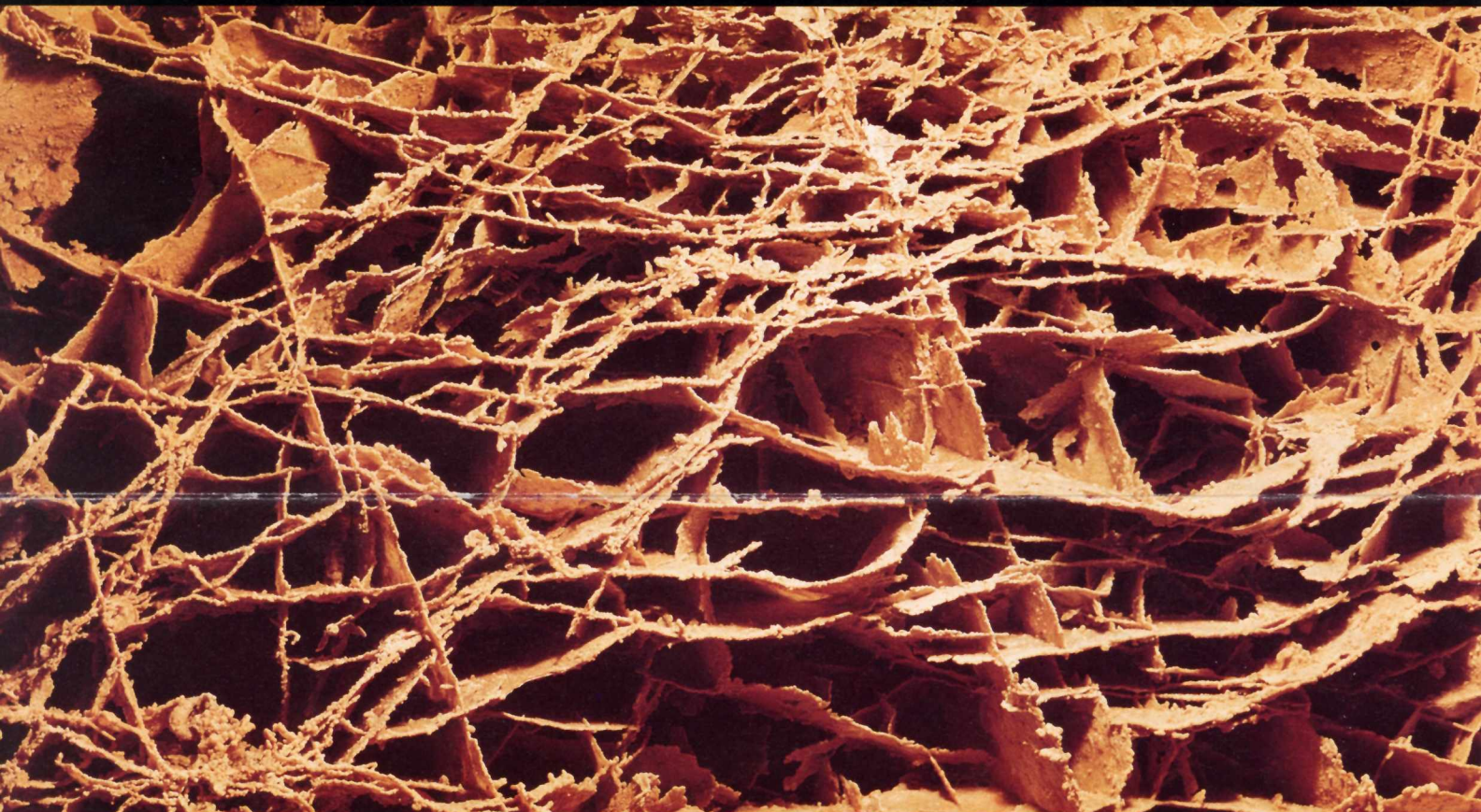


Wind Cave

National Park Service
U.S. Department of the Interior

National Park
South Dakota



Flowstone and stalactites



Elks Room, with boxwork on ceiling



Popcorn



Frostwork

“... we made our way down the stairway against the very strong wind and then began our descent proper, into the wonderful, indescribably wonderful cave—down, down into the very ‘bowels of the earth.’”

—An early explorer of Wind Cave, 1890

What tempted the first explorers of Wind Cave to leave behind their safe, familiar world and venture into the dark, unknown, almost lifeless depths of Wind Cave? Was it a search for hidden natural treasures? Curiosity? Was it the thrill of going where no man or woman had gone before?

Records of the earliest excursions into Wind Cave suggest that people entered the cave for all these reasons. Today’s visitors come to Wind Cave National Park to meander through some of the cave’s over 100 miles of passageways seeking similar experiences.

Don’t let the park’s name fool you, however. There is much more to Wind Cave National Park than its underground geological wonders. A diverse mix of wildlife, including bison, pronghorn, and prairie dogs, lives in the 28,295 acres of rolling grasslands, pine forests, hills, and ravines that make up its sunlit upper layer. Here you can see a small remnant of the prairie and imagine the scene that greeted westward-bound 19th-century pioneers—not farms and cities, as today, but open plains stretching across the middle of the continent. A piece of that prairie is preserved here in an almost natural state.

The Wind Cave area has been protected since 1903, when it became our seventh national park. Regarded as sacred by American Indians, the cave was not found by settlers until 1881, when brothers Jesse and Tom Bingham heard a loud whistling noise. The sound led them to a small hole

in the ground, the cave’s only natural opening. A wind was said to blow with such force out of the hole that it knocked Jesse’s hat off. That wind, which gave the cave its name, is created by differences between atmospheric pressures in the cave and outside. This wind can still be noticed at the cave entrance.

It was left to later adventurers like Alvin McDonald to follow that wind and discover the cave’s extensive network of passageways containing boxwork, popcorn, and frostwork formations and other delicate, irreplaceable features. Young Alvin and others who explored the cave before 1900 were fascinated by what they found: chocolate-colored



Alvin McDonald was not yet 18 when he began exploring Wind Cave in 1890. The diary he kept of the cave’s “inside workings” documents his systematic probe, which revealed many passages.

crystals, formations resembling faces or animals, and chambers that inspired names like the Garden of Eden and the Dungeon. Reports of these discoveries drew a stream of curious tourists to the cave. Local entrepreneurs, including the McDonald family, blasted open passages and guided tourists through for a fee. Cave specimens were removed and sold. Today the cave’s fragile features are protected.

To witness the beginning of the formation of Wind Cave, one of the world’s oldest caves, you would have to have been here 320 million years ago. Parts of the limestone that constitute the upper levels of Wind Cave were then being dissolved into cave passageways. As ancient ocean levels changed, these passages were filled with sediments. Beneath the ocean a thick layer

of sediments continued to be deposited above that limestone.

About 60 million years ago, the forces that uplifted the Rocky Mountains also uplifted the modern Black Hills, producing large fractures and cracks in the overlying limestone. Over millions of years, water moving slowly through those cracks dissolved the limestone to produce the complex maze of the cave’s passages.

Later erosion changed surface drainage patterns, which caused subsurface water levels to drop, draining the cave passages. As the modern Wind Cave formed, many of these newer passages intersected the older filled cave, revealing the red clay and sandstone sediments from 320 million years ago. A three-dimensional network of passages formed, creating one of the most complex caves in the world.

Also exposed were some of the most prominent features in Wind Cave—the boxwork. These thin, honeycomb-shaped structures of calcite protrude from the walls and ceilings (*photos above*). Although Wind Cave has few stalactites and stalagmites, many unusual formations and a variety of minerals are found in the cave. The complex geology of the cave, the profusion of boxwork, and the variety of minerals make Wind Cave a world-class cave.

You might wonder if after more than 100 years of exploration there is anything new to discover in Wind Cave. Barometric wind studies estimate that only five percent of the total cave has been discovered. In 1891 Alvin McDonald wrote in a diary of his cave trips: “Have given up the idea of finding the end of Wind Cave.” The better-equipped cavers of today have not given up. They continue to push farther and farther into the cave’s cool, black recesses.

TOP PHOTO OF BOXWORK—© ED COOPER; ELKS ROOM, POPCORN—© TOM BEAN; FLOWSTONE, FROSTWORK, ALVIN McDONALD—NPS

A Sanctuary for Wildlife



Pronghorn



Coyote



Prairie dog



Mule deer

Vast open prairies can look deceptively empty. But take a closer look. A small dark shape on the horizon may be a bison grazing knee-deep in bluestem and other grasses. You may glimpse a well camouflaged coyote hunting among the prairie dog towns. Slowly comes the realization that the nutrient-rich plants of the plains support an abundance of wildlife. Originally, Wind Cave National Park’s main purpose was to protect the cave and help visitors enjoy it. But by 1912, protecting and reestablishing native wildlife was recognized as an equally important goal.

Among the park’s foremost missions as a wildlife sanctuary was the restoration of populations of bison (*below*), elk, and

pronghorn to the Black Hills. By the late 1880s these animals had been eliminated from this part of their range, largely because of human predators. The story of the bison’s return reflects the success of the park’s management programs. Starting with 14 bison donated by the Bronx Zoo in 1913, the herd numbers about 350 today.

Other wildlife—including mule deer, cottontail rabbits, and many species of birds—live in the prairies, forests, and hills of Wind Cave. Located nearly at mid-continent, the park embraces animal and plant species common to both the East and West. Don’t be surprised to see western natives like ponderosa pines and

piñon jays alongside American elms and eastern bluebirds.

Safety and Regulations
Always view animals at a safe distance and stay alert. Bison and other animals are wild and unpredictable and can attack if startled. • Hunting, chasing, or harassing wildlife is prohibited; guns and other weapons must be packed away to prevent their use. • Feeding wild animals is prohibited; even small animals such as prairie dogs may bite. • Watch for rattlesnakes, which sometimes live in prairie dog burrows and can strike without warning.

COYOTE—© PHOTO RESEARCHERS, INC. / TIM DAVIS
OTHER WILDLIFE PHOTOS—© TOM BEAN



Exploring Wind Cave and the Black Hills

Touring the Southern Black Hills

There is a lot to see and do at Wind Cave National Park and in the surrounding area.

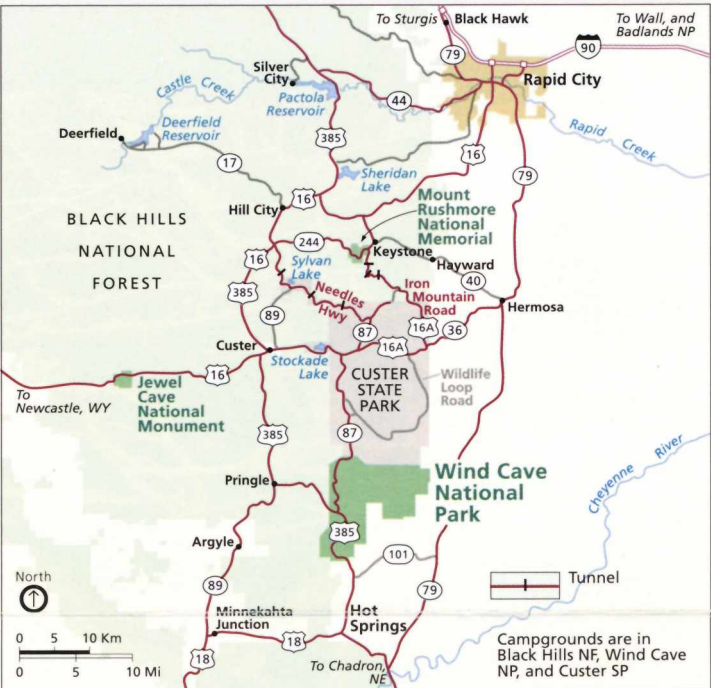
Several scenic roadways lead through the Black Hills to the park. Sight-seers especially enjoy the Wildlife Loop Road, Iron Mountain Road, and Needles Highway. These roads wind through pine-spruce forests, meadows, mountains and pinna-cles of granite, and lands populated by bison, pronghorn, deer, and prairie dogs.

Wind Cave country has many places of natural, historical, and scenic interest. Custer State Park and Black Hills National Forest offer outdoor recreation opportunities. With over one million acres, these two wild areas offer 30 campgrounds; many lakes for boating, swimming, and trout fishing; trails for hiking and horseback riding; and picnic areas.

Two other National Park System areas are within 50 miles of Wind Cave. Jewel Cave National Monument preserves more than 125 miles of cave decorated with sparkling jewel-like calcite crystals and varied cave formations; cave tours are given. Mount Rushmore National Memorial features the monumen-tal sculpture of four United States presi-dents: George Washing-ton, Thomas Jefferson, Abraham Lincoln, and Theodore Roosevelt.

Wind Cave National Park does not have lodging or other services. They are avail-able in Custer State Park and area commu-nities.

Warning The tunnels on the Iron Mountain Road (US 16A) are 12' 6" high and 13' 6" wide, and those on the Needles Highway/ Sylvan Lake Road (SD 87) are as low as 10' 8" and as narrow as 8' 7" (see map at right).



Visiting Wind Cave National Park

Visitor Center The visitor center offers books, brochures, exhibits, and audiovisual programs about the cave and park. Cave tour information and tickets are available. Schedules of activities such as talks and nature walks are posted. Some vending service is available. The center is open daily except Thanksgiving, December 25, and January 1.

Park Roads Sightseeing along park roads enables you to enjoy views of the Black Hills and see bison, pronghorn, and other wildlife. Pull into a parking area to enjoy the scenery safely. Bicycling is permitted only on park roadways. Backcountry biking is prohibited.

Camping/Picnic Areas Elk Mountain Camp-ground, in hills of ponderosa pine forest and prairie, has 75 sites for tents and recreational vehicles. The campground is open April through October, first-come, first-served. Picnic tables, fire grills, water, and restrooms are provided; fees are charged. Campfire programs are given

at the amphitheater in summer. Backcountry camping is allowed; a permit is required. The picnic area, located in a ponderosa pine wood-land, has tables and water in the summer.

Trails Three self-guiding trails help you explore the park's grasslands and ponderosa pine forests. Trail booklets are available at the visitor center or trailheads. Rankin Ridge Trail (1¼ miles) climbs to the top of Rankin Ridge, highest point in the park, for panoramic views of the Black Hills country from a ridgetop fire lookout. The Elk Mountain Trail (one mile) offers a mildly strenu-ous walk circling the campground. Hikers may travel crosscountry or explore 30 miles of hiking trails that include the southern terminus of the 111-mile Centennial Trail.

Safety and Regulations The danger of wild-fire is high year-round. Build fires only in fire grills. Never leave a fire unattended. • Pets must be physically restrained at all times and are not permitted in buildings, the backcountry, or cave.

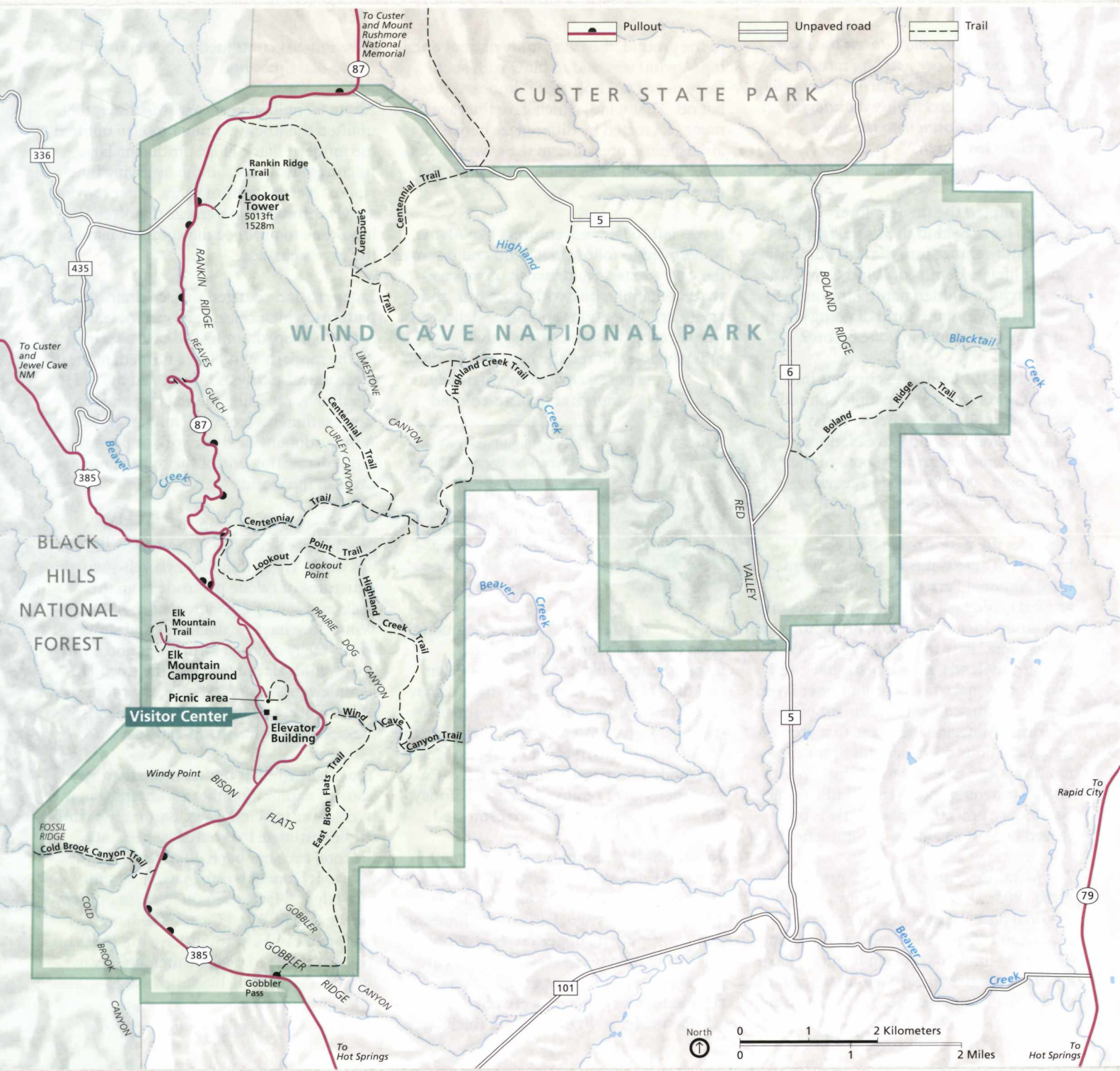
• Off-road driving is prohibited. • Avoid contact with poison ivy. • For firearms regulations check the park website.

Accessibility We strive to make our facilities, ser-vices, and programs accessible to all. Some tour details are given below. For additional informa-tion, go to the visitor center, ask a ranger, call, or check our website.

Wind Cave National Park
RR1 Box 190
Hot Springs, SD 57747
605-745-4600
www.nps.gov/wica

EMERGENCIES call 911

Wind Cave is one of over 400 parks in the National Park System. To learn more about national parks and National Park Service programs in America's communities, visit www.nps.gov.



Touring the Cave

Scheduled, ranger-led tours of Wind Cave are offered all year; fees are charged. The cave is closed on Thanks-giving, December 25, and January 1. Cave tour tickets and infor-mation are available at the visitor center. All tours begin there.

Approximately eight of the over 100 miles of known passages in Wind Cave are on the map below (shown in gray).

Three cave tours follow paved and lighted

walkways through passages decorated with boxwork and other fascinating cave formations. The **Natural Entrance Tour** (shown in red) and the **Fairgrounds Tour** (gold) are each 0.5 mile, last 1¼ to 1½ hours, and require negotiating 300 to 450 stairs. The **Garden of Eden Tour** (green) is 0.25 mile, lasts about one hour, and includes 150 stairs.

A short cave visit for visitors with special

needs may be arranged at the visitor center.

Two special tours are offered from mid-June to mid-August. The one-mile **Candlelight Tour** (purple) allows visitors to experience the cave as early visi-tors may have. Most of the route follows passages where the only light comes from hand-held candle lan-terns. Bending, stoop-

ing, and stair-climbing are required on this two-hour cave tour.

Another special tour, the **Caving Tour** (blue), lets visitors experience what it is like to ex-plore a wild 3,000-foot passage of Wind Cave. Participants must be physically fit, because this three- to four-hour trip requires a lot of crawling.

Reservations for these two special tours are required and may be made no sooner than one month in advance. Contact the park for reservations or infor-mation about age restrictions, proper clothing, and caving gear.

Safety and Regula-tions Portions of the cave tour routes may be uneven or wet and

slippery. Watch your step and wear low-heeled, non-slip shoes. • The cave is always 53°F; wear a jacket or sweater. • If you have breathing, heart, or walking problems, or are claustrophobic, ask your doctor before taking a tour. • The cave's delicate forma-tions are easily broken or discolored by skin oils; please do not touch. • Smoking, food, and drink are prohibited.

