Mammoth Cave

Open all year



									Page
÷	÷			•		•	,	•	3
	•								3
			•		•				4
÷					•	•	×	•	5
				•					7
×	•					14	x	•	10-13
Su	rfa	ce			٠		•		14
			•						15
	•		•		7.015		•	•	16–17
			÷		•		•		18
٠		•							19
·								•	21
			٠	÷	•	÷	•		24
	×.				•	•			25
							•		26
8				1	•		8	٠	27
•	x				•		•		28
ona	al P	ark	•		•				30-31
	·	•	•	÷	÷	•	•	÷	32
٠	÷	•				а.	÷	8	32
		 				Surface	Surface	Surface	Surface

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

WELCOME

More than 100 years ago tourists came from many parts of the world to see "the greatest cave that ever was." The National Park Service now welcomes you and your family to inspect its decorations and to enjoy its scenic underground passages. These passages have inspired thousands of visitors before you. The superintendent and his staff now earnestly hope that your visit will be a memorable experience.

You will enjoy your cave trips and your stay in the park much more if you take the time to read this booklet soon after you arrive. Reading time is only 20 minutes. We suggest, therefore, that you have a seat in the visitor center, your room, or your camp and invest the few minutes in this short narrative.

This booklet will give you many interesting highlights in both natural and human history. In just a few minutes you will learn how the cave was formed, who first discovered it, how it helped to win a war, and what creatures have lived deep within its corridors. You will also discover how the area became a National Park and how park personnel protect and maintain it so that you may share its inspiring story with past and future generations.

LEARNING ABOUT THE PARK

THE VISITOR CENTER is the logical starting point of your visit. You will enjoy your excursions, both underground and on the surface, infinitely more if you understand what you are seeing.

An orientation program of colored slides and narration is presented in the auditorium. The 14-minute program is designed to help you decide which of the varied trips you wish to take in the cave.

There is also a large exhibit room in the visitor center where many exhibits explain in detail how the cave was formed, the why and how of cave decorations, the story of the prehistoric Indian in the area, white man's history, and the plants and animals in and out of the cave. The short time spent in looking at these exhibits, either before or after your cave trip, may well prove to be the most valuable part of your visit to the park.

THE AMPHITHEATER is the center of activity as soon as darkness falls. There, each evening during the summer, a park naturalist, using color slides for illustration, unfolds new chapters of the park story.

THE TRAILS will lead you on leisurely walks over the surface and give you an opportunity to become acquainted with the plants, birds and other animals, and with the surface aspects (sinkholes and other features) of the unique Karst topography that relate to the cave below. The trails are described on page 15.

HOW THE CAVE WAS FORMED

Some 260 million years ago, much of Kentucky was covered by shallow inland seas. On the bottom of these seas, sediments were deposited which later became sandstone, shale, and limestone. Millions of years later, the gradual uplifting of the earth's surface drained the seas, exposing the rock strata to erosion and weathering processes.

One of these processes, solution, had much to do with forming Mammoth Cave. Carbon dioxide in the air when combined with rainwater forms carbonic acid. For thousands and thousands of years, ground water containing this acid seeped through to the limestone stratum below the surface and gradually dissolved it. Underground streams, flowing through the dissolved passageways, enlarged them by a scouring action. The process also cut passages vertically, so that pits and domes resulted. (Pits and high domes are notable characteristics of Mammoth Cave.) Underground tributaries helped to widen and smooth the passages.

Later, a series of uplifts of the earth's surface in this region accelerated the cutting action, deepening the valley of the Green River. The water table dropped as the earth's crust rose slowly, thus draining part of the cave. The upper region's of the cave then became dry, and ceilings were raised as rocks forming them fell to the floor of the cave. The ceilings of some domes became thin, and surface water seepage weakened them further. Final collapse of the ceilings formed sinkholes-holes in the dome ceilings that are often seen on the surface as circular depressions.

After the upper parts drained and became airfilled, water continued to be an agent in the cave's changing appearance. As water seeped down from the surface, it carried lime that had been dissolved from the limestone above. When the limeladen water entered dry passages, the water evaporated and the lime was deposited. Thus were formed the intricate patterns of travertine that we see today.



2

Thus Mammoth Cave was formed through eons difficult for man to imagine. Working quietly in the huge corridors and passageways, in the mammoth pits and domes, and in the great "rooms," patient natural forces continue to perform the delicate job of interior decorating.

ITS DECORATIONS

TRAVERTINE (dripstone and flowstone) is produced very slowly. It is white in its pure state. However, in the Frozen Niagara section you will notice it sometimes has an orange or brownish cast. This is color added by iron compounds absorbed by the water on its way to the cave. Travertine (sometimes called cave onyx) includes the following:

Stalactites-Icicle-like formations "growing" down from the cave ceiling where water enters the passage through cracks.

Stalagmites-Cone-shaped formations building up from the floor where water drips from stalactites directly above.

Columns-Formations resulting when stalactites and their corresponding stalagmites join after long periods of building.

> As surface streams eroded through the sandstone-capped hills of the Mammoth Cave region, water entered cracks and crevices of underlaying limestone and dissolved out underground waterways (shown in black).

> When the water table dropped, some of the passages were drained. These are the caves through which you walk today. The passages that are still filled with water will also eventually be dry, for as the water level of the surface river lowers, that of the underground streams will lower also.



The huge passageways were formed many thousands of years ago. Courtesy, National Park Concessions, Inc.; W. Ray Scott, photographer.

Draperies-Rows of stalactites that have grown together to form a sheet, or drapery, effect. Draperies are usually formed along cracks in the ceiling.

Flowstone-Formations that result when water flows over rock formations instead of dripping from them. A fine example of flowstone is Frozen Niagara.

GYPSUM forms decorations in the drier sections of the cave. Gypsum crystals develop on rock surfaces of walls and ceilings. During development, they push older growths outward into a variety of shapes. The process may form a crust over an entire wall or ceiling. When the formation is uneven, "blisters," or "snowballs," are produced by pressure from behind. A most beautiful stage is reached when the blister bursts and opens into soft, delicate shapes-flowerlike petals, rosettes, and fibrous masses that resemble cotton.

The beauty and variety of Mammoth Cave's decorations have drawn visitors like a magnet since discovery of the cave in 1799. As the latest member of this cavalcade, you have the choice of many cave trips to meet your interests.

"ALL OUT FOR THE CAVE"

Before each cave trip, this familiar call comes from the information desk. The number and length of trips vary from summer to winter, with fewer trips scheduled during the winter season (about mid-October to mid-April). You can check on the current trips and also buy your tickets at the visitor center.

There is a nominal guide service fee for each trip. Guide fees do not apply to children under 12, but a responsible adult must accompany them. Hold them by the hand and do not permit them to wander off the trail.

The map on pages 10-13 gives you some idea of the length of the trips as well as important trip features. A leaflet available at the information desk also describes these trips. Observing certain precautions can make your cave trips more enjoyable.

The trails are solid, though slippery in spots. In most places even a tall person can walk upright. You will never have to crawl! Stairways, ascending and descending, make certain trips more strenuous than others, but the pace is easy, with frequent stops for rest.

Wear a wrap. We recommend a sweater or a jacket. The cave is a chilly 54° and damp in spots. Slacks are more comfortable than shorts. Low-heeled shoes are a "must" and if they have rubber soles, so much the better.

Finally, have confidence in your tour leader, a uniformed employee of the National Park Service. His knowledge of the cave comes from many years of experience.

Wooden pipes used in saltpeter operations in War of 1812. Courtesy, National Park Concessions, Inc.; W. Ray Scott, photographer.



6

If you have any doubts about your endurance, or that of your companions, ask for details of each trip at the information desk. This is a good idea in any case. Select an easy trip for a starter-either Historic or Frozen Niagara makes a good beginner's choice. Choose your trip and join the crowd hurrying down the hill to the Historic Entrance or boarding the bus for the short drive to the New Entrance at the opposite end of the cave. Here you go!

FROZEN NIAGARA (3/4 mile-11/2 hours). This trip, electrically lighted all the way, starts with a 250-foot descent by stairway from the New Entrance. En route you will look up at Roosevelt Dome, 130 feet high, and down at Silo Pit, 95 feet deep. Distinctive features of Mammoth Cave, such vertical shafts result from water dripping and coursing downward along the intersections of joints. They are "pits" if you are looking down; "domes" if you are looking up.

Soon you will reach Grand Central Station, where four passages come together. A little farther on is The Big Break, a



scene of devastation where long ago the ceiling collapsed, littering the floor with gigantic rocks. Nearby, a ceiling that didn't fall looms overhead. Smooth Ceiling, the most expansive ceiling in the cave, measures 250 feet by 85 feet.

Then, 75-foot-high Frozen Niagara comes into view, the largest known travertine formation in the cave. You will leave Frozen Niagara to look down on Crystal Lake, 270 feet below, and continue on your way to Onyx Colonnade. Here you see an impressive assortment of dripstone formations stalagmites, stalactites, and columns that are no longer forming. The fragile stalagmites in the adjoining Onyx Chamber display wet and shining surfaces as evidence that they are still growing, and their slender size indicates rapid dripping. Your trip ends at a travertine dam called The Great Wall of China.

HISTORIC $(1\frac{1}{2} \text{ miles}-1\frac{1}{2} \text{ hours})$. This is an easy trip starting at the Historic Entrance, the natural entrance to the cave, featuring parts of the cave shown for more than 100 years. Saltpeter vats of the War of 1812 stand in the Rotunda and also at Booth's Amphitheater. The saltpeter found in the cave was a major source of the nitrate used to make gunpowder during that war. Then Martha Washington's Statue reveals itself. Just beyond the Giant's Coffin you will see the site of the world's first tubercular hospital-remnants of its two stone buildings still stand. Indians of long ago went into Mammoth Cave, deeper than they went into any other known cave. You will see and hear their story on this trip. On display are artifacts and a mummy more than 2,000 years old.

On this trip, you will also see the famous blindfish of Mammoth Cave. They were first discovered in Echo River in 1838.

This trip is electrically lighted throughout. You leave by the Historic Entrance.

ECHO RIVER (3 miles— $2\frac{1}{2}$ to 3 hours). Beginning at Historic Entrance, most of this trip is electrically lighted, but you will carry a lantern part of the way. There is some climbing (137 steps in one place) and the trail near the river may be damp.

You'll go down Broadway from the Rotunda to the Giant's Coffin, then turn off to go lower into an area of pits and domes. You will look down into the 105-foot Bottomless Pit, for many years the end of this trip. But you'll go farther now and squeeze your way through the winding corridor known as Fat Man's Misery. From River Hall you'll go down 360 feet below the surface to Echo River, the lowest depths of the cave open to visitors. The ride in the flat-bottomed boat is impressively mysterious. After returning to River Hall, you will go up through the cave's highest known dome—Mammoth

11

Dome, 192 feet from top to bottom. Back along Little Bat and Audubon Avenues to the Rotunda, you leave by the Historic Entrance.

SCENIC TRIP (41/2 miles-41/2 hours). This rather strenuous but rewarding trip asks nothing more than normal endurance. From Carmichael Entrance, a long flight of steps takes you past a giant rockfall called Rocky Mountains and into Diamond Grotto with its sparkling ceiling of gypsum. Marks left by oil lamps testify to tourist trips through the cave many years ago.

You can rest while lunching in the Snowball Room, where food is brought from the surface by a 268-foot elevator. Gypsum "blisters" on walls and ceiling gave this chamber its name.

Boone's Avenue, a winding passage with symmetrically curved walls, is more than 50 feet high in some sections and in many places narrow enough to touch from wall to wall with arms outspread. From these eerily winding channels, you come upon a sparkling display of gypsum flowers and needles. Then you will proceed into Grand Central Station. Thereafter, the route is the same as that of the Frozen Niagara trip.

MAMMOTH DOME $(2\frac{1}{4} \text{ miles} - 2 \text{ hours})$. During the winter, this trip replaces the Echo River trip when the river is at

12

flood from Cr Froze is too Niag New you An the e and thou trails A of th to th that enco trem cert by g

flood stage. The two trips are the same except for the passage from River Hall to Echo River and the boat ride.

CRYSTAL LAKE ($\frac{1}{2}$ mile— $\frac{11}{2}$ hours). This replaces the Frozen Niagara trip during the winter when the New Entrance is too wet to travel. You will enter and leave by the Frozen Niagara Entrance, thus missing the pits and domes near the New Entrance and Grand Central Station. But, as a substitute, you will have a boat ride on beautiful Crystal Lake.

ALL-DAY TRIP (7 miles—7 hours). This trip takes you the entire length of the cave, from Historic Entrance to Niagara, and incorporates most of the features of the other trips. Although it involves a great deal of walking, it follows good trails, and the guide sets a deliberate pace.

A bit of scenery included only in this trip comes at the end of the Echo River boat trip. Instead of turning back, you cross to the opposite side of the river and proceed through corridors that grow increasingly drier and more comfortable. You will encounter some notable gypsum flower displays. From the tremendous room where violinist Ole Bull was heard in concert in 1851, you continue on to Martha's Vineyard, marked by grapelike clusters of limestone in the ceiling.

Around the next corner you will find it hard to believe that you are still in a cave 267 feet below the surface. In the new Snowball Room, you will lunch in the atmosphere of a sidewalk cafe where the "streetlights" glow from lampposts under a sky of gypsum snowballs.

WHAT TO SEE AND DO ON THE SURFACE

SINKHOLES. Many surface features inside and outside the park help to tell the story of how the caves were formed. Most important are the depressions called sinkholes, or "sinks," that pit the rolling Kentucky lowlands along the entrance roads to the park. They are the results of solution and the collapse of cave ceilings.

You can see numbers of them on State Routes 70 and 255 as you drive through a region that has been called "The Land of Ten Thousands Sinks." A most spectacular example is Cedar Sink located about 4 miles from headquarters. In this large depression, a stream emerges from a cavern, flows on the surface, and is again lost underground.

THE RIVERS. The park's most important stream, the Green River, enters the park area from the east. It pursues a winding course across the park for about 25 miles before the Nolin River joins it at the western boundary. Along the way, the Green River is joined by underground streams, such as Echo River. This active circulation of underground and surface waters is essential to cave forming. The circulation would not be possible if the Green River were not there to serve as an outlet. The lowest cave levels are the youngest; the topmost, driest levels are the oldest. As long as the underground waters continue to circulate, new passages will be formed.

Blindfish from the Echo River.





Deer antlers are "in the velvet" in spring.

THE BOAT TRIP. Down the Green River and back by boat will rest you if you have spent an active day in the caves. It is particularly beautiful at sunset and refreshingly cool at midday, and you will never forget the mysterious quiet of the river on a moonlight cruise. Trips are frequent throughout the day from May to October. The round trip is 12 miles and takes an hour. (Write to M. E. Nash, Park City, Ky., for rates and other information.)

THE TRAILS. To help you enjoy the surface features of the park, winding trails have been constructed through the woods and along the river. The trails are most beautiful during spring and autumn, but they are also shady and pleasant in the cool of an early summer morning. For a start, try the self-guiding Sunset Point Nature Trail that begins near the tour leader station on the way to Historic Entrance. To double your enjoyment of this walk, be sure to get the *Sunset Point Nature Trail* booklet. It points out the most important features of this self-guiding walk. You can get a copy for 10 cents either at the information desk or from the vending machine at the start of the trail. This trail is less than a mile long and leads you to a splendid view of the Green River, almost 400 feet below.

ANIMAL LIFE

Blindfish, the first blind cave animals ever studied, are found in the Echo River in the depths of Mammoth Cave. They were discovered in 1838, and in 1842 the first scientific description of them was written. There are also blind crawfish and blind cave crickets. Their characteristics are lack of pigment, absence or degeneration of eyes, and a keen sense of touch.





Surface trails beckon hikers and photographers. Courtesy, National Park Concessions, Inc.; W. Ray Scott, photographer.

Aboveground, the lush forest provides a home for the whitetailed deer. The woodchuck, cottontail, and squirrel are much in evidence near the museum and hotel; and the chipmunk looks for handouts in the picnic and campground areas. Watch for a lively little lizard, the five-lined skink, by your doorstep.

Kentucky has long been famous for its rich variety of birdlife. Early in the 19th century the famous ornithologist, John James Audubon, was astonished to see great roosts of the passenger pigeon along the Green River. The pigeon is now gone but many kinds of birds will still brighten your visit. The park list of birds is a long one and includes robins, bluebirds, several thrushes, woodpeckers (including the striking pileated woodpecker), crows, various hawks, both the scarlet and summer tanagers, and many kinds of warblers.

FOREST AND FLOWERS

In midsummer, you will be particularly conscious of the dense hardwood forest that covers much of the park. Oaks and hickories predominate; redcedars and pines are scattered about through the broad-leaved trees. In autumn, there is a long span of colorful foliage in which beech, ash, dogwood, sycamore, sumac, blackgum, and, above all, oak and maple have a part. In spring the white and pink blossoms of dogwood and redbud intermingle.

Flowers that most typically belong to this part of Kentucky are the hepatica, early saxifrage, blue and white violets, springbeauty, yellow adderstongue, Dutchmans-breeches, cutleaf toothwort, crested blue iris, and butterfly milkweed; these

are the early bloomers. Later look for trumpetcreeper, blackeyed-susan, purple coneflower, ironweed, and goldenrod, parading their colors until late autumn.

THE SEASONS

SUMMER. In June you will find, as you walk along the bluffs, little vistas framed in the green leaves. Then, one day there will be a sudden burst of wildflowers-white and purple bergamot or beebalm, long slender fairywand, and, in more secluded areas, more than a dozen species of orchids will be budding and blooming. The wild petunias and stately ironweed at the roadsides will be mingling with the dainty Queen-Annes-lace. In the late summer, the Kentucky State flowerthe goldenrod-takes over in the woods, and many asters appear.

Bright swallowtail butterflies flit in and out among the butterflyweed; the buzzing of bees and the constant song of the cicada, or locust-as so many people have misnamed this insect-at midsummer give evidence of nature's busiest season.

All during the succession of hot summer days you can find relief in the cave or at the Historic Entrance, where cool drafts travel unceasingly outward. Nights in the park are cool and comfortable, and you usually need a sweater at the evening naturalist program.

AUTUMN. Aboveground, the park is in a state of high glory; the rolling hills are a blaze of color, and the Green River Valley flames with red, orange, and yellow. The river itself is truly green as it is at no other time of the year. The birds arriving from the north keep the skies alive with their

19

numbers. On occasions you may hear the resounding honk of the migrating geese. If you hear it, look overhead for their majestic "V" formation winging southward across the autumn sky. On the ground the woodchucks are ceaselessly eating to fatten themselves for their long hibernation. The sumac and blackgum are the first vegetation to change color; maples, oaks, and ash come a few weeks later, and the dogwood puts on a brilliant red. Days are mild and clear; nights, crisp and chilly.

WINTER. As the cave offers relief from heat in summer, it is an equally pleasant place to escape from freezing temperatures in the winter. However, on many winter days, surface temperatures encourage hiking and campfire picnicking.

Park naturalists have found spots where, on freezing days, air leaves the cave by cracks and fissures in the ground. Frost forms around these openings where moisture in the warm air from the cave condenses and freezes.

Vistas of the river and valley are never better than in this season, when the view is unobstructed by foliage. You become aware of the scattered evergreen trees-redcedar and pinestanding out fragrant and green in a brown-toned world.

Occasionally you may see deer on the trails or by the roadsides during the winter. The bird population--robins, cardinals, chickadees, juncos, and crows-is much in evidence.

SPRING. Flowers around the cave mouths are the first sign of this happy season, and hepatica is its chief harbinger, as well as the last flower to disappear in autumn. Look, too, for springbeauty and white cutleaf toothwort-blankets of them---and early saxifrage along the well-traveled path to the Historic Entrance.

Walk through the woods, and you will see dogwood and redbud blossoms overlapping the new spring green of the hard-

Desiccated body of Indian, who was trapped in cave more than 2,000 years ago. Courtesy, National Park Concessions, Inc.; W. Ray Scott, photographer.

caves."



wood trees. Migrants are arriving, the phoebe is seeking nesting sites in the cave entrances, and as many as 16 varieties of nesting warblers will be coming back to the park after their winter's stay farther south. If you go for a stroll, the paths will be filled with melody-from early morning until dusk.

HISTORY

EARLIEST DAYS. About 2,000 years before Europeans came to this continent, Indians lived in the Mammoth Cave area and visited the cave itself. Partly-burned torch sticks and other artifacts have been found along the trails. Pottery, gourds, sandals, and woven rope have been recovered, as well as remnants of tobacco leaves.

That these Indians went far into the cave was established in 1935 when an Indian mummy was found wedged beneath a huge boulder about $2\frac{1}{2}$ miles from the opening known today as the Historic Entrance. More than 2,000 years ago, this Indian was trapped on a ledge as he scraped the wall of the passage for its gypsum. Many cave walls bear scars made by gypsum-hunting Indians who must have valued the mineral, but for reasons unknown to us.

The date given for discovery of the cave by the white man is 1799. Legend says a local hunter was the first to set foot inside it when he pursued a wounded bear into the entrance to the cave. It was also in 1799 that pioneer Valentine Simms entered in Warren County records "200 acres of second-rate land lying on the Green River," and including "two petre

These same saltpeter caves a few years later were to give Mammoth Cave a particular niche in our national history. It

was the nitrate contained in the "petre dirt" that was used by the United States to manufacture gunpowder for the War of 1812. Without it, that conflict might have ended on a somewhat different note.

The total yield of saltpeter for war purposes was 400,000 pounds. "Petre dirt" was hauled long distances through underground corridors to leaching vats where the nitrates were extracted. These same vats and hand-drilled wooden pipes are in their original positions not far from the Historic Entrance.

After the war, many proprietors exhibited the cave to a public curious about the saltpeter operations, but it was not until 1837 that serious exploration began. It was then that a 15-year-old boy named Stephen Bishop, among the cave's first guides, crossed the Bottomless Pit on a slender pole, opening the way to extensive uncharted corridors and passages. Bishop guided the many eminent scientists who visited the cave thereafter, and achieved world renown before he died in 1859. He is buried in the park.

The last private purchaser of the cave was a Louisville physician, who established an underground tuberculosis sanitarium there in 1843. It seemed to him a hopeful experiment because of the even temperature and purity of the cave air, but his patients failed to recover. Some of the stone cottages used in the experiment are still standing. The doctor's heirs remained in possession of the cave and the 1,610 acres surrounding it until 1926.

IT BECOMES A NATIONAL PARK. In 1911 Kentucky Congressman R. Y. Thomas introduced the first bill to establish the cave as a National Park, but the area was destined to remain in private hands for many more years. In 1924 patriotic Kentuckians formed the Mammoth Cave National Park Association. The association petitioned the President in behalf of the project. In 1926 Congress authorized the establishment of the park, provided that the State of Kentucky would acquire and donate the necessary acreage.

During the 1930's, before it was fully established as a

Free camping is enjoyed by many visitors at Mammoth Cave. Courtesy, National Park Concessions, Inc.; W. Ray Scott, photographer.



National Park, the Mammoth Cave area benefited greatly from work performed by the Civilian Conservation Corps, under National Park Service direction. Much of the land had been misused for many years, the soil was seriously depleted, and there was widespread erosion. The fact that the park has regained so much of its natural loveliness can be attributed largely to the work done at that time.

The people of Kentucky, represented by the Mammoth Cave National Park Association and the Kentucky National Park Commission, acquired the minimum acreage needed. In May 1936, the minimum acreage was formally accepted by the Secretary of the Interior. In 1941 Mammoth Cave National Park was fully established as the 26th National Park, and the cave was thus placed under full protection from damage and exploitation in perpetuity.

HERE COME THE VISITORS. During the years when private owners operated the cave, visitors came by steamboat up the Green River from the Ohio, by stagecoach from Bowling Green, and by rail from Louisville. Great artists-singer Jenny Lind, violinist Ole Bull, and actor Edwin Booth-performed in auditoriums far underground. Among the visitors who carried whale-oil lamps and emerged from their tour with soot-blackened faces and clothing, were the Emperor of Brazil and the Grand Duke of Russia, in 1859.

An early commercial brochure on "America's Natural Wonder" advised that "bloomers or Turkish dress" were proper attire for ladies, and that gentlemen might rent suits for the trip. It admonished a lady "in no case, except that of illness," to take her escort's arm, explaining that "it is fatiguing to both parties." Should a visitor become lost in the cave, he was forewarned to "remain in the place where you first became confused, and not stir from it until rescued." (Good advice today, too.)

By the beginning of the 20th century, the cave's beauty had been marred in the more heavily traveled passages as visitors, using pointed objects or smoke from oil lamps and candles, continued to mar fragile walls and ceilings with their names and initials. Once the cave became a National Park, protection of its features from such thoughtless vandalism became a major concern.

PHOTOGRAPHY

In the cave you will need either photoflash or a long exposure from a tripod to get successful black and white pictures. Cave parties are expected to stay together, so there is little opportunity for stops of any length.

Color pictures are possible with flash equipment; light level in the cave is inadequate for motion pictures in color.

Sloan



An illustrated talk. Courtesy, National Park Concessions, Inc.; W. Ray Scott, photographer.

On the surface, you will find many photographic subjects. Take your photographic problems to the photo shop in the hotel. Its staff has had much experience in cave photography,

and will be glad to advise you.

HOME READING

The Eastern National Park and Monument Association, a nonprofit organization, lists some very readable books on this and other famous caves. You may buy the books at the park or you may order them by mail. You may write to the association, Mammoth Cave National Park, Ky., for a complete list of the books, with prices. The following is a partial list:

Geology of the Mammoth Cave National Park Area, by Ann Livesay (illustrated).

The Story of Mammoth Cave National Park, by Margaret M. Bridwell.

The Story of Caves, by Dorothy Sterling.

Sunset Point Nature Trail (illustrated with pictures and map of park trails).

Celebrated American Caves, by Charles Mohr and Howard

HOW TO REACH THE PARK

BY AUTOMOBILE. Mammoth Cave National Park is about halfway between Louisville, Ky., and Nashville, Tenn. It is 32 miles northeast of Bowling Green, Ky.

From points south and west, take U.S. 31W from Bowling Green to Park City. Then take State Route 255 to junction with State Route 70. From here it is 5 miles to park headquarters on Route 70.

From points north and east, take U.S. 31W to Cave City. Park headquarters is 10 miles from Cave City on State Route 70.

BY PUBLIC TRANSPORTATION. The Louisville and Nashville Railroad provides transportation to Cave City; Greyhound buses stop at Cave City and Park City. Taxi service is available from Cave City and Park City to the park.

NOTE: There are many privately owned caves in the vicinity of Mammoth Cave National Park. You are not inside the park until you have passed the official entrance sign reading MAMMOTH CAVE NATIONAL PARK. There is no entrance fee to the park. Cave trips are variously priced; information is available at the visitor center.

STAYING IN THE PARK

MAMMOTH CAVE HOTEL has comfortable rooms with and without bath and is open all year. The motel-type lodge and electrically heated cottages are also open the year round. Unheated cabins are available from May to September. If you expect to stay in the park during the summer travel season, we suggest you write to National Park Concessions, Mammoth Cave, Ky., for latest rates and other information, and make your reservations well in advance.

Accommodations are also available at nearby Cave City and Park City.

CAVE TRIP INFORMATION AND TICKETS are available at the visitor center.

FREE CAMPGROUNDS are equipped with tables, fireplaces, and comfort station. Camping is on a first-come, first-served basis.

THE POST OFFICE is in a separate building near park headquarters; it is open daily for incoming and outgoing mail. Have your mail sent in care of General Delivery, Mammoth Cave National Park, Ky.

CHURCH SERVICES (interdenominational) are held each Sunday at 4 p.m. Catholic services are held each Sunday at 7 a.m. and on holy days at 8:45 a.m.

Boating on the Echo River.





The "flowing" travertine of Frozen Niagara.

HELP US PROTECT THIS PARK

THE CAVE formations and natural decorations have been thousands of years in the making. Once injured, they cannot be replaced. You may see examples of vandalism. Most of these occurred before the cave came under National Park Service protection. You can prevent further damage by being careful not to dislodge or disturb the formations in any way, and by urging others to give the same consideration.

ABOVE GROUND, please exercise similar appreciation of the

rocks and trees and flowers. Leave them as they are for future visitors to see and enjoy.

FIRES are allowed only in designated campgrounds and picnic areas. Extinguish them completely with water before leaving. Do not throw cigarettes or matches from automobiles or along trails. Fire is the No. 1 enemy of the National Parks.

CAMPING is permitted only in designated campgrounds. There is no camping equipment for rent in the park. Bring your own fuel.



FISHING SEASON is open throughout the year and no license

is required. For regulations, inquire at park headquarters. MOLESTING WILDLIFE is forbidden. The park is a wildlife sanctuary.

PETS are allowed in the park on a leash, or otherwise physically restricted. They are never permitted in the cave.

MISSION 66

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

ADMINISTRATION

Mammoth Cave National Park is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is Mammoth Cave National Park, Mammoth Cave, Ky., is in immediate charge. Send your questions or comments on services within the park to him.

PARK RANGERS are the park's protective force. Their job is to help you enjoy your visit and to assist you with any problems. If you wish to report an accident or a fire, or are in any kind of difficulty, see the nearest park ranger.

PARK NATURALISTS are the park's interpretive force. Their job is to impart a dual story to you—the fascinating cave attractions below ground and the natural beauty of the plant and animal life above ground. They tell this story at campfire talks, at the museum, on nature hikes, and through publications.

TOUR LEADERS are the third group of uniformed personnel. They conduct the guided walks in the cave and have the same authority as park rangers and naturalists. You are in their care and subject to their jurisdiction on your cave trips. They are qualified for this responsibility by long acquaintance with the cave.

All uniformed personnel are here to help make your visit a pleasant experience. Please feel free to seek their aid.

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



NATIONAL PARK SERVICE Conrad L. Wirth, Director



COVER: Historic Entrance.

Reprint 1960

U.S. GOVERNMENT PRINTING OFFICE: 1960-O-563206

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington 25, D.C. - Price 15 cents