



# Badlands Visitor Guide

The official newspaper of  
Badlands National Park

2019 Summer Issue



Photo by Joe Salvni, park staff 2010

## Welcome to Badlands National Park

On behalf of our National Park Service (NPS) staff, and our park partners the Oglala Sioux Tribe, Forever Resorts' Cedar Pass Lodge, and the Badlands Natural History Association, welcome to Badlands National Park. Badlands is one of 418 areas in your spectacular National Park System.

Located in the midst of the Northern Great Plains and named Mako Sica by the Lakota people, Badlands National Park has 244,000 acres of spectacular landscapes, native mixed grass prairie, a large variety of native wildlife, important deposits of protected fossils, wonderful skylscapes, and compelling human history. This park is certainly a national treasure.



NPS Photo

Native people have roamed and hunted these lands for the last ten thousand years or more. Today, many Oglala Lakota people live near the park. The Oglala Sioux Tribal Government works closely with the NPS in cooperatively managing the expansive South Unit of the park. If you are at the White River Visitor Center in the South Unit, in addition to experiencing the park, consider visiting other interesting and important places on Pine Ridge Indian Reservation, such as Wounded Knee, the Oglala Lakota Historical Center near Kyle, the Pine Ridge Chamber of Commerce near Kyle with its exhibits, and the Heritage Center at the Red Cloud Indian School. An overlook along the highway at Red Shirt Table provides a stunning vista into the heart of the Stronghold area of Badlands and west to the Black Hills. Inquire locally about road conditions, access, and services as you plan your visit to the South Unit and Pine Ridge Reservation.

Visit the nearby Minuteman Missile National Historic Site and the many other wonderful parks in the region. There are approximately twelve units of your national park system within a half day's drive of Badlands. One could spend many days here and have a quintessential American experience.

I strongly encourage you to get out at the many overlooks, take a hike, participate in Ranger led programs, attend an evening program in the park amphitheater, participate in a night sky program, stay longer than you intended, and immerse yourself in this world class park. And then come back again and do all the things you didn't get to this time! Thanks for being here, hope to see you out in the park.

Michael D. Pflaum  
Park Superintendent

## Things to See and Do

### Plan Your Visit

- Drive the Highway 240 Loop Road (60 minutes).
- Take a side trip down Sage Creek Rim Road to Roberts Prairie Dog Town to see wildlife and experience spectacular views of the park (30 minutes).
- Hike a trail (see page 6 for a map of the trails that include descriptions, distances, and amount of time to allow).
- Attend the Night Sky Program, program listing on page 12 (60 minutes).
- Attend a ranger program. See program listing on page 12 (20 - 60 minutes).
- Stop by the Ben Reifel Visitor Center to watch the award winning park video and tour the exhibits (30 - 60 minutes).
- Take in a sunrise or sunset. They can be viewed and/or photographed from any of the overlooks or campgrounds located in the park (20 - 30 minutes).
- Stop by the White River Visitor Center (hours of operation on page 2) (45 minutes - 1 hour).
- Tour the South Unit of the park. Be sure to get permission from landowners before crossing private land (45 minutes - all day).

Follow us on:



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## Remember These Numbers . . .

# 0

The number of dogs and other pets allowed on the hiking trails and in the wilderness area. Look for more rules and regulations on page 3.

# 7

Number of days your vehicle entrance pass permits you to explore the Badlands. Stay a little longer!

# 45

Maximum speed limit on park roads. Lower speed limits are posted in heavy traffic areas.

# 100

Minimum distance in feet you should keep from park wildlife. Any time an animal reacts to your presence, you are too close.

## Quick Facts about Badlands National Park

- Established as a National Monument in 1939
- Redesignated Badlands National Park in 1978
- Acreage: 244,000
- Wilderness: 64,250 acres

- Visitation: approximately one million visitors each year from all over the world

### Key Resources:

- Largest expanse of protected prairie ecosystem in the National Park system
- Considered one of the world's richest mammal fossil beds
- 50% of Badlands National Park is co-managed with the Oglala Lakota Nation, the eighth largest American Indian Reservation in the United States
- Badlands National Park and the Buffalo Gap National Grasslands are one of the most successful reintroduction sites for the black-footed ferret, one of the world's rarest mammals.

### Key Management Issues:

- Visitor and employee safety
- Reduction of exotic plant species
- Protection of fossil resources
- Maintenance of park facilities
- Preservation of over 50,000 artifacts and specimens in museum collections
- Reintroduction of native wildlife (pictured below)



Black-footed Ferret

Photo by Randy Matchett, US Fish and Wildlife Service



Swift Fox

DianeHargreaves.com



Bighorn Sheep

Photo by Teresa Zimmerman



Bison

DianeHargreaves.com

# Visitor Facilities

## Ben Reifel Visitor Center

Located at park headquarters the Ben Reifel Visitor Center has several interactive exhibits, a 97 seat air conditioned theater that shows the park film, *Land of Stone and Light* throughout the day, and restroom facilities. Badlands Natural History Association sells postcards, books, posters, and other educational materials. Open year round.

Hours of Operation	
April 14 - May 25	8 a.m. - 5 p.m.
May 26 - September 28	7 a.m. - 7 p.m.
September 29 - October 26	8 a.m. - 5 p.m.
October 27 - April 2020	8 a.m. - 4 p.m.

**Badlands National Park is in the Mountain Time Zone.**

## White River Visitor Center

Located on the Pine Ridge Reservation off Highway 27 and BIA 2, this visitor center has exhibits, restrooms, and picnic tables.

Contact (605) 455-2878 for more information. The White River Visitor Center is only open seasonally, for information during the off season please call park headquarters at 605-433-5361.

Hours of Operation	
May 26 through October 27	9 a.m. - 6 p.m.

## Picnic Areas

Picnic tables are located at Bigfoot Pass and Conata Picnic Areas in addition to tables at the Ben Reifel Visitor Center and the White River Visitor Center. Bigfoot Pass and Conata Picnic Areas do not have water available. **Remember that open campfires are not permitted.**

## Local Services

### Gas Stations and Convenience Stores

- Cactus Flat
- Interior
- Kadoka
- Philip
- Pine Ridge
- Rapid City
- Wanblee
- Wall

### Restaurants

- Kadoka
- Philip
- Pine Ridge
- Rapid City
- Wall

### Motels and Campgrounds

- Cactus Flat
- Interior
- Kadoka
- Philip
- Pine Ridge
- Rapid City
- Wall

### Hospitals and Clinics

- Kadoka
- Philip
- Rapid City
- Wall

### Post Office

- Interior
- Kadoka
- Philip
- Pine Ridge
- Rapid City
- Wanblee
- Wall

## Cedar Pass Campground

Located near the Ben Reifel Visitor Center, Cedar Pass Campground has 96 sites. Summer camping fees are \$22 plus tax, per night per campsite for 2 people (no hook-ups) and \$37 plus tax for campsites with electrical hook-ups (2 people). Winter camping fees are \$15 plus tax per night per campsite. Campsites and RV sites may be reserved in advance on line at: [www.CedarPassLodge.com](http://www.CedarPassLodge.com) (if reservation is more than 72 hours in advance) and has a fourteen day limit. Less than 72 hours is first come, first serve. Cold running water, flush toilets, covered picnic tables, coin operated showers, and trash containers are available during the summer. Covered picnic tables, and trash containers are available during the winter. A dump station is available for a \$1.00 fee per use. Campground hosts are on duty during the summer to assist with registration and provide information. Look for them in the afternoon and early evenings at the campground entrance booth. **Open campfires are not permitted.**

**Group Camping:** Four campsites are available in the Cedar Pass Campground for organized groups with a designated leader. The nightly fee is \$4.00 per person with a minimum fee of \$40.00. Advance reservations can be made by contacting Sonya Michaels, Group Camping Reservations at: 480-627-5308 or [smichaels@foreverresorts.com](mailto:smichaels@foreverresorts.com)

### Contact information

Cedar Pass Lodge  
20681 Hwy 240  
Interior, SD 57750  
(605) 433-5460; fax (605) 433-5560

### Accessibility

- The Ben Reifel Visitor Center and White River Visitor Center are both accessible to wheelchair users.
- The Fossil Exhibit Trail, Window Trail, and Door Trail are accessible to wheelchair users.
- The Cedar Pass Campground has two accessible campsites. All campground restrooms are accessible. One group campsite is accessible.
- The Cedar Pass Lodge dining room and gift shop meet accessibility standards.
- Ask at the Ben Reifel Visitor Center about the listening devices that can be used to aid in hearing the park film.
- A complete listing of accessible facilities is available at the Ben Reifel Visitor Center or online at: <http://www.nps.gov/bad/>.

## Sage Creek Primitive Campground

Open year round, access to this campground may be limited in winter and during the spring rainy season due to road conditions. The Sage Creek Rim Road is remote and unpaved. Recreational vehicles larger than 18 feet in length are prohibited from the Sage Creek Campground. The campground is currently free and offers pit toilets and picnic tables. There is a fourteen day limit. There is no water available. **Generators and open campfires are not permitted.**

## Cedar Pass Lodge

The only lodging and restaurant in Badlands National Park, Cedar Pass Lodge provides guests to the park a distinctive collection of South Dakota and regionally made gifts, Native American crafts, and jewelry, and offers newly built cabins for overnight accommodations in this unique destination.

The cabins, built to Gold level LEEDs environmental standards, feature custom handmade furniture from sustainably harvested beetle kill pine from the Black Hills. The furniture was hand crafted, including table-tops crafted from regionally reclaimed barn wood, bringing to life the artisanship of the small family owned business that made them. Each cabin is equipped with energy efficient A/C and heat, refrigerator, microwave, coffeemaker, flatscreen TV, on demand hot water heater for shower, hair dryer and bamboo fiber towels.

**For additional information go to:** [www.CedarPassLodge.com](http://www.CedarPassLodge.com)

**or write:** Cedar Pass Lodge

20681 Hwy 240  
Interior, SD 57750  
(605) 433-5460 or fax (605) 433-5560  
**Email:** [dreddest@cedarpasslodge.com](mailto:dreddest@cedarpasslodge.com)

Gift Shop Hours of Operation	
April 20 - April 30	8 a.m. - 5 p.m.
May 1 - May 23	8 a.m. - 7 p.m.
May 4 - September 1	7 a.m. - 9 p.m.
September 2 - September 30	8 a.m. - 7 p.m.
October 1 - October 27	8 a.m. - 5 p.m.

**The dining room closes 30 minutes before the gift shop.**

Coffee Shop Hours of Operation	
May 22 - September 1	6 a.m. - 8 a.m. & 6 p.m. - 8 p.m.



For more information about these local communities, contact the Chambers of Commerce or South Dakota Tourism.

Kadoka Chamber 1-800-467-9217  
Philip Chamber (605) 859-2645  
Pine Ridge Chamber (605) 455-2685  
Rapid City Chamber 1-800-487-3223  
Wall Chamber (605) 279-2665  
South Dakota Tourism (605) 773-3301

[kadokacity@wccenet.com](mailto:kadokacity@wccenet.com)  
[ccphilip@gwtc.net](mailto:ccphilip@gwtc.net)  
[pracc@gwtc.net](mailto:pracc@gwtc.net)  
<http://www.rapidcitycvb.com>  
<http://www.wall-badlands.com>  
<http://TravelSD.com>

# Rules and Regulations

## Your Safety

- Summer is hot and dry. Carry and drink one gallon of water per person per day.
- Thunderstorms can produce lightning, hail, high winds, and tornadoes. During lightning storms, avoid lone trees and high places. Return to your car, if possible.
- Be careful on cliff edges and on badlands formations, especially when surfaces are wet.
- Wear clothing and sunscreen to protect yourself from the sun.
- Wear sturdy boots or shoes to protect your feet from cactus spines.
- Beware of rattlesnakes. They can be found throughout the park and are venomous. Rattlesnakes avoid the sun by coiling in cracks and crevices or staying in the thick grasses. Wear closed toe leather shoes. Be careful where you place your hands and feet.
- Plan your trip carefully. Use the Badlands Visitor Guide to choose a trail within your abilities. Make informed decisions and check with a ranger at the visitor center.
- Be careful when exploring buttes. The rock surface is very unstable. Falls are the most common cause of injury in the park. Most people find that it is easier to climb up rather than down.
- Cell phones will not work in most of the park. Your safety depends on your own good judgement, adequate preparation, and constant attention.
- Winter weather can be very unpredictable. Sudden and dramatic weather changes are common. Check at the visitor center for weather updates.
- Protect yourself - dress in layers, watch for changing weather conditions, and let someone know about your travel plans.
- Drones are not allowed to be flown in the park.
- The use of skateboards, roller skates, roller blades, roller skis, coasting vehicles and similar devices is prohibited in Badlands National Park.

## Protect Your Park

- Leave fossils, plants, flowers, rocks, and animals where you find them. Collecting in the park is illegal and punishable by a fine and/or imprisonment. Report all unusual sightings and finds to park staff at the Ben Reifel or White River Visitor Centers.
- Preserve our heritage. Do not enter, alter, or deface archeological sites. Do not collect artifacts.
- All vehicles and bicycles must travel on designated roads.
- It is recommended that you stay on designated trails in high use areas such as Fossil Exhibit and Cliff Shelf Nature Trails.
- Watch for wildlife crossing the roads. Observe the posted speed limits
- Help the park maintain its high air quality rating; turn off your engine when you are away from your vehicle. Letting your vehicle idle is punishable by a fine.



Photo: Dakota McCoy, park staff

## Rules of the Road

- The speed limit is 45 miles per hour, unless posted otherwise.
- Seatbelts are required by federal law for all passengers at all times.
- When viewing wildlife drive cautiously and use pull outs to allow others to pass safely.
- Keep vehicles on established roads. Do not park on the grass. The underside of your vehicle can start a prairie fire.
- Pedestrians have the right of way. Vehicles must stop for pedestrians in crosswalks. It's the law.
- Gravel roads may be closed due to heavy rain or snow. They can become slick and impassable. Check with a ranger at the visitor center

## Backcountry Camping & Hiking

Before you venture into the backcountry or wilderness, there are some things you should know:

- Permits are not currently required for overnight stays in the Badlands backcountry. Before setting out on an overnight trip contact a staff member at the Ben Reifel Visitor Center or Pinnacles Entrance Station for more information. Backcountry registers are located at the Medicine/Castle Trail Loop, Saddle Pass Trailhead, Conata Picnic Area, Sage Creek Basin Overlook, and the Sage Creek Campground.
- Twisted or fractured ankles are the most common serious injury sustained in Badlands National Park. Make sure you are wearing sturdy boots with good ankle support. The park is home to many burrowing animals. Watch your footing.
- Campfires are not allowed under any circumstances. Use a backpacking stove.
- Pets are not permitted on trails, in backcountry, or Wilderness Areas.
- The location of your campsite must be at least 0.5 miles from a road or trail and must not be visible from a roadway.
- There is little to no water available in the backcountry. The small amounts of water found are not drinkable or filterable due to the high sediment content. Always carry at least one gallon of water per person per day.
- All refuse must be carried out. Use the cat hole method to dispose of human waste. Dig a small hole 6 to 8 inches deep and a minimum of 200 feet from any water source. Since animals will often dig up cat holes and scatter the toilet paper, it is preferred that you pack out all toilet paper. If you must bury toilet paper, use a minimal amount and bury with at least 6 inches of soil. Strain food particles from wastewater, pack out food scraps, and scatter remaining water more than 200 feet from any stream channel.
- Check the weather forecast. Severe thunderstorms are common during the summer, so are days above 100°F (38°C). September and early October are the best backpacking months.

## Camping and Campfires

- Campfires are not permitted due to the extreme danger of prairie wildfire.
- Camp stoves or contained gas or charcoal grills can be used in the campgrounds or picnic areas.
- Wood gathering is not permitted.
- There are electrical hook-ups available in the Cedar Pass Campground.



NPS Photo

## Bicycling

**Bicyclist Warning:** The Badlands Loop Road is narrow with many curves. Watch out for large RVs with extended mirrors.

- Bicycles are prohibited on park trails.
- Bicyclists are permitted on all park paved and unpaved roads and must obey all traffic regulations.
- Always ride with the flow of the traffic.
- Several steep passes make riding the Loop Road challenging.
- See and be seen. Wear bright colors and a helmet. A map of suggested routes is available at the Ben Reifel Visitor Center.
- When bicycling near bison, move to the opposite side of the road and go slow.

## Hunting

• Hunting is strictly prohibited in Badlands National Park.

- State laws pertaining to firearms are strictly enforced.

## Pets

- Pets are allowed only on paved or gravel roads and in developed areas such as campgrounds.
- Pets must be kept on a leash no longer than six feet at all times.
- Pets are not allowed on trails or in public buildings.
- Leaving an animal unattended and/or tied to a fixed object is prohibited, as well as a danger to your pet.
- Pet etiquette dictates always cleaning up animal waste and disposing of it in trash receptacles.
- Service animals are an exception to most pet restrictions and are allowed on trails and in public buildings. Service animals must be kept on a leash at all times and, due to potentially infectious wildlife diseases, are not allowed in areas with prairie dog colonies.
- Dogs whose sole function is to provide comfort or emotional support do not qualify as service animals under the ADA.

## Emergency? Call 911

To report a crime in Badlands NP call: 605-433-5361 ext. 847  
To report a crime in any National Park call: 888-653-0009

## Road Conditions? Call 511

### Contact Us

#### Mailing Address

Badlands National Park  
25216 Ben Reifel Road  
Interior, SD 57750

#### Email

badl\_information@nps.gov

#### Park Website

[www.nps.gov/badl/](http://www.nps.gov/badl/)

#### Park Headquarters

605-433-5361

#### Fax Number

605-433-5404

## Follow us on:



To access Facebook: [www.facebook.com/BadlandsNPS](http://www.facebook.com/BadlandsNPS)  
To access Twitter: @BadlandsNPS

# Horse Use

The Badlands Wilderness Area is located in the Sage Creek drainage and consists of 64,000 acres of eroded spires and mixed grass prairie, offering prime horseback riding terrain in the park. Although most riders confine themselves to the Wilderness Area, horseback riding is allowed anywhere in the park except on marked trails, roads, highways, and developed areas. For day ride access, vehicles and horse trailers may be parked at overlooks and parking areas. Off road driving is strictly prohibited.



There are no designated riding trails in the park but topographic maps are available for purchase at the bookstore, located in the Ben Reifel Visitor Center.

A portion of the Sage Creek Campground is designated for horse use. A watering hole known as CCC Spring is located about 1/2 mile southwest of the campground. Hitching posts are provided. Riders must provide weed free hay or pellets for feed. Horses should not be allowed to run free or be picketed in the campground. No fires are allowed, except in contained grills. The campground stay is limited to 14 consecutive nights.

No commercial horse rental or day rides are available in Badlands National Park. Local businesses offer day rides outside the park and outfitters may offer overnight backcountry trips under a commercial use license. For more information, contact South Dakota Tourism or local chambers listed on page 2 of this paper.

- Only certified weed free hay or processed horse feed products may be brought into the park.
- Horses and pack animals are not allowed to run loose, be loose herded, or trailed.
- The tying of horses and pack animals to any living or dead feature that may damage the feature, vegetation, or soil is prohibited.
- Picketed horses and pack animals shall not be kept within 100 feet of trails, campsites, or water sources.
- Picket pins should be packed in. Picket pin sites must be moved frequently to prevent overgrazing or other damage to vegetation. The pins must be pulled out of the ground prior to leaving camp.
- Horse and pack animal manure must be completely removed from the campground and must be well scattered in any other grazing areas in the park.
- If a horse or pack animal is lost or dies within park boundaries, the loss must be reported as soon as possible to park staff.
- Dogs and other pets are not allowed in the Badlands Wilderness Area.



NPS Photo

# How Far To...?

## South Dakota Towns & Cities

Buffalo Gap	102 miles
Custer	120 miles
Deadwood	122 miles
Hermosa	122 miles
Hot Springs	148 miles
Interior	2 miles
Kadoka	26 miles
Philip	34 miles
Pine Ridge	83 miles
Rapid City	88 miles
Scenic	38 miles
Sioux Falls	280 miles
Spearfish	131 miles
Sturgis	110 miles
Wall	30 miles

## Out of State Cities

Denver, CO	490 miles
Minneapolis, MN	552 miles
Omaha, NE	458 miles

## National & State Parks

Minuteman Missile NHS	8 miles
Bear Butte State Park	120 miles
Custer State Park	125 miles
Devils Tower NM	197 miles
Grand Canyon NP	1,148 miles
Grand Teton NP	628 miles
Jewel Cave NM	148 miles
Mount Rushmore NM	99 miles
Rocky Mountain NP	475 miles
Theodore Roosevelt NP	343 miles
Wind Cave NP	132 miles
Yellowstone NP	574 miles

## Attractions

Wounded Knee via Scenic	82 miles
Wounded Knee via Kyle	67 miles
Crazy Horse Monument	114 miles
Black Hills National Forest	75 miles

# Badlands Wildlife

**Please do not feed the wildlife. Human food makes animals dependent on people for food and can make them aggressive.**



Coyote  
NPS Photo



Bighorn Sheep  
Photo by Mike Schroeder



Porcupine  
NPS Photo



Bobcat  
NPS Photo



Prairie Rattlesnake (venomous)  
DianeHargreaves.com



Blacktailed Prairie Dog  
Photo by Mike Schroeder



American Bison  
NPS Photo



Black-footed ferret  
Photo by Randy Matchett, US FWS



Swift Fox  
DianeHargreaves.com



Black-billed Magpie  
NPS Photo

Want to share a great wildlife sighting? Tweet it using the hashtag #BadlandsWildlife



# Badlands Geology

Deep canyons, towering spires, and flat-topped tables can all be found among Badlands buttes. Yet, despite their complex appearance, they are largely a result of two basic geologic processes: deposition and erosion.

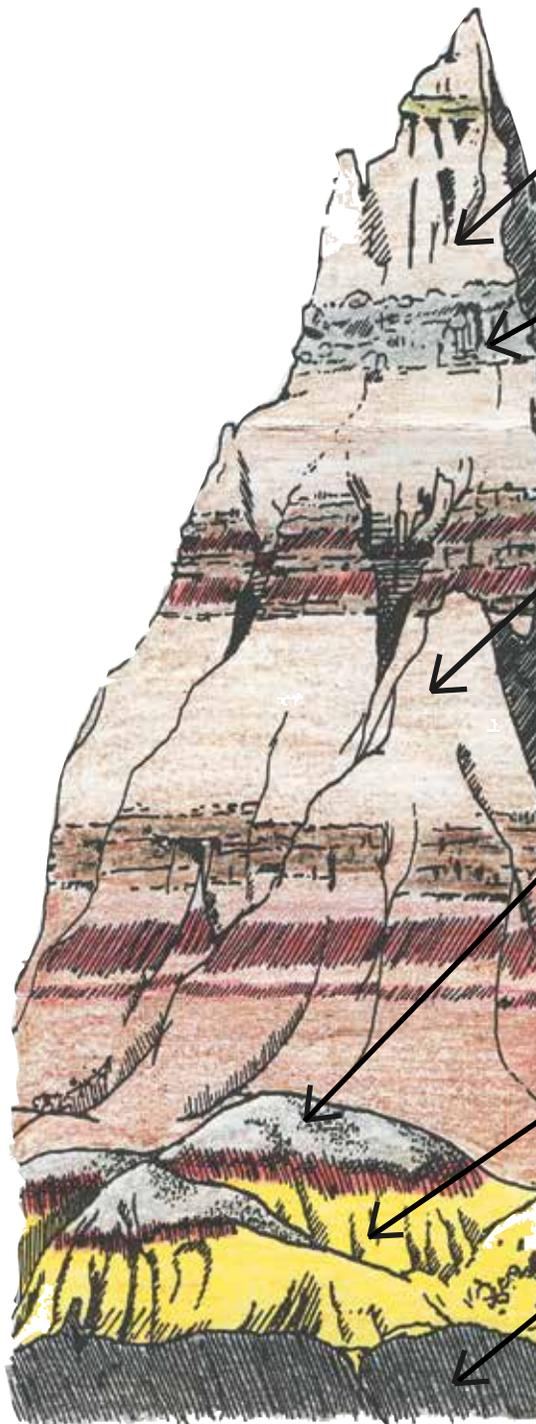
The serrated Badlands terrain did not begin eroding until about 500,000 years ago when water began to cut down through the rock layers, carving fantastic shapes into what had been a flat floodplain. The ancient fossil soils, buried for millions of years, were exposed once again. Many of the layers are gently warped and faulted due to mountain building activities that formed the Black Hills, 70 miles to the west.

Erosion is ongoing. Every time it rains, more sediment is washed from the buttes. One day, a peak may tower above the land; the next, a storm may weaken it just enough for it to crash to the ground. While the Badlands are permanent in human terms, they are short lived on a geologic time scale. Erosion rates suggests that they will erode away completely in another 500,000 years, giving them a life of one million years. Compare that to the age of the earth, which is approximately 4.6 billion years. Even the Rocky Mountains, considered young, started to rise only 70 million years ago. On average, Badlands buttes erode one-third inch each year. However, change can occur much slower or faster depending on things such as slope, aspect, parent material, and rainfall.

As the Badlands buttes erode, some of the sediment is washed onto the prairie below, building its level while the rest is carried by small streams to the White, Bad, and Cheyenne Rivers. These tributaries flow into the Missouri River, which drains into the Mississippi River. Eventually, some Badlands sediments will travel as far as the Gulf of Mexico.

The Loop Road hugs the Badlands wall, a long, narrow spine of formations that stretch 60 miles from Kadoka west towards the town of Scenic. Wind, rain, and freeze/thaw action have gradually worn away the badlands sediments, leaving the Badlands Wall behind. As erosion has continued, the wall has retreated from the three major drainages. The town of Wall, South Dakota takes its name from this feature that dominates the horizon.

A quick look at the buttes will show that the Badlands were deposited in layers. These layers formed soft, sedimentary rocks, composed of minute grains of sand, silt, and clay that have been cemented into solid form. Geologists study sedimentary rocks to determine what type of environment caused the material to accumulate. Layers similar in character are grouped into units called formations, with the oldest layers at the bottom.



The lighter colored **Sharps Formation** was primarily deposited from 28 to 30 million years ago by wind and water as the climate continued to dry and cool. Volcanic eruptions to the west continued to supply ash during this time. Today, the Brule and Sharps form the more rugged peaks and canyons of the Badlands.

As the Oligocene Epoch continued, a thick layer of volcanic ash was deposited, forming the bottom layer of the Sharps Formation. This **Rockyford Ash** serves as a boundary between the Brule and Sharps.

During the Oligocene Epoch, between 30 to 34 million years ago, the tannish brown **Brule Formation** was deposited. As the climate began to dry and cool after the Eocene the forests gave way to open savannah. New mammals such as oreodonts (sheep-like, herd mammals) began to dominate. Bands of sandstone interspersed among the layers were deposited in channels and mark the course of ancient rivers that flowed from the Black Hills. Red layers found within the Brule Formation are fossil soils called *paleosols*.

The greyish **Chadron Formation** was deposited between 34 to 37 million years ago as a river flood plain that replaced the sea. Each time the rivers flooded, they deposited a new layer on the plain. Alligator fossils indicate that a lush, subtropical forest covered the land. However, mammal fossils dominate. The Chadron is known for large, rhinoceros-like mammals called titanotheres. This formation can be recognized because it erodes into low, minimally vegetated, grey mounds.

The sea drained away with the uplift of the Black Hills and Rocky Mountains, exposing the black ocean mud to the air. Upper layers were weathered into a yellow soil, called **Yellow Mounds**. The mounds are an example of a fossil soil, or *paleosol*.

The oldest formation exposed in Badlands is the **Pierre Shale**. These black layers were deposited between 69 and 75 million years ago during the Cretaceous Period when a shallow, inland sea stretched across what is now the Great Plains. Sediment filtered through the seawater, forming a black mud on the sea floor that has since hardened into shale. Fossil clams, ammonites, and sea reptiles confirm the sea environment.

## Paleontology

### What is a fossil?

A fossil is a preserved sign of ancient life. Paleontologists study animal tracks and plants preserved over time, as well as bones that have been converted into fossils through natural chemical processes.

Other signs such as feces and pollen have also been fossilized and are studied to help get a broader picture of life in prehistoric North America. The area in and around Badlands National Park has had a long association with research on fossil vertebrates. Scientists have been using this area as an outdoor laboratory for over 150 years.

### Saber-tooth Cat Discovery at Badlands National Park

During the summer of 2010, while participating in a junior ranger program, a seven year old girl named Kylie Ferguson noticed something very unusual eroding out of the side of a badlands butte. She thought it might be a fossil. Kylie did the right thing and reported her discovery to a park ranger. The final outcome was a beautifully preserved saber-tooth cat skull. Paleontologists have identified the skull as belonging to the genus *Hoplophoneus*, a mountain lion-sized



saber-tooth cat that lived in the Badlands over 30 million years ago. A CT scan revealed the lethal damage caused by several bites to the back of the skull, likely caused by another saber-tooth cat. The CT data were also used to create exact replicas of the skull.

Annual surveys completed at the site have generated several new fossil discoveries including: fossil horses, turtles, lizards, plant remains, snails and a broad array of small mammals. Related studies have also determined that the site is from the middle Scenic Member of the Brule Formation and was deposited by a stream system about 32 million years ago. The Paleontology Lab is located in the Ben Reifel Visitor Center and is open to the public during the summer season.



NPS Photo

### To learn more

Use your smart phone to watch a 44 sec video about visiting the Fossil Prep Lab. No phone? No access? Check it out later at <http://www.nps.gov/av/mwr/avElement/badl-Welcome-to-Paleo-Sites.mp4>

### Exhibits at the Pig Dig

Badlands National Park staff and partners developed wayside exhibits describing the history and scientific significance of the Pig Dig Quarry. The exhibits are on site near the Conata Picnic Area and feature a mural which depicts the area 33 million years ago. The exhibits were completed at the end of 2012. The Pig Dig is included in a series of scientific publications and a new book on the White River Badlands.

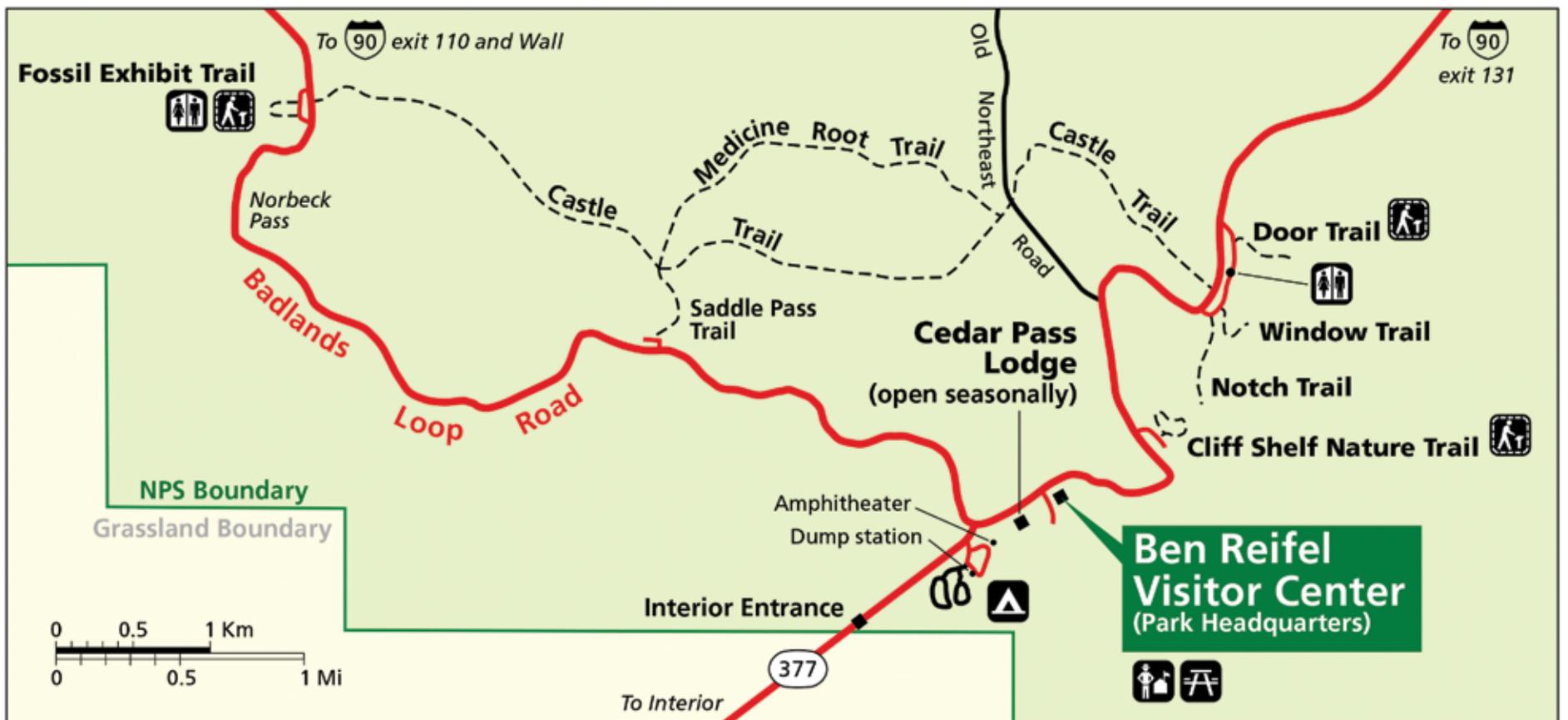
Be sure to check out our award-winning paleontological exhibits at the Fossil Exhibit Trail.

### Protecting Fossil Resources

You can help protect paleontological resources here and anywhere you travel by following these tips:

- No fossil collecting is allowed at Badlands National park without a signed permit from the park superintendent.
- Leave fossils where you find them. It's tempting to pick them up and take them with you, but don't. Removing them from their context destroys much of the information critical to scientists. Context refers to where they are found geologically and in what position the fossils are found.
- Be an informed visitor. Be familiar with current issues in paleontology. Once you watch for fossils in the news, you'll find them discussed almost daily.
- If you find a fossil, do not disturb it. Note the location by filling out a Visitor Site Report and give it to a ranger. One of the paleontology staff will investigate your find. Some of our most significant fossil discoveries are made by visitors.

# Hiking in the Park



## Door Trail

.75 miles/1.2 km (round trip)

30 minutes

Easy. An accessible ¼ mile boardwalk leads through a break in the Badlands Wall known as “the Door” and to a view of the Badlands. From there, the maintained trail ends. Travel beyond this point is at your own risk. Watch for drop offs.

## Window Trail

.25 miles/.40 km (round trip)

20 minutes

Easy. This short trail leads to a natural window in the Badlands Wall with a view of an intricately eroded canyon. Please stay on the trail.

## Notch Trail

1.5 miles/2.4 km (round trip)

1 1/2 - 2 hours

Moderate to strenuous. After meandering through a canyon, this trail climbs a log ladder and follows a ledge to “the Notch” for a dramatic view of the White River Valley. Trail begins at the south end of the Door and Window parking area. Watch for drop offs. Not recommended for anyone with a fear of heights. Treacherous during or after heavy rains.

## Castle Trail

10 miles/16 km (round trip)

5 hours

Moderate. The longest trail in the park begins at the Door and Window parking area and travels five miles one way to the Fossil Exhibit Trail. Relatively level, the path passes along some Badlands formations.

## Cliff Shelf

.5 miles/.8 km (round trip)

1/2 hour

Moderate. This loop trail follows boardwalks and climbs stairs through a juniper forest perched along the Badlands Wall. A small pond occasionally exists in the area and draws wildlife, such as deer or bighorn sheep. Climbs approximately 200 feet in elevation. Please stay on the trail.

## Saddle Pass

.25 miles/.40 km (round trip)

1/2 - 1 hour

Strenuous. This short trail climbs up the Badlands Wall to a view over the White River Valley. The trail ends where it connects with the Castle and Medicine Root Loop Trails.

## Medicine Root Loop

4 miles/6.4 km (round trip)

2 hours

Moderate. This generally rolling spur trail connects with the Castle Trail near the Old Northeast Road and at the intersection of the Castle and Saddle Pass Trails. Trail users are provided the opportunity to explore the mixed grass prairie while enjoying views of the Badlands in the distance. Watch for cactus.

## Fossil Exhibit Trail

.25 miles/.40 km (round trip)

20 minutes

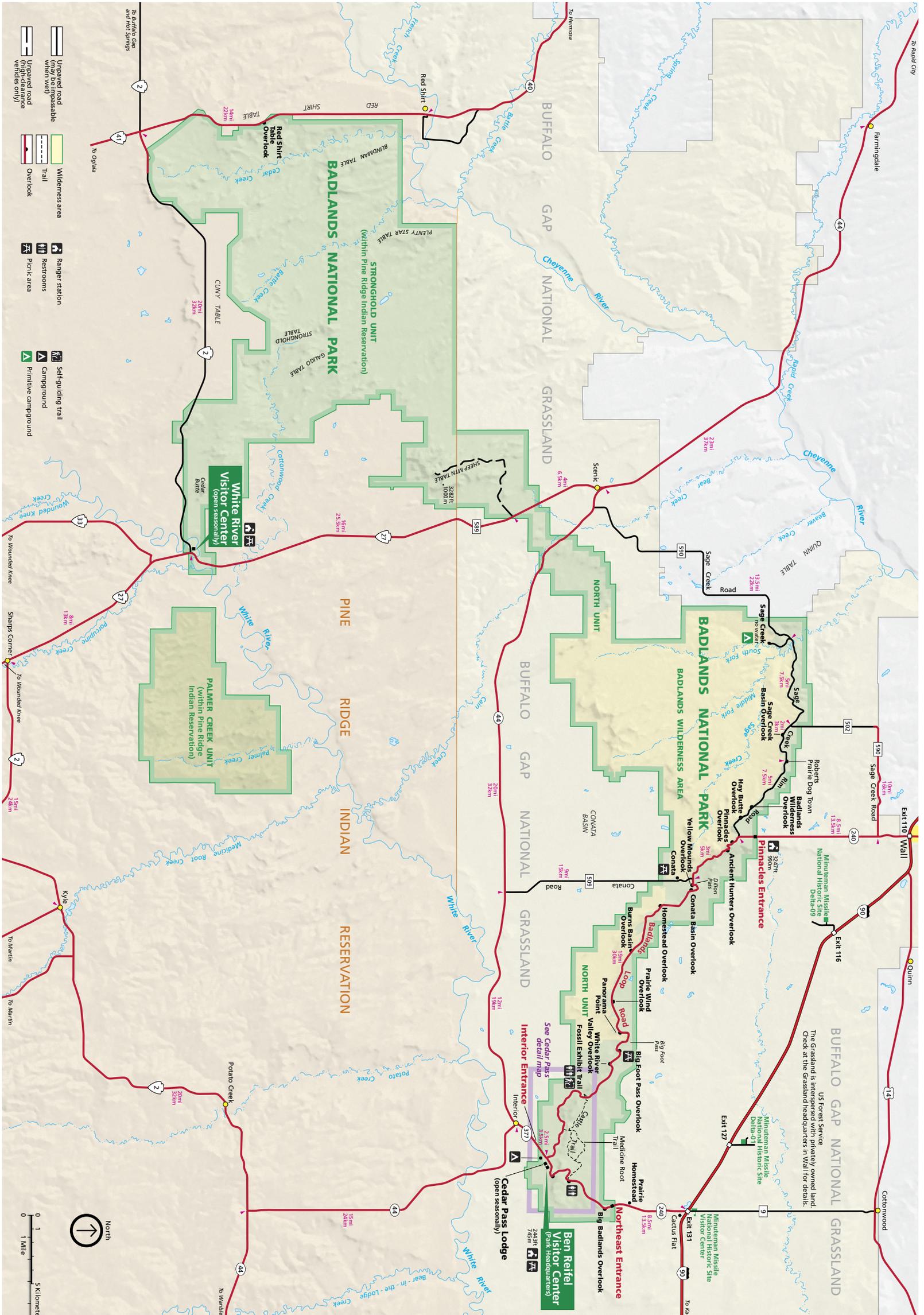
Easy. Fully accessible trail features fossil replicas and exhibits of now extinct creatures that once roamed the area.

## Badlands Weather

Month	January	February	March	April	May	June	July	August	September	October	November	December
Average High Temperatures	34°F	40°F	48°F	62°F	72°F	83°F	92°F	91°F	81°F	68°F	50°F	39°F
Average Low Temperatures	11°F	16°F	24°F	36°F	46°F	56°F	62°F	61°F	51°F	39°F	26°F	17°F
Average Precipitation (inches)	0.29	0.48	0.90	1.83	2.75	3.12	1.94	1.45	1.23	0.90	0.41	0.30

Weather warnings and forecasts for Badlands National Park and vicinity can be heard on NOAA Weather Radio 162.450 MHZ. Forecasts can also be obtained by calling 605-341-7531.

# Park Map



# Entrance Fees

<b>Vehicle</b> Private Non-Commercial	7 Days	\$25.00		
<b>Motorcycle</b> Private Non-Commercial	7 Days	\$15.00		
<b>Per Person</b> Bicycle, hiking, etc...	7 Days	\$12.00		
<b>Badlands Annual Pass</b> Unlimited entry to Badlands NP	1 Year	\$50.00		
<b>Interagency Annual Pass</b> Valid for unlimited entry to designated federal fee areas	1 Year	\$80.00		
<b>Interagency Senior Pass</b> 62 & Over US Citizen Valid for entrance to designated federal fee areas & half price on camping	Lifetime	\$80.00		
<b>Interagency Annual Senior Pass</b> 62 & Over US Citizen Valid for entrance to designated federal fee areas & half price on camping	1 Year	\$20.00		
<b>Interagency Access Pass</b> Permanently Disabled US Citizen Valid for entrance to designated federal fee areas & half price on camping	Lifetime	FREE		
<b>Interagency Military Pass</b> Active U.S. Military Valid for unlimited entry to designated federal fee areas	1 Year	FREE		
<b>Every Kid in a Park Pass</b> 4th Grade Pass Valid for unlimited entry to designated federal fee areas	1 Year (School year)	FREE		
<b>Commercial Tours</b> Based On Seating Capacity	Sedan (1-6) \$25 *	Van (7-15) \$50	Mini-Bus (16-25) \$60	Motorcoach (26 & up) \$150

\* plus \$12 per person

\*\* Please be prepared to show a valid ID with your pass upon entrance to designated federal fee areas.

# Your Entrance Fees At Work

Badlands National Park is a designated Federal Recreation Fee Area. Fees collected at Badlands directly benefit this park and other units of the National Park Service. Fees paid at Badlands are unique in that under special agreement fees are split with the Oglala Sioux Tribe.

- Park-wide trail improvements
- Replace and update wayside exhibits
- Continued support of the Bighorn Sheep program
- Continued support of the Fossil Preparation Lab
- Replace and upgrade vault toilets
- Print park newspaper

Some of the projects that have been funded by fees at Badlands include:

# Exploring the South Unit

The South Unit is a landscape of great historical and spiritual significance to the Oglala Sioux. In 1942, the War Department took 341,725 acres from the Pine Ridge Indian Reservation to establish a bombing range for training during World War II. In 1976, the Tribe granted an easement to manage some of the old bombing range lands as part of Badlands National Monument. This doubled the size of the Monument and led Congress to redesignate the area as Badlands National Park in 1978. The new Badlands National Park was subdivided into two units: the North Unit, consisting of park land north of Highway 44, and the South Unit, park land south of Highway 44.

The South Unit contains many sites sacred to the Oglala Lakota and other American Indian cultures. Please show respect by not touching or removing objects tied to trees and shrubs. All artifacts must be left in place. Remember to practice Leave No Trace principles at all times in the Stronghold District.

The White River Visitor Center was opened in 1978 and has remained open during the summer months to provide orientation to the South Unit and Pine Ridge Indian Reservation.

Due to the quantity of unexploded ordnance

that continues to litter the areas used for bombing practice, a multi-agency task force is working toward clearing the South Unit of these devices. Please contact a ranger if you find unexploded ordnance. Cellular phones can detonate these devices.

The South Unit remains largely undeveloped and lacks access points, such as roads and trails. The South Unit is a protected natural area and is not managed as a four-wheel-drive recreation area. Travelers must remain on existing primitive road tracks. Do not travel away from these tracks. We encourage anyone interested in backcountry hiking or camping in the South Unit to notify the ranger at the White River Visitor Center to ensure your safety and that you are not trespassing on private lands. Explorers must often cross private land to access the public land. Always obtain permission from landowners for vehicular or foot access before setting out for Cuny Table, Stronghold Table, and Palmer Creek. Be prepared with alternative destinations if landowners do not grant permission to cross their property. Hikers in the South Unit must be experienced map readers. Plan on a minimum of two days to hike in and out of the remote Palmer Creek area.

# Become a Junior Ranger!



NPS Photo

Are you ready to climb out of that car and have some fun with a ranger? Children ages 2 and older can become a Badlands National Park Junior Ranger! Junior Rangers are kids like you - national park explorers, fun seekers, and concerned citizens. There are two ways to become a Junior Ranger and earn your official Badlands badge.

Join us for the 11:00 a.m. Junior Ranger Program (June - August). Meet at the Ben Reifel Visitor Center for 30 minutes of laughs and learning. The program is different every day, but here are a few things you might do:

- Go on a nature hike.
- Play guessing games to learn

characteristics of prairie plants and animals, then hunt around the prairie for tracks and signs.

- See Badlands fossils and discover what paleontologists do.

Complete a Junior Ranger Booklet (year round). You can pick up your free Junior Ranger Booklet at the Ben Reifel Visitor Center. Return the booklet to a ranger when you have completed the activities and you will be awarded your badge. You can also complete the booklet as you travel through the park. Mail it back to us for review and we will return it with your Junior Ranger badge enclosed.

Parents! Junior Ranger Programs are fun for the whole family. Please attend the 11:00 a.m. Junior Ranger Program with your children. Your family can collect Junior Ranger badges at over 300 national parks.

Look for online adventures at: [www.nps.gov/webrangers](http://www.nps.gov/webrangers).



## Badlands Junior Ranger Pledge

As a Junior Ranger, I promise to help take care of National Parks and all the plants and animals that live there. I will learn more about special places like the Badlands and help teach others about nature.



NPS Photo

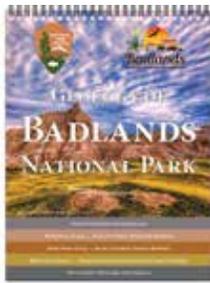
One of the few designated roads is the Sheep Mountain Table Road, 4 miles south of the town of Scenic on Pennington County Road 589. The stunning views from windswept Sheep Mountain Table are accessible under dry conditions, but the road is impassable when wet or snow covered (high clearance vehicles recommended). Please use caution along the unstable cliff edges of the table. Sheep Mountain Table is designated a day use area. Overnight camping is not allowed.



View from Sheep Mountain Table

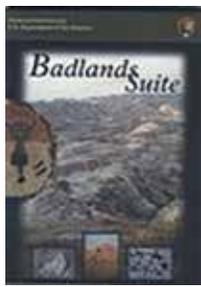
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# Shop Badlands Natural History Association



**Geology of Badlands National Park Flip Chart**  
\$9.95 \*\*

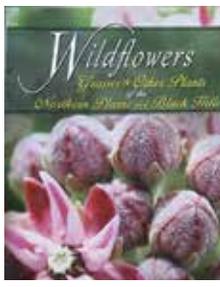
The Geology of Badlands National Park flip chart is somewhat of a layman's guide to what you are seeing when you come into the park. Layer by layer. Fossil by fossil. A perfect field guide, gift, or school group side-kick.



**Badlands Suite**  
\$9.95 \*\*

DVD includes:  
Land of Stone and Light  
From Field to Lab  
Multiple Perspectives

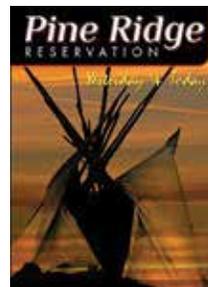
This DVD takes you on a journey into the White River Badlands of South Dakota. In three different presentations, become acquainted with the people of this place.



**Wildflowers, Grasses, & Other Plants of the Northern Plains and Black Hills**

**\$11.95 \*\***  
Author: Theodore Van Bruggen

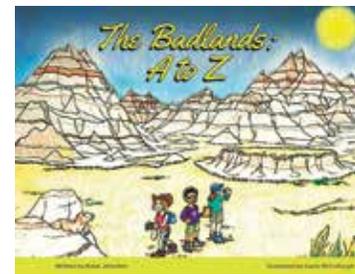
Color photographs and descriptions of over 300 plants found in Badlands National Park and the surrounding areas.



**Pine Ridge Reservation: Yesterday and Today**  
\$3.00 \*\*

Author: Gregory Gagnon

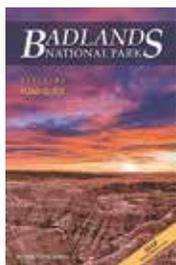
This is one of the only contemporary booklets on the Pine Ridge Indian Reservation in South Dakota. Goes together great with the Badlands Road Guide.



**The Badlands: A to Z**  
\$18.95\*\*

Author: Katie Johnston

Explore the many aspects of Badlands National Park and the surrounding area in this fun adventure from A to Z. Learn facts and follow Digger the Prairie Dog as he travels through the park (hidden on each page for you to find).



**Badlands National Park Road Guide Booklet**  
\$3.00 \*\*

Author: Badlands Natural History Association

Get your personal guide through the Badlands. Geology, history, frequently asked questions, and more! A MUST grab while visiting the Ben Reifel Visitor Center.

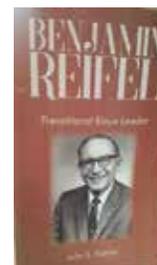


Check out the Badlands Natural History Association website: [www.badlandsnha.org](http://www.badlandsnha.org).

email: [orders@badlandsnha.org](mailto:orders@badlandsnha.org)

"Like" us on Facebook.

Follow us on Twitter @ BadlandsNHA



**Ben Reifel Transitional Sioux Leader**  
4.99\*\*

Author: John S Painter

Ben Reifel earned national recognition as one of the most noteworthy Native Americans in the history of South Dakota. The visitor center in the Cedar Pass area of Badlands National Park is named after him. This booklet will fill you in on Ben's time as a federal administrator, an advocate of ethnic integration, his time in Congress, and much more.

\*\*All prices are subject to change.

## Your contributions support projects and programs such as these:



NPS Photo

Badlands Heritage Celebration



NPS Photo

Badlands Bison Round-Up



NPS Photo

CT scan of fossil found in the park.



NPS Photo

Night Sky Program



NPS Photo

Junior Ranger Program

## Be A Part of Something **GOOD** in the Badlands!

Approximately one million people visit Badlands National Park every year. Your support helps Badlands Natural History Association inspire people to take action and protect Badlands National Park.

Badlands Natural History Association (BNHA), was established in 1959 to help Badlands National Park in furthering its scientific, educational, and interpretive activities. Proceeds from your purchases in the bookstore (in Ben Reifel Visitor Center) and online ([www.badlandsnha.org](http://www.badlandsnha.org)), as well as your memberships, go directly back to Badlands National Park to support park activities.

BNHA is the official non-profit in Badlands National Park. To become a member of BNHA, please complete the membership form and return by mail.

Your membership dues are used directly to enhance the experience of visitors to the area. An investment for the future, your contribution is a perpetuation of the National Park idea. It is gratefully received, immediately acknowledged, and always appreciated.

**This land is your land!**

1 million visitors  
+ Beautiful landscape

### WHY WE NEED YOU!

#### Yearly membership donation includes:

- 15% off all BNHA purchases in store and online
- discounts in participating cooperating associations across the US
- special association mailings and announcements
- Badlands Natural History Association tote bag

Yes!!! I want to be a part of something **GOOD** in the Badlands!

\$25 \$50 \$100 \$150 \$500

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

E-mail \_\_\_\_\_

Phone \_\_\_\_\_

Mail to: BNHA, PO Box 47  
Interior, SD 57750

# Park Neighbors in the Black Hills & Badlands Area

## National Grasslands Visitor Center U.S. Forest Service



NPS Photo

Visit your National Grasslands Visitor Center! This is the only visitor center for the nation's 20 National Grasslands. Stop by to experience a 25-minute film, Junior Ranger program, gift shop, and special ranger-led events and activities. Explore the fantastic outdoor Living Landscape areas.

Located off Interstate 90, Exit 110 in Wall, SD. To find out more about hours of operation, location, activities, and services provided at the National Grasslands Visitor Center call 605-279-2125 or visit [www.fs.usda.gov/detail/nebraska/specialplaces](http://www.fs.usda.gov/detail/nebraska/specialplaces).

## Mount Rushmore National Memorial



NPS Photo

Majestic figures of George Washington, Thomas Jefferson, Theodore Roosevelt and Abraham Lincoln, surrounded by the beauty of the Black Hills of South Dakota, tell the story of the birth, growth, development and preservation of this country. From the history of the first inhabitants to the diversity of America today, Mount Rushmore brings visitors face to face with the rich heritage we all share.

Located south of I-90 on US Hwy 16 and SD Hwy 244. For more information call 605-574-2523 or visit [www.nps.gov/moru](http://www.nps.gov/moru)

## Minuteman Missile National Historic Site



NPS Photo

During the Cold War, a vast arsenal of nuclear missiles were placed in the Great Plains. Hidden in plain sight, for thirty years 1,000 missiles were kept on constant alert; hundreds remain today. The Minuteman Missile remains an iconic weapon in the American nuclear arsenal. It holds the power to destroy civilization, but is meant as a nuclear deterrent to maintain peace and prevent war.

The visitor center is located at exit 131 on Interstate 90. Tours by reservation only. Call the site at 605-433-5552 or stop by the visitor center. [www.nps.gov/mimi](http://www.nps.gov/mimi)

## Jewel Cave National Memorial



Photo: Derek Bristol, August 2011

Immerse yourself within the third longest cave in the world. With over 195 miles of mapped and surveyed passages, this underground wilderness appeals to human curiosity. Its splendor is revealed through fragile formations and glimpses of brilliant color. Its maze of passages lure explorers, and its scientific wealth remains a mystery.

Located 13 miles west of Custer, South Dakota and 24 miles east of Newcastle, Wyoming on U.S. Highway 16. The Monument is about 54 miles from Rapid City, South Dakota via U.S. Hwy 16 / 385. For more information call 605-673-8300 or visit [www.nps.gov/jeca](http://www.nps.gov/jeca)

## Devils Tower National Park

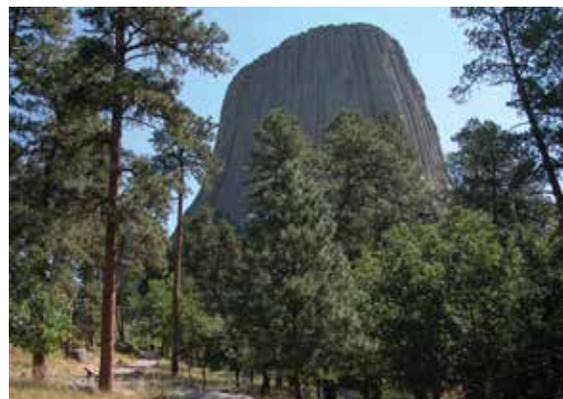


Photo: Ildar Sagdejev, July 2008

The Tower is an astounding geologic feature that protrudes out of the prairie surrounding the Black Hills. It is considered sacred by Northern Plains Indians and indigenous people. Hundreds of parallel cracks make it one of the finest crack climbing areas in North America. Devils Tower entices us to learn more, explore more and define our place in the natural and cultural world.

The most common route to the Tower is from Interstate 90, taking US Hwy 14 from Moorcroft, WY (exit 153 if approaching from the west) or US Hwy 14 from Sundance, WY (exit 185 if approaching from the east). For more information call (307) 467-5283 x635 or visit [www.nps.gov/deto](http://www.nps.gov/deto)

## Wind Cave National Park



NPS Photo

Bison, elk, and other wildlife roam the rolling prairie grasslands and forested hillsides of one of America's oldest national parks. Below the remnant island of intact prairie sits Wind Cave, one of the longest and most complex caves in the world. Named for barometric winds at its entrance, this maze of passages is home to boxwork, a unique formation rarely found elsewhere.

The Visitor Center is located 11 miles north of Hot Springs off U.S. Hwy 385, about 1/2 mile west from the highway. Do not use your GPS to find the visitor center -- you will get lost. For more information call 605-745-4600 or visit [www.nps.gov/wica](http://www.nps.gov/wica)

# Superintendent's Corner

For one hundred years, our National Park Service (NPS) has been in existence to "...conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations". The National Park Service cares for many of the nation's greatest natural, historic, and cultural treasures and stories. Badlands National Park is one of these extraordinary places, and those of us who work here are privileged and proud to do so.

Our National Parks provide many values, including: preservation of natural and cultural resources; preservation of important stories; opportunities for park visitors to learn, experience, and recreate; laboratories for research and science; and regional and national economics.

**Preservation of Resources:** Our National Park system contains many of the greatest resources of the United States, whether they are natural resources including landscapes, wildlife and vegetation or cultural resources including historic buildings, battlefields, monuments, and memorials. As a people, we have decided to preserve and protect these places for all to enjoy. Our parks are treasures worthy of the highest order of preservation for the good of all. Badlands is clearly a national treasure with the spectacular landscapes and sweeping vistas, native wildlife, the largest extent of mixed grass prairie in the national park system, the significant fossil deposits, and the clean air with wonderful skylscapes.

**The Stories:** Every place and its people have stories to tell. Many of the nationally significant stories are told in our national park system, in places where events actually occurred. This includes both happy and triumphant stories, as well as sad and tragic stories that can be difficult to hear. For many people, learning about those stories in the places where the history occurred is a very powerful experience. Consider the opportunity to walk in the footsteps of a soldier on his last day of life at a Civil War battlefield or walking a much older path of an Ancestral Puebloan of a thousand years ago. The stories at Badlands include the life of native people, early explorers traversing the area, homesteaders, and ranchers.

**Visitor Experiences:** Visitors to our national parks have opportunities for a wide variety of educational and recreational experiences, depending on a park's purpose and resources. Learning is possible through visitor centers, exhibits, guided Ranger programs, and more. Recreational opportunities may include hiking, camping, canoeing, sightseeing, viewing wildlife, and photography. At Badlands National Park, visitors can find great places to hike, attend a Ranger program, and experience the star filled night sky.

**Research and Science:** As a nation, we have decided that our parks are places where clean air, clean water, native wildlife, native vegetation, and natural processes are paramount. Because they are generally well preserved and protected, our parks make excellent places for authorized scientists to study our natural world and our culture and history for the benefit of all. Research in our parks is authorized by permit only and is carefully monitored to ensure that no unacceptable impact occurs.

**Economics:** The primary purpose for which parks are established is for preservation. However, when we take great care of these places, when they are safe and well maintained as can be, when the resources and stories are compelling, people come. And when people come, they need services which results in economic benefit within the regions surrounding the parks. Nationally, the economic impact of parks was approximately \$18.2 billion in communities within 60 miles of parks in 2017. At Badlands National Park, approximately \$66 million in annual economic benefit results in our region from visitation to the park.

As you visit Badlands and other great parks this year, take a moment to reflect on what the American people have accomplished in establishing and maintaining our national park system. Our parks have many important values. Enjoy your parks and let's work together to ensure their preservation for another century and more.

By Mike Pflaum, Park Superintendent

## Facinating and Multi-Faceted

The black-tailed prairie dog (*Cynomys ludovicianus*), a member of the Sciuridae or squirrel family, is an important species to the native mixed-grass prairie ecosystem that can be found at Badlands National Park. Once ranging from Canada to Mexico, prairie dogs now occupy only about 2% of their original range and are considered a South Dakota state "species of management concern". Prairie dogs increase habitat diversity. Several federal studies indicate that more than 160 species of plants and animals can be found associated with prairie dog colonies. These social animals contribute to the health of the prairie ecosystem by:

- Serving as prey for black-footed ferrets, swift fox, badgers, coyotes, bobcats, and many species of resident and migratory hawks and eagles.
- Creating habitat for black-footed ferrets, burrowing owls, tiger salamanders, mice, voles, and insects. Burrowing also helps aerate the soil which helps to recycle nutrients.
- Foraging on grass and keeping the vegetation short provides better protection from predators. The constant clipping of grass also creates nutrient-rich forage for bison, who are attracted to prairie dog colonies for dirt wallows.

In 2008, sylvatic plague appeared in and around the park and began decimating the prairie dog colonies. This disease, which is not native to North America, is transmitted primarily through the bites of fleas that have fed on infected rodents. Because of the prairie dogs' importance to the endangered black-footed ferrets, park staff have actively been managing both species to prevent the plague from wiping out prairie dog colonies in the park. Several colonies have been dusted with an insecticide to kill the fleas. An oral vaccine is also

being tried by scattering peanut flavored pellets throughout the prairie dog towns. Prairie dog colonies currently cover approximately 2,799 acres within the boundaries of Badlands National Park.

It is exciting to watch these social animals but do so safely. Avoid contact and keep any pets in your vehicle when visiting the prairie dog colonies. We need your help in keeping the prairie dog colonies healthy!



NPS Photo

# Summer Ranger Programs



These programs run from Sunday, May 26 through Monday, September 2, 2019

 = accessible

Badlands National Park is in the Mountain Time Zone. Programs are presented at several locations throughout the park. These locations are identified in the park newspaper and park brochure. You can also find them by watching for white signs announcing programs along the Loop Road.

-  **Geology Walk** **8:30 a.m. Daily**  
Explore the geologic story of the White River Badlands on this 45 minute walk. Meet at the Door Trailhead located at the far north end of the Door/Window parking area 2 miles south of the Northeast Entrance Station on the Badlands Loop Road. Wear a hat and closed-toe shoes. Terrain is varied.
-  **Paleontology Lab** **9:00 a.m. - 4:30 p.m. Daily June 4, 2019 through September 20, 2019**  
Come see a piece of history uncovered as the paleontology staff prepare fossils found in Badlands National Park. The lab is located in the Ben Reifel Visitor Center.
-  **Fossil Talk** **10:30 a.m. and 1:30 p.m. Daily**  
Explore what fossils can tell us about the story of ancient life in the Badlands and why they should be protected at this 15 - 20 minute talk. Meet at the Fossil Exhibit Trail, 5 miles northwest of the park headquarters/visitor center on the Badlands Loop Road.
- Junior Ranger Program** **11:00 a.m. Daily through August 17, 2019**  
Calling all visitors between 7 and 12 years of age! Meet at the Ben Reifel Visitor Center for a 30 minute adventure into an aspect of the Badlands. Wear closed-toe shoes and a hat. It may be a walk, a game, or another activity. Attendees will be awarded a Junior Ranger badge or patch. Parents are also welcome!
- Fun in the Sun** **Fri. - Mon. 3:00 p.m.**  
Participate in solar activities and view the sun through a solar telescope. Meet in front of the Ben Reifel Visitor Center. Wear sunscreen and a hat.
-  **Evening Program** **Daily May, June, & July 9:00 p.m.. August & September 8:30 p.m.**  
Join a park ranger for a 45 minute presentation at the Cedar Pass Campground Amphitheater. Check at the Ben Reifel Visitor Center Information Desk for the nightly program topic. Program will start when the sky is dark!
-  **Night Sky Viewing** **Daily May, June, & July 9:45 p.m.. August & September 9:15 p.m.**  
View the spectacular night sky through large telescopes or bring your own binoculars. The ranger will help you to locate and identify constellations, stars, and planets.

**Stop by the Ben Reifel Visitor Center and ask about updated program listings, Fall Ranger Programs, special programs, and events. These will also be posted on the bulletin boards throughout the park and on social media.**

## IMPORTANT -

In case of inclement weather, please check at the Ben Reifel Visitor Center for updated program information.

## Bison

Bison are the largest land mammal in North America. As a native species they play a unique role in the health and diversity of the ecosystem.

- Males weigh up to 2,000 pounds and are up to 6 1/2 feet tall at the shoulder.
- Females weigh up to 1,200 pounds and are up to 5 1/2 feet tall at the shoulder.
- Bison are extremely agile. They can jump up to 6 feet high and reach speeds of 35 mph.
- Bison can be seen rolling in the dirt, this is called wallowing. This behavior creates a scent for mating, regulates body temperature, and protects against insects.
- Bison hair is denser than cattle hair, allowing them to withstand extreme temperatures. Bison don't feel a chill until temperatures drop below -20° F.

### Bison Safety

- Give bison plenty of space. Stay at least 100 feet away.
- Be aware of your surroundings and how close you are to the bison, do not startle a bison.
- If you become too close to a bison, DO NOT RUN, back away slowly.

- When bicycling near bison, move to the opposite side of the road and go slowly.
- DO NOT HONK your horn at the bison. Be patient and stay in your vehicle.
- Bison are not normally aggressive. They become aggressive when they feel threatened, especially during rutting (mating) season, or when a calf is in danger.
- Rutting season is generally the last two weeks of July and the first two weeks of August.
- Bison do not like fast-moving things, such as people running or bicycles.
- Bison do not like dogs. Keep your dogs in your vehicle, because they are not allowed in the wilderness areas of the park.

A bison will do several things to indicate it may charge:

- Stop and look at you or turn to face you
- Swing its head back and forth
- Paw the ground or hook the ground with its horns
- Make short bluff charges or snort loudly
- Move straight for you
- Raise their tail if they become agitated

## WARNING

**YOU CAN BE INJURED BY BISON**



Bison can weigh 2000 pounds and sprint 30 miles per hour; *three times faster than you can run!*

These animals may appear tame but are wild, unpredictable, and dangerous.

## DO NOT APPROACH BISON

**You should maintain a minimum distance of at least 100 yards from park wildlife. Any time an animal reacts to your presence, you are too close.**

