

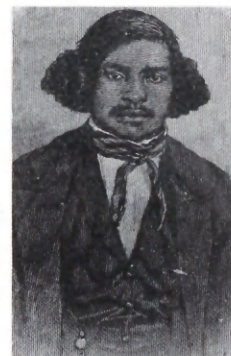
Into the Darkness

Since the days when prehistoric Indians explored the cave by the light of cane reed torches, Mammoth has inspired the imagination, tested the courage, and awakened the senses of visitors. Ancient artifacts and well preserved human mummies found in Mammoth indicate that people began venturing into the cave as many as 4,000 years ago. Modern-day encounters with the cave began, according to legend, in the late 1790s when a hunter chasing a bear through the hills near the Green River stumbled across its gaping entrance. This opening today is called the Historic Entrance. At first just a curiosity, Mammoth became a valuable commercial property with the outbreak of the War of 1812 between the United States and England. Cave sediments with abundant quantities of nitrate, an essential ingre-



Woven sandals and other artifacts have been found in Mammoth Cave, evidence that prehistoric Indians ventured into its chambers. The items are remarkably well preserved because of the cave's constant cool temperatures and stable humidity.

dient of gunpowder, were mined by slaves during the war. By the war's end, Mammoth was famous. It soon became one of the nation's most popular attractions. Visitors came by stage-coach and by train to be led by guides through its mysterious subterranean world. "No ray of light but the glimmer of our lamps; no sound but the echo of our own steps; nothing but darkness, silence, immensity," is how one early visitor recalled his tour. Meanwhile, explorations were revealing more of Mammoth's wonders. Stephen Bishop, renowned guide and cave explorer, discovered miles of passages, under-



Stephen Bishop was a legend in his own time. The self-educated black slave, who began guiding visitors through the cave in 1838 at the age of 17, became famous for his knowledge of the cave, his daring explorations, his many discoveries, and his wit and humor.

Cover photo: Mammoth Cave's most striking feature is its vast, incomprehensible size.

Early cave tour groups sometimes stopped for a picnic, as shown in this 1880 etching.



ground rivers, and gypsum-decorated chambers in the mid-1800s. Later explorers followed where Bishop left off, pushing the known extent of Mammoth even further, or, like Kentucky farmer Floyd Collins, discovering other caves nearby. Meanwhile, extraordinary events took place in the cave. In the 1800s and early 1900s there were weddings, performances by Shakespearean actor Edwin Booth and singer Jenny Lind, and the establishment of a hospital for tuberculosis patients in the cave. At the same time, support was growing to protect Mammoth's natural wonders. Finally in 1941 Mammoth Cave National Park was established to preserve



The remains of an 1843 experimental tuberculosis hospital in Mammoth Cave can still be seen.

its maze of passages, cavernous domes and pits, underground rivers and lakes, unusual animals, and beautiful navigable rivers and rugged topography. At that time, 40 miles of cave were mapped. We now know this is the world's most extensive cave system—over 300 miles long . . . so far. Visitors still come by the thousands, drawn by the dark frontier that is Mammoth Cave.



The tragedy of Floyd Collins focused the attention of the nation on Kentucky's cave region in 1925. Collins was an enthusiastic cave explorer. In 1917 he discovered Crystal Cave, and in 1925 he found another cave near Mammoth that he called Sand Cave. One day, while exploring a narrow passage of Sand Cave, a rock fell on his ankle, trapping him. Collins waited in the dark—cold, unable to move, and alone. The next day he was found, and rescue attempts began. Risking death themselves, Collins' family, friends, and strangers tried to free him. Newspapers and radio stations across the country carried frequent reports on their efforts. Finally a shaft was drilled and on the 15th day of his entrapment rescuers reached him, but it was too late. Collins was dead. Today his body is entombed in the park.



The Wild Cave Tour strays off the beaten track and into some of the more remote corners of Mammoth. It is for adventurers who relish the idea of crawling along muddy passages, squeezing through tight holes, and scrambling over boulders by the light of a headlamp.

The Ruins of Karnak, giant water-carved limestone columns in Mammoth Dome, tower above visitors on a tour of Mammoth Cave.

Stalactites, stalagmites, draperies, flowstone, and other cave formations are concentrated in the Drapery Room and other chambers and passages in the Frozen Niagara section of Mammoth Cave.

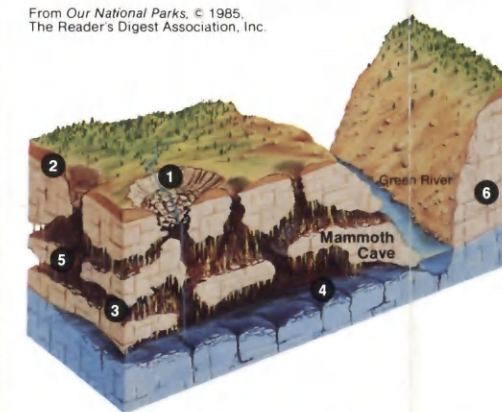
From the beginning, underground explorers doubted that they would ever find the end of Mammoth Cave. Today, the cave still seems to be a wilderness without boundaries. The Mammoth cave system goes on and on for more than 300 miles of known passages, and there is yet more cave to be explored. It is the longest cave in the world. No other cave even comes close. In this vast subterranean world, there are giant vertical shafts, from the towering 192-foot-high Mammoth Dome to the 105-foot-deep Bottomless Pit. Some passages and rooms are decorated with sparkling white gypsum crystals, while others are filled with the colorful sculpted shapes of stalactites, stalagmites, and other cave formations. Underground rivers, with names like Echo River and the River Styx, flow through Mammoth's deepest chambers. And in the cave's absolute blackness dwell many rare and unusual animals, including eyeless fish, ghostly white spiders, and blind beetles.



Visitors at Mammoth Cave's Historic Entrance.

An Underground Wilderness

Mammoth Cave is the centerpiece of one of the greatest cave regions in the world. The area, with its multitude of limestone caves, underground rivers, springs, and sinkholes, is known as a karst landscape. Water has been the guiding force in the creation of this landscape, including the intricate labyrinth of Mammoth. Underground water working in cracks and between rock layers has carved out Mammoth Cave's long, horizontal passageways over the past several million years. The upper passages, dry today, were hollowed out thousands of years ago; the lower passages are still being enlarged by the flowing waters of Echo River and other underground streams. Mammoth's huge vertical shafts, called pits and domes, have been created by groundwater seeping downward through sink-



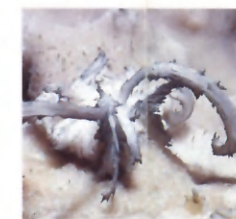
The landscape of the Mammoth Cave area: 1 sinkhole, 2 sandstone caprock, 3 horizontal pas-

sage, 4 underground river, 5 vertical shaft, 6 limestone layers.

holes or cracks located beyond the edge of the protective hard layer of sandstone that overlies much of the cave. Water also has been essential in decorating parts of the cave with gypsum formations, stalactites, stalagmites, draperies, and flowstone. The delicate gypsum formations occur on the walls, ceilings, and floors of some



Gypsum needles



Gypsum flower

Blind crayfish



of the cave's drier chambers; the rest of the formations appear in some of the wetter chambers. Since the creation of Mammoth Cave, unusual fish, shrimp, crayfish, crickets, spiders, beetles, molds, and mushrooms have taken up residence in its protective environment of cool darkness. Many of the cave animals are blind, or nearly so, and some lack skin pigments as



Blindfish

a result of living in the total blackness of the cave. Although sightless, many have other highly developed senses. Blindfish have extremely sensitive organs on their head and body that enable them to feel their way through the water. Cave crickets have exceptionally long antennae to perform essentially the same function on land. Other animals, such as bats and some cave salamanders, spend only part of their lives in the cave.

The cave cricket, like other animals that live in Mammoth Cave, is well adapted to its environment of perpetual darkness and a constant 54°F temperature. The cricket uses extra-long, extra-sensitive antennae to hunt for food and maneuver about the cave.



Color photos by Chip Clark

Exploring Mammoth Cave National Park

There are two worlds to explore in Mammoth Cave National Park—the extraordinary world of the underground and the more familiar surface world of oak-hickory forests, meandering rivers, and woodland wildlife. The park visitor center has extensive information on both. Books, folders, scenic drive and trail guides, cave maps, surface maps, a movie, exhibits, and park activity schedules are available at the center. It also provides up-to-date information on cave tours. Cave tour tickets are sold there, and all tours meet at the center. The visitor center is open all year except December 25. For more information, write: Mammoth Cave National Park, Mammoth Cave, KY 42259; or call (502) 758-2251 or, for cave tour information, (502) 758-2328.

Cave Tours

A variety of ranger-guided tours of Mammoth Cave are offered. These tours range from ¼ mile and 1½ hours long to 5 miles and 6 hours. Five tours are offered all year; four others, only in the summer. Tickets for all tours except the Wild Cave Tour can be purchased at the visitor center one day in advance; advance tickets are available through Ticketron reservation outlets across the country for all tours except the Wild Cave and Echo River Tours. Reservations can be made for the Wild Cave Tour by contacting the park. Tours are given every day except December 25. Tour members meet at the visitor center and then walk or take a bus to the cave entrance where their tour begins. See the map at right for

locations of the visitor center and cave entrances. The Snowball Dining Room, where lunch is sold, and restrooms are available on some tours. Children 16 or under must be accompanied by an adult. Children ages 8 to 12 can participate in a special guided exploration of the surface and a small cave.

TOURS YEAR-ROUND

The Historic Tour (2 miles, 2 hours) traces Mammoth's long and colorful history. The tour begins at the Historic Entrance, it goes into the Rotunda, where remnants of 19th-century nitrate mining operations are preserved, then continues along Broadway and Main Cave, chambers where Indian artifacts can be seen. The tour leads over

locations of the visitor center and cave entrances. The Snowball Dining Room, where lunch is sold, and restrooms are available on some tours. Children 16 or under must be accompanied by an adult. Children ages 8 to 12 can participate in a special guided exploration of the surface and a small cave.

The Half Day Tour (4 miles, 4½ hours) explores many of Mammoth's natural features. The tour descends through Carmichael Entrance and leads through gypsum-decorated Cleaveland Avenue, Snowball Dining Room, and through the long and winding Boone and Kentucky Avenues. Cave animals may be seen. The latter part of the tour follows the Frozen Niagara Tour route and exits at Frozen Niagara Entrance.

The Frozen Niagara Tour (¾ mile, 2 hours) of subterranean chambers filled with colorful stalactites, stalagmites, and massive flowstone formations begins at New Entrance. The tour descends 280 steps through a series of pits and domes and finally ends at Frozen Niagara Entrance. The trip includes a visit to Moonlight Dome and Crystal Lake.

The Travertine Tour (¼ mile, 1½ hours) is a less strenuous version of the Frozen Niagara Tour. It is designed for elderly persons. The trip begins and ends at Frozen Niagara Entrance.

The Disabled Tour (½ mile, 1½ hours), for physically impaired persons and assistants, begins with a ride into Mammoth's depths on the cave's service elevator. The tour includes Snowball Dining Room and part of Cleaveland Avenue. It ends with an elevator ride back to the surface.

SUMMER TOURS

The Lantern Tour (3 miles, 3 hours) recreates an oldtime tour of Mammoth, when guides led the way with kerosene lanterns. The tour, which starts at the Historic Entrance, follows the first part of the Historic Tour route, then continues into Main Cave and Chief City. It

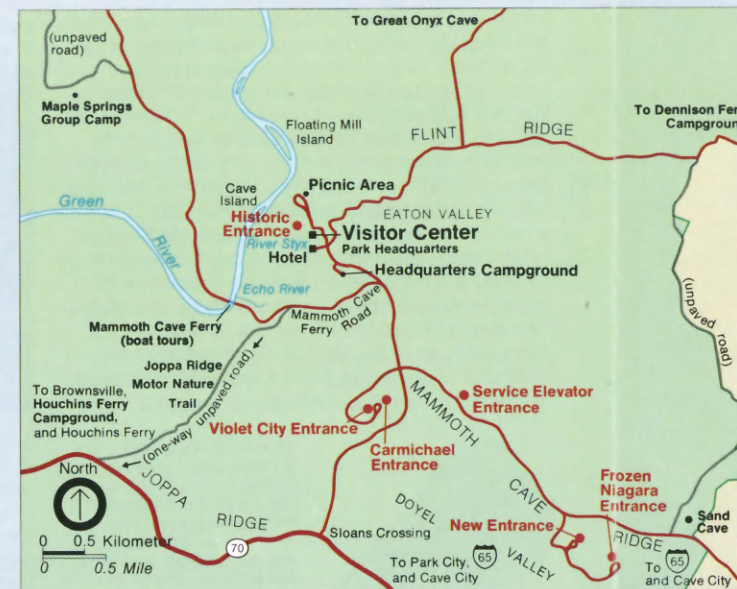
exits at Violet City Entrance.

The Echo River Tour (3 miles, 3 hours) descends to Mammoth's deepest passages where Echo River and the River Styx flow. The tour, which begins and ends at the Historic Entrance, includes a boat ride on Echo River. It also covers all the Historic Tour route.

The Wild Cave Tour (5 miles, 6 hours) is a strenuous investigation of a wild portion of Mammoth Cave. The trip requires stooping and belly-crawling through tight passages. Hard hats and headlamps are provided. The trip begins at Carmichael Entrance and ends at Frozen Niagara Entrance.

SAFETY CONCERNS
All cave tours are strenuous and require stooping and walking over uneven terrain. All except The Disabled Tour require climbing steps. Most tours follow dry, smooth, hard-surfaced trails, but portions can be wet and slippery. Watch your step. Sturdy low-heeled walking shoes are recommended. Persons who have heart or respiratory problems or who have difficulty walking should talk with a ranger before deciding on a tour. Visitors must stay with their tour and stay on cave trails. Smoking in the cave is not permitted.

Visitor Center Area



Surface Activities

Camping, Picnicking
Three campgrounds—Headquarters, Houchins Ferry, and Dennison Ferry—are open all year on a first-come, first-served basis. All have toilets, grills, and tables; all but Dennison Ferry have water. Evening ranger programs are given in the summer at Headquarters and Houchins Ferry campgrounds and at an amphitheater near Headquarters Campground. Large groups can call the park for reservations at Maple Springs Group Camp. Backcountry camping is allowed with a permit. A picnic area is near the visitor center.

Scenic Drives, Hikes
Motorists can tour a portion of the park on the Joppa Ridge Motor Nature Trail, a 2-mile dirt-and-gravel road. A drive guide is available. The road is

not passable by trailers or motorhomes. Seventy miles of trails wind through the park. Guided hikes are offered in summer.

River Trips
Green River boat tours are offered from April through October. For reservations, stop at the visitor center or call (502) 758-2243. Canoeists can float the Green and Nolin Rivers.

Park Lodging, Services
The Mammoth Cave Hotel complex has hotel rooms, restaurant, and gasoline station open all year. Rustic cottages, a camp store, hot showers, and a coin-operated laundry are available from spring to fall. For more information, call (502) 758-2225.

A Safety Message
Be alert for ticks, chiggers, and poisonous snakes. Do not feed wildlife.

Mammoth Cave Tour Area

Mammoth Cave tour routes wind through the passages shown in this illustration. Many more miles of chambers and

corridors are not shown here. Altogether there are more than 300 miles of known passages in the Mammoth cave system.

Illustration by Richard Schlecht
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