YOSEMITE



NATIONAL PARK, CALIFORNIA

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Introduction

As a citizen of the United States, you are a part owner of the Yosemite Valley, the giant sequoias, the lofty waterfalls, the high wilderness country, and all the striking beauty and wonder that is Yosemite National Park.

The National Park Service of the Department of the Interior, which administers the park for you, welcomes you here. We hope that your stay will be an experience you will long remember with deep pleasure and satisfaction. We are eager to do all we can to make it enjoyable. Please help us to protect this park and all that it contains, so that those who visit it in the years to come may find it no less beautiful than it is today.

The National Park System, of which this park is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.

"The most songful streams in the world . . . the noblest forests, the loftiest granite domes, the deepest ice-sculptured canyons . . ." wrote John Muir, are found in Yosemite. His are words that have stood the test of time. Yosemite National Park, in the heart of the Sierra Nevada, is an area that can be described only in terms of beauty.

It was, Muir insisted, "a place of such stature that the people should care for it." Steps were taken to assure such public care as early as 1864, when the valley and the Mariposa Grove of giant sequoias were made a park under the guardianship of the State of California. Twenty-six years later, the high country surrounding them became a National Park, but it was not until 1906 that Yosemite Valley and the Mariposa Grove were ceded back to the Federal Government and made a part of the park. Today it has an area of about 1,200 square miles.

Now more than a million people every year, from every corner of the world, spend summer, spring, autumn, or winter vacations here, for Yosemite is a year-round park.

Nowhere in the world are there waterfalls of such variety within a single area as those that leap into Yosemite Valley in the spring and early summer. Each has its own particular beauty, but perhaps the most overpowering, when in full flow, are the Yosemite Falls, whose combined height of 2,425 feet makes them the second highest in the world.

The domes and granite rocks of the valley—whether in the glow of sunset or the darkness of a gathering storm—invite awe and admiration. Add to these the groves of giant sequoias, the alpine meadows, lakes, and snowfields of the High Sierra, and you will understand why these wonders continue to draw people back to Yosemite again and again.

And just as you never tire of looking, you probably will never find time to do all the things the park invites, such as hiking the mountain trails; riding horseback in the valley or on the heights; fishing in the valley and in the high country; swimming and sunning on the river beaches; and skiing on the slopes at Badger Pass in winter. You can picnic, or camp and sleep beneath a starry sky, or you can luxuriate at any of a number of comfortable hotels. Though parts of the valley are sometimes crowded, it is easy to find solitude and quiet.

It will take many visits for you to know Yosemite, but whatever the mood or season, it will not disappoint you.

YOU WILL WANT TO SEE

Yosemite Valley. The valley encloses within its 7 square miles an astounding degree of natural beauty. Perhaps its size should be measured in cubic miles, for its highest point, the summit of Half Dome, is more than 4,800 feet above the valley floor. Furthermore, the largest share of phenomena associated with the valley—sheer walls, myriad waterfalls, and towering pinnacles—are above its floor. At 4,000 feet elevation, this

small part of the park is fortunately situated for year-round visiting. Rock walls protect it in winter storm; giant trees shield it from summer sun.

Your first impression of the valley will vary with the time of year, and the way you enter it. From the west, you get a preview of steep mountainside and overhanging cliff as you follow the rugged canyon of the Merced River to the Arch Rock entrance of the park. Inside, after a few miles, the narrow roadway widens suddenly into the meadow at Valley View, and you first see majestic El Capitan, rising 3,604 feet above the valley floor.

If you come from the north and west on Big Oak Flat Road, or from the east over the Tioga Pass Road, which joins it above the valley, the impact of beauty and grandeur will be more gradual as you descend the mountainside to the valley. Coming down, you may glimpse Pulpit and Elephant Rocks, Chief Tenaya's profile, and the Cathedral group of rocks and spires, preparing you somewhat for the magnificence of the inner valley view.

Coming from Wawona, you will see the spectacular vista that greeted the men of the Mariposa Battalion, who entered Yosemite Valley more than 100 years ago. Here, from Tunnel View, you look all the way up the valley to Cloud's Rest with El Capitan on your left, Bridalveil Fall on your right.

After locating food and shelter, we suggest that your next stop be the Yosemite Museum. You might then drive to the east end of the valley, park your automobile and walk around the Happy Isles, formed by the Merced River. Here you will find the trail leading to views of nearby waterfalls.

The waterfalls. The Upper Yosemite Fall drops 1,430 feet, and the Lower, 320 feet. With the cascades between, the total drop from the crest of the Upper Fall to the base of the Low Fall is 2,425 feet, a breathtaking sight when the water is pouring over the top of the cliff at full volume.

See these others, too: Ribbon Fall, 1,612 feet; Vernal Fall, 317 feet; Bridalveil Fall, 620 feet; Nevada Fall, 594 feet; and Illilouette Fall, 370 feet.

The falls reach their maximum flow in May and June. A few run all year. However, some have no visible water in dry years after mid-August.

The giant sequoias. Yosemite National Park has three important groves of giant sequoias (Sequoia gigantea): the Mariposa Grove near the south entrance to the park (part of the Yosemite Grant that became the Nation's first State park in 1864); and the Merced and Tuolumne Groves near Crane Flat on the Big Oak Flat Road.

The giant sequoias of the Sierra Nevada belong to a tree family that once was common over much of the northern hemisphere. Except for the giant sequoias and the coast redwoods, this family has disappeared from North America.

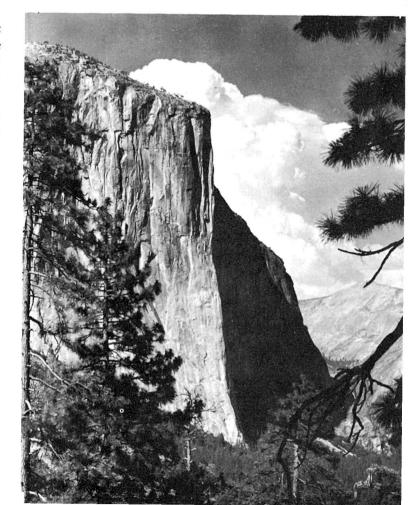
Many groves of giant sequoias were destroyed by glaciers during the Ice Age, but some escaped because they were in locations not actually reached by the glaciers. Today they grow naturally only in a narrow, 250-mile strip in scattered groves from Placer County to Tuolumne County in California. Their great resistance to fungi, fire, and insects contributes to their survival. Only two enemies threaten them—lightning and man.

Indestructible as they seem, these trees can be injured. Their roots, extending over a wide area, are extremely shallow, and lie exposed in many spots where the footsteps of sightseers have worn away the soil for nearly 100 years.

When you visit the groves, take care to stay on the pathway to avoid further damage to these majestic trees.

Be sure your visit includes the Grizzly Giant. Although no completely dependable method of computing the age of these enormous trees has been found, this giant is estimated to be well over 3,000 years old, and it is perhaps the oldest in the park. Its height is 209 feet; its base diameter is 34.7 feet.

El Capitan from Wawona Road near Tunnel View, 3,604 feet above Yosemite Valley.



Mariposa Grove is about 35 miles from the valley by way of State Route 41. You pass through magnificent open forests of pine (including the majestic sugar pine) and fir en route to the historic settlement of Wawona, a few miles from the grove.

Glacier Point (closed in winter). Perhaps the most breathtaking bird's-eye panaroma in Yosemite is from Glacier Point. Here you may look not only to the crest of the lofty Sierra Nevada, but down into Yosemite Valley, a sheer 3,254 feet below.

What you see below is in fact a miniature valley community, its familiar hostelries and landscapes in reduced scale. Looming across the valley are Half Dome, North Dome, and the waterfalls, seen this time from above. And, stretching majestically to the distant horizon is the High Sierra.

Nor is Glacier Point without its historic interest. Quaint Mountain House, perched on a bed of rock, is the oldest building in public use in the park. It was built in 1872 by pioneer James McCauley.

The high country (closed in winter). There are those who come to Yosemite without spending a day in the high country, thereby missing one of the choicest experiences the park has to offer. There are others who head for its peaks and lakes and meadows immediately, there to camp and fish and hike and ride in its heady air until time to leave.

Center of activity in the high country is Tuolumne Meadows (8,600 feet), one of the most beautiful, and the largest, of the subalpine meadows in the High Sierra. It is 55 miles from Yosemite Valley by way of the Big Oak Flat and Tioga Roads. During the summer one of the park's largest campgrounds is in operation there, as well as a full-scale naturalist program.

Scheduled saddle or hiking trips start from the valley, follow the High Sierra Loop, and radiate to mountain lakes and passes as high as 10,000 feet. Each night's stop is marked by a High Sierra camp. These trips are so scheduled that there is time at each camp to fish and explore.

But it is possible to see a great deal of the high country without "packing in." From Tuolumne Meadows, you can drive to Tioga Pass or Tenaya Lake, and there go adventuring among the little lakes nearby, or hike through the fields of glacial boulders in and about the granite domes.

If you were to spend several weeks, you would not exhaust the infinite variety of this vast wilderness country. This is probably the reason so many come back time and time again.

(For information on the High Sierra pack and hiking trips, inquire of the Yosemite Park and Curry Co., Yosemite National Park, Calif.)

For Your Protection. These briefed regulations are intended not only for protection and preservation of the park, but for your personal safety. Certain hazards—falling rocks and trees—treacherous streams and lakes—are inherent in a wilderness area. Use caution and commonsense to avoid accidents.

MOTOR VEHICLES. Speed limits are posted; they vary with road conditions.

All park roads are safe if you drive carefully; however, they are not built for speed. Use lower gear on downgrades to save your brakes; on upgrades, use lower gear to avoid vapor lock or overheating your engine.

Housetrailer users are permitted to drive the Tioga Road only from 7 p. m. to 7 a. m. from June 15 to September 15. This road is narrow and winding for 21 miles and housetrailers can cause traffic tie-ups during the day.

You may need tire chains at times during the winter, and it is advisable to carry them for use during sudden storms in late autumn or early spring.

Commercial trucking is not allowed in the park except on park business; commercial buses may enter only by special arrangement. All vehicles must stay on public roads.

CAMPING. Camping in Yosemite Valley and Wawona campgrounds is *limited to 30 days in any calendar year*. During the heavy-use months of June, July, and August, however, camping is *limited to 15 days* in Yosemite Valley, at Tenaya Lake, Wawona, Bridalveil, and along the river frontage at Tuolumne Meadows. Purchase of an additional 15-day permit or an annual vehicle permit does not entitle you to camp for a longer period.

FISHING. California fishing licenses are required for fishing in the park. The season conforms to State regulations. Limit: 10 fish, or 10 pounds and 1 fish. (Write to superintendent or see posted bulletins for full fishing regulations, including information on closed waters.)

BOATING AND SWIMMING. Boating is permitted in the park only on these lakes: Benson, Kibbie, May, Merced, Tenaya, Tilden, and Twin. Motors are not permitted. Streams used to supply local drinking water are posted; swimming in them is prohibited. Concessioner-operated swimming pools are at Camp Curry, Yosemite Lodge, and Wawona.

PRESERVING NATURAL FEATURES. Destruction, defacement, or removal of trees or rocks is prohibited as is the picking or carrying away of flowers or plants, and killing, injuring, or capturing any bird or animal.

PETS. You may bring your dog or cat to Yosemite, but only on condition that it be on a leash or otherwise under full physical control at all times; it may not be taken on trails or into public buildings. Dogs may be boarded in kennels; campers with pets are restricted to certain campgrounds.

FIRES. Report fires immediately to nearest ranger station!

Campfire permits are required except in public automobile campgrounds. Never leave a fire unattended.

Be sure your fire is out before you leave. Extinguish it with water.

You may not smoke while hiking or riding horseback, nor throw cigarettes, cigars, or matches from your automobile.

FIREARMS. Possession of firearms in the park is subject to rigid restrictions. Hunting with any type of weapon is not allowed in the park.

TRAILS. Hikers should stay on designated trails. *Please do not shortcut between zigzags or switchback*. The practice is dangerous to you and to any persons below you; it can also cause serious and destructive erosion. You should never hike alone; tell someone where you are going and when you will return. Vehicles are not permitted on trails or bridle paths.

Horses have the right-of-way on roads, trails, and bridges.

ABOUT THE WILD ANIMALS. All the animals in the park are wild; some are dangerous. Watch and photograph them from a distance. Park regulations prohibit feeding deer or bears, or molesting any animal.

HOW YOU CAN SEE THE PARK

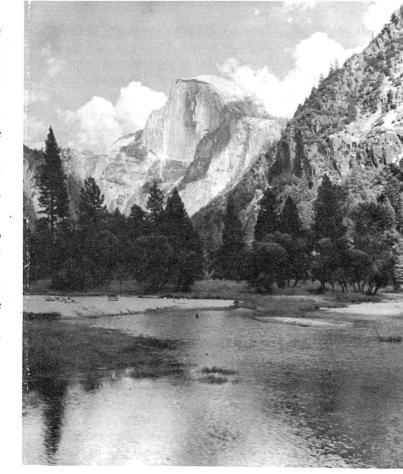
By trail. More than 700 miles of trails await you if you would not only tour the park, but know it intimately. There are many things you do not see from an automobile that can be a rewarding part of your experience in this and any other National Park.

Try one of the shorter trails from the valley for your orientation trip (distances given here are one way):

Vernal Fall: 1 mile to base of fall from Happy Isles. Nevada Fall: 3.2 miles to top of fall from Happy Isles. Glacier Point: 4.8 miles from base of Sentinel Rock. Yosemite Falls: 3.4 miles from Camp 4 to top of falls.

The last two involve climbs from valley floor to valley rim. Dozens of other trails from Yosemite Valley, Wawona, and Tuolumne Meadows offer from a day to several weeks of travel.

Perhaps the most famous Yosemite trail is the High Sierra Loop—a distance of 53 miles round trip from the valley, via Tuolumne Meadows. You can pack your own gear and camp



Half Dome from the Merced River, 4,852 feet above Yosemite Valley.

overnight at one of the trail campsites, replenishing your food stock, if necessary, at one of the five High Sierra Camps. These are about 10 miles apart, on the Loop Trail. You also may spend the night at one of these camps in a real bed, and eat a hearty breakfast or supper in the camp dining room.

The John Muir Trail, traversing 212 miles of high country wilderness, starts in Yosemite Valley, climbs to Tuolumne Meadows, and ends at Whitney Portal in Inyo National Forest.

U. S. Geological Survey topographic maps are standard equipment for hikers. You can purchase them at the Yosemite Museum any time of the year; at Tuolumne Meadows and Wawona during the summer.

Be sure to check trail conditions and obtain a fire permit and camping information at a ranger station before starting any overnight trips.

By horseback. Saddle horses and pack animals are available at Yosemite Valley stables, Tuolumne Meadows, and Wawona. Guides are required on saddle trips off the valley floor.

By automobile. There are 216 miles of roads in Yosemite National Park open to public travel. Do not be tempted to take any motor vehicle onto a trail or any other thoroughfare not intended for public vehicular travel. Park regulations strictly forbid this—for you own safety.

THE NATURALIST PROGRAM

From the museum at Park Headquarters in Yosemite Village, there is conducted a lively summer program of naturalist activities for every age and interest, from armchair travel to mountain climbing. Even if you are in the park for only a limited time, by all means make at least one visit to the museum, and take part in its programs if you can.

Yosemite was the first area of the National Park System in which naturalist programs were offered. At the urging of Stephen T. Mather, first Director of the National Park Service, the program pioneered at Lake Tahoe by Mr. and Mrs. C. M. Goethe of Sacramento was transferred to Yosemite in 1920, and they generously supported it here for 2 years. By that time, its popularity had made it a permanent fixture of the park. In a few years, similar programs were established in every National Park; the idea has also been widely adopted in State and other parks.

The museum and its surroundings. Morning and afternoon talks in the museum's geology room tell how the valley was formed. Relief maps and models, photomurals, and a pushbutton shadow panorama, which shows mountains uplifting and glaciers down-sliding with great realism, bring the story alive. Other exhibits include trees, birds and animals, Indians, history, and art. A game of matching animal tracks delights the small fry as well as their parents.

Take time for a stroll through the cool, sweet-smelling wildflower garden. Here every morning, in the Indian Circle, a naturalist shows how the Indians lived, hunted, cooked, and dressed. Be sure to visit the Happy Isles Nature Center at the upper end of Yosemite Valley. Exhibits here tell the story of Yosemite through the seasons, ways of enjoying the park, and interesting facts about wild animals, fish, and fishing. Here, too, is the meeting place for the popular Junior Ranger Program.

Do not miss the log cabin museum in Mariposa Grove; the overlook at Glacier Point; the exhibit at Tuolumne Meadows Campground Ranger Station; and the Sentinel Dome mountain spotter.

Walks and bikes. There are easy, guided walks each summer morning through the valley and at Wawona, Glacier Point, and Tuolumne Meadows. More vigorous all-day hikes leave twice weekly from the valley and almost daily from Tuolumne Meadows.

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The Junior Ranger Program's nature class is shown study skins which are carried on the bike.

High point of the summer for many hikers is the 3-day, naturalist-led trip to the 13,114-foot summit of Mount Lyell, the park's highest peak. There are two such trips annually late July and early August. You can obtain detailed information about them from the superintendent.

Campfire programs (summer only). Informal outdoor programs are held nightly except Sunday in Yosemite Valley at Camps 7 and 14 and at Yosemite Lodge; and at Glacier Point, Wawona, Bridalveil Creek Campground, Tenaya Lake, and Tuolumne Meadows several nights a week. At these programs, park naturalists tell the story of Yosemite in its various

Junior rangers (summer only). Those who are between the ages of 7 and 13 are invited to join this program, which is given Monday through Friday. You will become acquainted with animals, trees, and flowers, and make a nature scrapbook. Campfire programs, with such themes as Indians and the rocks of Yosemite, are held twice a week. Schedules are posted on bulletin boards.

Yosemite Nature Notes. The Yosemite Natural History Association, an officially designated cooperating society, issues Yosemite Nature Notes, which has grown from a 3-page mimeographed leaflet that first appeared in 1922 to a monthly. 12-page, printed publication. About once a year a special issue with full-color cover treats some such subject as Yosemite waterfalls, Indians, birds, fishes, auto tours, or trees. The monthly issues help keep the visitor up to date on the park.

You may subscribe to Yosemite Nature Notes by sending a check or money order for \$1.50 to the Yosemite Natural History Association, Box 545, Yosemite National Park, Calif. This is a splendid gift for a schoolchild or classroom, or for anyone who loves Yosemite.

At the Yosemite Museum the association also offers for sale books by outstanding writers on the Sierra. A list of publications and of special issues of Yosemite Nature Notes may be obtained at the Yosemite Museum or by writing to the address

PHOTOGRAPHY

Look for such familiar landmarks as El Capitan, Bridalveil Fall, the Three Brothers, Cathedral Rocks, Sentinel Rock, Yosemite Falls, North Dome, and Half Dome, and set up your

Remember that clouds and cloudy skies, and the subdued light of early morning and late afternoon often give more striking effects that full sunlight-even with color film. And do not forget that the rocks of Yosemite lend themselves especially well to black and white photography.

PLANTS AND ANIMALS

Life zones. Few places in the United States have a wider variety of native plants and animals than the Sierran slopes. Within Yosemite National Park, from the warm foothills near Arch Rock at 3,000 feet above sea level to the windy summits of peaks like 13,114-foot-high Mount Lyell, there are 5 easyto-recognize assemblages of plants and animals. These are roughly arranged in belts called "life zones." As you ascend the slopes, you go from one such life zone to another. At first the change is hardly noticeable; then, the altered scenery makes you realize you are surrounded by a different community of plants and animals.

The lowest elevations in the park are at about 3,000 feet. These elevations, encountered if you enter by way of the Arch Rock Entrance Station, are in the Upper Sonoran Life Zone. In this zone the relatively flat grassland of the foothill country changes as you climb. Trees begin to crowd brush-covered areas, and there are scattered stands of blue oak and digger-

pine. Living in this zone are the California jay and the thrasher, the shy ring-tailed cat, and the gray fox.

Higher in the park, you enter the Transition Life Zone. Yosemite Valley, at 4,000 feet, is in this zone. Much of it is more rugged country of great beauty, with its stands of black and golden-cup oak, yellow pine, incense-cedar, and white fir. You will note the increase of evergreens as you ascend. Typical animals you may see here are the band-tailed pigeon, pygmy owl, and Steller's jay; the gray squirrel, long-eared chipmunk, and chickaree.

Beginning at about 6,000 feet is the delightful Canadian Life Zone of cool evergreen forests of red fir and lodgepole, western white, sugar, and Jeffrey pines. The Sierra grouse, Mariposa fox sparrow, and Townsend's solitaire are seen here, as are the yellow-haired porcupine and the golden-mantled ground squirrel.

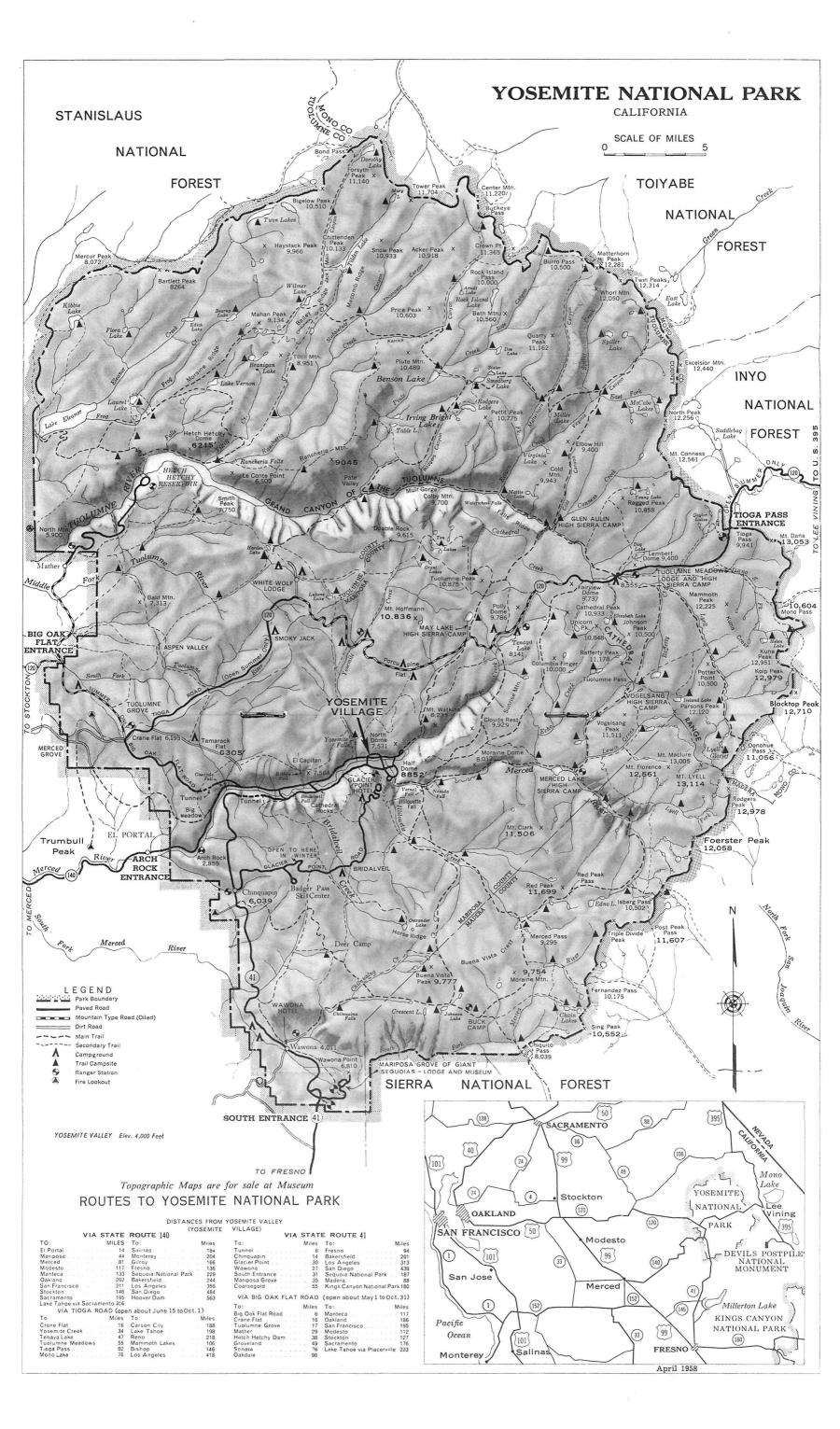
In traveling the road through Tuolumne Meadows and over the crest of the Sierra Nevada, by way of Tioga Pass, you traverse a region ranging between 8,000 and 11,000 feet elevation. Here lies the Hudsonian Life Zone with plants and animals similar to those found near sea level in the Hudson Bay area of Canada, far to the north. Mountain hemlock and lodgepole pine are the prominent trees; Clark's nutcracker and the Hudsonian white-crowned sparrow are typical of the area, as are the Belding ground squirrel and the marmot.

Above all this, along the higher crest of the Sierras, a climate similar to that of the Arctic, produces the Arctic-Alpine Life Zone. There, above treeline, grow stunted willows not more than a few inches high. Warm-blooded animals are scarce the Sierra Nevada rosy finch being most in evidence.

About the park animals. Of the 200 bird and 78 mammal species known to live in Yosemite, many stay within their accustomed life zones, but others, like the California mule deer, migrate between high and low elevations with the seasons. Some of the deer, however, do spend the entire year in Yosemite Valley, where their presence is a delight to the visitor. People who do not understand the purpose of park regulations often violate them by feeding deer, tending to make them dependent upon man. Unnatural foods soon reduce their vigor as wild animals and contribute to an untimely death. Remember, too, that all deer are in some degree dangerous to those who approach them closely.

The story of life zones in relation to animals in the park is a fascinating one, and is best understood by studying exhibits in the Yosemite Museum. There a series of dioramas shows you birds and mammals in their characteristic habitats.

Birds most frequently seen in the park include Steller's jay and blackheaded grosbeak, or "butter bird" (particularly in the campgrounds); western bluebird, western tanager, and



California woodpecker (in the country between Yosemite Valley and the high meadows); and mountain quail and Sierra grouse (particularly at Glacier Point, where hens and their families slow traffic periodically as they cross the road). In the high country, you will see the mountain bluebird and Clark's nutcracker; the merry water ouzel in the streams; and the Sierra Nevada rosy finch in the snowfields.

Yosemite's squirrel family is a large one, composed of Sierra ground squirrel, golden-mantled ground squirrel, Belding (or picket-pin) ground squirrel, and their relative, the chipmunk. In addition, there are these tree dwellers: chickaree or Douglas squirrel, gray squirrel (large, with bushy tail), and flying squirrel, which you may glimpse in the light of your campfire as it flashes by.

The park museums have illustrated pocket books listing and describing plants and animals of the park.

PARK SEASONS

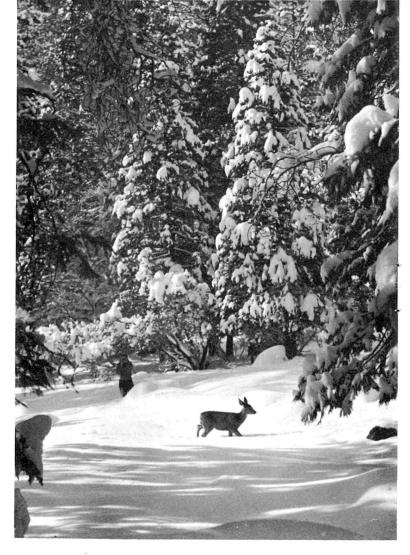
Summer. In the summer—family vacation time—the rock walls of Yosemite Valley seem to groan trying to harbor the crowds. Campgrounds are crowded from mid-June to early September, and other facilities are often in use beyond their intended capacity. July and August are good months to go into the high country.

There the meadows are colorful with the season's first flowers, for spring is late up there. The magnificent water wheels of the Tuolumne River are whirling 30 to 40 feet into the air, and you can almost hear things growing. Days are warm, but you will reach for a sweater as the sun gets low, and nights are chilly!

In the valley, days are usually warm; nights are pleasantly cool. Shady trails make hiking and riding a comfortable pastime. In midsummer, river beaches are fine for sunning. It seldom rains between June 1 and September 30, except for occasional afternoon thundershowers.

Autumn. Indian summer is a lovely season in Yosemite. In September the ferns in the valley begin to turn a hundred shades of gold and yellow; in October the trees turn tawny, and the air crackles with the first frost. Fishing is at its best, for streams and lakes are low, and the fish are near the surface.

Autumn color of oak and maple, dogwood and aspen varies from year to year, and with different elevations. By the end of October the Big Oak Flat and Wawona Roads are often in riotous display. Color along the 58-mile stretch of the Tioga Road from Crane Flat to the pass comes earlier and is an unforgettable sight. Check with the chief ranger's office (FRontier 2–4466) to find out whether or not the road is blocked by snow.



Deer browse among snow-covered evergreens.

Winter. Center of winter outdoor activities at Yosemite is the Badger Pass ski area, reached by way of the south entrance from Fresno and the west entrance from Merced. It is 20 miles from Yosemite Valley on the Glacier Point Road. Ski season is from about mid-December to mid-April, depending on weather. Have tire chains available.

You will find slopes for every degree of skill—the Queen Slope (rope tow) if you are a beginner; and three other more challenging slopes, with Constam T-bar lifts. Ski school is in session daily. Marked ski trails through the woods nearby are maintained by the National Park Service.

There are no overnight accommodations at Badger Pass, but you can find lodging at nearby Wawona or in Yosemite Valley. The ski house at the pass has cafeteria and grill, with a sunny porch for lunching outdoors, and a ski shop where you can

rent skis and boots. There are special classes for children and a reliable baby-sitting service for skiing parents. (Write to the Yosemite Park and Curry Co., Yosemite National Park, Calif., for details on all-expense ski tours.)

Spring. The season of waterfalls! Spring in Yosemite Valley means May and June, when the waterfalls are booming all around, the leaf buds are bursting in a pattern of green, and the dogwood and azalea reveal themselves in showy white and pink along the roadside. Sometimes melting snow and spring rains bring dozens of temporary waterfalls into play and swell the waters of the major falls to many times their average volume. During these periods of extra-heavy flow, Yosemite is truly a photographer's paradise.

GEOLOGY

How the valley was formed. Yosemite Valley is the product of processes which have been at work through many millions of years. Back in the age of reptiles, perhaps 130 million years ago, ridges of relatively low "folded" mountains lay where the Sierra Nevada now rises to such majestic heights. These were generally parallel, extending in a northwest-southeast direction. Beneath them the granites we see today were forming under conditions of tremendous heat and pressure. With the passage of eons, these low mountain ridges were weathered and eroded, exposing the granites and developing a landscape of rolling hills and broad valleys. Through these valleys, streams flowed from the northwest and the southeast, draining into a sluggish, meandering master-stream which was the ancestor of the present Merced River.

Through following ages, this enormous area of the earth's crust, which geologists call the Sierra Nevada block, began tilting westward. What is now the Great Valley of California stayed more or less in place, while the eastern edge rose intermittently to an elevation of more than 14,000 feet along cracks in the earth's crust (faults) which are recognizable today in the Owens Valley, east of the Sierra.

The tilting of the Sierran block speeded to a torrent the flow of such master-streams as the Merced. The side streams, their courses running parallel to the tilting, continued to flow at a gentle rate. Hence, while the rushing, silt-laden master-stream cut a V-shaped canyon, as much as 2,000 feet deep, the side valleys were left higher and higher above it. The streams of these hanging valleys fell as white-water cascades down the sides of the main valley.

A million or so years ago—only yesterday in geologic time—during the great ice age, a tremendous burden of ice and snow accumulated in the valleys and on the slopes above them. In places, this covering was as much as half a mile thick. As is still happening at many other places today, glaciers developed.

They advanced down the canyon on at least three occasions, grinding and polishing its bottom and sides and thus widening and deepening it. They also took advantage of systems of cracks or "joints." Water freezing in these fissures permitted the glaciers to quarry out and carry away great blocks of granite. When the gradually warming climate caused the glaciers to recede, they left the Yosemite Valley as a U-shaped trough with sheer polished walls instead of the preglacial V-shaped canyon. From most of the tributary hanging valleys, streams now fell free as spectacular waterfalls, which still add their beauty to "the incomparable valley." The last receding glacier left a natural dam of rock debris—a glacial moraine—near the foot of El Capitan. A 5½-mile-long lake was formed behind this dam.

Since then, silt, sand, and rock carried by the streams gradually filled the lake, producing the level valley floor of today. High in the mountains, scores of lakes, large and small, lie in basins long ago gouged out by the moving ice.

Domes and pinnacles. Yosemite's granite domes are unsurpassed anywhere in the United States, perhaps in the world, for number and variety.

How were they formed? In two ways:

First, by exfoliation (from the Latin "to strip of its leaves"). When overlying layers of rock were worn away, the release of pressure caused internal strain which in turn developed a system of cracks in the granite (like the layers in an onion). Weathering caused these shells or layers to peel off. Thus, gradually the angular surfaces took on a rounded contour, eventually producing the "domes." Their scaly surfaces, on both a large and small scale, tell us that exfoliation is still going on.

The best examples of such domes are Sentinel Dome (you can climb it easily from a spur off the Glacier Point Road) and the Starr King group, which can be seen clearly from Sentinel Dome or from along the Glacier Point Road. All these were fashioned long before the glaciers came.

In the formation of certain other domes, however, overriding glacial action also played a part in the rounding process. These include gigantic Half Dome, rising almost a mile (4,800 feet) above the mouth of Tenaya Canyon at the head of the valley, and the beautifully symmetrical North Dome and Basket Dome, on the north rim.

Near Tenaya Lake and Tuolumne Meadows, as you drive toward Tioga Pass, you can see clusters of domes, varying in size and symmetry. Look for the "glacier polish," on which the backlight of early morning or late afternoon gleams as it would on sheets of ice. Watch, too, for the "erratics," which are rocks and boulders of all sizes, brought down from the mountaintops by glaciers and deposited on the smooth glaciated surfaces when the ice melted away.

But return to the valley for perhaps the greatest geological wonder in all Yosemite—El Capitan. This massive granite block rises sheerly more than 3,000 feet from its base, with scarcely a crack or fracture in its entire perpendicular wall.

Learn to know Cloud's Rest, towering majestically at the upper end of the valley; Sentinel Rock and Cathedral Spires; and The Three Brothers, named for sons of Chief Tenaya, which stand shoulder to shoulder on the north rim.

YOSEMITE'S HISTORY

Discovery. Though Indians lived in Yosemite Valley and other places in the park for hundreds of years before white men came to California, it seems likely that the first glimpse of the valley itself by a white man came as late as 1849. One William Penn Abrams, in his diary, tells of having become lost while tracking a bear in October of that year, and having come upon "a valley enclosed by stupendous cliffs rising perhaps 3,000 feet from their base." Not far off, "a waterfall dropped from a cliff below three jagged peaks into the valley, while further beyond, a rounded mountain stood . . . as though it had been sliced with a knife as one would slice a loaf of bread." There seems no room for doubt that he was describing Yosemite Valley.

Sixteen years earlier, an exploring party led by Capt. Joseph Reddeford Walker crossed the Sierra en route to the Pacific coast. They probably traversed part of today's National Park, judging by their descriptions of waterfalls and big trees.

In 1851, members of the Mariposa Battalion entered Yosemite Valley. This fighting force, organized by the Governor of California, was under the command of Maj. James D. Savage, a veteran of the Mexican War. Its purpose was to subdue the Sierra Indian tribe called "U-zu-ma-ti" (which means "grizzly bear") who lived in the mountains surrounding the valley, and whose chief, Tenaya, had failed to appear at a meeting held by the Indian Commissioners in March. While on this expedition, the members of the battalion named the valley for this tribe. "Yosemite" has undergone many changes of spelling from that first used in attempting to reduce the name of the Indian tribe to writing. Lovely Lake Tenaya, along whose shores the Tioga Road now passes en route to Tuolumne Meadows, was named for their chief.

First tourist parties. James Mason Hutchings, an English adventurer, and two Indian guides brought in the first tourist party, in 1855. On his return, Hutchings wrote the first published account of the wonders of the valley for the Mariposa Gazette. He had been accompanied by Thomas Ayres, Yosemite's first artist, whose sketches may be seen in the park museum. When the sketches appeared with Hutchings' writings in the California Magazine in July 1856, they attracted hardy visitors to Yosemite from all over the United States.

The Yosemite Grant. The extravagant praise of visitors convinced certain public-minded Californians that Yosemite should be protected from private exploitation and set aside for public use. They passed their ideas to Senator John Connes (for whom one of the High Sierra peaks beyond Tuolumne Meadows is named); as a result of his efforts, President Lincoln, on June 30, 1864, signed an act of Congress providing that there be granted to the State of California:

"The 'Cleft' or 'Gorge' in the Granite Peak of the Sierra Nevada Mountains known as the Yo-Semite Valley . . . as well as the Mariposa Grove of Big Trees . . . for public use, resort and recreation."

The new park's first guardian was Galen Clark, who in 1856 established Clark's Station, in an area known today as Wawona. He served from 1866–79. Hutchings, who meanwhile had become the father of the first white child to be born in the valley, was the park's next guardian (1880–84).

John Muir and the President. A gentle, Scottish-born naturalist John Muir, had much to do with the writing of Yosemite's future history. He came to what is now the park in 1868 as a sheepherder. Appalled at the destruction caused by grazing, he began to write about the need of conservation in wilderness areas, and in the late 1880's found a sympathetic publisher in Robert Underwood Johnson of Century Magazine. Between them, they influenced Congress and the American people to think in terms of National Parks.

Thus in 1890, again by act of Congress, Yosemite National Park was established *around* the original Yosemite Grant. This (National) Park around a (State) park was administered by the U. S. Army. The State continued its control of the original grant until 1906, when it re-ceded its lands to the Federal Government, and the dual administration ended. By 1914, civilian supervision was in effect.

When the National Park Service was founded on August 25, 1916, by act of Congress which was signed by President Woodrow Wilson, its first director was Stephen T. Mather, a Californian and a great friend of Yosemite.

HOW TO REACH THE PARK

By automobile. From the West: Arch Rock Entrance via State Route 140 (open all year). Crane Flat Entrance on Big Oak Flat Road via State Route 120 (closed in winter). From the South: South Entrance via State Route 41 (open all year). From the East: Tioga Pass Entrance via State Route 120 (closed in winter). State Routes 140 and 41 are all-year surfaced roads. The Big Oak Flat Road west of Crane Flat and the Tioga Road are oiled or paved, but are narrow, winding, and steep in places, not suitable for buses, trucks, or housetrailers. Big Oak Flat, Tioga, and Glacier Point Roads are closed in winter.

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By railroad and bus. The Southern Pacific and the Santa Fe railroads and the Pacific Greyhound and Continental Trailways buses operate to Merced and Fresno from the north and south.

The Yosemite Transportation System of the Yosemite Park and Curry Company carries passengers to Yosemite Valley from Fresno, and Lake Tahoe in summer; from Merced all year. (Write to the Yosemite Transportation System, Yosemite National Park, Calif., for timetables, or visit your local agent.)

By air. United Air Lines serves Merced and Fresno on Los Angeles-San Francisco flights; Trans World Airlines serves Fresno.

WHERE TO STAY IN THE PARK

Campgrounds. Free campgrounds are maintained in Yosemite Valley throughout the year; in the high country and other parts of the park only during the summer.

See *Tips for a Carefree Visit*, page 7, regarding time limits on camping; a complete list of campground locations may be obtained from the Superintendent, Yosemite National Park, Calif.

Although Yosemite Valley has the largest number of campgrounds, there are others at Glacier Point, Bridalveil Creek, Wawona, Tuolumne Meadows, White Wolf, and in many attractive areas throughout the park where you can pitch a tent in uncrowded comfort. No reservations can be made.

Housetrailers are accommodated in most campgrounds, but there are no electrical connections or other trailer utilities anywhere in the park. Some campsites have fireplace and table; all of them are located near water and restrooms. Showers are available near the campgrounds in Yosemite Valley and at Tuolumne Meadows.

Campers are asked to register at campground entrances; this makes it possible for park rangers to deliver emergency messages. Study the camping regulations on the bulletin boards and keep a good camp; leave it clean when you go away, and use receptacles for materials that will not burn.

Only *dead and down* wood may be gathered for fuel. No sequoia wood may be used.

On trail trips, camp only at the locations listed on your campfire permit—which you must have if you camp at any but an automobile campground. You may get a fire permit any hour of the day or night at the chief ranger's office, Yosemite Village, or during the day at outlying ranger stations.

Accommodations. All hotels, lodges, and cabins are operated by the Yosemite Park and Curry Company, Yosemite National Park, Calif. (offices also in Los Angeles and San Francisco), from which you can obtain information on rates. Reservations are usually necessary; deposits are required.



Camping in Yosemite Valley.

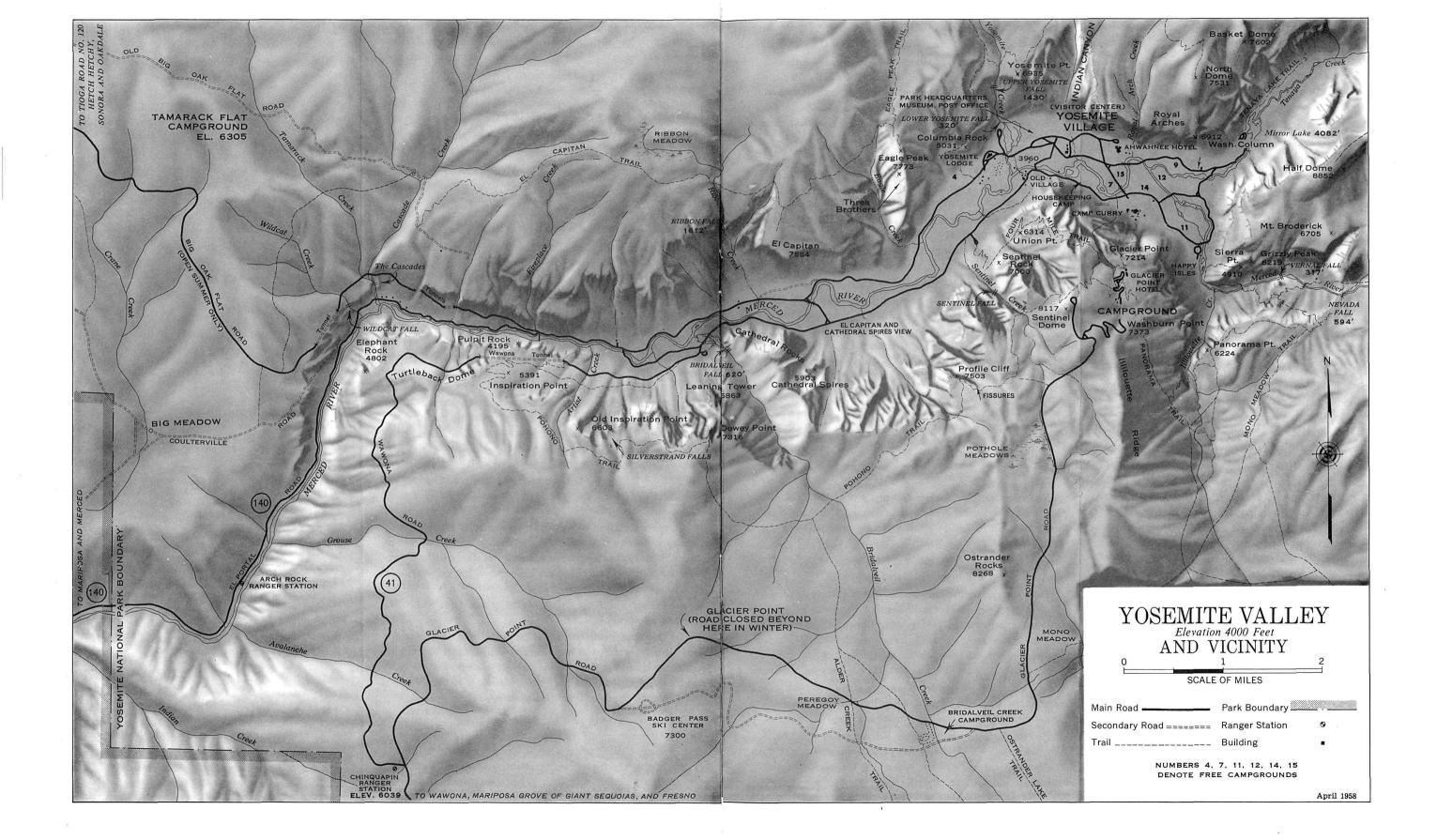
Ahwahnee Hotel, Yosemite Valley. Hotel rooms and cottages; dining room. American plan. (Closed briefly for renovation during late autumn.)

Yosemite Lodge, Yosemite Valley (all year). Hotel-type rooms; cabins with bath; cabins without bath, toilet, or running water; canvas cabins; housekeeping cabins. Cafeteria and grill. European plan.

Wawona Hotel Annex. Wawona. Limited number of hotel rooms with and without bath. European plan during autumn, winter, spring. Coffee shop nearby.

The following are open only during the summer:

Housekeeping Camp Headquarters, Yosemite Valley. Two sections of housekeeping tent cabins. By week, with or without linens, blankets, cooking utensils.



Camp Curry, Yosemite Valley. Bungalows with bath, cabins without bath; tents. Dining room, cafeteria, grill. Store. American and European plan.

Big Trees Lodge, Mariposa Grove. Rooms with or without bath. European plan. Cafeteria.

Wawona Hotel, Wawona. Rooms with or without bath. Dining room. American plan.

Glacier Point Hotel, Glacier Point. Rooms with or without bath. Cafeteria. European plan.

White Wolf Lodge, one mile off the Tioga Road. Cabins with bath. Tents. Dining room. European plan.

Tuolumne Meadows Lodge and High Sierra Camps. Canvas cabins without bath. Dormitory and private tents. Hot showers. Dining tent. European plan.

Degnan, Donohoe. Inc., Yosemite Valley. Meals and fountain service.

SERVICES

STORES: At Old Village in Yosemite Valley and Wawona, all year; also at Camp Curry, Camp 14, and Housekeeping Camp in Yosemite Valley, and at Tuolumne Meadows in summer.

EQUIPMENT RENTAL: Camping supplies, tents, cots, blankets, and cooking utensils may be rented in summer at House-keeping Camp headquarters; a deposit is required. In winter, skates and sleds may be rented at Camp Curry, and ski clothing and equipment at Badger Pass.

PACK AND SADDLE ANIMALS: In summer, experienced riders may rent saddle horses for riding without a guide on the floor of Yosemite Valley; guide service is required elsewhere. Guided saddle trips are scheduled daily both in and out of Yosemite Valley. Saddle animals are available also in summer at Mather, White Wolf Lodge, Tuolumne Meadows Lodge, and Wawona.

DINING ROOMS AND CAFETERIAS: Open all year in Yosemite Valley; in summer only in other parts of the park.

PHOTOGRAPHIC: Best's Studio in Yosemite Valley is open all year with an excellent selection of supplies and gifts, including enlargements of Yosemite scenes. The Yosemite Park and Curry Company has studios at the Ahwahnee Hotel and Yosemite Lodge, open all year; at Camp Curry, Yosemite Village, Glacier Point, Wawona, and Mariposa Grove during the summer. These studios will accept film for processing.

MAIL: The main post office is in Yosemite Village. Mail should be addressed to you there, in care of general delivery, or at the lodging unit in which you will be staying. There are all-year post offices at Wawona and Yosemite Lodge; summer post offices at Camp Curry and Tuolumne Meadows.

EMERGENCY MESSAGES will be delivered to you in campgrounds (if you have registered) and at regular lodging units.

TELEPHONE AND TELEGRAPH: Long distance calls may be made from public telephones throughout the park. Telegraph is available all year in Yosemite Valley. In summer, two offices are open, one in the Yosemite Village post office building, the other at Camp Curry. In winter, there is a telegraph office in Yosemite Lodge.

MEDICAL: A complete staff of doctors, nurses, and a dentist is maintained all year at the Lewis Memorial Hospital in Yosemite Village. There is a first-aid station at Badger Pass ski house during the winter.

CHURCH: The community chapel at Old Village in Yosemite Valley dates from 1879. Here both Protestant and Catholic services are held in winter. Weekly services for almost all denominations are held in summer; announcements are made at park campfire programs.

FOR THE CHILDREN: In summer the following are offered: Junior Ranger Program (see schedule at Yosemite Museum); daily burro picnic trips, 9 a. m. to 3 p. m. (Yosemite Park and Curry Co.); Kiddie Kamp and Grizzly Club at Camp Curry. Also, baby-sitting services at Camp Curry during the summer, Badger Pass in winter.

MISCELLANEOUS: Laundry (self-service in Yosemite Valley) and dry cleaning in each area.

Filling stations, towing service throughout the park; garage and repair service in Yosemite Valley.

ADMINISTRATION

Yosemite National Park is one of 29 National Parks in the National Park System. The System contains also many historic, prehistoric, and scientific areas, variously designated.

The Superintendent is in immediate charge of the park; his headquarters are in Yosemite Valley. Inquiries should be addressed to him at Yosemite National Park, Calif.

Park rangers are the uniformed protective force of the park. They are responsible for safeguarding its resources for your enjoyment and that of future generations; for visitor safety; and for enforcement of park rules and regulations. If you need information or direction, or are in difficulty of any kind, see a park ranger. You will find him always ready to be of help.

Park naturalists and ranger-naturalists, also uniformed, are the interpretive staff of the park. Their job is to help you to know and understand the natural and human history of Yosemite.

Park beadquarters in Yosemite Village are open 24 hours a day. Report fires, accidents, lost persons, injuries or any other emergencies there. Ask the operator at the nearest telephone to connect you with the rangers' office.

MISSION 66

Mission 66 is a program designed to be completed by 1966 which will assure the maximum protection of the scenic, scientific, wilderness, and historic resources of the National Park System in such ways and by such means as will make them available for the use and enjoyment of present and future generations.

VISITOR USE FEES

Automobile, housetrailer, and motorcycle permit fees are collected at entrance stations. When vehicles enter at times when entrance stations are unattended, it is necessary that the permit be obtained before leaving the park and be shown upon reentry. The fees applicable to the park are not listed herein because they are subject to change, but they may be obtained in advance of a visit by addressing a request to the superintendent.

All National Park fees are deposited as revenue in the U. S. Treasury; they offset, in part, appropriations made for operating and maintaining the National Park System.

Cover. Upper Yosemite Falls from across the valley.

Height of falls:

Upper Fall—1,430 feet.

Cascades-675 feet.

Lower Fall—320 feet.

Total drop-2,425 feet.



UNITED STATES
DEPARTMENT OF THE INTERIOR
Fred A. Seaton, Secretary

NATIONAL PARK SERVICE Conrad L. Wirth, *Director*

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