# INSIDE OUT

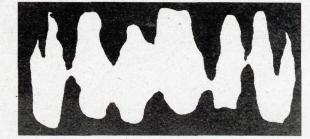
Official Newspaper of Mammoth Cave National Park

October 24, 1994 - March 17, 1995

LOOK INSIDE FOR A PARK MAP AND A SCHEDULE OF RANGER-LED PROGRAMS!

One copy per party, please





MAMMOTH CAVE NATIONAL PARK

## DID YOU KNOW THAT...

With over 345 known miles of cave passageways, Mammoth Cave ranks as the longest cave in the world. Optimisticeskaya, located in the Ukraine, is the second longest, but it is only one-third the length of Mammoth.

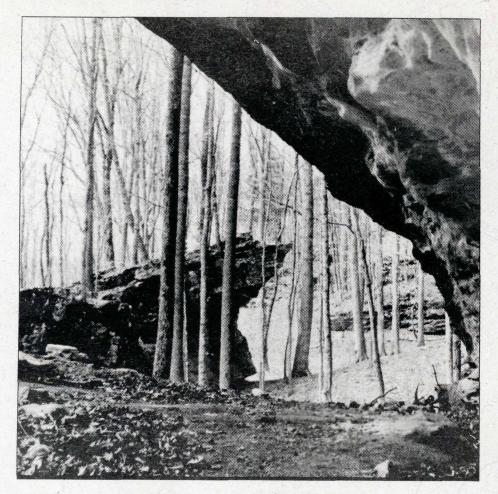
Mammoth Cave National Park was designated a World Heritage Site in 1981 and an International Biosphere Reserve in 1990. Mammoth Cave National Park merits this extra protection and special status because of its spectacular natural features both on the surface and in the cave.

Mammoth Cave National Park's 52,830 acres constitute one of the greatest protectors of biological diversity in Kentucky. While most of the park consists of second-growth woodlands, a number of unique plant communities – hemlocks and other northern plants growing in cool, moist ravines; wetlands; and open barrens with prairie vegetation – contribute much to the vast variety of plant life and harbor many of the park's rare species.

Native Americans first discovered entrances to Mammoth Cave around 4,000 years ago and continued to use the cave until 2,000 years ago. Guided by the light of dry weedstalk or cane torches and clad in thin woven-fiber slippers and light clothing, prehistoric people explored nearly 20 miles of Mammoth Cave. Driven by pure curiosity as well as by their interest in mining cave minerals (gypsum, mirabilite, epsomite and selenite), the native Americans left evidence of their passing – including cane torch fragments, bits of fiber, broken gourds, battered cave walls, and dug-out cave sediments – to remind us that some native Americans were great cavers.



# WINTER AT MAMMOTH CAVE NATIONAL PARK



Winter! Just the word conjures up images of cold, gloom, and dreary days. Look beyond those images. As with most other areas of the country, the Manmoth Cave landscape changes with each season. Dramatic winter scenes at Mammoth Cave consist of barren ridge tops, open forest canopy, and frosty whiteness.

Visiting the park in the winter easily reveals to us the karst topography which created the longest cave in the world. Spring and summer foliage prevents you from seeing much of this landform. Karst is a name for land made up of ridges and sinkholes which indicate limestone caves underneath. In karst areas you rarely see surface streams and, if you do, they soon disappear into the ground, entering the underground river system that sculptures cave passages. You'll notice one of those disappearing streams on your left as you walk to the Historic Entrance.

Pockmarks or depressions on the land, acting like sinks, also drain water underground. You may have noticed the bowl-like depressions along I-65 on your way to the park. The entire area along the interstate is called the Sinkhole Plain and all precipitation, whether it's snow or rain, "sinks" into the ground here and enters the Mammoth Cave system. The Mammoth Dome Sink just off the Heritage Trail or the Cedar Sink are two good examples of this karst landform.

The winter absence of forest foliage allows you to view intricate limestone layers exposed along the side of ridges and roadcuts. Imagine the miles and miles of cave passageways inside these ridges! Water oozing out of the horizontal cracks at the edge of the ridge comes in contact with freezing outside temperatures. A frozen waterfall begins to form and grows larger or smaller depending upon temperature variations. One can witness these frozen waterfalls along most of our park roads or over the lip of the Historic Entrance.

After a snow, the whiteness covers and highlights the park's forest textures creating an intricate pattern. Every blade of grass, each leaf left hanging on a tree, and forest debris all appear highlighted in your view. During the summer it is more difficult to see these textures created by nature. One can enjoy these tactile moments nestled amid the tranquility

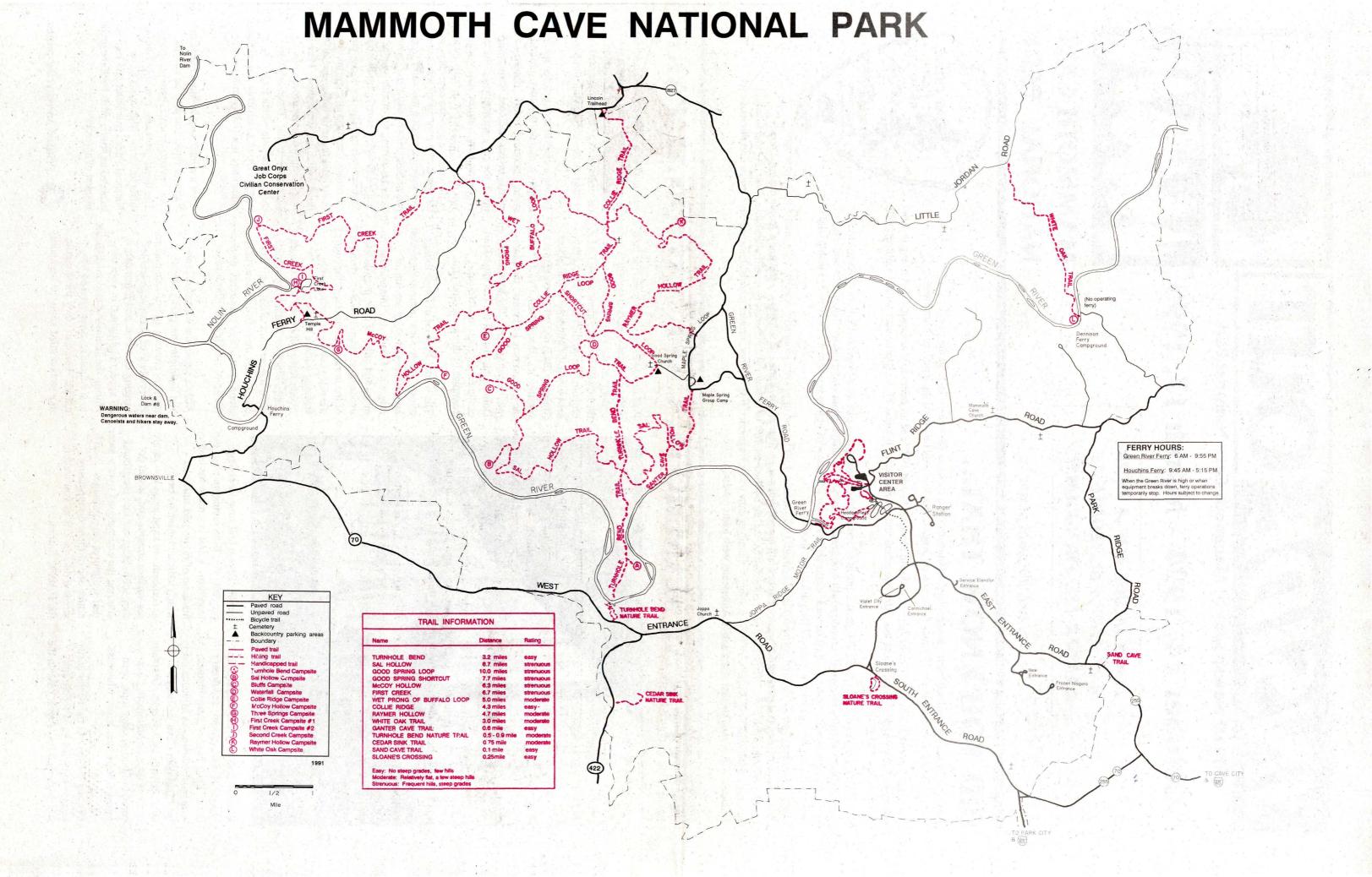
and quiet of a snow covered landscape by walking park trails. You might even encounter some of our winter residents such as the white-tailed deer or wild turkey during your rambles.

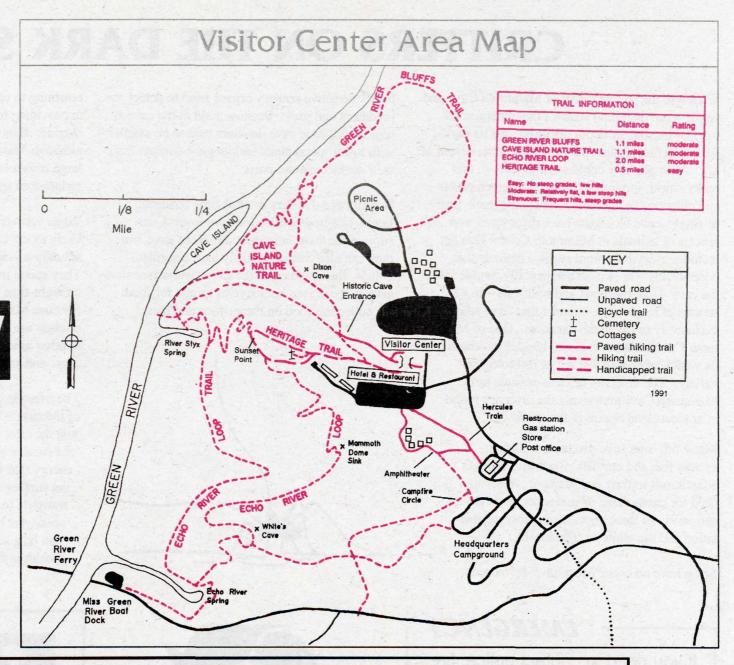
Taking a cave tour during the winter months is quite different than during spring, summer, or fall. Entering the cave is breezy and cold. Once deep inside the cave passageways, the mid 50-degree temperatures start warming you up. You notice it is fairly dusty in the cave. The extra cave dust is the the result of a caprock of sandstone and shale preventing the water from perculating into the cave, the lower air humidity during the winter months, and visitor's feet stirring up the dryer cave sediments. The dry winter cave air causes the mineral, gypsum, to flake from the cave walls, coating the floor with a fine white dust. Hair-like patches appear to be growing along some cave trails. These are salts called mirabilite which form only in winter. The cave environment changes when there is a change in the seasons

After a winter visit to Mammoth Cave National Park, you may be able to look beyond the cold, bare harshness. The beauty remains, it simply takes a different form. Mammoth Cave National Park's true heart and soul is exposed as winter pulls back the green blanket of summer.



Printed on recycled paper.





# Surface Activities to Do On Your Own!

HORSEBACK RIDING All trails north of the Green River (except Ganter Cave Trail) are open for horseback riding. When hikers and horses meet, horses must be slowed to a walk and hikers must remain quiet. Three campsites at Maple Springs Group Campground are available March through November. Each site can accommodate up to eight horses per site. Campsites cost \$15 per night and require reservations. For reservations, call the Chief Ranger's office at (502) 758-2251. Day-use horseback riders can park trailers at Lincoln Trailhead and across the road from Maple Springs Campground; trails are nearby. Always hitch horses more

Lincoln Trailhead and across the road from Maple Springs Campground; trails are nearby. Always hitch horses mothan 100 feet away from designated campsites, trails, or water sources. You may take a guided ride in the park with local stable operators.

**BOATING AND CANOEING** Almost 30 miles of the Green and Nolin Rivers carry boaters past dramatic bluffs and large trees. To explore the Green River, launch your boat at Dennison Ferry Campground or Green River

Ferry; you'll find the best take-out points at Green River Ferry or Houchins Ferry. On the Nolin River, launch your boat just below Nolin River Dam at Tailwaters Recreation Area. When you reach the Green

launch your boat just below Nolin River Dam at Tailwaters Recreation Area. When you reach the Green
River, paddle upstream against a gentle current and take out at Houchins Ferry. We do not recommend that paddlers continue down the Green River to Lock and Dam #6. Located outside the park, the ap-

proach to the dam is not marked with warning signs. Being sucked into the current above the dam could be extremely hazardous. You may rent canoes from concessioners located near the park. With a

backcountry camping permit, you can camp anywhere within the floodplain more than ½ mile from ferry crossings or developed campgrounds. River levels and current fluctuate dramatically, particularly during the winter months, and snags or sandbars may be hidden underwater. You must bring at least one Coast Guard-approved life preserver for each person.

**FISHING** If you fish on the Green or Nolin Rivers, you may catch muskie, bass, white perch, or catfish, among other species. Within the park, you don't need a fishing license, but all Kentucky creel limits apply. Fish by handline, rod and reel, or trot and throw line. Other methods, including limb-lining, are prohibited. Contact the Visitor Center or any County Clerk in Kentucky for a complete list of creel limits.

HIKING TRAILS BECKON Sixty miles of scenic trails on the north side of the Green River and ten miles of shorter trails on the south side of the river invite you to stretch your legs and explore the park's above-round wonders. The trail map in this newspaper shows roads and trails. Detailed maps and guidebooks are sold at the park's Visitor Center.

GANTER CAVE Hike or canoe out to the entrance of Ganter Cave for some on-your-own spelunking. Open to experienced cavers only, Ganter Cave is nearly 8,000 feet long and consists of at least two levels of passageway. Parties of four to nine people with appropriate caving gear can obtain a reservation to visit Ganter Cave. Inquire at the Visitor Center for a handout providing detailed information on requirements for a trip to Ganter.

**CAMPING** The park has four campgrounds. Houchins Ferry camping area has 12 primitive campsites and is open year-round. The other three camp areas are open March through November. The Headquarters Campground has 111 sites. Hot showers, coin-operated laundry, and a camp store near Headquarters Campground operate from spring to fall. Maple Springs Group Campground accommodates horses and large groups of people. Maple Springs is the only park campground that operates on a reservation system. Dennison Ferry is a primitive campground with 4 available sites. The Headquarters, Maple Springs, and Dennison Ferry campgrounds will be closed December - February. All park campgrounds have toilets, grills, and picnic tables; all but Dennison Ferry have water.

# CRITTERS ON THE DARK SIDE

Walk into the passageways of Mammoth Cave and you'll sense the grand scale of the underground world - its size, its depth, its quiet, and its darkness. On first glance, the cave may seem devoid of life. After all, how could anything live in this rocky world, foreign to the smell of green plants and oblivious to the rising and setting sun? Surprisingly, cave biologists have discovered over 200 species of animals in Mammoth Cave. This list includes everything from surface animals that occasionally use or even accidentally tumble into the cave – like raccoons and bullfrogs – to 42 species of troglobites, animals that have adapted exclusively to life in the darkness. One of Mammoth Cave's claims to fame, besides its length and its wealth of human history, is its biological variety. The diversity of cave animals in the Mammoth Cave area rivals the diversity found in any caveland region in the world.

Many full-time cave dwellers, including eyeless fish and crayfish, illustrate creative adaptations to their environment. With no need for camouflage or protection from the sun, many of these species have lost pigmentation and are white or translucent.

Some have no eyes. Most have developed

highly sensitive sensory organs used to detect predators and prey. Because food in the cave is scarce, full-time cave dwellers tend to be smaller, with lower metabolism and longer lifespans than their surface counterparts.

Not all cave dwellers are full-time residents.

Some, like troglophiles (or cave lovers), can survive for their entire lifetime in the cave, but they can also live exclusively on the surface.

Others, the trogloxenes (or cave visitors), customarily live in caves but leave to forage for food.

By collecting food on the surface and then



returning to caves, trogloxenes play an important role in providing food for cave animals that never venture outside. Bats are well-known trogloxenes, and although Mammoth Cave is not currently used by large numbers of bats, twelve species, including two endangered species live here.

When you visit Mammoth Cave, you're far more likely to see cave crickets than bats. Crickets, actually a kind of grasshopper, are also trogloxenes. They spend much of their life in the cave but depend on night-time forays on the surface to gather food. Because Mammoth Cave lacks large bat populations, crickets are extremely important in delivering energy to other animals in the cave, in the form of droppings, eggs, and carcasses.

The lifestyle of the trogloxenes – part in and part out of the cave – highlights the link between the surface and the cave environments. Bats and crickets could not survive without both worlds, but ultimately, the energy that feeds all of the cave animals comes from the surface. Stresses in the world aboveground translate to pressures in the world below. In that sense, the health of the animals below the surface can be a sensitive barometer of environmental health in the world of light.

#### **EMERGENCY**

If you need to contact police, fire, or ambulance, call:

911



#### Non-Emergency Assistance

758-2251 758-2322 773-2111 Pay phone locations:

- \* next to flagpole at Visitor Center
- \* Hotel lobby
- \* Breezeway between Service Station and Camp Store
- \* Minit Mart near the Houchins Ferry

PHONE

NUMBERS



### RECYCLE

During your Park visit, recycle aluminum cans by using the collection containers marked with the triple-arrow recycling symbol. Collection containers are located at the Visitor Center, the Hotel, the picnic area, and the Camp Store.

Central Kentucky Is CAVE COUNTRY. For information on attractions and accommodations outside the park, call toll free: 1 (800) 346-8908

# Regulations that deserve your attention...

- Pets on leashes are permitted on the surface in the park but only seeing-eye orhearing-ear dogs are permitted in the cave. Pets can be an incovenience to others, so please don't bring pets on park programs. Do not leave pets unattended while on tours or away from your campsite. The hotel operator maintains a kennel where you can leave your pet for a nominal fee. For additional information on the kennel, call 758-2225.
- Please report lost and found items at the Visitor Center or the Headquarters Campground entrance station.
- Collect only dead and down wood. Build fires only in designated firepits at each campsite. Be sure your campfire is completely out before leaving the vicinity. To minimize impact in the backcountry, use a self-contained stove if you have one.
- All plants and animals are protected within the park. Do not feed, harass, or destroy wildlife or pick plants.
- Only two species of poisonous snakes -- the timber rattlesnake and the northern copperhead -- are found in the park. Although you're unlikely to encounter poisonous snakes, do not handle or approach any snake if you're unfamiliar with their identification. Above all, remember that snakes are protected within park boundaries and are an important part of the natural community. Do not kill them.



### Handicapped Accessibility

#### **Visitor Center**

The Visitor Center and its restrooms are accessible. One or more rangers are trained – to some degree – in sign language. Call the park ahead of time to find out if a sign language interpreter will be available for your tour date. Inquiries may also be made at the Information Desk.

#### Headquarters Campground Area

Loop D has two designated wheelchair accessible campsites. Restroom facilities are also accessible. The nearby campstore, showers, post office, and laundry facilities are also accessible. Camping facilities are available March through November.

#### Picnic Area

Open seasonally, the Picnic Area is minimally accessible. There are two handicapped parking spaces and picnic tables. Restrooms are not accessible for mobility impaired visitors.

#### The Heritage Trail

This level trail offers all visitors a leisurely stroll and has been specially designed to accommodate visitors with disabilities. The trail features wheelchair turnouts, rest areas with benches, and lights for evening use. Along this trail, you'll find a beautiful overlook, large trees, and The Old Guide's Cemetery. You can borrow a cassette tape describing the walk at the Visitor Center. The trail begins at the end of the footbridge near the Mammoth Cave Hotel.

#### Ranger Activities

Some ranger-led activities are accessible. Refer to page 8 for details.

#### Hotel & Restaurant

Recent hotel renovations have improved access for visitors in a wheelchair. Four fully accessible overnight accommodations and two fully accessible sets of restrooms are now available.

#### READ THIS BEFORE YOU GO INTO THE CAVE...

Consider your physical limitations realistically when choosing a cave tour. Tours are not recommended for visitors who fear heights or close places and/or cannot climb steps. Do not let friends or family members talk you into joining a cave tour if you feel uncomfortable about it.

Walking sticks and canes are permitted on cave tours only when sufficient need is demonstrated.

Tripods (and monopods) can be hazardous to other visitors and may damage cave formations. Therefore, tripods are not permitted in the cave.

Strollers are impractical on bumpy narrow cave walkways and stairways and are therefore not permitted on cave tours. Carry children in backpacks with caution because of low ceilings.

To protect air quality, smoking is not permitted in the cave.

Year-round, the cave temperature in interior passageways fluctuates from the mid-50s to the low 60s (in Fahrenheit degrees). However, winter temperatures can be below freezing at entrances! In most areas of the cave, you'll be comfortable if you wear long pants and take a sweater or jacket with you.

Hard-packed dirt trails can be somewhat rough and uneven and may be wet and slippery. You'll encounter numerous stairs and some steep inclines on many cave tours. Therefore, durable footwear suitable for walking is essential.



#### HOW TO GET CAVE TOUR TICKETS

Cave tours sell out quickly, so in order to participate in the tour of your choice, we strongly urge you to make reservations. For all cave tours, you can make reservations no earlier than 56 days before and no later than one hour before you wish to tour the cave. If you live in the U.S.A. or Canada, make reservations by calling:

1-800-967-2283

Use Master Card, Visa, or Discover Card to pay for your phone reservation. In addition to the regular fee for ranger-led activities, you will be charged an additional \$1.00 fee for each ticket sold over the telephone. You can also make reservations in person at the park Visitor Center at no additional charge. Groups of forty or more people are eligible for a discount on certain programs.

For additional information on ranger-led cave trips, call the park at 502-758-2328 Monday through Friday 8:00 AM - 4:30 PM, Central Standard Time.

## Photo Tips in the Cave

Even though it is electrically lighted, taking photos in the cave can be tricky - especially in large caverns where the light dissipates. To make picture-

taking more successful, follow these tips:

Use a flash, especially with disc, instamatic and Polaroid cameras.

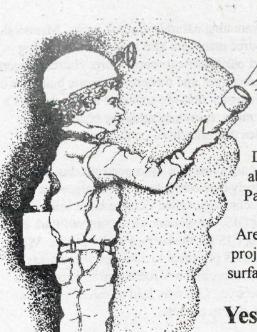
Use a fast speed film (ASA400 or greater).

Take photos of objects less than twelve feet away.

High intensity lights attached to video cameras spoil the ambience of visiting the cave. Please use video cameras that work effectively in low light and leave attachment lights on the surface.



emember, we're on Catral Time. If you've ore here from the ed or north, the time one change can be consing. For example, you're arriving from Laisville or other rts of northern Kentuck u'll gain an r oming south to Mann. th Cave. Th you. ime carefully to ensure that your ti with ars.



Are you between 6 and 13 years

Do you want to learn all you can about Mammoth Cave National Park?

Are you ready to complete some projects and take part in ranger-led surface or sub-surface programs?

Yes?

Then the Junior Ranger Program is for you! Ask at the Visitor Center Information Desk for details.







Accommodations in the park are provided by National Park Concessions.

Inc. For information on hotel rooms, cabins, kennels, and food services, call the concessioner at

(502) 758-2225.







Visitor Center hours: 8:00 AM - 5:00 PM

# Mammoth Cave National Park World Heritage Site - International Biosphere Reserve

Mammoth Cave National Park was authorized by Congress in 1926 and was established July 1, 1941, to protect and preserve the natural environment within its boundaries. It is administered by the National Park Service, U.S. Department of the Interior.

On October 27, 1981, Mammoth Cave National Park joined the ranks of renowned places like Australia's Great Barrier Reef, Egypt's Pyramids of Giza, Nepal's Kathmandu Valley, and India's Taj Mahal Historic Park. The United Nations Educational Scientific and Cultural Organization (UNESCO) designated Mammoth Cave National Park as a World Heritage Site for its exceptional natural features, its habitat for threatened and endangered species, and its association with events and persons of world historic and archeological significance.

Mammoth Cave National Park, unlike many sites on the list, is known for its natural heritage as well as its cultural heritage. Mammoth Cave is the most extensive cave system in the world, with more than 345 surveyed miles of cave passageways. Carbonate and sulfate mineral deposits decorate portions of the cave with a great variety of forms. Over 200 species from many animal groups have been found in the cave and more than 25 of these only live in underground environments.

Fossils of prehistoric creatures such as brachiopods, crinoids, and corals are found throughout the Mississippian age rock that makes up the cave.

The park's association with humans began nearly 12,000 years ago. Pre-Columbian Indians identified from four cultural periods (Paleo-Indian, Archaic, Woodland, and Mississippian) occupied the park and its environs. People from the Early Woodland Period are particularly significant because they were the first to practice organized horticulture in North America. Some of these people entered the cave and collected minerals from the walls and sediment. These people explored further into Mammoth Cave than any other cave in the world - over three miles distant from any probable point of entry.

On February 7, 1990, Mammoth Cave National Park again gained prestigious international status when UNESCO designated the Mammoth Cave area as a unit of

the International Network of Biosphere Reserves to assess the effects of human manipulations upon the area. Biosphere reserves are important or unique natural environments where conservation and sustained use of the natural resources are combined. They represent specific types of ecosystems such as deserts, semi-deserts, tropical grasslands, and temperate deciduous woodlands. These special areas are targets for research, monitoring, and education. Cooperation among government policy makers, scientists, and local citizens is of primary importance to the system in order to ensure the conservation of the regional culture, its environments and resources.

Mammoth Cave National Park has become a key area for international research on karst hydrology and cave ecosystems. The biosphere reserve, which includes the watershed area south of the park known as the sinkhole plain, encompasses 60,000 acres.

The surface landscape is dominated by a mixed eastern hardwood forest with 84 species of trees. The Big Woods, a 307 acre stand of fragmented old growth forest, is an example of the grandeur that all of Mammoth Cave National Park will someday possess.

Green River, designated a significant free flowing stream, bisects the park from east to west and provides habitat for 84 species of fish, 47 species of freshwater mussels, and many other invertebrates. The Green River is intimately connected with the sinkhole plain and the underground streams where water resurges at several large springs. The lack of surface drainage combined with enclosed valleys, sinkholes and caves make this Biosphere Reserve one of the world's classic karst areas.

The cooperation among the entities to manage the land and water resources to meet human needs while conserving natural resources is one of the most important goals of the UNESCO Man and the Biosphere Program. Continuous research, monitoring, and environmental education will teach us how the ecosystems work, how we are changing them, and how to keep the ecosystems and the societies that depend on them healthy.

## PROTECTING OUR DELICATE RESOURCES

Managing, Monitoring, and Maintaining the System

- \* What if you wanted to go on a cave tour but couldn't because sewage ran into underground streams?
- \* What if you wanted to enjoy the vista from the Scenic Overlook along the Heritage Trail but couldn't because smog blocked the view?
- \* What if you wanted to explore the cultural traditions of south central Kentucky but found that the structures linking us to the past had fallen into disrepair?

Working behind the scenes to address these issues is the responsibility of a small but important group of park employees - the resource managers. These professionals include an ecobiologist, geologist, hydrologist, physical science technician, historian, computer specialist, and others. They work with other park employees, concessioners, and the public to protect and preserve Mammoth Cave National Park's natural and cultural heritage.

Protecting the quality of the water running through Mammoth Cave's vast labyrinth of passageways presents challenges to resource managers, for most of the park's water originates beyond park boundaries. Human waste disposal and agricultural and mining practices outside the park impact water quality inside the park. For example, extraordinarily high levels of fecal coliform bacteria, found in the gastro-intestinal tract of warm-blooded animals, have been discovered in the underground Echo River during flooding. By studying the entire Green River drainage basin -- inside and outside the park -and by employing specialized techniques, resource managers can observe variations in water quality during normal and flood conditions and trends in water quality can be established.

Information collected provides park managers with a "picture" of what is happening deep in the ground and helps track down pollution sources. Research conducted at Mammoth Cave over the last 20 years has alerted park rangers and park neighbors to the importance of protecting our water resources. Several projects now underway -- a regional sewage disposal system and an innovative program to limit agricultural runoff -- promise to help protect water quality in the park. Techniques employed in the Mammoth Cave region can serve as models for combatting and preventing groundwater contamination elsewhere in the nation and throughout the world.

In addition to studying water quality, resource managers also monitor air quality in the park. Using sophisticated equipment, resource managers identify pollutants, study their effects on plants and animals, and determine sources of pollutants. Mammoth Cave National Park regularly experiences ozone levels high enough to visibly injure plants. Acid rain levels are sometimes severe enough to potentially impact salamanders, fish, and frogs. Future air quality studies will measure the impact of air pollution on visibility, determine sulfur dioxide levels,

and identify pollution-sensitive species.

Besides examining natural resource issues, Mammoth Cave resource managers also work hard to catalog and protect our historical roots. Three churches, more than 70 cemeteries, and numerous historic buildings or National Register sites are scattered across the park's 80 square miles, communicating the history of over 600 families that once lived on this land.

All of the park's resource management tasks are aided by a relatively new computer data management and mapping technology called Geographical Information System, or GIS. Mammoth Cave National Park is establishing GIS for the surface and the cave. When completed, GIS promises to allow park managers to analyze resources and environmental threats from a new perspective. GIS may lead to solutions that we are not yet able to consider.

In a way, we can compare Mammoth Cave's resource managers to horticulturalists in a formal botanical garden; the hard work of the gardeners may go unnoticed, but the results of their labor are appreciated by everyone. And so it is in Mammoth -- you may never see a resource management ranger while you visit the park, but you'll enjoy the results of their work.

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# Celebrate the National Parks!

Superlatives belong to the national parks. The National Park System contains the United States' highest mountain, biggest glacier, deepest lake, largest geyser, deepest canyon -- and longest cave. National parks protect volcanoes, fjords and rivers, shorelines, sand dunes and salt flats. National parks also preserve forts, battlefields, and armories; factories and seaports; cliff dwellings, Spanish missions, homesteaders' cabins, mansions, the residences of presidents, and memorials to black Americans and women. National Parks areas are the nation's overseerers of archeological sites, historical areas, and natural wonders.

Thaddeus Kosciuszko National Memorial in Philadelphia, occupying about one-sixteenth of a city block, is the National Park System's smallest area; Wrangell-St. Elias National Park and Preserve, sprawling across 13 million acres in southeastern Alaska, is the largest. Every state except Deleware and nearly every U.S. possession contains at least one of the 367 parks in the 80million acre National Park system. Approximately two percent of our nation's land falls under National Park jurisdiction. Two out of every three Americans have visited national parks. Last year alone, over 273 million visitors came to visit our parks.

Even though the parks represent a tremendous amount of diversity, and the challenges have intensified over the years, the overall guiding light has remained constant for over 75 years. In the language of the Organic Act of 1916 which created the National Park Service, the bureau was established to "conserve the scenery and the natural and historic objects and the wildlife therein and to provide for ... enjoyment ... in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

This mandate of the National Park System has stood the test of time. Since the first national park area was established at Yellowstone in 1872, the concept of setting aside areas of natural and historic significance has spread around the world. Today, 120 countries on every continent have labeled over 8,500 areas with unique plant and animal species, geomophological sites, habitats of special scientific, educational, or recreational interest, or natural landscapes of great beauty as protected areas. These areas continue to be inspirational, educative, cultural, or recreational havens for visitors of all backgrounds. National parks do indeed attempt to preserve and protect for generations to come.

Realizing a Dream ৩৩৩৩৩৩৩৩৩৩৩৩৩

Mammoth Cave National Park, like other large land parks in the East, was created after the area had been settled by pioneers. Land for large western parks was usually set aside by Acts of Congress before settlers had staked a claim to the land. Development of large eastern national parks was difficult because of heavy settlement.

After an agreement was made with the United States Congress, Kentuckians began raising money for land acquisition in 1926. If enough property was accumulated by the State of Kentucky, the Federal Government would administer it as Mammoth Cave National Park. This dream was realized in 1941, but not without a price.

The Mammoth Cave National Park Association was established to acquire land required for a national park. The process of acquiring enough land displaced more than 600 families. Yet, when you travel through Mammoth Cave National Park today it is hard to find any reminders of those families. All the homes, outhouses, barns, and fence lines were removed by the Civilian Conservation Corps

(CCC) during the 1930s. The only structures remaining to tell the story of those people are churches and cemeteries left behind by the abandoned communities.

As you drive along the roads or walk the trails of Mammoth Cave National Park this winter, you might notice the ways nature has reestablished itself in half a century. Farming communities have become forest communities.

What a great gift the citizens of Kentucky gave to this country, and to the world! Mammoth-Cave is not only a national park, but has twice been recognized by the United Nations Educational and-Scientific and Cultural Organization (UNESCO). Designated as a World Heritage Site for its exceptional natural features and threatened and endangered species, Mammoth Cave is also associated with events and persons of historical and archaeological significance. In 1990, the designation of Mammoth Cave National Park as a unit of the International Network of Biosphere Reserves drew worldwide attention to the effects of human manipulations upon this unique cave area.



# Celebrations at Mammoth Cave

Participate in some of the special events and activities being observed at Mammoth Cave National Park. From displays in the Visitor Center area to weekends filled with walks, talks, and activities, your national park is the perfect backdrop for expanding cultural, historical, and holiday interests.

American Indian Month November Archeology Weekend Christmas Sing in the cave December January Cave Clean-up Black History Month **February** Women's History Month March Volunteer Spring Clean-up Wildflower/Dogwood Month April Easter Sunrise Service Wildflower Weekend

#### Archeology Weekend November 5 & 6, 1994

If you're interested in life during prehistoric and historic times, this series of discussions, lectures, slide presentations, and craft demonstrations is not to be missed! Learn weaving techniques, flint knapping, and the latest in archeological preservation and continuing research in and around the Mammoth Cave.

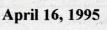
Admission: Free

#### Christmas Sing December 11, 1994

Experience the spectacular acoustics of the cave during renditions of holiday favorites. This cave celebration continues a century-old tradition of decorating the cave during holidays to the delight of local residents and travelers from afar.

Admission: Free

Easter Sunrise Service



This impressive outdoor service is conducted by the Caveland Ministerial Association at the Mammoth Cave Ampitheatre. Music is provided by area choirs. Admission: Free

#### Wildflower Weekend April 22 & 23, 1995

Celebrate the coming of spring with a variety of conducted nature walks to view some of the 872 species of flowering plants located in Mammoth Cave National Park. Slide presentations, displays, and intriguing lectures by renown botanist round out this colorful weekend.

Admission: Free



# Ranger Programs

October 24, 1994 - March 17, 1995

Get to know your park through these ranger-led hikes below the ground!



Visitor Center Hours: 8:00am until 5:00pm Central Time
NOTE: \* Tours offered weekends October 24, 1994 - January 8, 1995 and March 11 & 12, 1995 only

Tour Descriptions	Mon	Tue	Wed	Thur	Fri	Sat	Sun
HISTORIC TOUR - 2 hours, 2 miles, (strenuous).  Visit famous cave passages and learn about the cave's rich human history. View artifacts left by native  Americans, discover ruins of mining operations, and see evidence of early visitors, explorers, and workers at  Mammoth Cave. Must descend and climb one stairway with over 60 steps and must climb over 90 steps on a steel tower. If you fear heights or close places and/or cannot climb steps, do not take this tour.	9:30 AM	9:30 AM	9:30 AM	9:30 AM	9:30 AM	9:30 AM *1:30 PM	9:30 AM *1:30 PM
TRAVERTINE TOUR - 1 1/4 hours, 1/4 mile, (easy). Ride a bus to the cave entrance and view decorative dripstone formations, including stalactites and stalagmites. Must climb 18 steps; an additional 49 steps are optional. Recommended for those who cannot walk long distances.	12:00 Noon 3:30 PM	12:00 Noon 3:30 PM	12:00 Noon 3:30 PM	12:00 Noon 3:30 PM	12:00 Noon 3:30 PM	*9:00 AM 12:00 Noon 3:30 PM	*9:00 AM 12:00 Noon 3:30 PM
TOUR FOR THE MOBILITY IMPAIRED - 1 1/2 hours, 1/2 mile, (easy). Designed for physically impaired visitors unable to participate in other cave tours. Ride a van to the cave entrance and enter the cave via an elevator. See tubular passageways and delicate gypsum minerals on cave walls. Two wheelchairs are available for visitors who have not brought their own. Restrooms not wheelchair accessible. NOTE: Golden Age and Golden Access passports do not qualify participants for a discount on this tour; discounts have been taken into consideration when establishing this tour rate.	1:30 PM	1:30 PM	1:30 PM	1:30 PM	1:30 PM	1:30 PM	1:30 PM
MAMMOTH PASSAGE TOUR - 1 1/4 hrs, 3/4 mile, (moderate). Visit the large passage referred to by early cave explorers as "Main Cave," whose high vaulted ceilings and broad avenues gave birth to the cave called "mammoth." Park Rangers discuss the cave's creation by water, the absence of what many people refer to as "typical" cave formations, the cave's cultural history and contemporary environmental concerns. Visitors must descend and climb more than 70 stairs. Must climb a steep hill to return to the Visitor Center.	1:45 PM	1:45 PM	1:45 PM	1:45 PM	1:45 PM	1:45 PM *4:00 PM	1:45 PM *4:00 PM
CLEAVELAND AVENUE TOUR - 2 1/4 hours, 1 mile, (moderate). A bus ride takes you to the cave's entrance. Descend approximately 220 stairs at the entrance. See gypsum-encrusted tube passages and learn about early tours in Mammoth Cave. Food service at Snowball Room is available seasonally (for an additional fee). Exit by elevator, ascending 267 feet to buses waiting to return you to the Visitor Center.  * Tickets sold at Visitor Center on day of tour only *	William Designary Construct Same Security Sa			ed bas	Participal	*10:45 AM	*10:45 AM
WILD CAVE TOUR - 6 to 6 1/2 hours, 5 1/2 miles, (extremely strenuous). Must be 16 yrs. or older to participate. (Be prepared to show proof of age.) Crawl, climb, and squeeze through small passages off traditional tour routes. Helmets and lights provided. Kneepads available, but you may bring your own. Gloves strongly recommend. Food available at Snowball Room. (Lunch cost not included in tour fee.) You may bring your own funch. Restrooms available.		Source Sales III				9:30 AM	9:30 AM

Call 1-502-758-2328 or 1-800-967-2283 for current tour fees.

FOR PARK INFORMATION CALL 1(502) 758-2328
FOR TOUR RESERVATIONS CALL 1 (800) 967-2283
FOR CAVE AREA INFORMATION CALL 1 (800) 346-8908
FOR ACCOMMODATIONS IN THE PARK CALL 1(502) 758-2225