

# MEMORIES OF CHILDHOOD: OUR WONDERFUL TRIP TO OLD MEXICO



OR "THE HAT 'N THE BAT"



WITH DADDY, GRANDMOTHER, JERRY AND NANCY

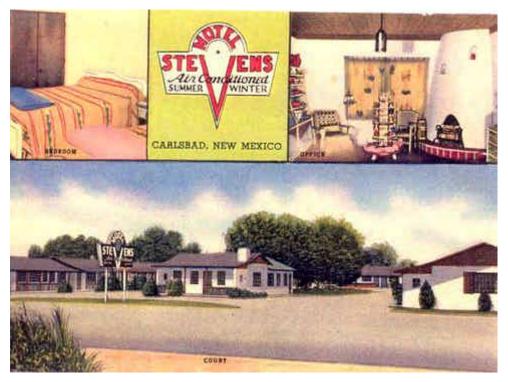
## BY NANCY K. GOOCH HULTGREN



#### PART III: Carlsbad Caverns National Park, New Mexico

The "main focus" of our five-day trip, in the early spring of 1952, was extended time to visit two locations—Carlsbad Caverns National Park, in the southeastern part of the State of New Mexico, and Ciudad Juarez, Mexico—across the International Border from El Paso, Texas, which lies in the far western tip of Texas.

A beautiful morning awaited as we rose from our beds in the small motel in the town of Carlsbad, New Mexico. Out in the parking lot, in front of our room, the Hudson was covered with a thick layer of dust, accumulated during our long drive through Colorado and New Mexico. No rain in sight to help wash the car off, but my dad pulled into a Texaco Gas Station in town to refuel, and have the attendant check the oil and clean the windshields and side windows for us. (While living in Denver, Colorado, my dad often frequented a favorite Texaco Station on Colorado Blvd., not far from our first house on Birch Street.) In a friendly tone, and looking at our license plates, which read "Colorful Colorado," the station attendant asked, "How far have you folks come? Headed for the Caverns I bet! Any time of year is a good time to go, ya' know! Doesn't matter what the temperature is on the outside today, cause deep in the Caverns the temperature is the same year round—56°."



Motel Stevens in Carlsbad, New Mexico. Curt Teich vintage linen postcard.

Leaving Carlsbad and the Pecos River Valley behind, my dad pointed the Hudson southwest out of town on US Hwy. 62/US Hwy. 180. Looking east, I could see the sun breaking through a distant smattering of fluffy clouds—throwing a sheet of golden light across the Chihuahuan Desert floor. The route we followed brought us along the edge of *what was* an ancient seabed, where fish once swam, and now cacti grow. Today the edge of the old sea basin is well marked by the uplift of the nearby ridgeline, or limestone reef, to our west that extends from near the city of Carlsbad, southwestward to Guadalupe Peak in west Texas.

Twenty miles down the road and we reached the tiny hamlet of **White's City**, New Mexico and the junction with NM Highway. 7. This was the National Park Service entrance road, leading into the eastern foothills of the **Guadalupe Mountains**. White's City offers fine facilities for tourists, conveniently located near the Caverns. We turned west on the entrance road, passing the **White's City Business Center** on the left—a stop for groceries, food service and souvenirs.

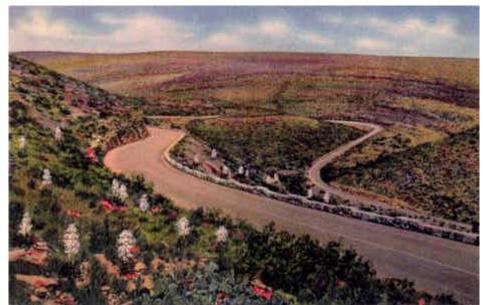


Just up the road (right side) was the attractive stained wood and stone sign with the words **Entering: Carlsbad Caverns National Park** that announced our arrival, alongside a US flag, at the park boundary. From here it was a seven-mile drive toward park headquarters, on the winding road up through **Walnut Canyon**, which carves deeply into the limestone reef—with several pull-offs for vistas, interpretative exhibits and nature trails. Songs of desert birds greeted us as we followed the road through rocky mesas, covered with Spanish-dagger (yucca), prickly pear cactus, soapweed, cane cactus and other species of desert flora—including cholla (a *walking stick* cactus), ocotillo, lechuguilla agave and century plants. Common shrubs along the way were mesquite, acacia, saltbush and creosote.

#### **Chihuahuan Desert Plants on the National Parkland**



Desert plants survive dry conditions by storing water in their leaves and stems. Rain is an added bounty that prompts the land to rejoice by bursting into blossom.



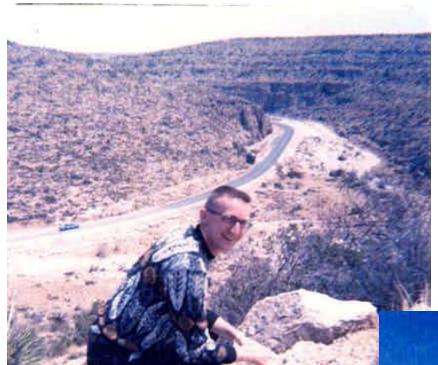
The drive up Walnut Canyon is a very pretty one-especially in the early morning hours, with the sun just beginning to peer over cliffsides. Here there are scattered clumps of desert black walnut trees from which the canyon got its name. These trees are found on the banks of the "usually dry" Walnut Creek. Rainfall in this country is scant—averaging 10" to 12" a year. When rain is abundant, Walnut Creek crosses and recrosses this road on its passage down the canyon. In areas of full sun along the road, we spotted the huge showy, snowycovered blossoms of several of the banana yucca.



Photos by Ron Hultgren (March 18, 2001): Walnut Canyon Highway is the scenic drive through Carlsbad Caverns National Park. We were exiting the park (near closing time), following our afternoon tour of the Big Room and the Ranger-led tour of the King's Palace in the Cavern—and savoring sunset, which was casting long shadows along canyon walls—when we spotted the huge bloom of a banana yucca next to the road. I'm shown (Nancy Gooch Hultgren) 49 years after my "first visit" to Carlsbad Caverns (March 1952), on this, my fourth visit, in March 2001.

On a high canyon curve, the magic of my mind projected forward through a time span of 12 years (to April 1964) and I saw a young couple standing near a small, red Volkswagen, with the woman taking a picture of her husband, by a viewpoint, looking back down Walnut Canyon.

The woman, now 21, was an *image* of myself. They were young newlyweds (married less than six months)—and recent transplants to the State of New Mexico. This was his first visit and her second visit to Carlsbad Caverns National Park.



Nancy Gooch married Ron Hultgren (Ron shown here at Walnut Canyon Overlook) on October 26, 1963, in Davenport, Iowa. In March 1964, they left their home in Iowa and moved to Albuquerque, New Mexico.

Ron went to work for Sandia Corporation in Albuquerque. Nancy worked as a clerk-steno in the Plans Branch of Base Ops, Kirtland Air Force Base.

— April 11 and 12, 1964 —

Nancy (right) at White Sands National Monument, near Alamogordo, New Mexico.

Taking their first weekend excursion, to explore their new surroundings, they chose a drive to the southeastern part of the state, with visits to Carlsbad Caverns and to White Sands National Monument.

#### Climbing the Entrance Road to Carlsbad Caverns: Up Through Walnut Canyon

The early morning sun shone brilliantly—highlighting the desert growth on the east facing ridges. Higher up, evergreen junipers became evident, scattered along the slopes and in grassy areas on the tops of the mesas. We would later learn from the park ranger that the parkland surrounding Carlsbad Cavern varies from 3,595' to 6,520' in elevation above sea level.

Entering the parking terrace, we were now atop the limestone reef (Capitan Reef), a relatively flat summit, which forms Guadalupe Ridge. Getting out of our Hudson, I could see for miles in all directions across broad desert plains to rugged mountains. To the southwest ran the escarpment of the reef out to the distant blue outline of the Guadalupe Mountains in West Texas—the highest point in all of Texas. To me, this part of New Mexico truly was a "Land of Enchantment." In eagerness to get started and find the mouth of the natural entrance to Carlsbad Cavern, I reached for Grandmother's hand to follow along beside me. Jerry and I were both ready to explore this strange, underground environment. We had never visited a cavern and my dad had told us earlier in the trip that these were the "most magnificent" caverns in the world! In wonderment I tried to imagine, "How were these caverns formed?"

Ancient Reflections—The Creation of the Caverns: Water measured in quantities from oceans to tiny droplets has created Carlsbad Cavern. The rocks in which the cavern formed are the product of an ancient reef, known as Capitan Reef. 260 million years ago, much of what is now New Mexico lay beneath a tropical, inland sea. Over a period of 10 million years, a 400-mile long (2 to 3 mile wide) horseshoe-shaped reef was built up along the edge of the inland sea—formed from the remains of sponges, algae and seashells—along with lime (calcium carbonate) that precipitated directly from the water. Cracks developed in the reef as it grew toward the sea. 250 million years ago, the sea receded and evaporated and no sign remained of the reef, which was buried under deposits of salts and gypsum that filled the basin. In time, the basin was no more—the landscape was a nearly flat surface, with little relief. As eons passed, the old sea basin, the reef, and the surrounding regions were deeply buried under thousands of feet of sediments. Twenty to 40 million years ago, the Guadalupe Mountains began their uplift due to compressive earth movements. Sediments above the reef were eroded and began to uncover the buried rock reef. The exposed reef became part of the Guadalupe Mountains. As this process continued, slightly acidic rainwater seeped down into the cracks and fractures in the rock reef—slowly dissolving the limestone and beginning the process that formed large, underground chambers. From far below, hydrogen sulfide moved up from oil and gas deposits and combined with the fresh water to make a mild sulfuric acid solution that dissolved the limestone. Slow movements of the water carried the dissolved material away. The eventual result was a honeycomb of openings filled with water. Finally, 2 to 4 million years ago, massive earth movements again uplifted and tilted the entire region. Erosion stripped away the overlying sediments, exposing the fossil reef that was much harder than the basin salts and gypsum; and, therefore, more resistant to erosion. Today the edge of the old sea basin is well marked by the ridge that extends from near the city of Carlsbad, southwestward to Guadalupe Peak in west Texas. As uplift continued, groundwater drained away leaving air-filled openings. With the loss of buoyancy that the groundwater supplied, massive chunks of weakened rock could not support their own weight and collapse was commonplace—thus leaving large underground chambers and passageways known today as Carlsbad Cavern.

More than **500,000 years ago**, the decoration of **Carlsbad Cavern**—stalactites, stalagmites and a variety of other formations—began as chambers became air-filled. Even when lower parts of a chamber were still flooded, decorations began in the drained upper portions. Water is nature's

primary tool in this process—and it is still going on. Each drop of water dissolves a tiny bit of limestone and carries it along on its downward trip. Billions of drops later, thousands of cave formations take shape as the liquid evaporates and leaves the cumulative bits of limestone behind.

A Historical Perspective: More than a thousand years before the first ranchers entered the region of the Guadalupe Mountains of southeastern New Mexico, American Indians were living in the area now known as Carlsbad Caverns National Park. Although the names of these prehistoric Native American discoverers of the caverns were never recorded, their signatures can be seen in the numerous pictographs and cooking pits located throughout the park. These early people left no evidence that they ventured any further into the Cavern than the natural entrance. What lay beyond remained a mystery until the late 1800s—if Spanish explorers found the cave entrance, no mention of the discovery was ever made in their journals.

Ranchers in the 1880s became aware of the cave because in the early evenings, spiraling bat flights darkened the sky above the mouth like the funnel of a tornado. The earliest exploration for which records exist took place in 1883, when the father of 12-year-old **Rolth Sublett** reportedly lowered the child into the "twilight zone" area of the Cavern entrance. No one explored the deeper recesses until 1901.

Credit for most of the early exploration of Carlsbad Cavern goes to **James (Jim) Larkin White**, a Texas-born cowboy. As White told his story, he was mending fences one day around 1901, when he came upon "the great hole under long slabs of yellow and gray stone." Returning to work, he could not forget the cave, and returned a few days later to the cave entrance. He made a ladder of sticks, rope and wire, and following his curiosity, descended into the darkness of the cave—carrying only a coal-oil lantern. He found the bat section of the cave and went as far as what he'd soon name **Devil's Spring**. His imagination about what lay beyond his dim lantern light captured him, and he resolved to see all of the cave he could reach.

About the same time, Texan **Abijah Long** discovered the Cavern's second smaller entrance, while grazing his mules one day. Descending by rope, he found himself among the bats, their guano almost up to the 90-foot ceiling in places. The business potential for fertilizer overwhelmed his mind and he filed a mining claim on March 28, 1903, and began a bat guano mining operation in the Cavern. Jim White became Long's foreman—in large part to explore the cave when he could. At first, the miners built a rail system with ore cars, to haul the guano out the Natural Entrance. Later they sunk shafts, directly into **Bat Cave**, erected a hoist tower on the surface, and put a guano bucket and pulley system into operation. They transported the bat guano to Carlsbad over a primitive wagon road they cleared down the 45-percent-grade hill.

The biggest market for guano was Southern California, where orange groves were being planted. Low prices, high costs, and processing problems kept Abijah Long from making money, however, and he sold his claim. Six other companies would try their hand at Carlsbad's guano industry over the next two decades, but none would really succeed.

Jim White remained with the mining operations through the changes, exploring more than half of the known cavern—naming many formations and rooms. White wanted everyone to see his "Bat Cave" with its many natural wonders, but few people believed his improbable tales of a huge underground wilderness full of unusual cave formations. "Climbing the road to the Caverns," an early visitor wrote, "was like driving up a flight of stairs—one needed to take an extra axle and tires for repairs along the way." Then there was the "elevator" down, as visitors were lowered 170 feet into Bat Cave by the guano bucket and hoist. It took a nerve-wracking hour to lower 20 people. Once there, the "trail" was simply the best route through boulders and around ledges, and White claimed he sometimes had to blindfold visitors to get them through a section.

One day in 1915, Jim White said he decided to do everything he could to bring the world to see "his" cave. He started moving rocks and leveling paths to make a better trail—at steep places driving auto axles from the junkyard into the rocks and stringing wire handholds between them. Then he invited local Carlsbad photographer Ray V. Davis to come see the cave—hoping Davis would take photos to prove its magnificence to the skeptics. Davis was enchanted from his first look at the King's Palace, and he began working in the cave regularly. Over the next few years, he'd pioneer cave photography and play a significant role in bringing the Cavern to the world's attention. He made a hundred trips into the cave—carrying 75 to 100 pounds of equipment from the entrance by himself. At first, Davis took only close-ups, but as he learned to control the lighting, he shot wider scenes with flashes. His multiple-flash technique, using magnesium powder was dangerous, but produced depth that had never been attained before. A cloud of white smoke would form, which had to clear before Davis could shoot again. Sometimes he could make only one picture a day, at a cost of \$15.

Even with Davis' pictures as evidence, people didn't believe the Cavern's wonder. So in September 1922, Davis set up a tour for prominent Carlsbad citizens. Forty signed up—but only 13 showed up. One of them was **S. L. Perry**, editor of the *Carlsbad Current-Argus*. Perry wrote up the tour for his paper: "Words are inadequate to convey it to the mind. You can never appreciate its beauty and grandeur unless you see it...." With this publicity, the tide turned and visitors started coming almost daily. By spring 1923, Davis was exhibiting his Cavern photos in his studio and putting them in hotels throughout the Southwest. Jim White was advertising his guide service in the *Current-Argus*:

\*\* BAT CAVE GUIDE \*\* - Sightseers wishing a guide for exploring the California Bat Caves will find me at the cave, or Weaver's garage, while in Carlsbad. I charge \$2 per person per day, when not less than 5 in a party. - Jim White

White enthusiastically shared the Cavern with all visitors and gradually word of the cave spread—finally reaching Washington, DC. Again, there were non-believers; but in 1923, the US Department of the Interior (General Land Office) sent inspector **Robert Holley**, who was instructed to survey the Cavern and determine if it was truly an outstanding natural scenic wonder and if so, report on the possibility of securing it as a national monument. Holly expected this to be a little job, taking but a few hours, but it took over a month, during which time Holley became duly impressed. The report he wrote began: "I am wholly conscious of the feebleness of my efforts to convey in words the deep conflicting emotions—the feeling of fear and awe, and the desire for an inspired understanding of the Divine Creator's work, which presents to the human eye such a complex aggregate of natural wonders in such a limited space." He recommended national monument designation for the Cavern.

Later that same year—October 25, 1923—President Calvin Coolidge signed a proclamation creating Carlsbad Cave National Monument with 719.22 acres to be administered by the National Park Service. Jim White, who was to continue cave explorations for most of his life, became the first Chief Ranger. Seven years later—May 14, 1930—Carlsbad Caverns National Park was created.

By the mid-1920s, two thousand people a year were visiting the Cavern, and the first major improvements began. The Carlsbad Chamber of Commerce funded the construction of a stairway down from the Natural Entrance – 216 wooden steps zigzagging down the slope. A new road up Walnut Canyon, a parking lot, a ticket office, and a chief guide's house were built. Telephones were installed in the cave, and the three-mile tour route was gradually lighted with primitive, generator-powered electric lighting.



Left: Original photo/postcard (1920s) of Jim White that I discovered over the Internet and purchased from a postcard dealer in Maryland in September 2002. – NKH

As guano miner, explorer, guide, trailbuilder, park ranger, and tireless promoter, Jim White spent nearly a half century bringing this cave to the public's attention. During those early years, he did what ever needed to be done to draw others to the Cavern he so dearly loved.

Backside of photo/postcard states: Carlsbad Cave National Monument—located 30 miles SW of Carlsbad, NM is the largest and most spectacular cave in the world. Good Trails and Electric Lights, etc. Good roads leading to it.

Jim White, single-handedly, had the courage to risk entry into the inky depths of an unknown, huge underground chamber. He endured scorn from those who stayed safely on the surface ridiculing his exploration reports. He guided almost everyone through the cave—including the casually interested visitor, to government and scientific experts, reporters and photographers. After years of toiling in near anonymity, White's dedication and determination bore fruit when Carlsbad Cave National Monument was authorized in 1923.

In May 1927, in the midst of the early development at Carlsbad Cavern, **Colonel Tom Boles** became the Monument's **first superintendent**. He brought exactly the mix of talents the Cavern needed at the time and would enthusiastically lead important Cavern development over the next 19 years. Boles focused on bringing more people to the cave and providing the facilities they needed to have a quality experience. He gave talks to visitors, hosted weddings in the Cavern, and created a network of informers to notify him when celebrities were coming. He would make them Cavern boosters and send them out to tell their fans. His efforts paid off. Hollywood directors filmed a newsreel of the bats, as well as scenes for the movies **Haunted Underworld** and **The Medicine Man**. In the 1930s, the Santa Fe Railroad photographed its ads in the Cavern—with models clad in evening dresses, standing at the foot of giant stalagmites.

By 1930, the Cavern was hosting one hundred thousand visitors per year, and there were an estimated 23 miles of explored passages. Congress introduced a bill making Carlsbad Cavern a national park on May 14, 1930. In the Cavern, the stairs were replaced by a sloping trail down the Natural Entrance and the first elevators were built. Two single-lift elevators, the longest ones in the world, were installed, the project being completed in 1931. Two years later, the park was enlarged from 719 acres to 10,000 acres and in 1939, President Franklin Roosevelt signed legislation adding 39,000 acres.

Bat Guano Bucket: It Made Carlsbad Cavern More Accessible for the Early Guano Miners and the First Tourists...



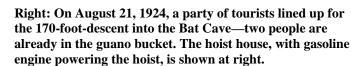
Left: Abijah Long, first guano mining boss at Carlsbad Cavern, first entered the cave in 1903. Jim White, right, came to work as one of Long's miners.

Below: Mining bat guano. Miners at work in the cave 1906 or 1907. At left is Charles Dasso, who owned the claim at the time. He sold it in 1907.





Jim White, above, poses with the guano bucket and one of his original homemade kerosene torches that he frequently used in early exploration of the Cavern.

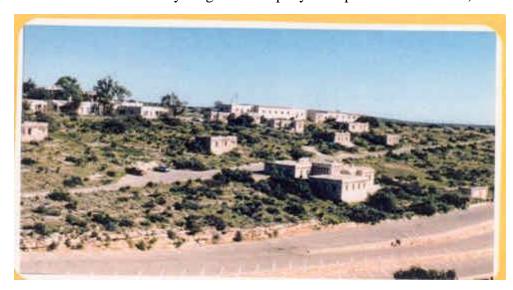




Left: Guano bucket elevator in 1924. Two of the occupants are Elizabeth and Dana Lee. Also shown are rickety ladders—a dubious substitute for the ride down in the guano bucket.



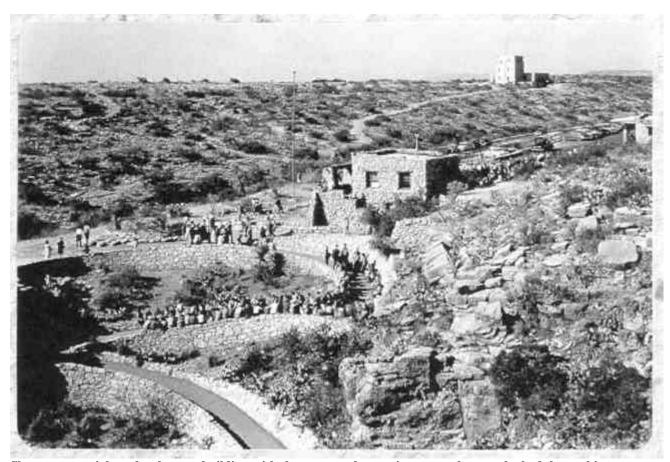
Looking around, I saw a number of small government buildings, all made of stone, just above the parking lot. Some were dwellings used for offices by the National Park Service staff and some for ranger quarters. The largest of the structures directly in front of where our Hudson was parked had a sign on the building's front that read Cavern Supply Company. This was the concessionaire for Carlsbad Caverns National Park; and in 1928, they began serving lunches 754 feet below the earth's surface. (Cavern Supply Company also made use of one of the stone buildings as a day nursery to take care of children too young to accompany their parents on the tour.)



View of the original parking terrace (1952 visit) showing some of the small stone buildings. Cavern Supply Company building was torn down in 1959.

Photo by Ron Hultgren: From observation tower in the visitor center, October 1995.

We saw a small sign that read *Ticket Office* with an arrow pointing to our right, so we followed some other visitors over to the nearby stone structure, located at the top of a switchback trail leading down to the Cavern entrance. We climbed the steps to the covered front porch and inquired within for information about the tours. My dad was charged \$1.20 each to purchase two adult tickets for him and Grandmother. Jerry and I were under 16 so we got to go for *free*. We were all signed up for the next available morning tour. My dad was asked which state we were from, and he replied, "Colorado." Five conducted tours were offered throughout the day, complete with lunch service. We found that we could expect the tour to last approximately 4 hours, including time to rest and eat a prepared box lunch, which would cost an additional 75 cents each. At the end, we would ascend by one of two single-lift, eleven-passenger elevators, back to the earth's surface. (The **elevator building**, with its three-story observation tower, stood on the rise overlooking the parking terrace where we had left our Hudson.) We understood the instructions about wearing comfortable walking shoes and were told that the year-round temperature in the Cavern would be 56° F—no matter what season we were in, *winter or summer*, on the surface—so it was smart to wear a jacket. My dad wore his suit jacket, Gran her long cloth apricot-beige coat, Jerry his jean jacket, and I wore a lightweight green coat.



Shown upper right—the elevator building with three-story observation tower that overlooked the parking terrace. Right-hand edge of photo shows a portion of the Cavern Supply Company. The stone ticket office (torn down in 1959) is shown near the beginning of the switchback trail that wound down to the Natural Entrance of Carlsbad Cavern. Photo (1953) from Bob Hoff, Historian, Carlsbad Caverns National Park.

My dad and Grandmother picked up and glanced through copies of the *Carlsbad Caverns Illustrated Guide Book*. As we exited the ticket office, we passed a large cactus garden containing all the local varieties of cacti. Nearby was an old Apache mescal-cooking pit (or "grinding hole" worn into the limestone by continued use of a *mano* or grinding stone) that had been excavated. We came to the head of the trail edged all the way with a border of stone and began descending over a long series of marvelously constructed switchbacks. This trail would lead us "down and down" amongst wonders that we were about to behold. Having some spare time before the next tour, we decided to investigate the opening of the cave—so I ran ahead down the trail—pausing in amazement as the huge domeshaped entrance, rocky and discolored, came into view. Cave swallows circled above the mouth. We descended in a corkscrew pattern toward the Cavern opening, where ages ago a limestone collapse formed a *natural entrance* 4,350' above sea level in the foothills of the Guadalupe Mountains. Along the switchbacks, we passed elevated terraces of Chihuahuan Desert growth and abundant patches of prickly-pear cacti, all illuminated by the bright sun's early morning rays.

My dad motioned for Gran, Jerry and me to walk further down the trail, and he would stand above us to take our picture, with the mouth of the Cavern just behind us. Jerry stood a bit beyond us on the trail. As we waited, I gazed into the dim interior, from which rose the cool, slightly dank odor of undersurface regions. The last bit of sunlight, before the encompassing shadow of the darkness beyond, captured Gran, Jerry and me, as my dad clicked the camera. (See photo below: By George Gooch – March 1952)



Minutes after my dad took our picture, I heard the noise of a siren—signaling that it was time for visitors to assemble with the park rangers at the natural entrance. Our group was large (nearly 250 visitors) and we gathered around the lead park ranger to hear his introductory talk. Our ranger/guide began: "Ladies and gentlemen—you are entering the world's most spectacular caverns! For spacious chambers, for variety and beauty, this cave is the King of its kind! You face a steep 830 foot descent—like walking down from the top of an 80-story building—so this is the time to take the elevators if you think you can't make it!"

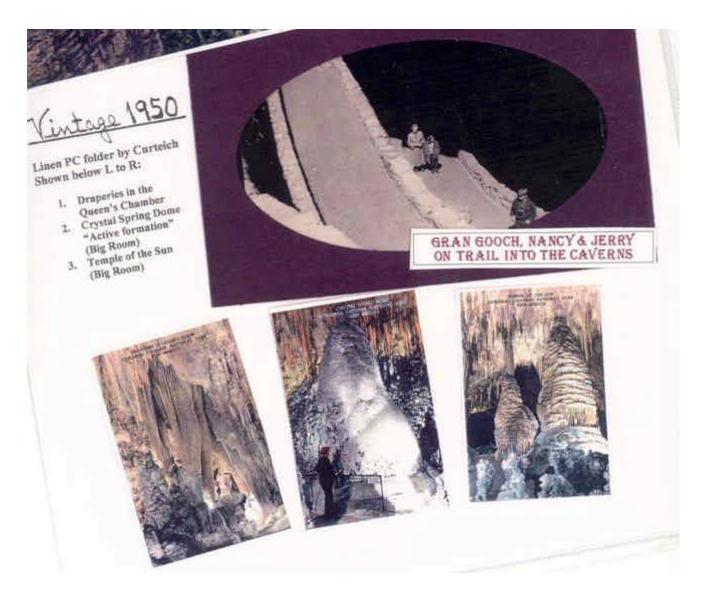
Our guide went on to tell us that the surface area of **Carlsbad Caverns National Park** encompasses 49,000-plus acres, and within that area there are more than 30 limestone caves (some unexplored)—each outstanding in the profusion, diversity, and beauty of their formations. The park preserves a portion of the **Capitan Reef**—one of the best-preserved, exposed Permian-age fossil reefs in the world. The ranger told us that water, geologic forces, climatic changes, and vast spans of time have produced and changed the fossil reef and its spectacular caves—processes that continue to this day.



CARLSBAD CAVERNS NATIONAL PARK

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NEW MEXICO March 1952

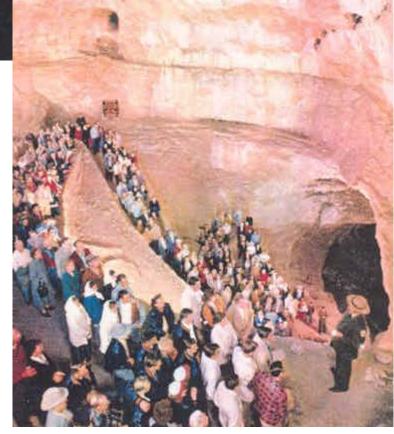


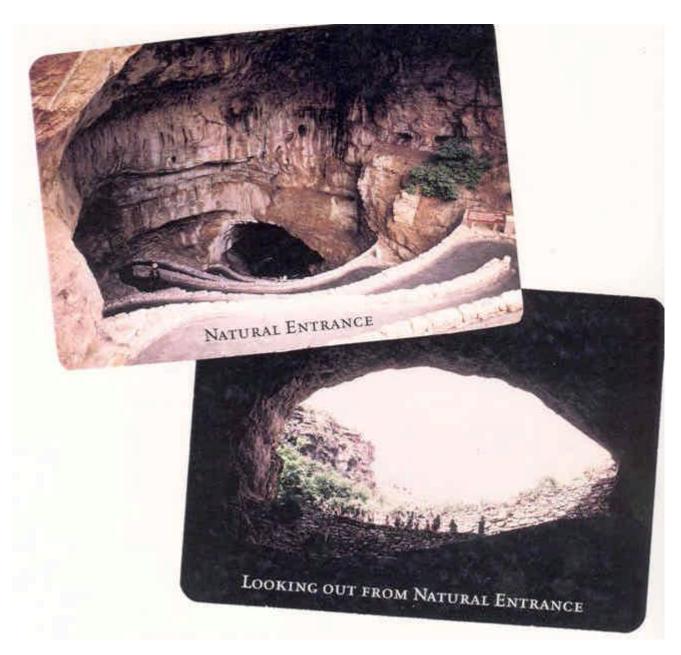


Then the rangers asked the group to form a long line, two abreast—and the line began to move slowly down toward the first objective, the **Auditorium**, far below. I could barely contain my excitement looking down over the edge into the depths, as I walked next to Jerry—with my dad and Grandmother following just behind. At a turn in the path, a ranger clicked attendance on a counter. (The total attendance at Carlsbad Caverns National Park in 1952 was 530,000 visitors.) Switchbacks ever descending, the expectant line of visitors could be seen below and above us—those who have entered and those who were about to.

Above Photo by Ron Hultgren: "The Natural Entrance" October 1995

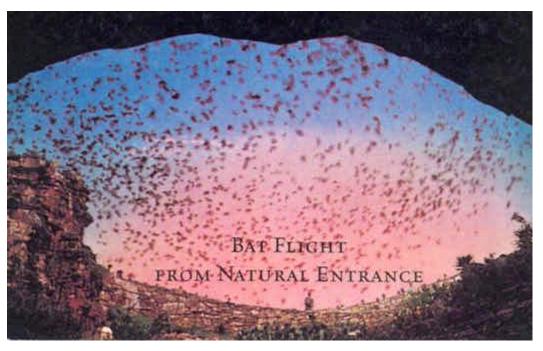
Right: Ranger Claude Fernandez as he tells hikers that they face a sharp 829-foot-descent and "this is the time to take the elevator if you think you can't make it." The *National Geographic Magazine* October 1953 "Carlsbad Caverns in Color" by Mason Sutherland (Assistant Editor). Photo by: E. "Tex" Helm.





Twisting and turning, the trail suddenly steepened. I looked back and high overhead, the **natural opening** was receding in the distance and as the natural light from the opening diminished our group passed into the "twilight zone" that extends as far as there is enough light for the human eye to see. Beyond the twilight zone is the "dark zone." The group moved along never surrounded by total darkness since a ranger ahead would switch on a series of lights to illuminate our immediate area. The artificial lights, ranging from 50 to 2,000 watts, were carefully and skillfully concealed. (There were 25 circuits, each illuminating 1,000 feet of passageway.) We were told that commercial electric power was installed in the national park three years earlier (1949). Prior to that, the park had its own generator. We also learned the National Park Service had recently begun (1951) paving the Cavern trails; and as we continued the tour, we noted long portions of the trail were still "dirt covered" while other sections were newly laid asphalt.

After a continual descent of several minutes, we made a long loop and to our left was the entrance (a half mile back from the trail) to the **Bat Cave**—home of one million **Mexican free-tailed bats**. We stopped here for a few minutes, as the ranger described the bats, for which this cavern is so famous. He began, "Long before man, the bats came. At first only a few, then millions found much to their liking in this large corridor stretching into darkness. For untold millennia, uncounted colonies of bats used the cave for daytime roosting in the summer months. The great depth of their droppings or guano attests the vast time of their habitation. Originally scores of feet deep, the guano was mined from Carlsbad Cavern for fertilizer in the early days. Now that mining is a thing of the past, and the bats themselves are better protected from DDT and other pesticides, the guano is rapidly accumulating once again. During the day, they crowd together on the ceiling of Bat Cave. At dusk, however, the bats leave the cave in gigantic swarms and are silhouetted against the darkening night sky like a huge dark, swift-moving cloud. This exodus can last 20 minutes or as long as 2 ½ hours. Once out of the cave, the undulating mass of hundreds of thousands of bats flies, in serpentine fashion, toward the southeast to feed in the **Pecos and Black River Valleys**. Once there, they begin gorging themselves on moths and other night-flying insects. With the coming of dawn the bats begin flying back to the cave individually, or in small groups. They reenter the cave in a fashion almost as remarkable as their departure. Each bat positions itself hundreds of feet above the cave entrance. It then folds its wings close to its body and plummets like a hailstone (at speeds up to 25 mph or more) into the blackness of Carlsbad Cavern—making a strange buzzing sound as it does. One by one the bats return to the safety of the Bat Cave, where they sleep until reemerging again at dusk. The Mexican free-tailed bat, a migratory bat, stays here and in other Southwest caves from early spring through late October, and then flies south to tropical Mexico for the winter." Jerry and I looked at each other in great disappointment when the ranger told us that we could not expect to see any bats at this time of year (late March).

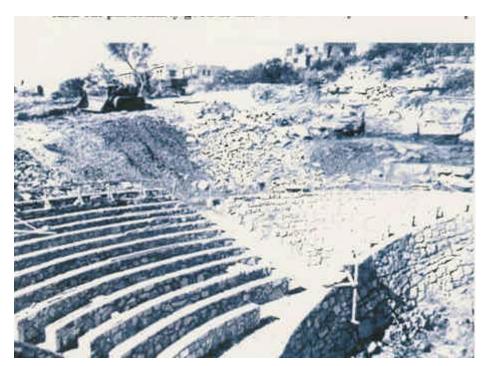


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NOTE: In 1963, the Bat Flight Amphitheater at the Natural Entrance was constructed and placed into operation as a seating area for bat flight viewers. (The top section of the switchback trail, which was in place on our March 1952 visit had to first be removed to make room for the amphitheater.)

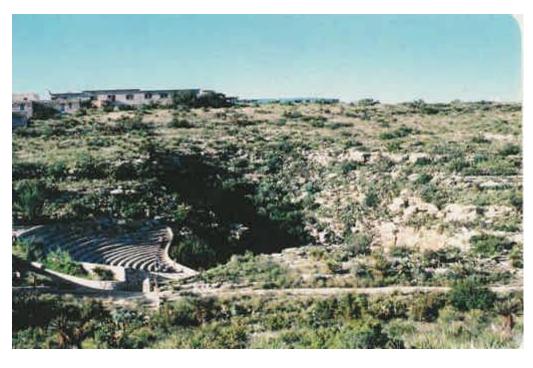
My third visit, and Ron's second visit, to Carlsbad Cavern was in October 1995. At the time of a very orange sunset, after spotting a large tarantula scurrying across the trail near the top of Guadalupe Ridge, which overlooks the Cavern's natural entrance, on one side and the ancient seabed on the opposite side, we walked down to the outdoor amphitheater to watch the evening bat flight. Prior to the flight, which we watched for about 40 minutes, a female park ranger gave a talk. She told us that we were permitted to take pictures of the bat flight, providing we didn't use a flash setting, which would disturb the bat's echolocation (or sonar system). Ron took two pictures as the bats spiraled out—they didn't turn out particularly good as this is an extremely difficult event to photograph.

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Bat Flight Amphitheater shown under construction in 1963 photo. (NPS Photo)

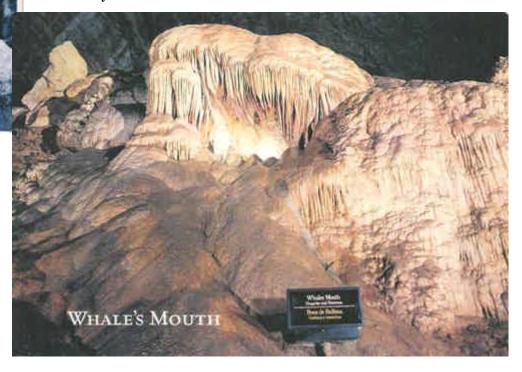
October 1995 – Bat Flight Amphitheater shown from the Nature Trail near the Visitor Center. (Photo by R. Hultgren)



Completing the loop to the right brought into view the **natural entrance** far above—from which the group had just come. Another turn and the daylight was gone. From here until emerging at the end of the tour, the only light would be artificial. The group came to rest in the **Auditorium**, a spacious area where the ranger stopped us for an explanatory talk. We began to see modest formations, faintly colored. The acoustics here were excellent, hearing every word spoken in a moderate tone. With one ranger leading us, other rangers were placed along the column of people to be responsible for about 30 visitors each, and to answer our questions. Our long line proceeded straight ahead to the next chamber, along sentinel pillars, through low-ceilinged passages flanked by stalactites, and past a lone, fluted column whose base rises from a clear, cool pool of water that the lead ranger pointed out as **Devil's Spring**, the First Spring to be named by Jim White.

Left: George Adams sitting beside the great fluted column at Devil's Spring (First Spring). This self-portrait is one of the first photographs—perhaps the very first—made by an amateur in Carlsbad Cavern. (Ca. 1908)

Below: The "stone teeth" of the Whale's Mouth are the first example of draperies to be seen by walk-in visitors to Carlsbad Cavern.



As the group tramped along, fine dust from the trail looked like a faint cloud of incense. After entering a long passage, we descended abruptly into a deeper cavern. The lights along the side were adequate, but not too obvious. Formations grew in size and interest. Across the space high along the Cavern wall were formations suggesting ancient cliff ruins. We reached a point where the ceiling was 125 feet above the trail. Our path through the Cavern was winding down through the layers of limestone that were laid down over *eons of time* in the ancient sea. Just ahead was a formation called the **Whale's Mouth**, which is cleverly lit to show the ribbon-like stalactites that give the illusion of a wide-open whale's mouth emerging from the sea. It was here that our group entered the massive Capitan Reef itself.

Beyond laid depths of hundreds of feet. Our switchback descent led to the outer edge of a parapet overlooking **Devil's Den**—a 75- to 80-foot drop-off into a black pit that explorer Jim White tried repeatedly to find a way around but couldn't. At this point, we were 500 feet below where we started

at the surface. Here the Cavern ceiling was 270 feet above where we stood. We soon came to the foot of a "rock and rubble pile," many stories high, called the **Devil's Hump**, which our ranger-guide told us at one time involved an exhaustive climb for people on this tour, up a long wooden staircase, in order to reach "points beyond" in the Cavern. However, in March 1929, a tunnel "directly through" the rubble pile was blasted out and opened. We followed the ranger as the trail entered this low rockcut tunnel. In the narrow tunnel passage, gypsum crystals formed sparkling bunches of "grapes" or "wasps' nests" on the ceiling. Coming out, the trail entered the **Main Corridor**—a "cathedral-like" hall that continued almost straight, but gently downward. Along the way were an array of weird formations—stalagmites, pillars rising near at hand—the American Eagle, with a 12-foot-wingspan; the Baby Hippo formation; and high above the trail, the Three Little Monkeys. Walls rose smooth on one side—fantastically irregular on the other. Obelisks, monoliths, and pagoda-like forms came into view—some of them grotesquely aloof, stark and alone. Festoons of stalactites hung from the ceiling, which has dark clefts and fissures. Soon after, we passed a formation known as the Witch's **Finger** where the trail actually climbed and descended three times over huge chunks of solitary rocks and rubble where millions of tons of material had fallen long ago when water drained from the passages.

When a depth of approximately 600 feet was reached, the lead park ranger stopped the group of visitors and invited those unable to complete the tour to "fall out and rest"—and to take the short cut passage to the rest area and lunchroom located 755 feet below the surface. Several seniors and families with younger children left our group accompanied by one of the rangers.

On the right, we passed smooth, high walls as the trail climbed and led to near the top of the mammoth 200,000-ton **Iceberg Rock**—the largest "loose" rock in the Cavern. (Like an iceberg at sea, it conceals 7/8s of its bulk.) From this point, we took the long, wooden staircase straight down the side of Iceberg Rock for our final deep thrust into the lowest part of the Cavern open to visitors—830 feet below the desert surface. (Jerry and I held tightly to the stair's railing—it would be a long fall, with a rough ending, for anyone taking a misstep here.) During our descent, the park ranger told us that we would soon be entering the **Scenic Rooms**—the most highly decorated area of the Cavern.

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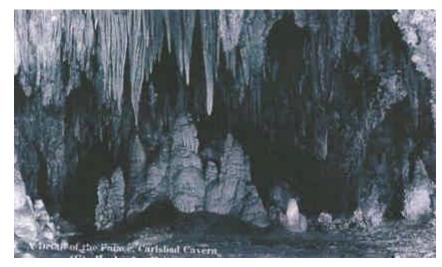
NOTE: The long wooden staircase running over the top of Iceberg Rock down to the Green Lake Room, which we walked down in March 1952, was put in place in 1941 as a shortcut for visitors too tired to walk down into the Scenic Rooms, back up Appetite Hill, and on to the underground lunchroom. The staircase was eventually closed and replaced by an inclined trail in 1957. On the ranger-led King's Palace Tour to the Scenic Rooms my husband and I took in March 2001, the ranger stopped the group to point out the long, wooden stairway that I had descended in 1952. He told us the stairs were considered "unsafe," but the park decided to leave the stairway in place as a part of Cavern history. As my eyes followed up the long stairway to the point where darkness enveloped it, I felt a "shiver inside" remembering that a 9-year-old awestruck child had followed this staircase down to untold wonders—49 years earlier. I was glad to know that the staircase would remain, and IF some day my own children and/or grandchildren should visit Carlsbad Cavern they will perhaps recognize the significance of the old, "now unsteady and unused" wooden stairway.

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Once off the wooden staircase, we joined the newly paved trail known as **The King's Highway** and descended into the first of the scenic rooms, the **Green Lake Room**, an artistically illuminated wonderland of formations containing a small emerald pond fed by dripping water. Rich in lacy, jagged stalactites and ponderous pillars, this room marked the beginning of the truly spectacular

formations and the highly decorated chambers. Our eyes were dazzled by thousands of delicate stalactites hanging *icicle-like* from the ceiling. Each of the stalactites, the downward hanging stone lances, was formed by water seeping out of the ceiling and leaving a trail of mineral in tubular form, like a soda straw. Where the drip continued, droplets falling to the floor built a stalagmite growing upward. Sometimes the stalactite and stalagmite grew together to form a pillar or column. The sentinel form was a formation before us called the **Veiled Statue** (or **Frozen Waterfall**). We were told that most of the formations at Carlsbad Cavern have stopped growing, reflecting climatic changes overhead in semi-arid New Mexico.

Another steep descent, this time through a narrow passageway, led us to the **King's Palace**. As we entered, a park ranger pointed his flashlight at an 8-foot-long, narrow *soda straw* formation known as the **King's Bell Cord**. The King's Highway leveled off as it opened into this highly scenic circular room, glittering with stone chandeliers like the ballroom of an emperor. Myriad stalactites—a wide variety of delicate formations—a riot of fantastic forms—formed only a few corresponding stalagmites, probably because a pool of water inhibited their growth.



One of Ray V. Davis's most popular postcards was this one on the left—taken in the King's Palace.

In 1915, black and white photos taken by pioneer Carlsbad Cavern photographer, Ray V. Davis, were displayed in the town of Carlsbad. They created a sensation as people clamored to see the marvelous cave for themselves. Davis' photos made Carlsbad Cavern famous. His fame as a photographer became well established when his photos accompanied the article "A Visit to Carlsbad Cavern," which appeared in the January 1924 issue of *National Geographic*. Davis continued to take hundreds of photos of the Cavern—many being made into postcards. Davis and his assistant, Robert Nymeyer, began producing 2,000 picture postcards a day and could barely keep up with demand.

Further up the trail, the ranger pointed out the **Kissing Rock**. A drapery-shaped stalactite projected from the ceiling. Just below and "not quite touching it" was a similar shaped stalagmite. Within a thin razor's blade of kissing—"doomed never to touch"—they are called the **Frustrated Lovers**. The Kissing Rock stands guard near a keyhole entrance from the King's Palace to the **Queen's Chamber**—known for it's elaborate stalactite drapery formations. The Queen wasn't in, but (a formation known as) the **King's Boots** hung in her chamber.

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NOTE: When Ron and I visited Carlsbad Cavern in March 2001, we signed up for the King's Palace Tour. When we were in the Queen's Chamber, the park ranger asked our small group of 25 if there was anyone afraid of the dark? If so, then the other ranger would accompany them on to the next chamber. Everyone stayed and we took seats on one side of the trail on the

rough, limestone edging. We were about to experience a dark cave. He told everyone to be silent for the next few minutes. Then he walked back up the trail around a bend and turned off all of the lights so we could experience the cave in its natural state. After a moment, the Ranger said that now he would duplicate "what it would have been like down here" for the cave's *early explorer*, Jim White. Out of sight, around the bend of the trail, our guide lit a kerosene lantern. From that distance, he walked slowly toward us. As the dim light approached, we saw the shadows of the formations moving along the walls and ceiling. Before he extinguished the lantern, he showed us one last demonstration. Directly in front of our group was a 10-foot high formation, which he called the *Ice Cream Cone*. He said that this formation has the ability to "emit light" (absorbs light and gives it back—or *fluorescence*). He doused the lantern and in the darkness flashed a camera flash bulb on the *Ice Cream Cone*. The formation, which absorbed the flash of light, continued to glow for several seconds.

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Papoose Room—the baby of the royal chambers. Its low ceiling was gleaming with porcupine-quill stalactites. After leveling off, the trail began to climb, a relief from the long descent. We passed through a narrow tunnel carved to rejoin the King's Palace. The group sat down on a long, natural limestone bench at the widest and most beautifully decorated part of the chamber. The ranger pointed to a variety of formations in front of us. He took some time to tell of various Hollywood motion pictures that have been filmed at Carlsbad Cavern. Prior to 1952, movies filmed at the national park included *The Haunted Underworld*, *The Medicine Man*, *Night Without Stars* and *King Solomon's Mines*. (I recall seeing the latter movie when we lived in Denver.) One of the most famous "yet to be filmed" was *Journey to the Center of the Earth* with James Mason and Pat Boone. Several scenes took place right in front of where we were sitting—but not until 1959.) Now climbing The King's Highway, we stopped while the park ranger moved his flashlight to an area about 50 feet below the trail to show us an "encrusted bat" that perhaps centuries ago had fallen from the ceiling.

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NOTE: On our March 2001 King's Palace Tour, the park ranger told us that beginning in the 1970s the tours at Carlsbad Cavern switched from being "ranger guided" to "self-guided." In 1991, the four chambers just described from the 1952 tour, were designated once again as a ranger-guided tour. He said that during the time of self-guided tours, people were leaving the trail and breaking off a number of cave decorations in this area. So, I note here that my March 1952 childhood tour would have shown the Scenic Rooms of the King's Palace Tour in a much more "pristine condition."

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Further up the trail the ranger pointed to evidence along the cave's wall of Man's early contact with the cave. Indeed, this may have been the "first time" that modern Man had ever set eyes upon the scenic portion of the cave. In the stone were etched initials, along with a date of 1904, which were placed by a small party of miners. In the early 1900s, the first bat guano mining operation took place in the upper Bat Cave portion of the Cavern.

Our hike up **Appetite Hill**, a different route out of the Scenic Rooms than our earlier descent down the long, wooden staircase over the top of Iceberg Rock, was the equivalent vertical distance of an 8-story building and we heard "much huffing and puffing" along the steep switchbacks from our fellow tour members. When we came to a point directly under a portion of **Iceberg Rock**, the lead ranger stopped the group for a discussion. Rhetorically he asked us, "What is Carlsbad Caverns all about?

You look around and you see things like this 200,000-ton rock, Iceberg Rock, and you wonder—that rock is about the same weight as a fully loaded aircraft carrier." "Oooo," said all the kids, and Jerry shouted out that he thought that Carlsbad Cavern was all about rocks, water, erosion and bats. "Carlsbad Caverns is famous for its bats!" Jerry said. The park ranger nodded and continued, "Carlsbad Caverns is, in my opinion, about *one thing*—Carlsbad Caverns is about *change*. All of the things that you have been talking about—the rocks, the water, the bats—all of this is part of that change." He went on to explain, "Before there was desert—which you see above the Caverns—the rainfall here might have measured 80 inches a year or more—if there had been anyone around to measure it. A lot of the things that we see here are the result of what happened in the past. Caves have a tendency to preserve things for a long time. All of those spires and pinnacles, stalactites and stalagmites, resulted from rain seeping down from the surface—drip, drip, drip. The whole magnificent reef itself, a 400-mile horseshoe of rock, made from fossils, developed gradually. There have been battles here between the different forces of nature—the uplifting, shifting, dropping, the earthquakes taking place, floods," the ranger said. "All of that is written here but you have to look closely to see that."

"Iceberg Rock represents a fallen portion of the Cavern's ceiling," the ranger continued. "And most of the breakdown, the rocks and rubble we see along the trail, fell long ago when water drained from the passages. The 200,000-ton Iceberg Rock fell much more recently—about 300,000 years ago—and slipped so gently that its pendant stalactites received no injury. These stalactites do not hang vertically—so we know they were formed before Iceberg Rock fell."



Site of a tremendous breakdown in ages past—Iceberg Rock was long called the entrance to the King's Palace. Seated to right center, a guano miner guide holds a kerosene hand torch. Note: The pendant stalactites, hanging from the base of the mammoth rock do not hang vertically. Photograph by Ray V. Davis (1918).

Topping Appetite Hill just beyond Iceberg Rock, the now-level trail passed **The Boneyard**—a partially dissolved rock chamber, looking like a stony bit of Swiss cheese, with a 3-dimensional maze of passages. The trail then led through the entrance to the **Big Room** on our way to a "welcome break" at the **Rest Area and Lunchroom**, located 754 feet below the surface.

Appetite Hill had sharpened ALL our appetites! Everyone was famished following our 2-mile rigorous hike down from the Natural Entrance at the surface, through the long series of switchbacks, the Main Corridor, and the Scenic Rooms. We needed to "refuel" because we still had one more segment of the tour to go—a one and a quarter mile trek through the Big Room.

On our way into the lunchroom, we passed the Cavern's two original eleven-passenger elevators installed in 1931 that would whisk us safely back to the earth's surface again at the end of our tour. I noticed several people "mulling about" next to the elevators, waiting their turn to go up. The low-

ceilinged lunchroom, void of cave formations, was installed (we were told) in 1927. Many rows of picnic-style tables and benches awaited us. The rangers announced to our group that we would be given 40 minutes for lunch and a rest. There were restroom facilities here, so we stopped "first" to make use of them. Coming out with Gran, we saw Jerry, and got into the long lunch line. Cavern Supply Company, the concessionaire was equipped to serve and feed as many as 2,000 patrons in an hour. Quickly, we passed through the aisles—picking up a box lunch and beverage, and Gran paid the cost of 75 cents each. As we carried our lunches over to one of the empty picnic tables we spotted my dad entering the line. With his lunch in hand, he joined us. He seemed very excited about something and his face was simply beaming as he proudly shared his news: "I just met the wife and widow of the man (Jim White) who was the very first person to explore these caverns!" Wow! I felt very impressed by this and I heard my dad state this again (many times) that day as we continued our tour of the Cavern and even (later) he was still talking about this—after we had exited the national park.

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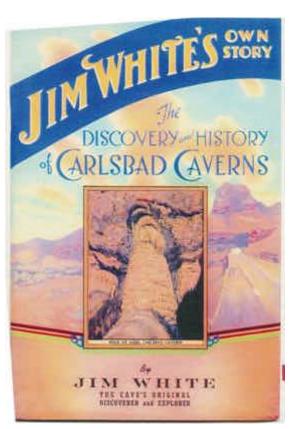
NOTE: I have a copy of the October 1953 issue of *National Geographic* with its excellent article titled, "Carlsbad Caverns in Color." On Page 438 is the following statement: "Mrs. Jim White who sells her late husband's memoirs at a booth close to the elevators, told me how she had cooked for Dr. Willis T. Lee\* and other members of the National Geographic Society's exploratory party in 1924. When Jim took them out to the Bat Cave and let them down in the iron bucket," she said, "I put a pot of beans on the stove, never knowing when they'd come back. Every day I drove burros with drinking water to the entrance." Jim's old bucket, in which he let Bat Cave visitors down into 170 feet of darkness, hangs today in a prominent position above his widow's sales booth."

\*Dr. Willis T. Lee of the US Geological Survey, backed by a \$16,000 grant from the National Geographic Society, explored, surveyed, and mapped portions of the Cavern and wrote two articles for *National Geographic*. The first article, A Visit to Carlsbad Cavern, New Mexico," appeared in January 1924. The second article was published in September 1925, entitled "New Discoveries in Carlsbad Cavern," with an accompanying article by Vernon Bailey, "Bats of the Carlsbad Cavern."

All these years later, I don't remember my dad mentioning where he met Mrs. Jim (Fannie) White. It wasn't until a couple of years ago when I read the 1953 issue of *National Geographic* 



that I realized she probably was stationed near her sales booth that noon hour when we wandered into the Lunchroom. Of course they would have met! My dad was always very friendly—he knew no strangers.



Jim White's Own Story: The Discovery and History of Carlsbad Caverns was published in 1930. Told by Jim to traveler-journalist Frank Ernest Nicholson, it recounts the story of Jim's life and achievements, but did not stop there. His actual accomplishments made for fascinating reading; however, Nicholson chose to sensationalize and beautifully crafted the tale—adding fiction along with facts to capture a wider reading public.

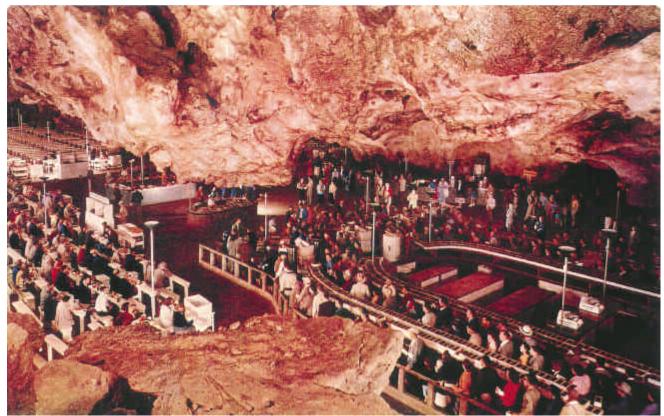
The National Park Service eventually granted Jim White concession rights with a spot for a sales booth by the elevators near the Underground Lunchroom, 754 feet below the earth's surface. Here, during the 1930s, Jim made a modest living selling autographed copies of the book. Tourists crowded around the counter of White's little stand, plying him with questions about his early days in the Cavern and snapping his picture beneath the old guano bucket hanging in an alcove behind him. Although they rarely got much of an answer from him, Jim White truly became a legend in his own time.

Jim's health began to fail by 1941, so he and his wife, Fannie Hill White, moved to the town of Carlsbad to be near a doctor. Jim's trips to the cave were decreasing, so Fannie eventually took over the sale of the books and Indian curios. After Jim died on April 28, 1946, Fannie sold the book on her own until her death in October 1964. (On March 28, 1952, my dad, George Gooch, stopped at the sales booth to meet and chat with Fannie Hill White.)

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Our rest stop time was up. Following lunch, the members of our tour group assembled with the park rangers. Forming a long line, we began moving toward The Big Room, whose mile and a quarter trail would consume the second half of our tour. This richly ornamented limestone chamber, the largest known in the United States, is shaped like a huge cross and the floor space covers the equivalent of 14 football fields. The Big Room has a length of 4,000 feet, a "greatest width" of 625 feet, and a "greatest ceiling height" of 255 feet. The 8-acre space is a magnificent showcase of cave architecture—a splendid collection of speleothems (the technical term for stalactites and stalagmites), drapery, soda straws, popcorn, and other decorations. They loom and hang and jut in the most startling ways.

Following the path in a counterclockwise pattern around the Big Room we entered the **Hall of Giants**—where three huge stalagmites stood, the largest being **Giant Dome**—the largest stalagmite in the Cavern towering 62 feet above the trail with a base circumference of 100 feet. A thin band of stone attached to the ceiling turns it into a column. (**Photo: following page**) The neighboring two formations, not exactly identical, are called **Twin Domes.** Our tour guide pointed his flashlight overhead toward the **Onyx Draperies** hanging from the ceiling above the trail and said they were composed of calcium carbonate—not true onyx, which is a form of quartz.



Following our hike down from the Natural Entrance, through the switchbacks, the Main Corridor, and the Scenic Rooms, our guided party arrived at the 754-foot-deep Lunchroom and Rest Area—a "welcome break" during our 3-mile-long tour. We quickly passed through the aisles, picked up a boxed lunch and beverage, and carried them to the picnic tables. Cavern Supply Company, the concessionaire, can feed 2,000 patrons and hour. Photo by E. "Tex" Helm for National Geographic Magazine, Oct. 1953, "Carlsbad Caverns in Color."

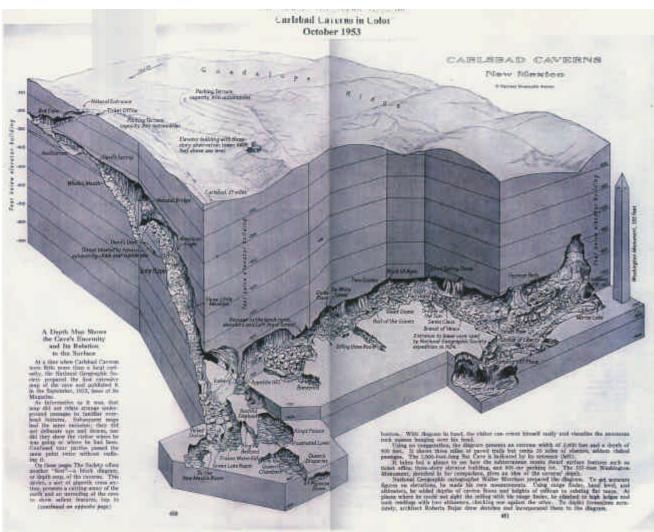
We came to **Fairyland**—an area of popcorn-covered stalagmites,  $2\frac{1}{2}$ - to 4-feet tall. Beyond Fairyland, the trail passed near the imposing 25-foot tall column the **Temple of the Sun**, named for its sun-like colors. The ranger related that impurities within the limestone, particularly iron oxides tinge "The Temple" with delicate pastel hues. Lights uncover the beauty of the formations, but the bulbs are white and add no color themselves. It's all nature's work. The largest columns are typically aligned beneath ceiling fractures, where the greatest amount of water enters a cave. We walked past the **Breast of Venus**, a wide conical-shaped stalagmite, to the **Totem Pole**—tallest of several neighboring skinny stalagmites that resemble their Indian-made namesakes. It soars 42 feet toward the frostwork ceiling. The **Giant Chandelier**, made of ribbon stalactites, hangs suspended above the Totem Poles and forms an awesome centerpiece in the Big Room.



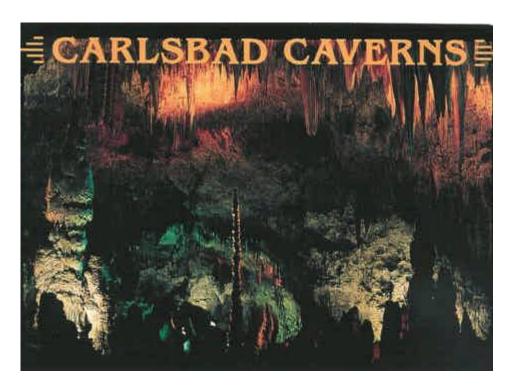
Left: Original photo/postcard by Ray V. Davis (1920s) Over the years, Davis retook this scene many times experimenting with light sources and greater exposure time. This was one of his bestselling postcards. Back of card states: "This view in the Big Room of the Carlsbad Cavern, showing the Totem Poles is probably the best known photograph of this underground wonderland. The slender Totem Pole is 42 feet high. Grouped around it are several stalagmites—many of them resembling blanketed Indians, seated in council.



Near the entrance to the Big Room, we entered the Hall of Giants. Giant Dome (center), the largest stalagmite in the Cavern, towers 62 feet above the trail. Since it actually touches the ceiling, it is a column. Twin Domes (right) are not identical, and they were not necessarily born at the same time. The Onyx Draperies hang above the trail. Note the ranger near the base of the giant domes.



Three-dimensional view of Carlsbad Cavern from *National Geographic*, "Carlsbad Caverns in Color," October 1953.



#### The Big Room with Its Totem Pole and the Centerpiece of the Giant Chandelier

As we advanced to the next stop, our guide cautioned the group against souvenir hunting. He stated, "Remember, you can destroy in an instant what nature took centuries to build. Please don't touch the formations," he counseled, and "Stay on the trail at all times and make your trip quietly."

Off to the right side of the trail we came to the **Jumping Off Place**, which overlooks **Lower Cave**, 93 feet below. The lead ranger told us that Jim White explored it by rope, and later (1924) for Dr. Lee's research expedition with *National Geographic*, cut rungs from trees in Walnut Canyon and built a ladder of wire and wood. Seventy-five feet of it swings free of the wall, and those who descended it did so unhappily. "A wire ladder has an erratic nature and an obstinate disposition," **Dr. Willis T. Lee** wrote. "It has a tendency to be where it does not belong. Those who first descended had an unhappy time swaying and spinning about in the darkness." We saw, still suspended at the entrance to Lower Cave, two shaky-looking ladders of wire and wood—which had rusted and rotted, but the National Park Service preserves them for historic interest.

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NOTE: The Big Room is shaped like a cross or a capitol "T" shape. In 1955, the next area we passed became known as the *Top of the Cross*—with a large seating area added for ranger talks. In 1985, cavers explored the fractures in the ceiling over this portion of The Big Room. When they climbed here, they discovered 800 feet of passage, which they named "Spirit World."

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Next we came to **Mirror Lake**—a drip pool, fed by infiltrating surface water. The small lake correctly reflected the name on its own mirrored signpost. The ranger reminded us that throwing coins, food, or other objects in cave pools is forbidden. Just beyond we came to the **Bottomless Pit**. Though it's only 140 feet deep, mystery has surrounded it since the early days. In September 1928, aviatrix **Amelia Earhart** visited Carlsbad Cavern and planned a return trip to descend into the Bottomless Pit. However, years later, her plane went down over the Pacific Ocean.

#### Amelia Earhart's Visit to Carlsbad Cave National Monument: September 1928

Amelia Earhart was a "first' in aviation. She was called "Lady Lindy," because of her record-breaking career and she looked a little like **Charles Lindbergh**. In 1928, she was the first woman to fly across the Atlantic Ocean as a passenger. On May 20, 1932, she was the first woman pilot to fly solo across the Atlantic. Miss Earhart was well respected around the world.

In September 1928, Earhart planned to make the first transcontinental flight by a woman—from New York to Los Angeles and back again. Flying an English plane, a 1927 Avro Avian, the historic flight would land in 23 cities and cover approximately 5,500 miles. Traveling west from Mecham Field in Fort Worth, Texas, Amelia was somewhat off-course and so she decided to land in Hobbs, New Mexico. In Hobbs, her plane was refueled with bad fuel—causing engine trouble. She ended up with a four-day stopover in Pecos, Texas, waiting for a replacement part from El Paso. The Pecos Rotary Club had Miss Earhart as a guest speaker on September 7. The Pecos Chamber of Commerce pressed her into refereeing a national air race—so she renewed acquaintances and met "round-the-world flyers," posing with some of them for newsreel cameramen.

On September 9, **Mr. and Mrs. Ralph Sparks** of Pecos invited Amelia to accompany them on a drive "just a few miles north over the Texas-New Mexico border" to visit (then called) **Carlsbad Cave National Monument**. During their tour, she received a tremendous ovation by a crowd of 415 visitors in the Big Room. She was amazed, awestruck and uplifted in soul (as are all who enter) by the wonders she saw that day—but she was not quite satisfied with the usual tourist jaunt.

While visiting the Cavern, Amelia had exploration on her mind. And she stated to Park Superintendent Colonel Thomas Boles, "I want to do a little exploring—go where no one else has been." "Very well," replied Boles. "We'll let you try your hand at it and see what it is like." Boles led her over to the **Jumping Off Place**, in the Big Room, which overlooks **Lower Cave**. The descended 93 feet down the rickety wire and wood ladders Jim White built for the 1924 *National Geographic* expedition.

After their descent into Lower Cave, Colonel Boles put a lantern in Earhart's hand—pointed to a dark, brooding hole, and encouraged her to go on her own and see what was there. "But how will I know I am really the first—that no one has been in there ahead of me?" she wanted to know. "By the dust," Boles explained. "If the dust shows signs of having been disturbed, you will know that you are exploring that area for the first time."

Lantern in hand, in went Miss Amelia. Evidently she decided she was in a region untrod by man, because she kept going. The rays of her lamp fought off the heavy blackness that closed around. Darkness in Carlsbad Caverns is such as no dweller atop of earth can know unless completely blind. It is utter slightlessness—blackness so heavy, so intense, as to be almost suffocating.

She also went into stillness so absolute that the ears rang. It was if she had been cut off from all the world: had entered into a strange, weird, grotesque universe in which there was no other living thing.

Slowly, on and on, the girl flyer crept almost stealthily through the crevices, between mighty masses of stone that loomed with horrid suddenness into the lantern's sickly light—on into the black ghastly bowels of the inner world.

– This somewhat "vivid account" is excerpted from the *El Paso Herald*, Thursday, January 31, 1929.

Twenty minutes later, Amelia Earhart returned with the caving bug.

She had seen her wonders—the first time they had been beheld by mortal eyes. She had known the thrill of going into unchartered and unknown places alone. She was keyed up with the excitement of it.

Immediately Colonel Boles signed Amelia up as a cavern guide. Fascinated and excited, Earhart planned future explorations—possibly to Bottomless Pit with Boles and chief ranger Jim White. Even a woman who had tempted fate so many times in an airplane could find caving exhilarating. However, Amelia Earhart never made it back to the Cavern—she disappeared over the Pacific Ocean (July 2, 1937) on a leg of her around-the-world flight. Had history not made a fateful turn for Earhart, she could have been one of the Cavern's exceptional female explorers.



Left: Famed aviatrix Amelia Earhart was photographed by Superintendent Thomas Boles in the Big Room of Carlsbad Cavern on September 9, 1928. Along with Boles and Jim White, Amelia planned to return and make a descent of Bottomless Pit, but disappeared on a flight over the Pacific Ocean before she ever got the chance.

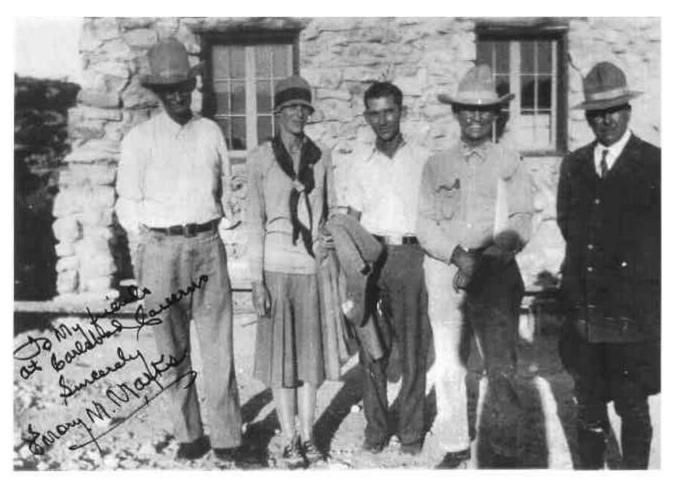
In a later newspaper article, Earhart said, "I have been in six directions in my life—north, south, east, west and up. And now at Carlsbad Caverns, I have been down."

From the Chicago Tribune, July 8, 2001 – "The Wonder Under: Carlsbad Cavern tells a tall but true tale of rocks, water, bats, and change." – quoting park historian Bob Hoff.

Other internet sources for this account:

The Archives, Pecos Enterprise, Pecos, Texas – "Brandon Hotel Hosted Earhart's 1928 Pecos Stopover," April 2, 2001

"City Participates in Earhart Flight Re-creation Events," September 10, 2001



Sept 9, 1928: Staff at Carlsbad Cave National Monument Greets Amelia Earhart
Amelia Earhart shown with Jim White (left) and Supt. Thomas Boles (far right)

"Picture provided by Bob Hoff: Park Historian"

### The Bottomless Pit, Maw Agape, Yawns Below the Trail in the Big Room

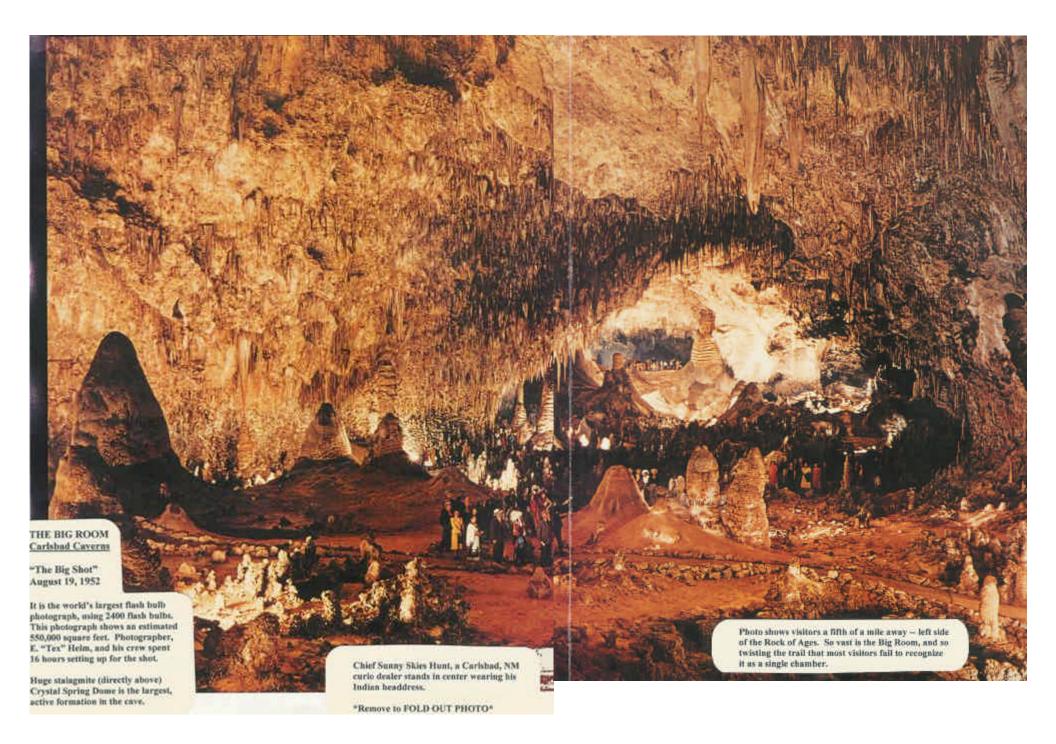
Old-timers named the Bottomless Pit to exaggerate its depth, which they recognized as limited. The soft silt bottom keeps objects from making a sound when they hit. Today park employees sometimes descend to the bottom with the aid of ropes. A flashlight easily picks out the floor 138 feet below the trail. Here the Cavern's ceiling hangs 285 feet above the opening's mouth—making the overall distance 423 feet—longest vertical drop in the Cavern. At times park managers find a variety of objects that visitors have thrown in—even a wedding ring.

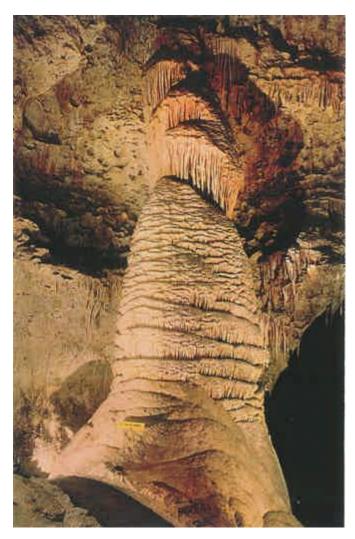
On the surface, the pit would be called a sinkhole. Water dissolved the rock, possibly around a vertical fracture. If this abyss had any drain, collapse sealed it off long ago. The pit is one of many in the Cavern. The deepest is 1,100 feet below the surface.

Abundant water in the distant past is also the key to the amount of decoration in the Cavern. When the climate began to dry, most formations stopped growing, and today, we were told, 95 percent of them are dry and dormant. We walked on to **Crystal Spring Dome**. Our ranger stated, "This is the largest and the fastest growing of the formations within the Cavern that is still active. The fractures and pores in the rock in this area allow water to reach the Dome regularly. It may take rainwater falling on the surface anywhere from 2 weeks to a year to reach a formation such as this."



Photo by: E. "Tex" Helm for the National Geographic (Oct 1953 issue) "Carlsbad Caverns in Color."





Left: Rock of Ages in Carlsbad Cavern. One of the largest formations to be found in the Cavern, it stands alone in solitary majesty. From its base a magnificent view of the Big Room opens to the Cavern visitor. (Early 1950s postcard from Cavern Supply Company.)

Coming near the end of our loop around The Big Room we reached the **Rock of Ages.** The 1928 *Cavern Guide* described the bulky Rock of Ages as "probably the handsomest stalagmite in the whole cave." It has more history surrounding it than any other Cavern formation. Many special events were held in this spot over the years—including Will Rogers' visit in 1931. Superintendent Boles instituted the "**Rock of Ages Ceremony**" here, which was conducted from 1927 to 1944. After people were seated, Boles would deliver an inspirational address. Then an attendant flipped a switch—plunging the hall into *primeval darkness*. Then "out of the gloom" a quartet of park rangers advanced singing the hymn *Rock of Ages* as the lights were brought up gradually, beginning with those most distant. It was the most famous lighting show ever held in a cave.

Our group paused here and the lead ranger told us that this was the spot where "all the lights would be turned out" for a moment to give us, the visitors, a chilly taste of the "absolute inky blackness" that reigned for millions of years while the Cavern grew. Our guide asked us to refrain from speech lest we destroy the illusion. Now we were experiencing the cave in its natural state—with endless seconds of silence and darkness—a true sensation of wonderment and peace.

Our last stop before exiting The Big Room was at the **Painted Grotto** and **Doll's Theater**—where the Cavern's natural color blushes through. Both of these areas have clusters of formations known as *soda straws* that are tinted a delicate peach from iron oxide.

We chattered excitedly as our group exited The Big Room, taking the short return walk to the elevators, near the lunchroom. Walking past Fannie White's sales booth, my dad grinned giving her a

good-bye salute. One of the rangers pushed the button to signal the elevators and then turned and asked our group if there were any final questions. We all agreed the tour had offered a marvelous variety of wonders and we appreciated the park rangers who gave in-depth descriptions regarding the wide variety of natural formations—a few of the *fittest people* departed our group here—choosing instead to take the long (754 foot) uphill walk to the surface. We waited our turn for the ride to the Chihuahuan Desert surface on one of the two single-lift elevators. When these were installed and began operating at Carlsbad Cavern in November 1931, they were considered the longest in the world. The two elevators have a capacity of eleven passengers each—so, with a large group, we had to wait several minutes to take our turn. Once aboard, we went up at about 9 mph, up the equivalent distance of a 75-story building.



Elevator building at Carlsbad Cavern National Park. Vintage postcard on 1930s era linen by Curt Teich and Company.

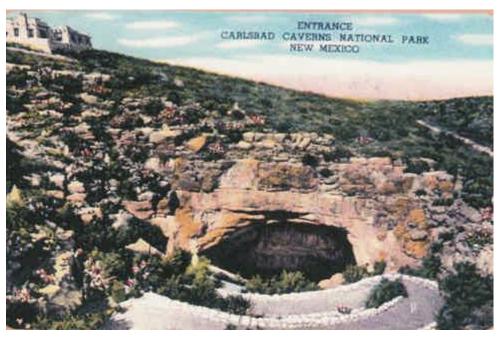
A minute later, the door opened and we exited through the **Elevator Building** (elev. 4,406 feet) that overlooks the **Parking Terrace**. This structure, built in 1931 of native stone, houses the elevators that connect the surface to the cave, 754 feet underground. We discovered that the building contains a lounge (or waiting room), a small museum exhibit, restrooms, and a ticket office, which at one time collected a fee for the elevator ride. We climbed the staircase to the observation platform on top. After four hours "deep within the earth's surface," I squinted as my eyes adjusted to the glare from the brilliant afternoon New Mexico sunshine. Warmer surface temperatures greeted us and I had no need now for this green jacket, which I quickly shed. I absorbed "anew" the view of distant desert landscape from this our vantage point atop the Guadalupe Ridge. To the north and east lies the plateau area with its deep, straight-walled canyons. To the west, in Texas, we could see the precipice that marks El Capitan. Behind El Capitan lies Guadalupe Peak, the highest point in Texas (elev. 8,751 feet). To the south was the vast Pecos River Valley—extending for many, many miles.



Left: Government buildings and parking terraces at Carlsbad Caverns National Park. Right edge of parking terrace shows the stone ticket office. To its left is the Cavern Supply Company.

Looking just below toward the crowded parking terrace, I spotted the Hudson. We meandered down the trail to the parked vehicles on the terrace. As we were placing my jacket in the trunk of the car, I looked up at my dad and asked if I could please go part way down the switchback trail for a last look at the **Natural Entrance**? He said, "OK, but hurry back! We want to make it to El Paso before dark." Jerry came with me, as I excitedly skipped ahead down the trail. Then coming into view of the Cavern's mouth we paused to marvel as we took our "one last look" at the immense opening.

Right: The natural entrance of Carlsbad Cavern. 1950 vintage postcard folder by Curt Teich and Company.



It was nearly mid afternoon when we exited the parking terrace and slowly drove down the national park's seven-mile **Walnut Canyon Highway**, down through rocky mesas covered with a wide variety of desert growth, including snowy-covered blossoms of the banana yucca, on our way to the exit. This was a "day well spent" and we were happy that my dad had chosen such a magnificent place to stop and spend four hours.



Left: The scenic drive through Carlsbad Caverns National Park. 1930-era linen postcard by Curt Teich and Company and distributed by Jim White Mountain Tours.

We continued to discuss what an amazing experience our underground tour had been when a few miles down the road, we noticed a wooden sign, which pointed to a short hiking trail. Jerry and I shouted, "Why don't we stop here to see what this is?" My dad pulled the Hudson over and we walked back through desert growth to explore the site of some shallow limestone caves—*used by ancient Indians*. A few pottery shards were scattered about.

I looked up toward the sun shining high overhead—absorbing the welcome warmth on my still cool skin—as a gentle breeze blew a wisp of hair across my face. I glanced up at my grandmother; we exchanged contented smiles—she reached for my hand. Somehow I identified with this remote setting of the canyon cutting through cliff sides of the ancient limestone reef. To some perhaps this remote, rugged desert landscape would appear barren and uninteresting—but to me it offered quiet respite and beauty, a place of reflection. For a short moment, I felt almost blended and one with these surroundings.

We returned to our *dust-covered* Hudson and, as we drove off, we began again to converse about our wonderful day of sightseeing at **Carlsbad Caverns National Park**. We exited past the park's entrance sign and flagpole and into White's City—pausing to pick up bottled soda pops "for the road" at the Business Center. At the intersection, we turned south to rejoin US Highway 62/180—passing the DeLuxe Court on the west side of the highway, which looked like a comfortable night's abode for road-weary travelers on their way to the Cavern.

I felt a certain reluctance as we departed—never knowing then that there would be other days to return to the Cavern as an adult—to explore and learn more about this place and touch base with fond childhood memories of this day.



Far Left: Scene from an early 1930s postcard folder by Curt Teich and Company.

Near Left: Early 1950s postcard of White's City Business Center, White's City, New Mexico