

CARLSBAD CAVERNS NATIONAL PARK

New Mexico



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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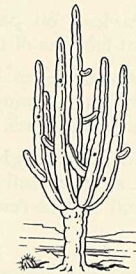
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NATIONAL PARK SERVICE

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CARLSBAD CAVERNS
NATIONAL PARK

NEW MEXICO



OPEN ALL YEAR

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LITERATURE AND MAPS

Government publications on Carlsbad Caverns and other national parks and a general circular of information on the national monuments under the jurisdiction of the Department of the Interior may be obtained as indicated below. Separate communications should be addressed to the officers mentioned.

DISTRIBUTED FREE BY THE NATIONAL PARK SERVICE

The following publications may be obtained on written application to the Director of the National Park Service, Washington, D.C.:

Glimpses of Our National Parks. 66 pages; well illustrated. Contains descriptions of the most important features of the principal national parks.

Glimpses of Our National Monuments. 74 pages; well illustrated. Contains descriptions of all the national monuments administered by the Department of the Interior except the newest ones.

Map of the National Park-to-Park Highway. 18 by 20 inches; shows principal highways connecting the western national parks; also location of national monuments, national forests, and Indian reservations.

SOLD BY SUPERINTENDENT OF DOCUMENTS

The following publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C., at the price indicated, postage prepaid. Remittances should be made by money order or in cash.

National Parks Portfolio. By Robert Sterling Yard. Cloth-bound, \$1. 274 pages; more than 300 splendid illustrations showing outstanding views of our country's finest scenery; a distinctive gift book.

CONTENTS

	PAGE
FORMATION OF THE CAVERNS	5
EXTENT OF THE CAVERNS AND OF PARK	8
DISCOVERY OF CAVERNS BY JIM WHITE, AND SUCCEEDING EXPLORATIONS	11
PREHISTORIC SANDAL FOUND	12
THE BAT SPECTACLE	12
THE DESERT PLANTS	15
WEATHER CONDITIONS	16
THE UNDERGROUND TRIP	17
FLOOD LIGHTING OF THE CAVERNS	20
ELEVATOR SERVICE	20
FEES	21
ADMINISTRATION	21
HOW TO REACH THE PARK	23
ACCOMMODATIONS	24
NEARBY PLACES OF INTEREST	26
REFERENCES	29
RULES AND REGULATIONS	30

*FREE INFORMATION
ABOUT OTHER NATIONAL PARKS*

Illustrated circulars of information for the following national parks may be obtained free of charge by writing to the Director of the National Park Service, Washington, D. C.:

ACADIA, MAINE
CRATER LAKE, OREGON
GLACIER, MONTANA
GRAND CANYON, ARIZONA
GRAND TETON, WYOMING
GREAT SMOKY MOUNTAINS—NORTH CAROLINA,
TENNESSEE
HAWAII—ISLANDS OF HAWAII AND MAUI
HOT SPRINGS, ARKANSAS
LASSEN VOLCANIC, CALIFORNIA
MESA VERDE, COLORADO
MOUNT MCKINLEY, ALASKA
MOUNT RAINIER, WASHINGTON
SEQUOIA AND GENERAL GRANT, CALIFORNIA
WIND CAVE, SOUTH DAKOTA
YELLOWSTONE—WYOMING, MONTANA, IDAHO
YOSEMITE, CALIFORNIA
ZION AND BRYCE CANYON, UTAH

CARLSBAD CAVERNS
NATIONAL PARK



AMONG the superb areas included in the national-park system of the United States is a series of connected caverns of unusual magnificence and extent known as the Carlsbad Caverns. They are located in southeastern New Mexico, in the rugged foothills of the Guadalupe Mountains. The region is picturesque semidesert country, and its unusual cactus vegetation is as strange and interesting to many visitors as are the caverns themselves.

Following a six months' exploratory expedition by the National Geographic Society, which proved the caverns to be the largest yet explored anywhere in the world, the Federal Government, by proclamation of President Coolidge, on October 25, 1923, established the Carlsbad Cave National Monument. Later, by act of Congress approved May 14, 1930, the area became the Carlsbad Caverns National Park.

FORMATION OF THE CAVERNS

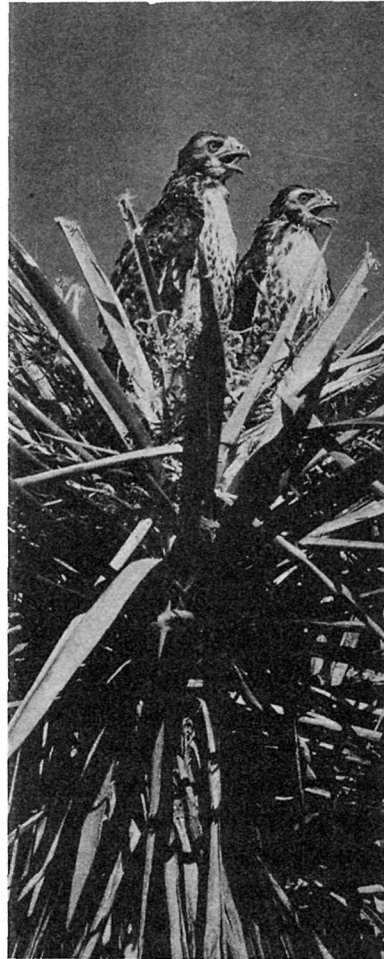
Carlsbad Caverns, like most caves, is a series of openings in a massive limestone which were made by percolating ground water. The Carlsbad limestone in which these caverns were formed was laid down originally in a sea of muddy water. This limestone deposition took place toward the close of the Permian period some 200 million years ago.

The region appears to have remained as land until early in the Cretaceous period, when, about 120 million years ago, it was again submerged. The next emergence, which appears to have been the last, occurred at or near the close of the Cretaceous period, and took place about 55 or 60 million years ago. The beginning of Carlsbad Caverns probably dates from this time.

A limestone which has been subjected to several such periods of movement or warping and which is finally elevated above sea level is an ideal medium for the circulation of ground water.

Once water enters a limestone it begins its incessant process of removal by solution. First, a water-soaked limestone, then drop by drop water moves from crevice to cavity until a series of tortuous openings are developed. Some may be small, some large; they extend in all directions and all are connected. More water enters with each rain, and these cavities continue to enlarge by solution, sometimes at a rapid rate and at other times slowly, thus forming caves and passageways. Long, continuous passageways oftentimes result when ground water is diverted along the contact of an impervious layer, or along a crevice or joint plane. Ultimately the water flowing through these passageways leaves the limestone in the form of seepages or springs.

Cave rooms may be formed or enlarged by solution of embedded salt or gypsum, which oftentimes is accompanied by partial caving in of the walls. Such caving extends sometimes to the surface above. If this process were to continue indefinitely, all the limestone would ultimately be removed, but Nature generally corrects or compensates for any such damaging condition. Eventually the amount of water entering most caves is checked either by its diversion into a different route or by clogging the pores of the surrounding limestone. When this stage is reached, evaporation becomes an important factor and deposition replaces solution and removal.



Young Hawks in Nest on Yucca Plant

During this second period of development Nature converts these gray cavities into a fairyland of divine conception. In the Carlsbad Caverns there are myriads of beautifully sculptured effects hanging from the ceiling. Some of these are inverted spires variously ornamented and known as stalactites; some are small delicate growths resembling plant structures. Should the amount of water be so great that it enters any opening faster than it can be evaporated, part of it falls to the floor and gradually

builds up stalagmites and other masses of limestone which frequently assume grotesque shapes. In some cases the stalagmites and stalactites join, thus forming huge columns.

Less frequently irregular spiral forms develop, which are known as helectites. Many of these formations are beautifully colored, generally shades of tan, but sometimes rose, green, or purple. This coloring is due to the presence of iron and other mineral matter in the limestone.

For those who are interested in this fascinating subject it may be said that these ornate forms are due to the deposition of limestone which has been carried in solution by ground water and which crystallizes upon the walls of the cave as the water evaporates or when dissolved carbonic-acid gas, which it may contain, escapes. Even after the pores in the limestone become partially clogged and the circulation of ground water is sluggish, a small amount of water,



Desert Flora

CARLSBAD CAVERNS NATIONAL PARK

saturated with lime, is gradually seeping through. As this water reaches the surface of the cave or cavity it evaporates and deposits its tiny load of lime. A small opening is to be found in the center of each stalactite through which the water passes. This constant addition of small increments of lime to the surface by evaporating water is the method by which cave formations grow.

In the lower levels of Carlsbad Caverns are to be found many beautiful transparent plantlike growths which are formed by the deposition of gypsum instead of calcite or lime.

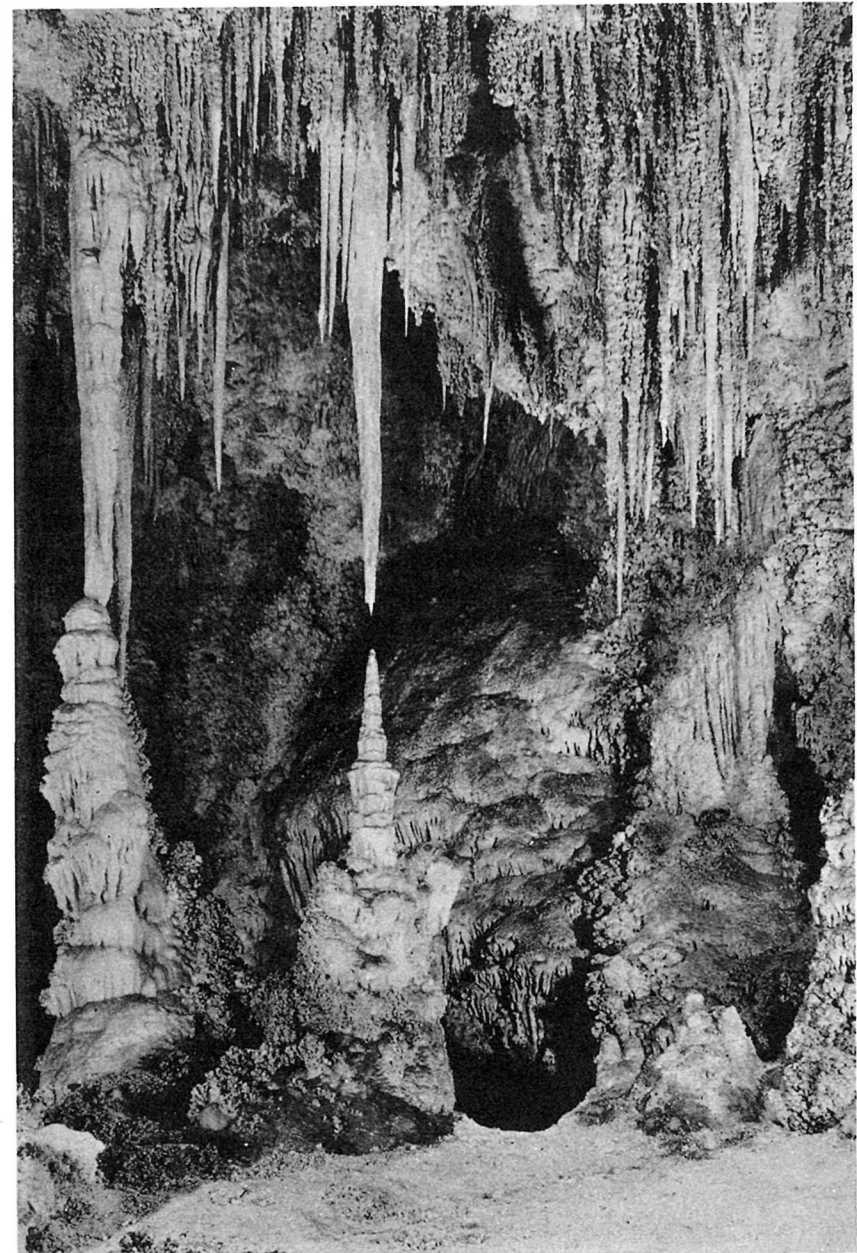
The brilliance, or translucent appearance, of the formations in a cave is due to the fact that they are saturated with water. If, for any reason, the seepage of water into the cave is stopped, its appearance gradually becomes dull and the surface slowly assumes a powdered appearance. Such a dry cave is spoken of, in cave parlance, as being dead.

The immensity of the large rooms, the beauty of form, and the impenetrable stillness leave an indelible impression upon those who venture into this fairyland. The beauty, form, and color are so impressive that a consideration of the method by which the caverns develop appears inadequate to explain the events that have taken place.

EXTENT OF THE CAVERNS AND OF PARK

Although a national reservation for nearly 10 years and the subject of intensive explorations, the size of the Carlsbad Caverns is not yet known. Already 32 miles of passages and chambers have been explored, and each year further mileage is conquered. How far the caverns extend under the Guadalupe Mountains no one knows.

At the present time the cavern has three main levels, and there may be others not yet discovered. The first is at the 750-foot level, to which visitors are conducted. Below it is another vast subterranean apartment at 900 feet, and below that still another at 1,320 feet. None of these levels has been completely explored, nor is it the desire of the National Park Service to



Typical Formation in Big Room of Carlsbad Caverns

CARLSBAD CAVERNS NATIONAL PARK

make further explorations until the present known areas are more fully developed.

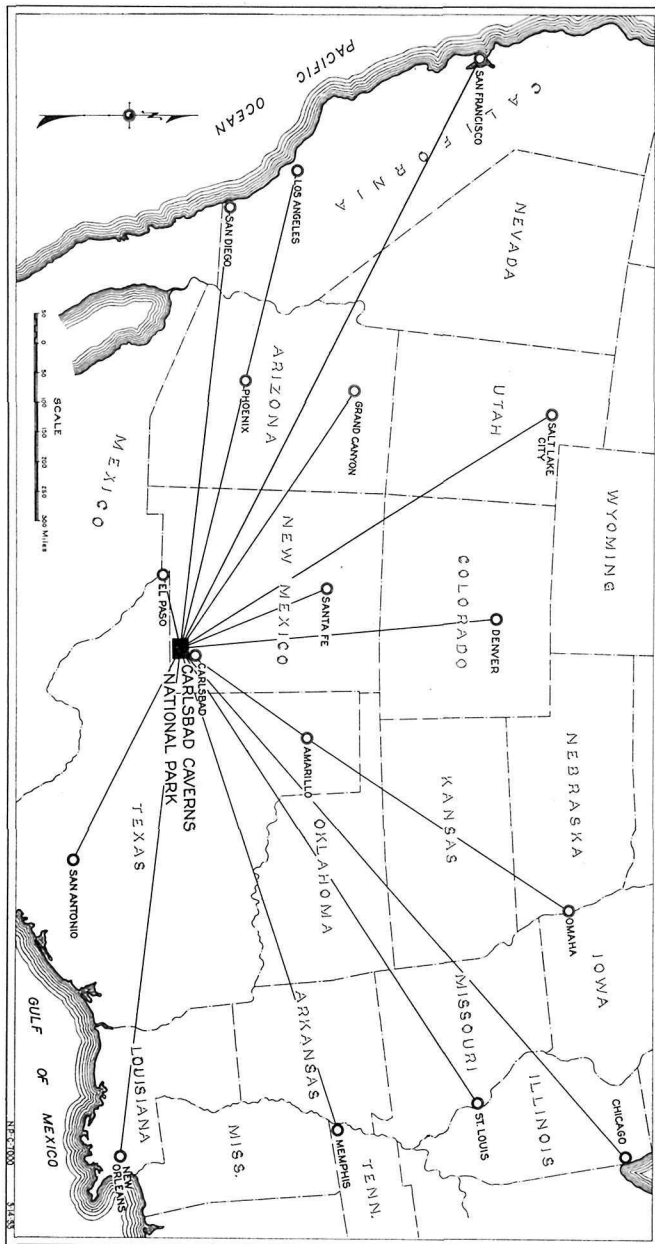
Although the underground caverns are so extensive, the surface area of Carlsbad Caverns National Park was only a little more than 700 acres until February 23, 1933, when President Hoover signed a proclamation increasing its size to 9,240 acres. Authority for this extension was granted by Congress in 1930, when it authorized the park's establishment.

Within this enlargement are many small caves which, while not so rich in formations as the main caverns, are of archeological interest in that several of them are the burial places of prehistoric inhabitants of the region. Other evidences of prehistoric occupancy are the circular rock mesal or cooking pits and the potholes or grinding bowls found near the entrance to the caverns. Just at the entrance to Carlsbad Caverns is an excellent example of a mesal pit. The early Indians baked not only mesal and cactus but sometimes meats in these pits.

Early pioneer trails passed near the caverns' entrance. The Spanish conquistadors are believed to have come into the Guadalupe Mountains at Rattlesnake Springs, near the caverns, and the historic old Butterfield express trail (the first express trail across the West) crossed the route of the Spaniards at this point. Over the Butterfield Trail the Forty-niners freighted their gold from California to St. Louis, and today wagon irons, relics of old wagon trains that met with disaster at the hands of maurauding bands, are sometimes unearthed.

DISCOVERY OF CAVERNS BY JIM WHITE AND SUCCEEDING EXPLORATIONS

The first white man to explore the caverns was Jim White, a cowboy. This was in 1901. Seeing a dark, moving column issuing from the region, he investigated and found a natural opening in the earth which led down to the caverns. The dark, smokelike column proved to be alive, a moving stream of bats from down in the darkness of the caves.



With a young Mexican boy as his only companion, Jim White made extensive explorations of the caverns, insuring success in his return by leaving behind him a trail of smudge marks and strings. Many long stretches of string still remain in the less-visited portions of the caverns today, a monument to the intrepid courage of the young cowboy whose love of adventure made him the pioneer explorer of the world's greatest caverns.

After discovering Carlsbad Caverns, Jim White never missed an opportunity to take visitors into his find and share its beauties with them. Their reports of the size and magnificence of the underground chambers finally resulted in examination of the caverns by Robert Holly, of the Government Land Office, and Dr. Willis T. Lee, of the Geological Survey, both of the Department of the Interior. These men were greatly impressed with the magnificence of the caverns. Shortly afterward Dr. Lee led the National Geographic Society expedition into them. His reports, published in the National Geographic Magazine of January 1924 and September 1925, gave the caverns national publicity.

PREHISTORIC SANDAL FOUND

Although Jim White was probably the first white man to enter the Carlsbad Caverns, he was not the first human being to have this distinction. Recent trail construction uncovered a sandal a short distance inside the entrance which has been identified as the handiwork of the Basket Makers who inhabited the region approximately 4,000 years ago.

THE BAT SPECTACLE

The bat spectacle which first claimed the attention of Jim White is now one of the great attractions of the Carlsbad Caverns National Park.

Each evening at dusk, except during the winter period of hibernation, millions of bats come forth from a cavern 150 feet below the surface, flying in a spiral through the great entrance

arch, and streaming off over the rim in a southerly direction, later to separate into flocks which disappear in the distance for a night's foraging. Beginning about sunset, the flight outward lasts for about three hours. The bats return before the following dawn.

It has been estimated that 3,000,000 bats during one night's foray consume a little over 11½ tons of night-flying insects, such as various kinds of moths, beetles, flies, and mosquitoes.

During the day the bats hang by their hind legs, heads downward, in great clusters high on the walls and ceilings of their particular portion of the cavern. From October until March they hibernate, hanging in this position and seeming almost lifeless.

There are five kinds of bats in the cavern, but by far the greater number are Mexican free-tailed bats (*Tadarida mexicana*). Their common name of free-tailed bat is descriptive of the tail, which projects about 1 inch beyond the skin that stretches between the hind legs.

During the latter part of June or early in July the young, one or two in number, are born. The newly born bat instinctively clings to the under side of the mother, and is carried about in this position even when she is flying in search of insects.

The portion of the cavern occupied by the bats is a long corridor extending a quarter of a mile eastward from the main entrance, and is not open to visitors. The presence of such large numbers of bats was responsible for the accumulation of great deposits of guano. Between 1901 and 1921, before the cavern was in Government ownership, about 100,000 tons of guano were taken out by a fertilizer company and sold to citrus growers. It is estimated that this was accumulated over a period of from 1,500 to 1,600 years.

In some portions of the cavern not now inhabited by bats there are guano stains, showing that formerly bats occupied these portions of it. In the Papoose Chamber, many years ago, a bat died while clinging near the top of a stalagmite, and the growth of the formation sealed the little mammal in a stony tomb, where it may be seen today.

A talk on the bats by a ranger-naturalist is given each evening at the cavern entrance just before the flight begins.

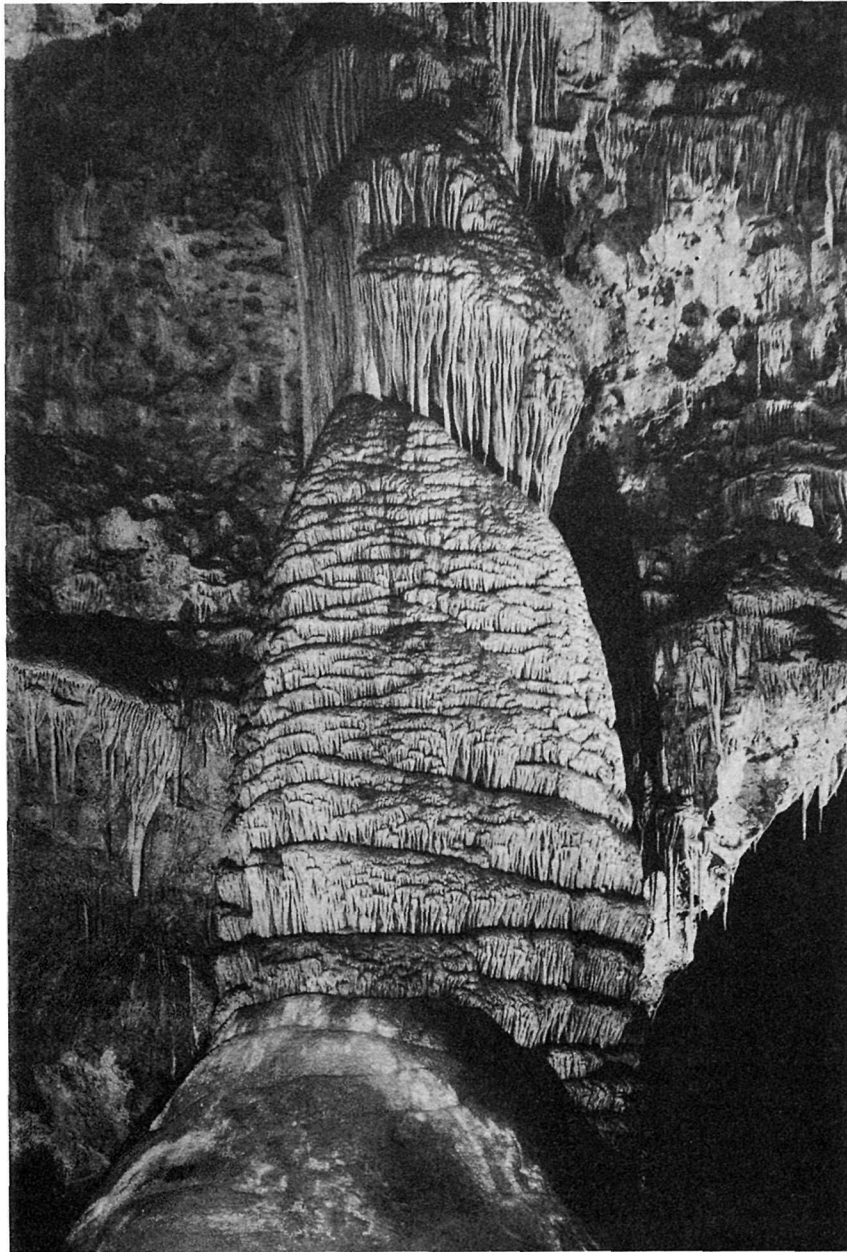
THE DESERT PLANTS

The region about the Carlsbad Caverns National Park contains many interesting desert plants. With an annual rainfall of only 10 inches, the little water which does fall runs off quickly, because the limestone outcrops at the surface and there is little soil to retain the water. The many peculiar forms of plants show adaptations resulting from the necessity for the retention of water, the lessening of evaporation, and the protection of the plant from being eaten. For instance, the thickened joints of the pricklypear cactus, the spherical or cylindrical forms of other cactus varieties, and the thickened leaves of the purslanes enable all these plants to store water whenever the roots have the opportunity to absorb it. Most of the cactuses and the allthorn have lost their leaves altogether while the ocotillo sheds its small leaves during the driest part of the year, thus reducing the surface from which evaporation may take place. As a means of reducing evaporation, many of the plants of the region, like the various kinds of catclaws and blue-thorn, have developed very small leaves. In other cases the leaves may have a waxy surface, as in the goat bean, or varnished surfaces, as in the creosote bush, or a hairy covering, as in the sages. Plants such as the cactuses, allthorn, blue-thorn, catclaws, ocotillo, and algireta are protected by their spines or thorns from being eaten, while the creosote bush and the rabbit brush have a distasteful flavor.

The cavern visitor who comes in April or May may be fortunate enough to see many plants in full bloom, plants which flower for only a short time, go to seed, and then for months give no evidence of their existence.

The following are some of the very conspicuous plants which may be seen in a few minutes' walk from the cavern entrance. The cactus garden near the ticket office contains all of the cactuses, as well as a few of the other plants of the region:

Juniper, cedar, *Juniperus monosperma*; popotillo, jointfir, Mormon tea, *Ephedra torreyana*; Spanish dagger, la palma, *Yucca macrocarpa*; soapweed, palmilla, *Yucca elata*; sotol, *Dasyllirion*



Rock of Ages

wheeleri; beargrass, *Nolina microcarpa*; lechuguilla, little century-plant, little mescal, *Agave lechuguilla*; mescal, centuryplant, *Agave parryi*; black walnut, *Juglans rupestris*; hackberry, *Celtis reticulata*; mulberry, *Morus microphylla*; catclaws, *Acacia greggii*, *Mimosa biuncifers*; mesquite, *Prosopis glandulosa*; goat beans, *Broussonetia secundiflora*, *Rhoeidium microphylla*; soapberry, *Sapindus drummondii*; New Mexican buckeye, *Ungnadia speciosa*; bluethorn, *Zizyphus lycioides*; candle flame, devils-walkingstick, ocotillo, *Fouquieria splendens*; desertwillow, *Chilopsis linearis*; allthorn, *Koeberlinia spinosa*; prickly-pear, *Opuntia engelmannii*, *Opuntia phaeacantha*; cane cactus, *Opuntia imbricata*; tasajello, *Opuntia leptocaulis*; brown-flowered pataya, *Echinocereus chloranthus*; yellow-flowered pataya, *Echinocereus dasyacanthus*; devils-pincushion or strawberry cactus, *Echinocereus stramineus*; claret cup, *Echinocereus triglochidatus*; melon cactus, *Echinocactus horizonthalonius*, *Neomammillaria hemispherica*, *Neomammillaria meicantha*; devils head, manco caballo, horse crippler of the Rio Grande, *Homalocephalus texensis*; turks head or fish-hook cactus, *Ferocactus uncinatus*; button cactus, *Epithelantha micromeris*, *Corypantha macromeris*, *Escobara sneedii*.

WEATHER CONDITIONS

Carlsbad Caverns National Park is open throughout the year. Although the cavern temperature remains stationary at 56°,

the surface temperature runs the gamut from nearly zero weather in winter to over 100° in summer. Therefore, clothes of ordinary weight, plus a light sweater or other wrap, are needed for the trip through the caverns at all times of the year.



Entrance to Carlsbad Caverns

While on the surface, clothes should follow the season. No special clothes are needed for the cavern trip, since trails and stairways are followed the entire distance. Low-heeled shoes, however, are advisable.

THE UNDERGROUND TRIP

At the present time 7 miles of underground corridors and great chambers in the Carlsbad Caverns National Park are open to visitors. The entrance is through the great natural arch from which Jim White first saw the bats emerge. This arch is 90 feet wide and 40 feet high in its greatest dimensions. Leading to the entrance is an excellent trail, its many graceful curves insuring an easy grade. Until recently a series of wooden stairs, with over 700 steps, led down to the main cavern. Now the greater portion of these steps has been replaced by trails similar to those leading to the entrance arch, thus both simplifying the descent and adding to the appearance of the cavern entrance. The main corridor of the cave, just inside the entrance, is immense, but, apart from its great size, has nothing of particular importance to offer when compared with the beauties of the chambers beyond.

The trail through the main corridor extends for almost a mile, and leads to the Green Lake Room, which derives its name from a small green pool alongside the trail.

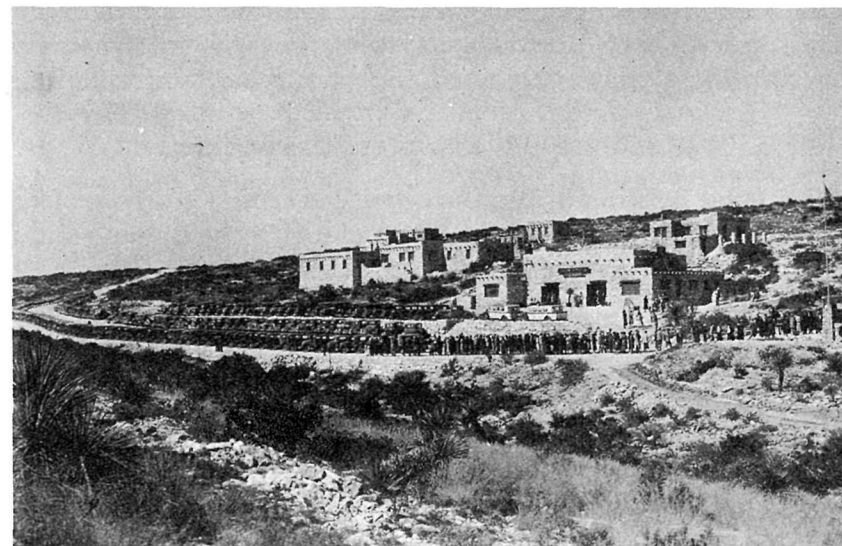
The trail then passes through a short artificial tunnel to the King's Palace, thought by many to be the most beautiful chamber in this or any other series of caverns. It is almost circular in form and is separated from the adjoining chambers by curtains and partitions of gleaming onyx.

A natural "keyhole" leads from the King's Palace to the Queen's Chamber, which is particularly famous for its elephant ears or draperies, some hanging straight, others draped or folded back. Some of these are so delicate and translucent that a light placed behind them brings out faint tints of pink and tea rose. In this chamber the helectite formation is unusually interesting, the small sticklike formations interlacing in an effect resembling an impenetrable thicket of thorns.

In natural sequence comes the Papoose's Chamber, a beautiful little room opened to the public on July 3, 1932, which leads back to the King's Palace, whence the trail leads over a series of winding terraces to the lunch room, at the beginning of the Big Room. The lunch room is unique in cave developments. Here, over 750 feet below the surface, the Cavern Supply Co. serves lunch at a nominal cost.

Water has been piped from the surface and is available in sanitary drinking fountains, tables and benches have been built, and comfort stations installed nearby. A stop of about half an hour is made here each day for lunch.

Leaving the lunch room, the visitor enters the Big Room itself, the most impressive of the many chambers of the caverns. It is nearly 4,000 feet long and 625 feet wide, and at one place the ceiling arches 300 feet above. In this room the formations are massive as well as magnificent, exceeding in size and beauty those of any known cave. The stalactites vary from almost needlelike proportions to huge chandeliers; the stalagmites are equally varied, although of different contours. Here is found the 60,000,000-year-old Giant Dome,



Tourists Opposite Caverns Entrance

already mentioned, which bears a striking resemblance to the Leaning Tower of Pisa. Another great formation, slightly younger geologically, is the majestic Rock of Ages, where each day the visitors stop to hear a brief talk on the park, generally followed by the singing of Rock of Ages. The scene is one of great impressiveness. Fountain basins lined with masses of crystalline onyx marble resembling lily pads, tall, graceful stalagmites resembling the totem poles of the Alaskan Indians, and masses reminding one of snow-banked forests add to the beauty of the scene.

From the Big Room the return trip to the surface is made in about an hour and a half. Throughout the tour one finds fresh changing air, with a temperature, winter and summer, that seldom varies more than 2° from 56° Fahrenheit.

Properly to cover the 7 miles of the caverns now open to the public requires about 5 hours, with a half-hour luncheon stop. Before the cave trip starts at 10:30 a.m., a brief talk is made by a Government official at the cavern entrance. Park rangers conduct the party throughout the entire trip, there

being about one ranger for every 20 people. Visitors are urged to ask questions of the rangers, who are well informed on cavern geology and are glad to impart authentic information.

FLOOD LIGHTING OF THE CAVERNS

The flood lighting of the Carlsbad Caverns is a masterpiece of electrical illumination. At no time during the underground trip does the visitor see a switch, a cable, or a flood light; all have been artfully concealed behind rock shields, sending their beams to the ceilings and to the formations, from where they are reflected back to the trails.

The 7 miles of trails open to visitors are divided into 24 lighting sections, controlled by a switch at each end. As a party enters a certain section the front guide pushes a button and the lights flash on for 1,000 feet ahead. Then, after the party has passed through, the back guide pushes another button and the lights of this section fade away as the front guide flashes on the lights of the 1,000-foot section ahead. During the tour of the caverns only two or three adjacent sections are illuminated at one time. Despite the fact that the lighting system is divided into sections which generally are turned on separately, the power house on the surface generates sufficient current to light all the circuits at one time.

The cavern lights range from 50 candlepower to 2,000 candlepower, depending upon the type and degree of illumination required for the particular feature involved.

The lighting system was installed by electricians of the National Park Service, ably assisted by specialists from the Westinghouse Co., whose valuable aid was contributed to the Government in the interests of the visiting public.

ELEVATOR SERVICE

In addition to the system of broad, easy trails, the Government has provided elevator service between the surface and the 750-foot level by means of two high-speed passenger elevators, with a combined capacity of 500 persons an hour.

These are the second longest single-lift elevators in the United States, being surpassed only by those in the Empire State Building in New York City. The speed of the elevator is 700 feet per minute.

The elevators were designed with the same features for safety and comfort of passengers as are embodied in the latest installations in modern office buildings. When once in motion the elevator will automatically stop at top or bottom. Telephonic communication from the cage at all elevations may be made with the surface. The cage may be controlled from the building at the surface as well as by the operator in the cage.

The use of the elevator by able-bodied persons is discouraged as much as possible, as visitors who make the entire 7-mile trip on foot gain far more than those who use the elevators. Many visitors make the trip down on foot, and then return to the surface by the elevator, and this is recommended for those lacking sufficient strength to walk the entire distance.

Col. Thomas Burns, a centenarian, of Burkett, Tex., made the cavern trip in July 1932, just one week after celebrating his one-hundredth birthday. Colonel Burns walked the entire tour of the caverns unassisted, using the elevator only on the up trip.

F E E S

A fee of \$1.50 for guide service is charged each adult entering the caverns. No charge is made for children 16 years of age or under when accompanied by adults taking responsibility for their safety and good conduct while in the caverns.

A charge of 50 cents in each direction is made for each adult using the elevator. Half fare is charged for children between the ages of 5 and 12 years. No charge is made for children 5 years of age or under when accompanied by adults assuming responsibility for their safety.

ADMINISTRATION

The representative of the National Park Service in immediate charge of the Carlsbad Caverns National Park is Thomas Boles,

CARLSBAD CAVERNS NATIONAL PARK

superintendent. He maintains headquarters in the town of Carlsbad, N.Mex., 25 miles north of the caverns, and the park post office. He is assisted in protecting the park by a force of rangers, headed by a chief ranger, who lives near the caverns entrance in a group of buildings especially designed in Pueblo Indian style.

The National Park Service maintains an information bureau at the superintendent's office in Carlsbad. Information may also be obtained at any of the hotels, camps, garages, or transportation offices in Carlsbad.

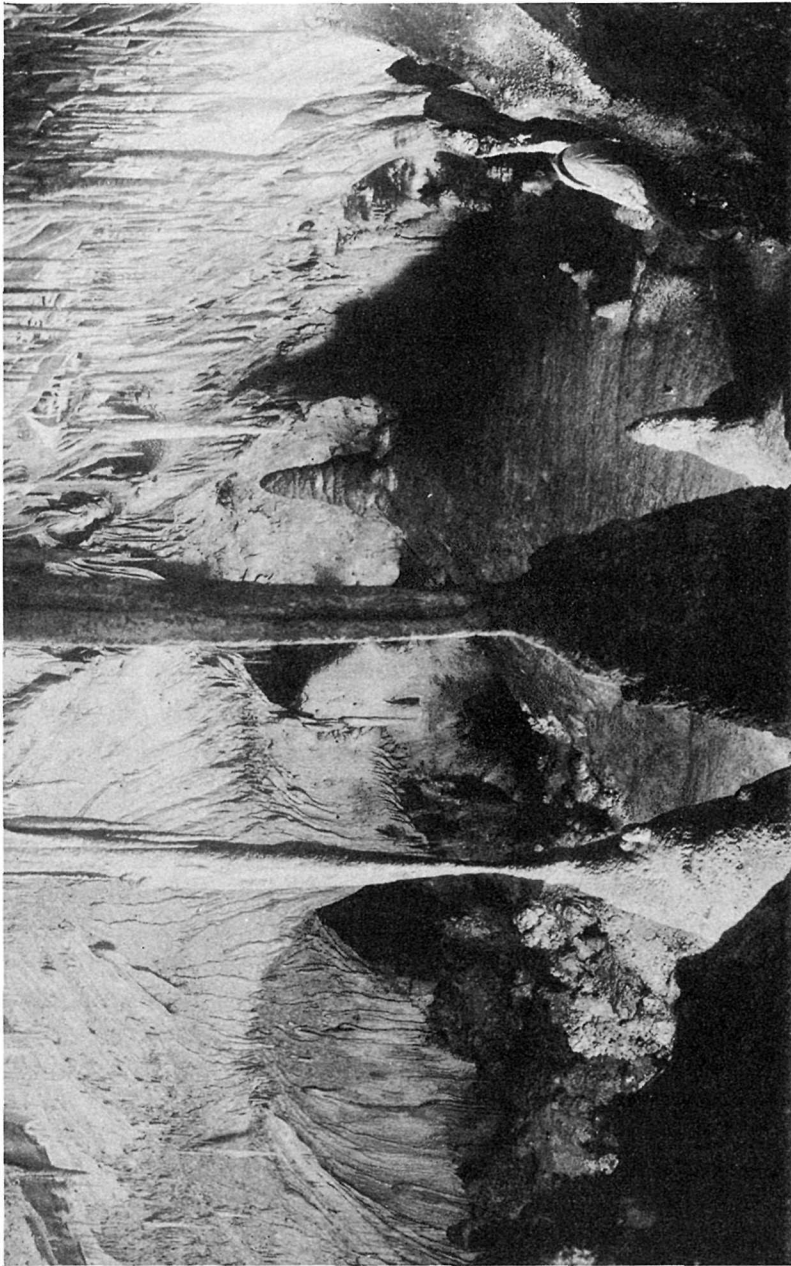
HOW TO REACH THE PARK

BY RAIL, AIRPLANE, AND AUTO STAGE

By a combination of rail and bus, Carlsbad Caverns National Park is served by the Santa Fe System on the north and the Missouri Pacific-Texas and Pacific Lines and the Southern Pacific Lines on the south. The town of Carlsbad is the rail terminus via the Santa Fe, the local line branching off at Clovis, N.Mex. There is a regular bus service from Carlsbad to the caverns and return, the charge for this service being \$3 for the round trip during the summer season. During the remainder of the year the \$3 rate applies only when three or more persons make the trip. It is \$4 each for two persons and \$8 for only one. Visitors coming from the railroads to the South may obtain bus service at El Paso or Pecos, Tex. In addition to being the main entrance to the park on the Southern Pacific Transcontinental Lines, El Paso is also the airplane gateway.

BY AUTOMOBILE

Excellent motor roads lead to Carlsbad Caverns National Park from all directions. One of the most recently designated national highways is U S 62, which extends from Niagara Falls, N.Y., to El Paso, Tex., and probably intersects more transcontinental highways than any other road in the country. Among these are United States Highways Nos. 66 and 70. State Road



The Dome Room

CARLSBAD CAVERNS NATIONAL PARK

No. 2, which it also intersects, connects the park with Santa Fe and Mesa Verde National Park and also, through its intersection with United States Highways Nos. 380 and 60, with the Grand Canyon National Park and the Petrified Forest National Monument.

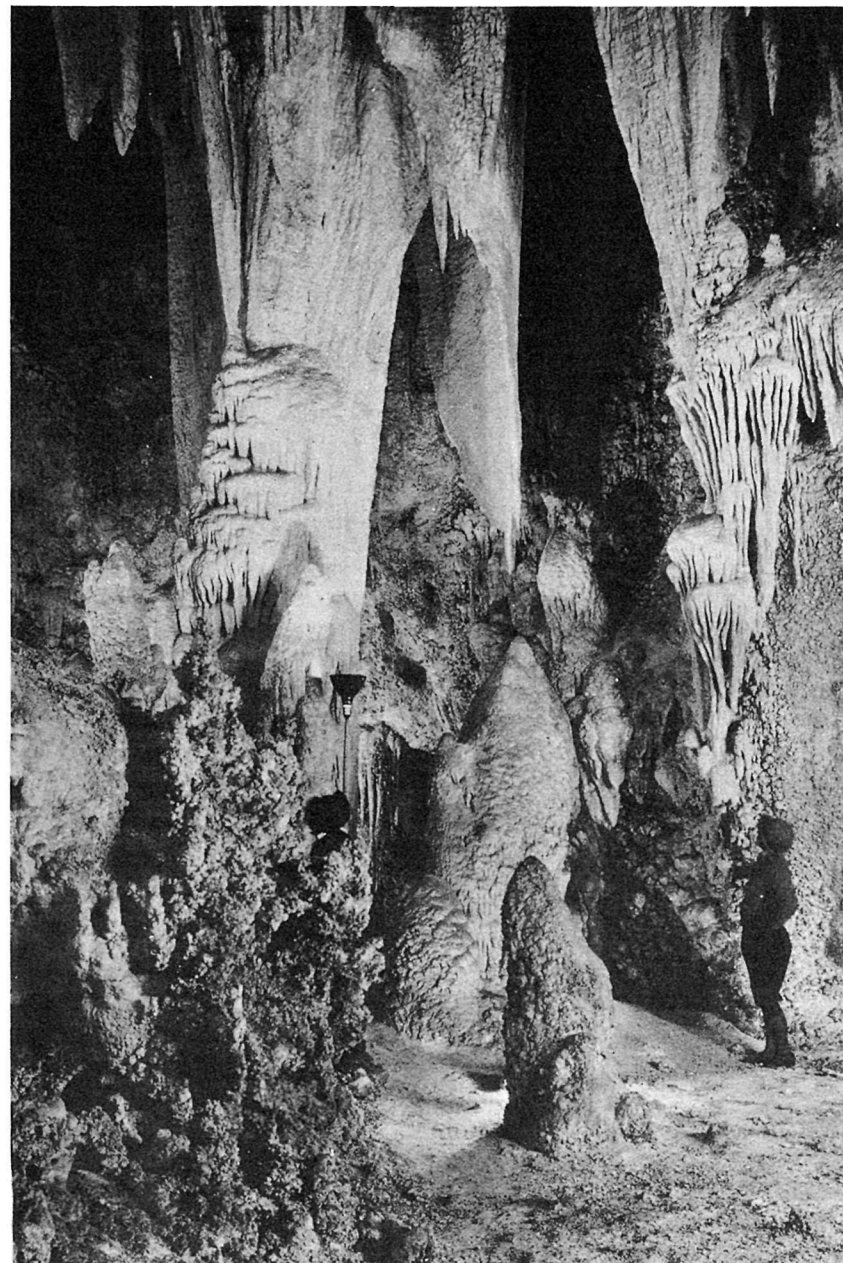
Motorists on United States Highway No. 80, known as "The Broadway of America", or the "Bankhead Highway"; on U S 290, the Old Spanish Trail; and U S 90, the Mexican Border Highway, may reach the park via Pecos, Tex., and Carlsbad.

Coming in from the southwest over No. 62 to El Paso, motorists continue along this road to Carlsbad Caverns, a distance of 160 miles through country of especial interest. Leaving the eastern limits of El Paso, the highway crosses the desert floor for 25 miles to the Hueco Mountains. Through these mountains it goes with long, sweeping curves and easy grades to a vast plain of semiarid grazing land. Not far to the north of this highway the old Butterfield stage coach route was laid out in the fifties.

About 90 miles east of El Paso the highway crosses the salt lake beds, which were the cause of the Salt War of San Elizario in 1877. Slightly more than 100 miles out of El Paso the highway joins with the Van Horn-Carlsbad Highway and soon enters the Guadalupe Mountains, winding up through the canyons which the Butterfield stage coaches once traversed, and swinging around Guadalupe Point and El Capitan, the highest points in Texas. At the entrance to Walnut Canyon, about 156 miles out of El Paso, is the Cavern Junction. Here motorists should keep to the left to reach the entrance to the Carlsbad Caverns National Park.

ACCOMMODATIONS

There are no overnight accommodations available in Carlsbad Caverns National Park, but modern hotels and tourist camps in nearby cities and towns along the approach highways offer various types of service at prices ranging from \$1 to \$2 for camps, and from \$1.50 to \$3 for hotels. The National Park Service exercises no jurisdiction over these accommodations.



Sheet Stalactites in Queen's Chamber

In the park itself, however, a store is maintained near the caverns entrance where refreshments, soft drinks, pictures, photographic supplies, cigarettes, candy, post cards, and souvenirs may be purchased. This is operated by the Cavern Supply Co., the only public utility operating under Government franchise and supervision. Rates and service at the store are approved by the Secretary of the Interior.

The Cavern Supply Co. also serves luncheon at the 750-foot level in the cavern for the convenience of visitors making the 6-hour trip. Orders for luncheon, at the moderate cost of 60 cents, are taken as the visitors start on the cave trip.

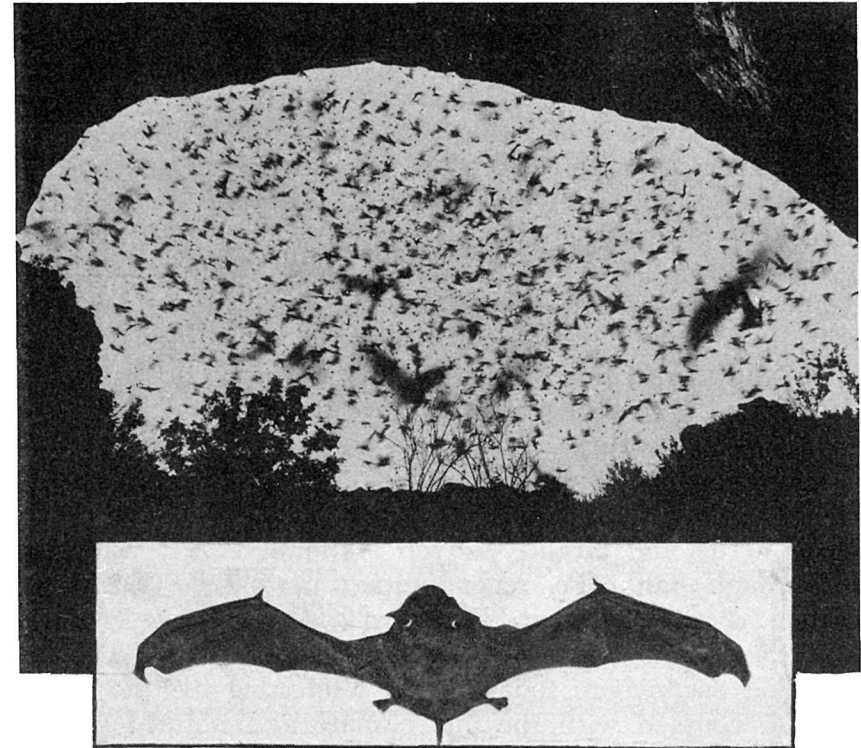
Another service furnished by the company is a day nursery near the caverns entrance, where babies and small children are cared for. A charge of \$1.50 a day for each child is made for this service. Although there is no limit placed on the ages of children going through the caverns, parents will derive much more enjoyment from the trip if not accompanied by very small children, especially those under 4 years of age.

NEARBY PLACES OF INTEREST

Carlsbad.—The town of Carlsbad, about 26 miles from the caverns, is in the heart of a Government irrigation district. It is an oasis in the sagebrush and cactus-covered desert. An interesting attraction is the municipal beach, and swimming, fishing, golf, and tennis are among the sports offered. The water at the municipal beach is freshened by mineral springs. The only actual potash mine in America is located near Carlsbad. Carlsbad has an interesting museum containing cavern exhibits and archeological relics of the region.

Artesia, also in an irrigated district, is about a 90-minute ride from Carlsbad Caverns on State Highway No. 2. Hotel and camp-ground accommodations are available, and the town and vicinity have much of interest to offer the traveler. Bountifully stocked by the nearby Federal fish hatchery, the waters of Lake McMillan and the Pecos River offer excellent fishing. Large- and small-mouth bass and perch, catfish, and

other warm-water fish are plentiful. The artesian wells and oil refineries attract much attention from visitors. Thirty miles east of Artesia is an area about 20 miles in length and 10 miles wide containing innumerable relics of a prehistoric people.



Bat Flight

So far, archeologists have been unsuccessful in attempts to identify this race; but pottery, basketry, implements, and other remnants of its civilization are to be found throughout the area.

Roswell, about 100 miles north of the caverns, offers golf, swimming, tennis, and good motion-picture theaters. Surrounding Roswell are fine irrigated farms, and there are many beautiful drives through this interesting region. The largest artesian well in the world, furnishing 13,000,000 gallons of water a day, is located just east of Roswell. A little farther

east are the Bottomless Lakes, surrounded by richly colored bluffs. The Lincoln National Forest, Billy the Kid Land, and the Mescalero Apache Indian Reservation are west of Roswell on United States Highway 70 and United States Highway 380. Hotels and camp grounds are available throughout this region. There are some 700 summer cabins in the Ruidoso Canyon alone.

El Paso (gateway to Old Mexico).—This thriving city, 160 miles southwest of Carlsbad Caverns, offers much of interest to the traveler. Fort Bliss, the largest cavalry post of the United States Army and home of the First Cavalry Division, is at the eastern edge of the city. Three old missions, Ysleta, Socorro, and San Elizario, may be visited in the Rio Grande Valley, a few miles below El Paso. These missions were built in the latter part of the seventeenth century. Just across the Rio Grande is Juarez, the largest Mexican city on the border. One of its principal attractions is Mission Nuestra Señora de Guadalupe, first permanent structure to be built in this valley by Spanish priests in 1659.

Santa Fe.—If you motor north from Carlsbad Caverns to Mesa Verde and Grand Canyon National Parks, you may go through Santa Fe, second oldest permanent European settlement in the United States and capital of New Mexico. The influence of the Spanish settlers and the native Indians is visible everywhere today. This interesting historic background, coupled with the fine climate and natural beauty of the region, has made Santa Fe a favorite resort with travelers. The exact date of its establishment has never been fixed, but much of the evidence available points to 1605. Many ancient buildings closely connected with its colorful past still stand. The Governor's Palace, believed to have been erected early in the seventeenth century, is now the home of the Historical Society of New Mexico, the School of American Archeology, and the New Mexico Museum of Archeology. This building was continuously occupied by Spanish and American governors until 1909. Gen. Lew Wallace lived in it from 1878 to 1881, and it was there that

he wrote the concluding chapters of Ben Hur. Just north of the city are the ruined earthworks of Fort Marcy, constructed by General Kearny when he occupied Santa Fe in 1846.

Remains of many communal dwellings, built by the prehistoric peoples who occupied this region long before the arrival of the Spaniards, are found throughout the Southwest, and many of them may be seen a few miles from Santa Fe. Just over the New Mexico State line, in the southwestern corner of Colorado, is Mesa Verde National Park, created by the Federal Government in 1906 to protect hundreds of the most notable prehistoric cliff dwellings in the United States.

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RULES AND REGULATIONS

(Approved Feb. 28, 1933, to continue in force and effect until otherwise directed by the Secretary of the Interior)

The following rules and regulations for the government of the Carlsbad Caverns National Park are hereby established and made public, pursuant to authority conferred by the acts of Congress approved June 8, 1906 (34 Stat. 225), and Aug. 25, 1916 (39 Stat. 535), as amended June 2, 1920 (41 Stat. 732):

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 the trees, flowers, vegetation, rocks, formations, mineral, animal, or bird, or other life is prohibited.

No person or persons shall be permitted to enter the caverns unless accompanied by National Park Service employees or guides. Competent guide service is provided for the public by the Government, for which a fee of \$1.50 shall be charged each person entering the caverns. No charges shall be made for children 16 years of age or under when accompanied by adults. An additional charge of 50 cents in each direction will be made for adults using the elevator and 25 cents for children between the ages of 5 and 12. Adults will be held responsible for the conduct of children whose names appear on their tickets.

Defacement by writing, carving of names, or otherwise of any of the walls or formations in the caverns or their destruction is prohibited under penalty of the law.

No canes, umbrellas, or sticks of any kind, nor firearms or any other explosive material will be permitted to be taken into the caverns. The tossing or throwing of rocks or other material inside the caverns is prohibited.

2. **Camping.**—No camp shall be made along roads except at localities designated by the superintendent or his representative.

Especial care shall be taken that no lighted match, cigar, or cigarette is dropped in any grass, twigs, leaves, or tree mold.

3. **Hunting.**—The park is a sanctuary for wild life of every sort, and hunting, killing, wounding, capturing, or frightening any bird or wild animal in the park, except dangerous animals when it is necessary to prevent them from destroying life or inflicting injury, is prohibited.

4. **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. Application for such permission should be addressed to the Director through the superintendent of the park. Permission to operate a standard-size moving-picture camera, such as is used for commercial purposes, must be secured from the superintendent of the park, and no flashlight shall be taken without special authority in writing from said superintendent.

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

6. **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.

7. **Mining Claims.**—The location of mining claims is prohibited within the park.

8. **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.

9. **Authorized Operators.**—All persons, firms, or corporations holding franchises or permits 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 employ a person whose presence in the park may be deemed by the superintendent subversive of good order and management of the park.

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

10. **Travel.**—Load and vehicle weight limitations shall be those prescribed from time to time by the Director of the National Park Service 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.

11. **Miscellaneous.**—(a) Expectoration into the waters of the park or their defilement in any other manner is prohibited.

(b) The drinking of intoxicating liquors in the park is prohibited, and intoxicated persons will be barred from the caverns and the park.

12. **Fines and Penalties.**—Persons who render themselves obnoxious by disorderly conduct or bad behavior or infraction of park regulations 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 or his authorized representative.

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 6 months, or both, and be adjudged to pay all costs of the proceedings.

13. **Lunches.**—Lunches must be eaten only in designated places; and all trash must be placed in nearby trash cans.

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 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.

DO YOU KNOW ALL THE NATIONAL PARKS

- Acadia, Maine.**—Combination of mountain and seacoast scenery. Established 1919; 18.74 square miles.
- Bryce Canyon, Utah.**—Canyons filled with exquisitely colored pinnacles. Established 1928; 55.06 square miles.
- Carlsbad Caverns, New Mexico.**—Beautifully decorated limestone caverns believed largest yet discovered. Established 1930; 14.45 square miles.
- Crater Lake, Oregon.**—Astonishingly beautiful lake in crater of extinct volcano. Established 1902; 250.52 square miles.
- General Grant, California.**—Celebrated General Grant Tree and grove of Big Trees. Established 1890; 3.96 square miles.
- Glacier, Montana.**—Unsurpassed alpine scenery; 250 lakes; 60 glaciers. Established 1910; 1,533.88 square miles.
- Grand Canyon, Arizona.**—World's greatest example of erosion. Established 1919; 1,009.08 square miles.
- Grand Teton, Wyoming.**—Most spectacular portion of Teton Mountains. Established 1929; 150 square miles.
- Great Smoky Mountains: North Carolina, Tennessee.**—Massive mountain uplift covered with magnificent forests. Gorgeous wild flowers. Established for protection 1930; 465.18 square miles.
- Hawaii: Islands of Hawaii and Maui.**—Volcanic areas of great interest, including Kilauea, famous for frequent spectacular outbursts. Established 1916; 245 square miles.
- Hot Springs, Arkansas.**—Forty-seven hot springs reserved by the Federal Government in 1832 to prevent exploitation of waters. Made national park in 1921; 1.48 square miles.
- Lassen Volcanic, California.**—Only recently active volcano in United States. Established 1916; 163.32 square miles.
- Mesa Verde, Colorado.**—Most notable cliff dwellings in United States. Established 1906; 80.21 square miles.
- Mount McKinley, Alaska.**—Highest mountain in North America. Established 1917; 3,030.46 square miles.
- Mount Rainier, Washington.**—Largest accessible single-peak glacier system. Third highest mountain in United States outside Alaska. Established 1899; 377.78 square miles.
- Platt, Oklahoma.**—Sulphur and other springs. Established 1902; 1.32 square miles.
- Rocky Mountain, Colorado.**—Peaks from 11,000 to 14,255 feet in heart of Rockies. Established 1915; 405.33 square miles.
- Sequoia, California.**—General Sherman, largest and oldest tree in the world; outstanding groves of Sequoia gigantea. Established 1890; 604 square miles.
- Wind Cave, South Dakota.**—Beautiful cavern of peculiar formations. No stalactites or stalagmites. Established 1903; 18.47 square miles.
- Yellowstone: Wyoming, Montana, Idaho.**—World's great geyser area, and an outstanding game preserve. Established 1872; 3,437.87 square miles.
- Yosemite, California.**—Valley of world-famous beauty; spectacular waterfalls; magnificent High Sierra country. Established 1890; 1,176.16 square miles.
- Zion, Utah.**—Beautiful Zion Canyon 1,500 to 2,500 feet deep. Spectacular coloring. Established 1919; 148.26 square miles.