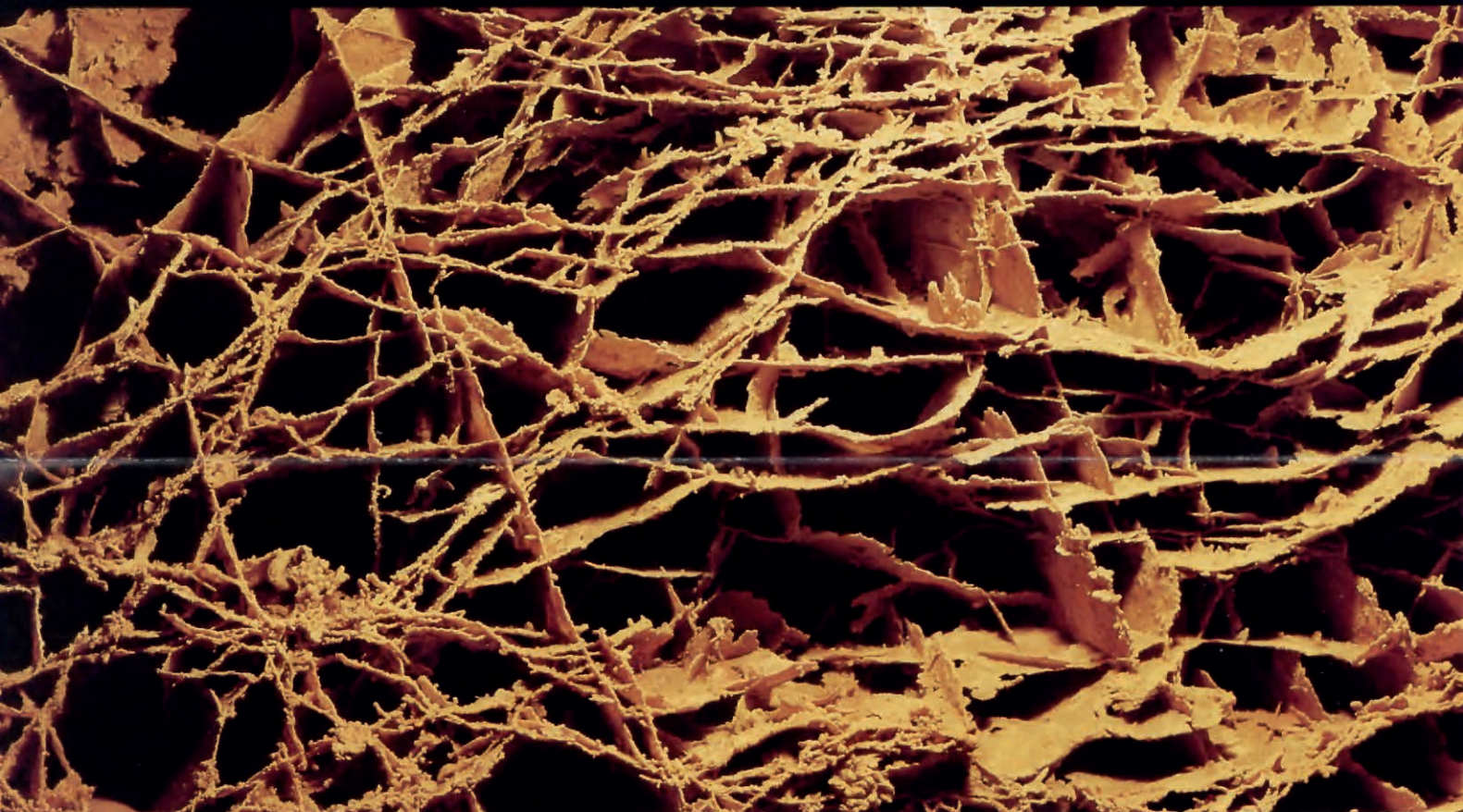


Wind Cave

National Park
South Dakota

National Park Service
U.S. Department of the Interior

Official Map and Guide



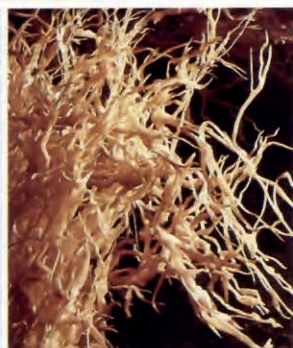
Flowstone and stalactites



Frostwork



Popcorn and helictites



Helictite "bush"

"... 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?



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 this systematic probe, which opened up many passages.

Records of the earliest excursions into Wind Cave suggest that people entered the cave for all these reasons. Today visitors come to Wind Cave National Park to meander through some of the cave's more than 55 miles of passageways seeking similar experiences.

However, don't let the park's name fool you. 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, dwell in the 28,292 acres of rolling grasslands, pine forests, hills, and ravines that cover its sunlit upper layer. Here you can see a small remnant of the prairie and begin to 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 its almost natural state.

The Wind Cave area has been protected since 1903 when it became our seventh national park. Although Native Americans may have known of the cave, it was not discovered by settlers until 1881 when two brothers, Jesse and Tom Bingham, heard a loud whis-

ting noise. The sound led them to a small hole in the ground, the cave's only natural opening. A wind was said to be blowing 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 unearth 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 the turn of the century were fascinated by what they found—chocolate-colored crystals, formations resembling faces or animals, and chambers that inspired names such as 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



Wind Cave's early popularity gave rise to commercial ventures such as a stagecoach trip to the cave from Hot Springs. Handbills proclaimed the cave "the Great Freak of Nature."

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. At that time parts of the limestone that constitute the upper levels of Wind Cave were being dissolved into cave passageways. As ancient ocean levels fluctuated, 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.



Visitors who toured Wind Cave before it became a national park in 1903 were led by private guides who provided candles to light the way. Groups often stopped to pose for a souvenir photograph.

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 that caused subsurface water levels to drop, draining the cave passages. As the modern Wind Cave formed, many of these newer passages intersected the original cave, revealing the red clay and sandstone sediments from 320 million years ago.

It was after the cave formed that most of the colorful cave formations began to decorate its walls. One of the most prominent features in Wind Cave is boxwork (see top photograph)—thin, honeycomb-shaped structures of calcite that protrude from the walls and ceilings. Nowhere else in the world can such a large display be seen. Some of the better known cave formations, such as stalactites and stalagmites, are rare here.

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 approximately 5 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 are continuing to push farther and farther into the cave's cool, black recesses.

Cover photo of boxwork by Ed Cooper
Wildlife photos by Tom Bean

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A Sanctuary for Wildlife



Pronghorn



Prairie dogs



Coyote



Mule deer

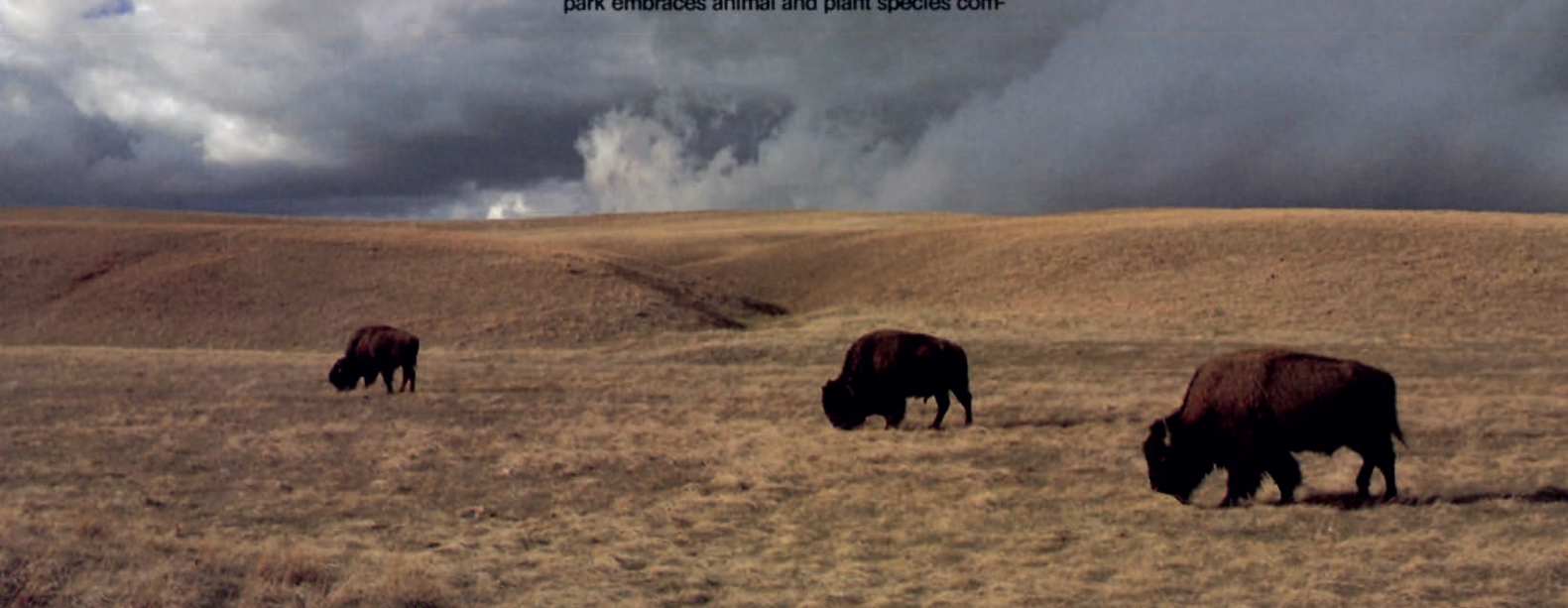
Vast open prairies can look deceptively empty. But take a closer look. A small dark shape on the horizon may actually be a bison grazing knee-deep in bluestem and other grasses. You may glimpse a well camouflaged coyote hunting among the prairie dog "towns." Slowly comes the realization that the nutrient-rich plants of the plains support an abundance of wildlife. When first established, Wind Cave National Park's main purpose was to protect the cave and assist visitors in enjoying it. But by 1912, the protection and reestablishment of native wildlife within the park's boundaries 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 uncontrolled hunting. 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 kinds of birds, live in the prairies, forests, and hills of Wind Cave. Located near the middle of the country, the park embraces animal and plant species com-

mon to both the East and West. Don't be surprised to see ponderosa pines and pinyon jays—both Western natives—alongside American elms and eastern bluebirds.

To protect yourself and park wildlife, always view animals at a safe distance and stay alert. Bison and other animals are wild and unpredictable and may attack if disturbed. 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, who sometimes live in prairie dog burrows and can strike without warning.



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Touring Wind Cave Country

Wind Cave National Park is in the Black Hills, rugged mountains surrounded by prairie where, an observer once noted, the "lover of nature could . . . find his soul's delight." There is much you can see and do at Wind Cave and on your way to and from the park.

Several scenic roadways lead through the Black Hills to Wind Cave. Roadside sightseers may particularly enjoy the Wildlife Loop Road, Iron Mountain Road, and Needles Highway, which wind through pine-spruce forests, meadows, mountains and pinnacles of granite, and lands populated by bison, pronghorn, deer, and prairie dogs. Ask about these and other travel routes. **Warning!** Because of low, narrow tunnels, vehicles more than 10½ feet high or 10 feet wide should not use Iron

Mountain Road (Rt. 16A); vehicles more than 11½ feet high or 9 feet wide should not use Needles Highway (Rt. 87). See map at right for tunnel locations.

During your visit to Wind Cave country, you may want to take a trip to places of natural, historical, or scenic interest nearby. Custer State Park and Black Hills National Forest, adjacent to Wind Cave, offer a variety of opportunities for outdoor recreation. In the more than 1 million acres of these two wild areas are about 30 campgrounds; many lakes for boating, swimming, and trout fishing; hiking and horseback riding trails; and picnic areas.

Within 40 miles of Wind Cave are two other National Park System areas. Jewel Cave National Monument preserves an 80-mile-long

cavern decorated with sparkling jewel-like calcite crystals and a variety of other cave formations; cave tours are given. At Mount Rushmore National Memorial, the monumental sculpture of four American presidents—Washington, Jefferson, Lincoln, and Theodore Roosevelt—can be seen.

As you travel in the area, you will find that many area communities, including Custer, Hot Springs, and Rapid City, as well as some smaller towns and Custer State Park, provide lodging, grocery and camping supply stores, gasoline stations, and other services seasonally or all year. Private campgrounds are also available in the area. Lodging facilities and grocery services are not available in the national park.



Visiting the Park

Visitor Center Wind Cave National Park's visitor center has books, brochures, exhibits, and slide programs about the cave and other park resources. Cave tour information and tickets are available and schedules of activities such as talks and nature walks are posted. In the summer, food and gifts are sold. The center is open daily except Thanksgiving, December 25, and January 1. For more in-

formation, write: Wind Cave National Park, RR1, Box 190-WCNP, Hot Springs, SD 57747-9430; or call (605) 745-4600.

Park Roads Sight-seeing along park roads allows you to enjoy views of the Black Hills and see bison, pronghorn, and other wildlife. Please enjoy the scenery from parking areas. Bicycling is permitted on park roadways only.

Backcountry biking is prohibited.

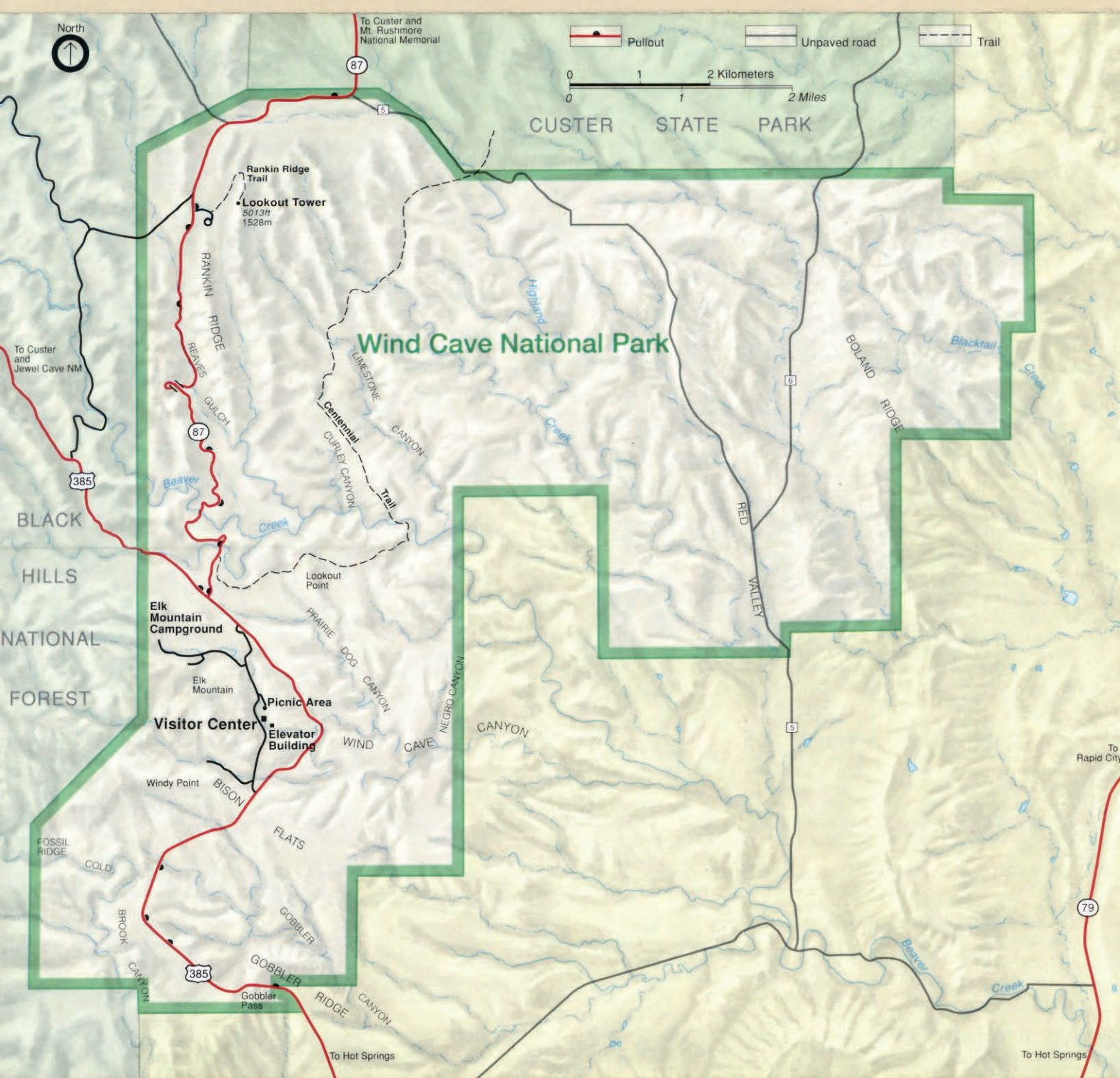
Camping/Picnic Areas Elk Mountain Campground, in rolling hills of ponderosa pine forests and prairie, has 100 sites for tents and recreational vehicles. It is open all year on a first-come, first-served basis. Picnic tables, fire grills, restrooms, and firewood are provided all year. Water is available only from about May to early October, when a camp-

ing fee is charged. Campfire programs are given at the campground amphitheater in the summer. Backcountry camping is allowed; a backcountry permit is required. The picnic area, located in a ponderosa pine woodland, has tables and water during the summer season.

Trails Two nature trails explore the grasslands and ponderosa pine forests of the park; trail

booklets are available at the visitor center or trailheads. Rankin Ridge Trail (1¼ miles) climbs to the top of Rankin Ridge, the highest point in the park, for panoramic views of Black Hills country. A ridgetop fire lookout is usually open from 8 a.m. to 5 p.m. Elk Mountain Trail (1 mile) is a fairly level walk that circles the campground. Hikers can also explore along fire roads or by traveling crosscountry.

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



Exploring the Cave

Cave Tours Ranger-guided tours of Wind Cave are offered several times daily on a scheduled basis from March through October. Fees are charged during this period. Free unscheduled tours are given the rest of the year; the cave is closed on Thanksgiving, December 25, and January 1. Cave tour tickets and information are available at the visitor center, where all tours begin.

Approximately 8 of the more than 55 miles of passages known to exist in Wind Cave are shown on the map below.

Three cave tours—two ½-mile tours and a ¼-mile tour—follow paved, lighted walkways through underground passages decorated with boxwood and other fascinating cave formations. The **Natural Entrance Tour**, shown on map in red and dark blue respectively, last 1¼ to 1½ hours and require traversing 450 stair-steps. The shorter **Garden of Eden Tour**, shown in light blue, lasts about ¾ of an hour and requires minimal climbing.

Two special tours are offered from early June to mid-August. A 1-mile candlelight tour, shown in purple, allows visitors to experience Wind Cave as early visitors may have. Most of the tour route follows passages where the only light comes from hand-held candle-lanterns. Bending, stooping, and stair-climbing are required on this 2-hour trip. Another special tour—the caving tour, shown in green, lets visitors experience what it is like to explore a wild

3,000-foot passage of Wind Cave. Participants must be physically fit because much crawling is required on this 3- to 4-hour trip. Reservations for both special tours can be made up to a month in advance; contact the park for reservations or for information about proper clothing, caving gear, and age restrictions.

A cave tour for handicapped visitors or others with health or fitness

limitations may be arranged at the visitor center.

Safety and Regulations Portions of the tour routes may be uneven or wet and slippery. Watch your step and wear low-heeled non-slip shoes. The cave temperature is always 53°F; wear a jacket or sweater. If you have heart, breathing, or walking problems, or are claustrophobic, talk with

a ranger before taking a tour. The cave's delicate formations are easily broken or discolored by skin oils; please do not touch. Smoking is prohibited.

