grant 1890	Middle eastern California	3.96	Created to preserve the celebrated General Grant Tree, and grove of Big Trees.
Glacier 1910	Northwestern Montana	1,533.88	Rugged mountain region of unsurpassed alpine character—250 glacier-fed lakes of romantic beauty—60 small glaciers—Precipices thousands of feet deep—World-famous scenery of marked individuality—Fine trout fishing.
Grand Canyon 1919	North central Arizona	1,009.08	The greatest example of erosion and the most sublime spectacle in the world.
Grand Teton 1929	Northwestern Wyoming	150	Includes most spectacular portion of Teton Mountains, an uplift of unusual grandeur.
Great Smoky Mountains 1930	North Carolina and Tennessee	465.18	This area is not to be developed as a national park until at least 427,000 acres have been donated to the United States, as specified in the organic act. Meanwhile the park area of 297,719.7 acres already in Federal ownership is being protected by the National Park Service.
Hawaii 1916	Hawaii	245	Interesting volcanic areas—Kilauea and Mauna Loa, active volcanoes on the island of Hawaii; Haleakala, a huge dormant volcano on the island of Maui.
Hot Springs 1921	Middle Arkansas	1.50	47 hot springs said to possess healing properties—Many hotels and boarding houses—19 bathhouses under Government supervision. Reserved by Congress in 1832 as the Hot Springs Reservation to prevent exploitation of hot waters.
Lassen Volcanic 1916	Northern California	163.32	Only recently active volcano in United States proper—Lassen Peak, 10,453 feet—Cinder Cone, 6,913 feet—Hot springs—Mud geysers.
Mesa Verde 1906	Southwestern Colorado	80.21	Most notable and best preserved prehistoric cliff dwellings in United States, if not in the world.
Mount McKinley 1917	South central Alaska	3,030.46	Highest mountain in North America—Rises higher above surrounding country than any other mountain in the world.
Mount Rainier 1899	West central Washington	377.78	Largest accessible single peak glacier system; 28 glaciers, some of large size; 48 square miles of glacier, 50 to 500 feet thick—Wonderful subalpine wild-flower fields.
Platt 1902	Southern Oklahoma	1.32	Sulphur and other springs said to possess healing properties.
Rocky Mountain 1915	North middle Colorado	405.32	Heart of the Rockies—Snowy range, peaks, 11,000 to 14,255 feet altitude—Remarkable records of glacial period.
Sequoia 1890	Middle eastern California	604	The Big Tree National Park—Scores of sequoias 20 to 30 feet in diameter; thousands over 10 feet in diameter; General Sherman Tree, 36.5 feet in diameter and 272.4 feet high—Towering mountain ranges—Startling precipices—Mount Whitney—Kern River Canyon.
Wind Cave 1903	South Dakota	18.47	Cavern having several miles of galleries and numerous chambers containing peculiar formations.
Yellowstone 1872	Northwestern Wyoming, southwestern Montana, and north-eastern Idaho	3,437.87	More geysers than in all rest of world together—Boiling springs—Mud volcanoes—Petrified forests—Grand Canyon of the Yellowstone, remarkable for gorgeous coloring—Large lakes—Many large streams and waterfalls—Vast wilderness, one of the greatest wild bird and animal preserves in the world—Exceptional trout fishing.
Yosemite 1890	Middle eastern California	1,176.16	Valley of world-famed beauty—Lofty cliffs—Romantic vistas—Many waterfalls of extraordinary height—3 groves of Big Trees—High Sierra—Waterwheel Falls—Good trout fishing. Winter sports.
Zion 1919	Southwestern Utah	148.26	Magnificent gorge (Zion Canyon), depth from 1,500 to 2,500 feet, with precipitous walls—Of great beauty and scenic interest.

# The NATIONAL PARKS PORTFOLIO

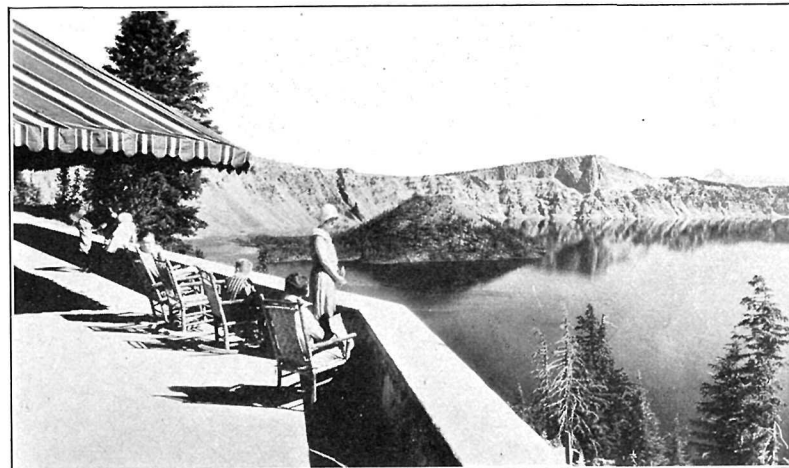


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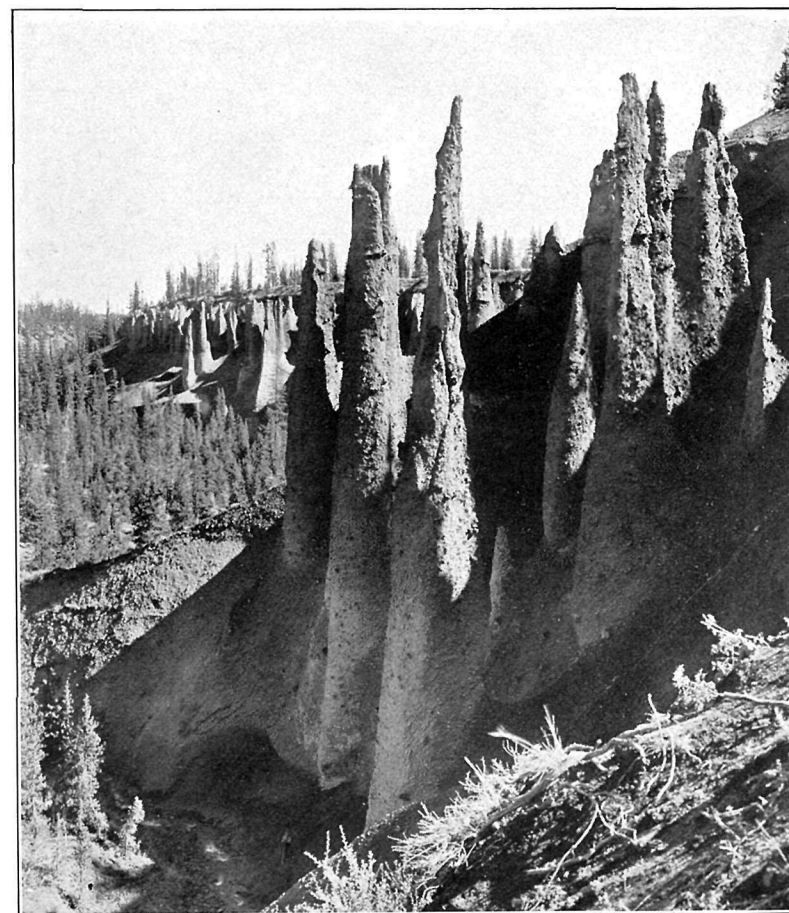
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"THE SEA OF SILENCE," 6 MILES ACROSS AND 2,000 FEET DEEP  
From the veranda of Crater Lake Lodge

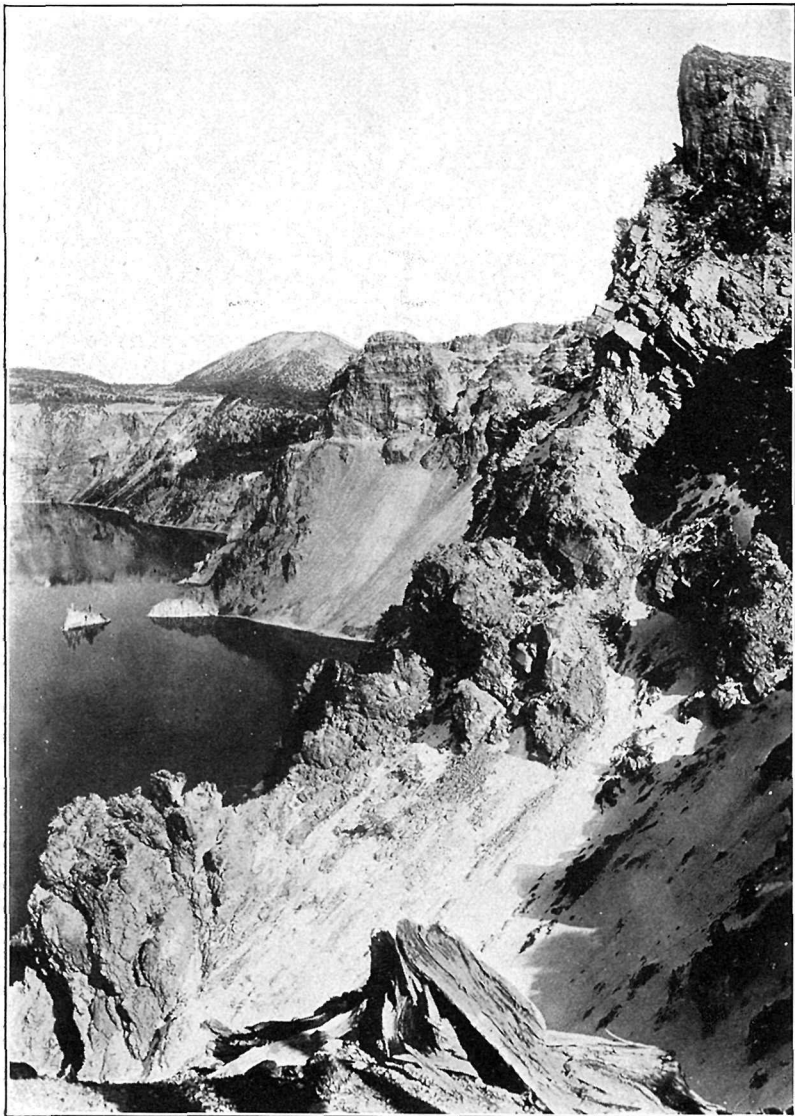


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SAND CREEK PINNACLES

"An uncanny crowd of spectral fingers in a great chasm."





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"A THOUSAND WONDERS ARE CALLING, 'LOOK UP AND DOWN  
AND ROUND ABOUT YOU.'"

—John Muir