Wind Cave National Park News

The Official Newspaper of Wind Cave National Park 2009



Passage:

Into the Darkness of Wind Cave

Visitors to Wind Cave have an opportunity to explore an amazing and complex underground world. As you travel the paved, lighted trail your eye is drawn to the unusual formations and then beyond to side passages where the light ends and darkness begins. You begin to realize that you are surrounded by a wilderness unlike any you have seen before.

The first thing most visitors notice about Wind Cave is its unusual and abundant formation called boxwork. This rare feature is seldom seen in other caves. Early



Wind Cave is famous for its unusual boxwork

explorers were baffled by it and, because of its often nearly square nature and resemblance to the cubby holes in a post office, they named it boxwork. Its origins are tied to the formation of the cave. The limestone in which the cave formed was subjected to internal pressures causing tiny cracks. Through a series of

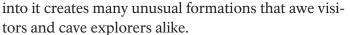
chemical reactions, those tiny cracks were filled with calcite. As the cave formed, the crack fillings were slowly revealed.

Another unusual feature of the cave is its length. With more than 131 miles of explored passages Wind Cave is the 4th longest cave in the world. While the length is impressive the amazing part is that almost

all of the known passages lie beneath a one square mile area of land. This makes Wind Cave one of the most complex in the world. Imagine an ant trying to crawl through a sponge, and you will have an idea of what it is like to explore this cave. Studies of the air moving in and out of the cave's tiny entrance indicate that only a small portion of the cave – maybe as little as 10% – has been found. Every time explorers enter the cave, they

These areas are covered in white snow-like formations such as popcorn, frostwork, moon-milk, or a combina-

tion of all of them. They develop after the cave has formed as water slowly seeps into it. Decorations such as stalactites and stalagmites, often seen in other caves, are rare in Wind Cave since they require lots of dripping water. Wind Cave is drier than most caves, but the water that does come



Stalactites and Flowstone are

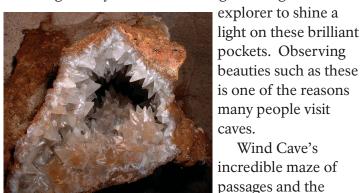
rare in Wind Cave

Wind Cave's

cave's unusual deco-

rations cause many

An observant visitor to the cave will also see pockets lined with sparkling crystals. These geodes formed with the limestone and are often hidden within the limestone until a crack or a break in the rock forms, revealing the crystals within. Imagine being the first



Calcite crystal geodes can be seen in the walls of the cave

people to look beyond the paved and lighted trails to explore a secret world few have seen. The intrepid explorers entering this mysterious wilderness are not there just for adventure. As they travel to the edge of the map and beyond, they are responsible for docu-

menting the unknown by surveying or mapping. While mapping, explorers record details about the formations, the cave's geology, where water is dripping, evidence of cave life, and historical material left by early explorers. This data helps cave man-



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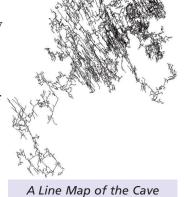
In Case of Emergency **Dial 911**

Welcome from the Superintendent



Welcome to Wind Cave National Park. This national park is one of the oldest in the country. Established in 1903, it was the eighth national park created and the first set aside to protect a cave.

While Wind Cave is the major attraction with its unique boxwork and significant underground cave passageways, the surface resources, including both natural and cultural resources, are also worth the stop. The buildings around the visitor center date back to the 1930s Civilian Conservation Corps. The wildlife such as bison, pronghorn antelope, elk, mule deer, prairie dogs, and black-footed ferrets are also exciting to view.



have the prospect of

Boxwork is not the

only formation seen in

the cave. Traveling

through the cave one

often finds areas that

are reminiscent of a

winter landscape.

finding places and

things unseen by

human eyes.



Frostwork and popcorn are seen along the tour routes



Exploring and mapping Wind Cave

agement staff identify the best way to protect not only the cave but also the special resources found in it.

So whether you are on a tour or exploring the unknown, Wind Cave is a mysterious place where we can experience the thrill of seeing new objects that inspire, confuse, and delight us. Explore Wind Cave and enjoy the experience of visiting a place where questions and mystery abound. You might find that you agree with an 1890's newspaper statement about the cave: Tourists are bewildered, amazed, and stand speechless as they become entranced, intoxicated by the unexpected profusion of Elysian beauties. ...adjectives are useless, vocabularies fail; the camera is outwitted; nature triumphs.

Today, visitors from around the world come to see these two parks in one. Our hope is that you have a safe and enjoyable visit to Wind Cave National Park, take plenty of pictures, participate in our programs, and leave nothing behind but footprints.

Travel Safe.

Vidal Davila Superintendent

Simple Rules for Safety and to Protect Park Resources

Protecting the Park

Park resources are for everyone to enjoy. Do not disturb or remove plants, wildlife, antlers, bones, rocks, or any other natural or cultural feature. They are protected by federal law. These resources are all part of the park's ecosystem and are important to the park's history and to the survival of other animals and

plants. Please leave these objects undisturbed so the next visitor can enjoy them.



Weapons

Hunting, shooting, or carrying weapons is prohibited in national parks. Weapons may be transported in a vehicle, if unloaded, disassembled, cased, and out of sight.

🚮 Wildlife

Animals in the park are wild and unpredictable. *Do not approach or attempt to feed them*. Feeding animals cause them to become dependent on handouts and they may fail to survive the winter. Fed animals are attracted to highways where they can be struck by vehicles.

Be aware that rattlesnakes are sometimes found in prairie dog towns and other areas of the park. Bison also frequent prairie dog towns. They can run 35 miles per hour and may weigh a ton! Stay a safe distance (at least 100 yards from a bison) from all wildlife.

Litter

Do not leave traces of your visit. Litter is unsightly and spoils the park experience for everyone.

Planning Your Visit

K Visitor Center

The Wind Cave Visitor Center is a great place to start your park visit. The visitor center is open from 8:00 a.m. to 4:30 p.m. daily, with extended hours during the summer. The visitor center is closed on Thanksgiving, Christmas and New Year's Day. All cave tours begin at the visitor center and are offered daily throughout the year when the visitor center is open. For more information see page 7.

Exhibits, maps, book sales, backcountry permits, information about cave tours and ranger programs, lost-and-found services and Federal Recreational Lands Passes are available here.

Ranger Programs

When visiting the park, plan to attend a ranger-led program. While cave tours are offered all year long, additional programs are presented in the summer. For more information about ranger programs and cave tours see page 7.



The fee for camping is \$12.00 per night, per site. In the off-season when facilities are limited, the fee is \$6.00 per night. Holders of the Federal Recreational Lands Senior or Access pass pay half price. Group camping is available by reservation. Call the park at 605-745-4600 for group camping reservations.

The campground has restrooms with cold water and flush toilets, but no showers, electrical hookups, or dump stations. Firewood is available for campers. During the summer months, park rangers present campfire programs at the amphitheater.

A Backcountry Camping

Wind Cave National Park's backcountry offers visitors an excellent opportunity to experience and enjoy the abundant resources of the park. Backcountry camping is permitted in the northwestern part of the park. Several habitats and a variety of plants and animals can be found in this area.

Backcountry campers must have a permit. Permits are free and can be obtained at the visitor center or at either of the Centennial Trailheads. For your safety and for the protection of park resources, follow all regulations during your stay. Leave no trace of your visit by packing out what you pack in. Pets are not permitted in the backcountry.

就 Pets

To protect your pet and park wildlife remember: *pets are prohibited in the backcountry and on most hiking trails*. Pets are permitted on the Elk Mountain Nature Trail at the campground and on the Prairie Vista Nature Trail near the picnic area. Be sure to clean up after your pet. Pets may not be left unattended and must be on a leash at all times. Be aware that ticks are common in high grass. They may affect your pet and you.

Do not leave your pets in your vehicle while visiting the cave or for any length of time. The temperatures inside a vehicle can become extreme, putting your pet in grave danger. Kennel space is available in Hot Springs or Custer. Pets may not be left unattended outside of a vehicle, even if they are leashed.

When hiking park trails (see next

page), make sure to carry plenty of

water, as daytime temperatures in

(38°C). Water is not readily avail-

found in the backcountry should be treated or boiled before drinking.

Flies, mosquitoes, and wood ticks

can be found in the wetter areas of

the park. Be watchful for prairie

rattlesnakes in prairie dog towns

Rattlesnakes will not usually strike

and near cliffs and rocky areas.

unless provoked.

the summer can exceed 100°F

able along the trails. Any water

Hiking Safely



🖨 Traveling in the Park

All vehicles (including bicycles) must remain on roadways that are open to the public. Off-road driving or bicycle riding is prohibited.

Slow down and enjoy the view!

When driving park roads, *obey all speed limits*. They are strictly enforced to protect you and the wildlife. In the last 20 years over eighty bison have been struck and killed by motor vehicles in the park. You can help protect the wildlife; please obey all posted speed limits and watch out for animals on the road - they may appear suddenly. Keep your seatbelt fastened.



Drive safely, enjoy the view

A Picnicking

The park's picnic area is located ¹/₄ mile north of the visitor center and is open year-round. The picnic area contains tables and fire grates. Drinking water is available in the summer months.

Restrooms

Restrooms are available year-round at the visitor center, picnic area, and the Elk Mountain Campground.

Weather

Summer in the southern Black Hills brings warm daytime temperatures with cool evenings. Thunderstorms are common in June and July and occasionally in August. These thunderstorms can be dangerous with large hail and severe lightning.

Slow-moving storms can dump large amounts of rain over a small area. The steep canyons, rock cliffs, and small creeks of the Black Hills are prone to flash flooding. Be cautious when camping near a creek bed even if it is dry. Move uphill if flooding starts.



▲ Campground

The Elk Mountain Campground is located one mile north of the visitor center. Due to a construction project the campground may be closed until May 22, 2009, if weather permits the campground may open earlier. However, some of the 75 camping sites may remain closed all the summer. Occupancy is on a first-come, first-served basis; generally the campground does not fill. Each site accommodates up to eight people and two vehicles. Two sites are available for campers with disabilities.

🚮 👪 Trash and Recycling

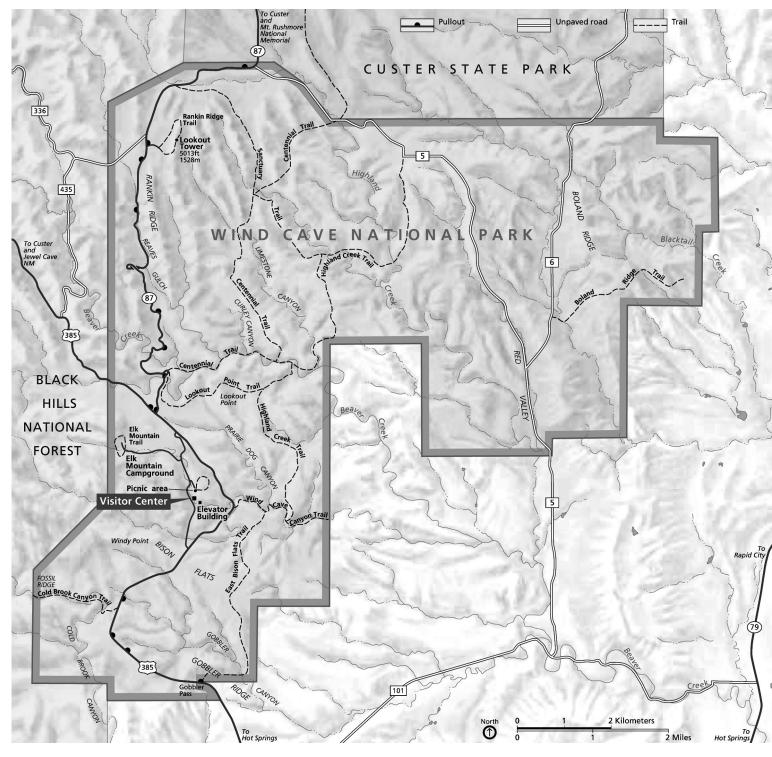
Trash receptacles are available at the visitor center, the picnic area and the Elk Mountain Campground. Recycling facilities are also available at these areas. The park recycles glass, aluminum cans, steel cans, and plastic containers with PETE 1 or HDPE 2 markings. Please rinse recyclables before placing them in containers. Bicycling is limited to established park roads that are open to the public. *Bicycling off road, on trails, or in the backcountry is prohibited.* Bicyclists can ride comfortably on U.S. 385 as it has wide shoulders. S.D. 87 in the park is winding and narrow with little room for bicyclists. Bicyclists should take precautions when on this road.

Bicycling

Bicyclists may also travel on the park's back roads, NPS 5 and 6. These roads provide visitors with a great opportunity to see the prairie areas of the park. When bicycling, be aware that animals roam freely through the park. Remember to keep a safe distance from bison and all wild animals. The park has limited food and beverage vending services in the visitor center. There are no lodging, gasoline, grocery, or restaurant services in the park. These are available in the nearby towns of Hot Springs (15 minutes south) and Custer (25 minutes north). For information regarding services in Hot Springs, call 800-325-6991. For Custer, call 800-992-9818.

Campgrounds, motels, and some grocery services are located in Custer State Park bordering Wind Cave National Park to the north. For information about Custer State Park, call 605-255-4515. For information about state park lodging, call 800-658-3530.

Hiking



HIKING IN THE PARK

Wind Cave National Park includes 28,295 acres of prairie grasslands and ponderosa pine forest. The park is a fascinating combination of ecosystems where eastern habitats meet western ones. They support a diverse assortment of life. Hiking any of the 30 miles of trails can help visitors better understand the park. You may even want to leave the trails and travel cross-country along the ridges, through the canyons, or across the rolling prairie. A topographic map is recommended and can be purchased at the visitor center.

CENTENNIAL TRAIL

An excellent example of the diversity of the park can be seen by hiking Wind Cave's six-mile section of the Centennial Trail. This trail crosses the prairie, climbs the forested ridges, and explores the wetter, riparian habitat of Beaver Creek. The 111mile Centennial Trail meanders from Wind Cave National Park north through the Black Hills.

NATURE TRAILS

There are three nature trails in the park. The Rankin Ridge Nature Trail leads to the highest point in the park where the views are spectacular. The Elk Mountain Nature Trail explores an ecotone, or meeting zone, where the grassland and forest converge. The Prairie Vista Nature Trail starts at the visitor center and explores the prairie grasslands. Informational signs are available on the trails or booklets are available for purchase at the trailheads. Each trail is about one mile in length.

Hiking Trails

	One-way Length	Difficulty	Description
Cold Brook Canyon Trail	1.4 miles (2.3 km)	Moderately Strenuous	The trail begins south of the visitor center on the west side of U.S. Highway 385. This trail traverses a former prairie dog town, the edge of a prescribed fire, and through Cold Brook Canyon to the park boundary fence.
Wind Cave Canyon Trail	1.8 miles (2.9 km)	Easy	This former road follows Wind Cave Canyon to the park boundary fence. Wind Cave Canyon is one of the best places for bird watching. Limestone cliffs provide good nesting areas for cliff swallows and great horned owls. Standing dead trees serve as homes for red-headed and Lewis's woodpeckers.
East Bison Flats Trail	3.7 miles (6 km)	Moderately Strenuous	Hike one-half mile down the Wind Cave Canyon Trail to pick up the East Bison Flats Trail. This trail leads hikers across the rolling hills of the prairie. From this trail you may see panoramic views of Wind Cave National Park, Buffalo Gap, and the Black Hills.
Lookout Point Trail	2.2 miles (3.5 km)	Moderately Strenuous	This trail follows the rolling hills of the prairie, traverses Lookout Point, and ends at Beaver Creek. Take a side trip up Lookout Point to see the results of the 1999 wildfire. This trail can also be combined with part of the Highland Creek Trail, and the Centennial Trail, to create a 4.5-mile loop that begins and ends at the Centennial Trailhead.
Sanctuary Trail	3.6 miles (5.8 km)	Moderately Strenuous	The trail begins about one mile north of the Rankin Ridge fire tower road. This trail follows the rolling hills of the prairie, crosses a large prairie dog town, and ends at the Highland Creek Trail. View the Rankin Ridge fire tower at the intersection of the Centennial Trail. This trail provided a fire break for the 2000 wildfire of 1,135 acres.
Centennial Trail	6 miles (9.7 km)	Moderately Strenuous	The southern access to the trail is on the east side of S.D. Highway 87. The northern access is on NPS 5, 1.4 miles east of its junction with S.D. Highway 87. This trail is part of a 111-mile trail through the Black Hills. The trail leads hikers across prairies, through forested areas, and along Beaver Creek. The trail is marked with posts and trees bearing the Centennial Trail logo.
Highland Creek Trail	8.6 miles (13.8 km)	Strenuous	The southern trailhead is along the Wind Cave Canyon Trail one mile east of U.S. Highway 385. The northern trailhead is on NPS 5, 2.8 miles east of S.D. Highway 87. This trail is the longest and the most diverse in the park. The trail traverses mixed-grass prairies, ponderosa pine forests and riparian habitats of Highland Creek, Beaver Creek, and Wind Cave Canyon.
Boland Ridge Trail	2.6 miles (4.2 km)	Strenuous	The trail begins one mile north of the junction of NPS 5 and NPS 6. This trail climbs to panoramic views of Wind Cave National Park, the Black Hills, Red Valley, and Battle Mountain. Elk are often seen from this trail.

Wind Cave's Amazing Prairie

The prairie is a place like no other and a hike or drive through Wind Cave National Park provides an opportunity to experience this unique ecosystem. The prairie is more than just grass. It is a combination of many plant communities that include a variety of plants, from stately trees and colorful shrubs to tall waving grasses and a dazzling profusion of wildflowers. These plant communities are composed of species that have adapted to survive extreme conditions. This diversity is what makes the whole system strong.



The Secret World of the Prairie

The prairie has a secret world that helps it survive – underground. The long, interconnected root systems of prairie grasses help these plants reach water deep in the ground even under the driest conditions. These roots hold the soil firmly in place and prevent excessive runoff that could lead to erosion.

Other prairie species such as some forbs (broad leaved plants) and wildflowers without deep root systems adapt by producing large quantities of seeds. These may remain dormant in the soil until favorable moisture conditions occur.



A Summer Storm on the Prairie

Water Sustains Life

Water is important in all ecosystems. In the prairie, areas with flowing streams have a large variety of plants such as shrubs, trees, and tall grasses. Conversely, south- facing hillsides are drier than surrounding areas since the sun shines directly on them through all seasons of the year. Plants found here (cacti, yucca, and warm season short grasses) are adapted to low levels of moisture. North facing slopes generally stay cooler because the sun shines on them at a lower angle and for shorter periods of time. Here, you will find more forbs with showy wildflowers and cool season grasses. Another factor that affects park vegetation is geographical location. The park is located in the center of the country where eastern tall grass and western mid and short grass prairies converge. This produces a diversity rivaled by few ecosystems. Again, water plays an important part in determining which grasses dominate the landscape in any given year. In a wet season, the tall grasses thrive. In drier seasons, short grasses have the advantage. The prairie ecosystem is unusual and wonderful in that it may look very different from one year to the next - but species are rarely lost or gained. As conditions change, different groups of plant species rise and fall in abundance. However, even when prairie plant species are not highly visible, they remain a part of the system unless unfavorable conditions occur for a very long time.

Bison on Wind Cave Prairie



Prairie Flowers and Grasses

Diversity Provides Strength

Diversity provides strength to the prairie and insures survival – it is the way the prairie copes with ecological variability. Not only are there species that thrive in wet or dry years, there are species that flourish during seasonal cycles – mid-summer warm species verses early spring cool plants. Because there are so many different species, when insect infestations or diseases occur, some plants decline while others survive or even thrive. This insures there will always be prairie vegetation and a food source for prairie animals.



Elk on the Prairie Edge

Animals and the Prairie

Grazing animals help maintain the prairie. An enormous amount of dead material can accumulate on the prairie in the course of a year. Leaves die in the fall and roots become dormant during cold winter months. The following spring, new shoots grow. As years progress, old, dead leaf litter accumulates creating a thick layer of thatch covering the ground. Nutrients are locked up in material yet to decay. It becomes more difficult for sunlight to penetrate to new shoots. The ground is insulated and stays colder longer, delaying spring plant growth.

Bison, prairie dogs, elk and other grazers remove much of this litter letting the sun reach the ground and allowing plants to grow. The biological processes involved when animals eat and digest plant material and then eliminate wastes also promote the cycling of nutrients by providing fertilizers to the prairie ecosystem.

Fire Protects the Prairie

Few ecosystems involve fire as frequently as does a prairie. Fire is the great cleaner and recycler of the land. It helps remove litter; it keeps forests from encroaching onto the prairie; it helps prevent non-native plants from taking over more fire-resistant native species; and it promotes greater diversity and nutritional quality of forage for wildlife.

Without the effects of fire, the prairie would change and could disappear. As litter accumulates, plants actually weaken and are smothered. Trees and woody shrubs are able to become established in the grassland communities. They create shade as they grow and further restrict the sunlight other plants need.

Fire has the power to turn plant material (which may take months or years to decay) into ash within seconds, providing useable nutrients to plants. Sunlight is absorbed by the blackened ground and its warmth stimulates dormant plants and seeds to sprout and grow. Grazers feed on the nutritious early growth, stimulating yet more growth. Trees and shrubs exposed to intense heat are killed, allowing the ground under them to receive full sunlight once again. Fire is nature's way of cleaning house. At Wind Cave National Park, researchers have determined that historically prairie fires occurred every 5 to 7 years.



Crews are hired during the summer months to manually reduce non-native species.

Climate Change and Prairie

The plant communities of Wind Cave National Park and the entire Great Plains will be affected by climate change. Scientists have linked the slight warming of night-time temperatures in the last twenty years to the decline of blue grama grass in short-grass prairies. The ways plants use and transpire water will be changed by the higher temperatures. Grasslands are expected to have a 50% increase in water use due to increased evapotranspiration.

Climate models also indicate declining levels of organic matter in the soil due to the slowing effect higher temperatures have on decomposition rates. This reduces the capacity of the soil to hold moisture and diminishes the richness of the soil.



Fire Recycles Nutrients

Threats to the Ecosystem

As strong as the prairie is, it is not without threats. One of the most serious is the invasion of non-native plants. Canada thistle is one nonnative species that concerns park managers. It is an invasive species that can completely dominate an area where dozens of native species once grew, out-competing them for space, nutrients, sunlight, and water.

Spotted knapweed is another non-native species. It is known to aggressively invade native plant communities and alter the soil chemistry by its secretions so that native species cannot germinate or grow. Managers must carefully plan how to control the spread of these and other invasive species. The park practices an integrated pest management approach to control non-native species and takes advantage of the many tools available. These include chemical pesticides, biological controls (i.e., insects or plant pathogens), prescribed fire, and mechanical and manual controls.



Plant Communities of the Prairie



View of the Expansive Prairie Seen on Park Road - NPS 5

The Future

The prairie as we know it today may not exist in 100 or 1,000 years, but all plant species will respond to the new environmental and ecological conditions and try to adapt and survive. The plant patterns we call prairie may evolve into a different system – a different grassland, or a shrubland, or something new. Whether humans like the changes or not, life in plant form has persisted on the earth for millions of years with remarkable flexibility and will undoubtedly continue.

The prairie is both grand and subtle. Today, there are few places managed to protect prairie ecosystems and their natural processes. Wind Cave National Park is one of those places. Here we can explore grassland communities, recognize prairie diversity, and appreciate its beauty.

To experience the park's diverse plant communities, drive the park roads or hike the trails. The gravel roads, NPS 5 and 6, travel through the largest prairie portions of the park. The more than thirty miles of hiking trails allow you to explore many different habitats. As you travel, look for the surprising number of plant communities that support the vast array of wildlife in this remarkable national park.

Program Information

Become a Junior Ranger!

The Junior Ranger Program is an exciting opportunity for children and their families to learn about the park. Becoming a Junior Ranger helps youngsters understand the park's ecosystems, the cave, and the animals. It also helps them learn how they can help protect all parts of our environment. Junior Ranger booklets are available at the bookstore. There are activities for children up to age 12.

On Wednesdays and Saturdays during the summer season, a Junior Ranger Hike will be presented at

New Lights for the Cave

To see the cave well you need lights and since the first light system was installed in 1931 Wind Cave has had several systems. Many lessons were learned from these, including how difficult it is to maintain an electrical system within a cave. The last time the light system was upgraded was in 1979. That system is reaching the end of its serviceable life and is no longer consistent with professional standards.

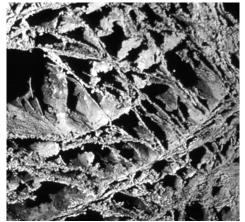
By summer, engineers expect to complete work along the Fairgrounds Cave Tour Route. The lights were installed in the Garden of Eden in the winter of 2008 and will be installed in the Natural Entrance late in 2009. Some evidence of the lighting project will

Cave Tours

Cave Tour Information

All cave tours are ranger-guided and leave from the visitor center. The cave temperature is 53°F (11°C) year round. A jacket or sweater is recommended. Good walking shoes are required. Sandals are not recommended.

Tickets are sold at the visitor center. *Tickets must be purchased at* least five minutes before tour times.



be seen on all of the tour routes. Each time a new light system is installed, managers have to consider how to illuminate the cave while protecting it. This new light system can help in several ways. It primarily uses LED and compact fluorescent bulbs, cutting the park's use of power considerably. The lights protect the fragile features of the cave because both types of bulbs produce less heat and light energy.

9:00 a.m. Topics for this hike will

vary. The program will be geared

As in the past, thanks to the gener-

rangers will be taking photographs

Junior Rangers. These youngsters

will then be able to share their pic-

tures and adventures with families

Rangers at home by logging on to

for parents and their children.

ous support of Kodak, park

and friends.

of the accomplishments of our

Kids can also become Junior

www.nps.gov/webrangers.

Water plays an important part in the development of cave crystals and reducing the heat will allow the water to remain so crystals can grow. The new lights also helps limit algae growth in the cave because of the reduced heat and light energy.



and journey through the middle level of the cave. Wind Cave's famous boxwork is abundant throughout this trip. Most of the 300 stairs along this route are down. This tour is moderately strenuous and exits the cave by elevator.

Garden of Eden Tour 1 hour, ¹/₄ mile

This tour is the least strenuous with only 150 stairs. It is a wonderful sample of Wind Cave. Small amounts of all of the beautiful cave formations – boxwork, pop corn, and flowstone - are seen along the trail. The tour is for people with limited time or abilities. This tour enters and exits the cave by elevator.

Surface Activities

Prairie Hike 🏌

Take a hike with a ranger! Explore the park's varied habitats with this two-hour summer activity. The daily hike begins at the visitor center before the group drives to a nearby trailhead. Bring drinking water and wear hiking boots or sturdy shoes. Check at the visitor center for details.

Evening Hike 🏌

Explore the happenings on a prairie dog town at night and possibly see an endangered species - the black-footed ferret! These evening hikes begin at the Elk Mountain Campground Amphitheater before driving to a nearby site. Bring a flashlight and wear hiking boots. Check at the visitor center for details.



Campfire Program 📐

Become better acquainted with park resources by attending an evening campfire program. These talks are presented during the summer at the Elk Mountain Campground Amphitheater. Topics may include wildlife, plants, geology, cave exploration, park management, or history. The programs last about 45 minutes.

Discovery Activity

Daily, during the summer, ranger talks or demonstrations take place at the visitor center. These programs explain some facet of the park. Topics may include local wildlife, plants, geology, area history, or cave surveying. Check at the visitor center for meeting place and topic.



Wild Cave Tour 💦 4 hours, 1/2 mile

Explore the cave away from the developed trails. On this tour visitors will be introduced to the basics of safe caving.

Wear old clothes and gloves, as much of the trip will include crawling. Long pants, long sleeved shirts, and sturdy, lace-up boots or shoes with non-slip soles are required. No sandal of any kind is permitted on this tour. The park provides hard hats, lights, and kneepads.

Candlelight Tour 2 hours, 1 mile

Experience the cave by candlelight. This tour takes place in a less developed, unlighted part of the cave. Each participant will carry a candle bucket. Shoes with non-slip soles are required. No sandals are permitted. This tour is limited to 10 people and the minimum age is 8. This strenuous tour covers 1 mile of rugged trail. Reservations are strongly recommended. Reservations are accepted beginning one month before the tour. Please call the park at 605-745-4600 for more information.

Cave Boxwork

Natural Entrance Tour 1¹/₄ hours, ¹/₂ mile

This tour includes a visit to the only known natural entrance of Wind Cave giving visitors the opportunity to see how the cave got its name. Participants enter the cave through a man-made entrance

Fairgrounds Tour 1¹/₂ hours, ¹/₂ mile

This tour explores both the upper and middle levels of Wind Cave. Boxwork is abundant along the trail in the middle level of the cave. In the upper level, the trail winds through large rooms and into areas where popcorn and frostwork can be seen. This is the most strenuous walking tour. The tour enters and exits the cave by elevator. There are 450 stairs along the route with one flight of 90 steps up.

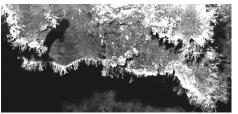
Please do not bring jewelry, watches, or other valuables on the tour. Clothing worn on the Jewel Cave Wild Cave Tour is not permitted in Wind Cave since this clothing could be covered with manganese, which could stain the cave.

This tour is limited to 10 people and the minimum age is 16. We require a signed parental consent form for participants 16 and 17 years old.

Reservations are required. Reservations are accepted beginning one month before the tour. Please call the park at 605-745-4600 for more information.

Tours For Visitors With Special Needs

The visitor center and the cave are accessible to people with limited mobility. Please call to make special arrangements or ask at the information desk for a special tour. Limited areas of the cave are accessible to wheelchairs. The fee for the tour is \$5.00 for adults and half price for Senior or Access pass holders.



Cave Boxwork with Frostwork

Ranger Programs

Cave Tour Fees

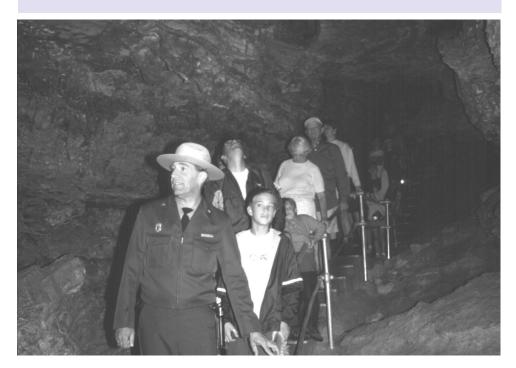
Tickets must be purchased at least five minutes before tour time

	Garden of Eden Cave Tour	Natural Entrance Cave Tour	Fairgrounds Cave Tour	Candlelight Cave Tour	Wild Cave Tour
Adult 17 & Older	\$7.00	\$9.00	\$9.00	\$9.00	\$23.00
Youth age 6 - 16	\$3.50	\$4.50	\$4.50	*\$4.50	**Not Permitted
Infants and Toddlers age 0 - 5	Free	Free	Free	Not Permitted	Not Permitted
Senior/ Access Pass		\$4.50	\$4.50	\$4.50	\$11.50

cardholders only

* Minimum age for Candlelight Tour is 8

** Minimum age for Wild Cave Tour is 16. The fee is \$23.00



Cave Tour Safety and Information



All tours are ranger-guided and leave from the visitor center. Tickets are sold on a first-come, first-served basis, except for the Candlelight and Wild Cave tours (see Reservations below). During peak summer visitation, long waits for tours may be encountered. To avoid waits, the best time to visit the cave is during the early hours of the day. During the summer, weekends are good times to visit; Tuesdays and Wednesdays are the

Photography is permitted, but no tripods. Pets are not allowed in the cave. Do not leave your pets in your vehicle while visiting the cave. See Page 2 for more information about pets in the park.

Cave tours are moderately strenuous. Persons with claustrophobia, heart or respiratory conditions, or other physical limitations should reconsider. A tour is available, by request, for visitors with special

Program Schedule

April 5 – April 25, 2009 Visitor Center: 8:00 a.m. – 5:00 p.m. Garden of Eden Tour: 9:30, 11:30, 1:30, and 3:30



April 26 – May 22, 2009

Visitor Center: 8:00 a.m. – 6:00 p.m. Cave Tour: 9:00, 10:30, 11:30, 1:30, 2:30, and 4:30

May 23 – May 25, 2009, Memorial Day Weekend

Visitor Center: 8:00 a.m. – 6:00 p.m. Garden of Eden Tour: 11:00, 1:00, and 3:00 Natural Entrance Tour: 8:40, 9:20, 10:30, 11:30, 12:30, 1:30, 2:30, 3:30, 4:30, and 5:00 Fairgrounds Tour*: 10:00, 12:00, 2:00, and 4:00 Campfire Program: 8:30 p.m., Saturday and Sunday

May 26 – June 10, 2009

Visitor Center: 8:00 a.m. – 6:00 p.m. Garden of Eden Tour: 12:30, 1:30, 2:30, and 3:30 Natural Entrance Tour: 9:00, 10:00, 11:00, 12:00, 1:00, 2:00, 3:00, 4:00, and 5:00 Candlelight Tour: 1:30 p.m. June 7, 8, 9, and 10, 2009 only Wild Cave Tour: 1:00 p.m. June 7, 8, 9, and 10, 2009 only

June 11 – August 15, 2009

Visitor Center: 8:00 a.m. – 7:00 p.m. Garden of Eden Tour*: 10:40, 12:40, 2:40, and 4:40 Natural Entrance Tour: 8:40, 9:00, 10:00, 11:00, 12:00, 1:00, 2:00, 3:00, 4:00, 5:00, 5:30, and 6:00 Fairgrounds Tour*: 9:30, 10:20, 11:40, 12:20, 1:40, 2:20, 3:40, and 4:20 Candlelight Tour: 10:30 a.m. and 1:30 p.m. Wild Cave Tour: 1:00 p.m. Ranger-led Hike: 9:00 a.m. Campfire Program: 9:00 p.m.

August 16 – September 7, 2009

Visitor Center: 8:00 a.m. – 6:00 p.m. Garden of Eden Tour*: 10:30, 1:40 and 3:40 Natural Entrance Tour: 9:00, 10:00, 11:00, 12:00, 1:00, 2:00, 3:00, 4:00, and 5:00 Fairgrounds Tour*: 9:30, 11:20, 1:20, and 3:20 Candlelight Tour: 1:30 p.m. Wild Cave Tour: 1:00 p.m. Weekends Only August 16, 22, 23, 29, 30, and September 5 and 6 Campfire Program: 8:00 p.m.

September 8 – September 26, 2009

Visitor Center: 8:00 a.m. – 6:00 p.m. Natural Entrance Tour: 9:00, 10:30, 11:30, 12:30, 1:30, 2:30, 3:30, and 4:30 Evening Program: 7:00 p.m. Tuesday, Thursday, and Saturday

September 27 – October 17, 2009

Visitor Center: 8:00 a.m. – 5:00 p.m. Garden of Eden Cave Tour: 9:30, 11:30, 1:30, and 3:30

busiest days. Reservations for school and organized groups are available (see Reservations.)

Wind Cave is 53°F (11°C) throughout the year so a sweater or jacket are recommended. Good walking shoes are required on all tours. Cave trails are dimly lighted and trail surfaces may be uneven, wet, and slippery. Do not wear sandals. Ceilings along the tour route are low, requiring some bending. There are no restrooms in the cave. No eating, drinking, chewing tobacco or gum is allowed in the cave. needs. Call 605-745-4600 or ask at the information desk.

Reservations

Tickets for most cave tours are sold on a first-come, first-served basis; however, reservations are accepted for schools or large groups. Reservations are strongly recommended for the more strenuous Candlelight Tour and required for the Wild Cave (spelunking) Tour. Reservations are accepted beginning one month before the tour. Please call 605-745-4600 for reservations.

For the protection of the cave, do not touch or remove rocks or formations and do not step off the trail.

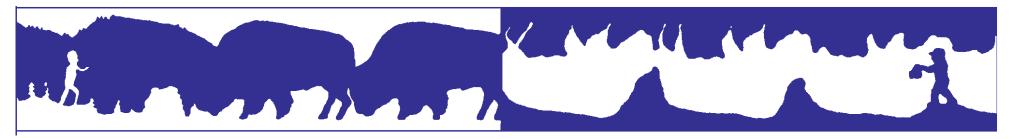
October 18, 2009 - Early April, 2010

Visitor Center: 8:00 a.m. – 4:30 p.m. daily except Thanksgiving, Christmas, and New Year's Day Garden of Eden Cave Tour: 10:00, 1:00, and 3:00

Tour schedules are subject to change. Please call 605-745-4600 to confirm tour times. Programs are subject to cancellation during severe weather.

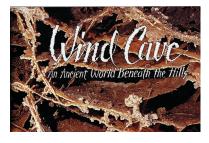
* The Fairgrounds or Garden of Eden Tours may be cancelled due to the installation of the new cave lighting system.

IN CASE OF AN EMERGENCY Dial 911 or contact any park ranger or call the visitor center at 605-745-4600.

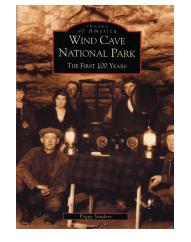


The Black Hills Parks & Forests Association

The Black Hills Parks & Forests Association sells books, maps, and other park related publications in visitor centers at Wind Cave National Park, Jewel Cave National Monument, Custer State Park, Buffalo Gap National Grassland, and Black Hills National Forest. The association publishes books and materials about these areas. Cooperating associations are non-profit, tax exempt organizations authorized by Congress to promote educational and scientific activities within national parks. All profits from association sales support the educational, interpretive, and research activities of these agencies. Many different types of publications are available in the bookstores including books specific to Wind Cave National Park and others about local natural and human history. These publications, maps, and items are available at the bookstore, by mail order, or from the association web site, <u>www.blackhillsparks.org</u>, fax: 605-745-7021, or email <u>bhpf@blackhillsparks.org</u>. Membership in the Black Hills Parks and Forests Association supports the organization and entitles members to a 15% discount on all purchases. The membership is \$29.95 per year. For more information call 605-745-7020.

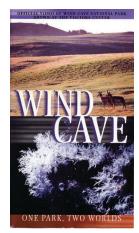


Wind Cave: An Ancient World Beneath the Hills - In this wonderful, easy-to-read book, Art Palmer explains the geology of Wind Cave, how it is related to the Black Hills, and how the boxwork formed. The charts and graphs help make the topic easily understood by people unfamiliar with geology. The pictures of the unusual Wind Cave boxwork alone make this book well worth the investment. \$8.95

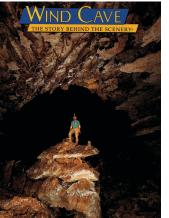


Wind Cave National Park: the First 100 Years

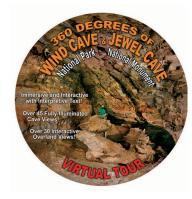
In 1903, Wind Cave National Park became the eighth national park in the nation and the first created to protect a cave. Peggy Sanders encapsulates the park's 100 year history in over 200 vintage images. Travel through time with the early cave and animal management teams, through the Great Depression, and into the present with a collection of classic pictures and stories. \$19.99



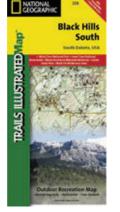
Wind Cave: One Park, Two Worlds - takes viewers on a journey into two vastly different landscapes of uncompromising beauty - the prairie and the cave. This 20 minute movie tells the dramatic stories of Wind Cave National Park's natural and human history, including the story of Alvin MacDonald - the first explorer of this subterranean world and the story of the bison - the symbol of the Great Plains. Through breathtaking photography this video captures the spirit, mystery, and beauty of one of America's oldest National Parks. \$19.95



Wind Cave, The Story Behind the Scenery -If you are interested in learning more about the ecosystems, wildlife, and history of Wind Cave National Park, this book by Ron Terry is an excellent choice. It contains outstanding photographs and information about the cave and its unusual boxwork formation. This book goes beyond the cave, including photos and insights about the park's incredible prairie. This book is part of a series that explores the natural, geological, and cultural history of the national parks. \$9.95



Take a 360 degree Tour of Wind Cave National Park. This CD has over seventy immersive and interactive panoramic views of Wind Cave National Park and Jewel Cave National Monument. Share the views of the cave or the prairie that you enjoyed on your visit or explore the wilderness of the cave through pictures. The CDs play on your Mac or PC computers allowing you to see maps, photographs, and a 3D model of the cave. The 3D program provides views of the underground or surface world of both parks. \$34.95



Trails Illustrated Map, Black Hills South - If you are interested in hiking in Wind Cave National Park or Custer State Park, this is the trail map to have. This tear-proof, waterproof map details the hiking trails, campsites, roads, elevations, and many other standard features of a topographic map. Wind Cave National Park is illustrated on one side and Custer State Park and the Black Elk Wilderness are on the other side. The map is part of a series of National Geographic Trails Illustrated Maps. There is also a Black Hills North map detailing the north half of the Black Hills National Forest. \$11.95

Name _			Mail to: Fax to:	Black Hills Park 26611 U.S. Hw Hot Springs, SI 605-745-7021		n
Address _			ταλιύ.	005-745-7021		
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Subtotal 15% Member Discount Shinping		(-)	Signa		Expiration Date	
			Postage and Handling Charges (Valid in U.S. only)			
	Shipping		Up to \$3	\$.00 \$2.75	\$3.01 to \$10.00	\$3.75
SD orders add 5% sales tax Membership at 29.95 each		(+)	\$10.01 t	o \$25.00 \$5.50	over \$25.00 Mail tube (cave maps)	call for information \$3.50

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