### **Park Planner**

**National Park Service U.S. Department of Interior** 



# **Badlands Visitor Guide**

The official newspaper of **Badlands National Park** 

2013 Issue



Photo by Carrie Barton, park visito

## Welcome to Badlands

Hello and welcome to Badlands National Park—a geological landscape of buttes, spires, and rolling grasslands. We're part of an immense ecological and cultural region that offers this part of South Dakota as a destination to our nation's historical, geological, and paleontological past. Together, places like Badlands and Wind Cave National Parks, the Black Hills National Forest, Custer State Park, Minuteman Missile National Historic Site, Crazy Horse Memorial, and Mount Rushmore National Memorial offer meaning to the American experience.



Located on the edge of our country's Great Plains, we are part of the largest undisturbed mixedprairie rangeland remaining in the United States. Within the park's 244,000 acres is the Badlands Wilderness, 64,000 acres of pristine National Wilderness where you can see bighorn sheep, coyotes, black-footed ferret, swift fox, bison, and mule deer. Whether you enter the park from the Pine Ridge Oglala-Lakota Indian Reservation, the towns of Wall, Interior, or Kadoka, the rolling sea-ofgrass that surrounds Badlands is one of our country's largest grasslands-known as Buffalo Gap National Grasslands—which is the home of our continent's largest free roaming mammal: the American bison.

This is a heritage area with a long ancestry that traces its history from prehistoric hunters and gatherers to today's tribes of the Great Sioux Nation, and later homesteaders, ranchers, and farmers. Together with our partners the Oglala-Lakota Tribe who manage the Badlands South Unit, we welcome you to visit our White River Visitor Center on the Pine Ridge Indian Reservation, and the Ben Reifel Visitor Center on the Badlands Loop Road in the north. Sometimes called Mako Sica by the Oglala, the great eroded spires that define the Badlands call us back to a time when brontotheres, oreodonts, camels, and entelodonts walked the swamps and savannahs that are today's Great Plains. Take a moment to hike or walk a trail, and enjoy 65 million years of geological history. You can now "like" us on Facebook and share your experience with our other Facebook fans. Welcome!

Eric J. Brunnemann Superintendent

### Remember These Numbers . . .

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.



Stay a little longer!



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

### 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 Robert's 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) which is staffed by members of the Oglala Sioux Tribe (45 minutes - 1 hour).
- Tour the South Unit of the park. Be sure to get permission from landowners before crossing private land. A list of contacts is available at the White River Visitor Center (45 minutes - all day).

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#### Follow us on:



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

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### Quick Facts about Badlands National Park

- Established as a National Monument in 1939
- Redesignated Badlands National Park in 1978
- Acreage: 244,000
- Wilderness: 64,144 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 facilitiesPreservation of over 50,000 artifacts
- and specimens in museum collections
- Reintroduction of native wildlife (pictured below)



Black-footed Ferret

Swift Fox

Photo by Randy Matchett, US Fish and Wildlife Service



Bighorn Sheep

Bison



Photo by Teresa Zimmerman



DianeHargreaves.com

## **Visitor Facilities**

### **Ben Reifel Visitor Center**

Located at park headquarters the Ben Reifel Visitor Center reopened in 2006 with new exhibits, a 97 seat, air conditioned theater, a new park film, *Land of Stone and Light*, and improved classroom and restroom facilities. Badlands Natural History Association sells postcards, books, posters, and other educational materials. Open year round.

Hours of Operation					
April 15 - May 25	8 a.m 5 p.m.				
May 26 - August 26	8 a.m 7 p.m.				
August 27 - September 7	8 a.m 6 p.m				
September 8 - October 26	8 a.m 5 p.m.				
October 27 - April 2014	8 a.m 4 p.m				
Badlands National Park is in the Mountain Time Zone.					

## White River Visitor Center

Reservation off Highway 27, this visitor center is operated by the Oglala Sioux Parks and Recreation Authority and is staffed by Tribal members. In 2007, new exhibits were installed by the National Park Service. 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**

June through August 10 am - 4 pm

#### 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

- Convenience Stores
   Cactus Flat
   Pine Ridge
   Interior
   Rapid City
- KadokaWanbleeWall

### Restaurants

- Cactus Flat
  Kadoka
  Pine Ridge
  Rapid City
- Kadoka Rapid C • Philip • Wall

#### Motels and Camparound



### Hospitals and Clinics

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

### **Cedar Pass Campground**

Located near the Ben Reifel Visitor Center, Λ Cedar Pass Campground has 96 sites. Summer camping fees are \$16 per night per campsite (no hook-ups) and \$28 for campsites with electrical hook-ups. Winter camping fees are \$10 per night per campsite. Campsites and RV sites may be reserved in advance on line at www.CedarPassLodge.com and has a fourteen day limit. Cold running water, flush toilets, covered picnic tables, 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 \$3.00 per person with a minimum fee of \$30.00. Advance reservations can be made by

contacting Group Camping Reservations at: www.CedarPassLodge.com or write to: 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 Window Trail and the Door Trail are both 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/badl/.

## 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. It is not recommended for large recreational vehicles. The campground is currently free and offers pit toilets and picnic tables. There is a fourteen day limit. There is no water available. **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 tabletops 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:

www.CedarPassLodge.com or write Cedar Pass Lodge, 20681 Hwy 240, Interior, SD 57750; (605) 433-5460; fax (605) 433-5560

Gift Shop Hours of Operation	on 🍈 🛏
April 12 - May 15	8 a.m 5 p.m.
May 16 - May 26	8 a.m 7 p.m.
May 27 - September 1	7 a.m 9 p.m.
September 2 - September 30	8 a.m 7 p.m.
October 1 - October 15	8 a.m 5 p.m.
The dining room closes 30 mi gift shop.	nutes before the



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

Interior City Council	(605) 433-5445
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@wcenet.com ccphilip@gwtc.net 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.

#### **Protect Your Park**

- Leave fossils, 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: Carrie Barton, park visitor

#### Rules of the Road

- The speed limit is 45 miles per hour, unless posted otherwise.
- Seatbelts are required by state 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.

#### 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.
- They are not allowed on trails or in public buildings.
- Leaving an animal unattended and/or tied to an object is dangerous. Due to the extreme summer heat, do not leave your pet in your vehicle with out leaving a window cracked at least several inches or without water.
- Pet etiquette dictates always cleaning up animal waste and disposing of it in trash receptacles.

#### Emergency? Call 911

#### Road Conditions? Call 511

#### Contact Us

Mailing Address Badlands National Park 25216 Ben Reifel Road PO Box 6 Interior, SD 57750

Park Website www.nps.gov/badl/

Email badl information@nps.gov

Park Headquarters 605-433-5361

Fax Number 605-433-5404

Follow us on:



To access Facebook: www.facebook.com/BadlandsNPS To access Twitter: @Badlands\_Ranger or @BadlandsEdu

## 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 ridingtrails 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 ½ 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

### **Out of State Cities**

Denver, CO Minneapolis, MN Omaha, NE

Wall

490 miles 552 miles 458 miles

30 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	1,148 miles
Grand Teton NP	628 miles
Jewel Cave NM	148 miles
Mount Rushmore	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.



Photo by Mike Schroeder











Photo by Mike Schroeder



DianeHargreaves.com



Photo by Randy Matchett, US FWS



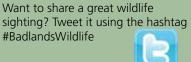
Photo by Julie Rice, Volunteer



Photo by Mike Schroeder



DianeHargreaves.com



## **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 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.

## 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

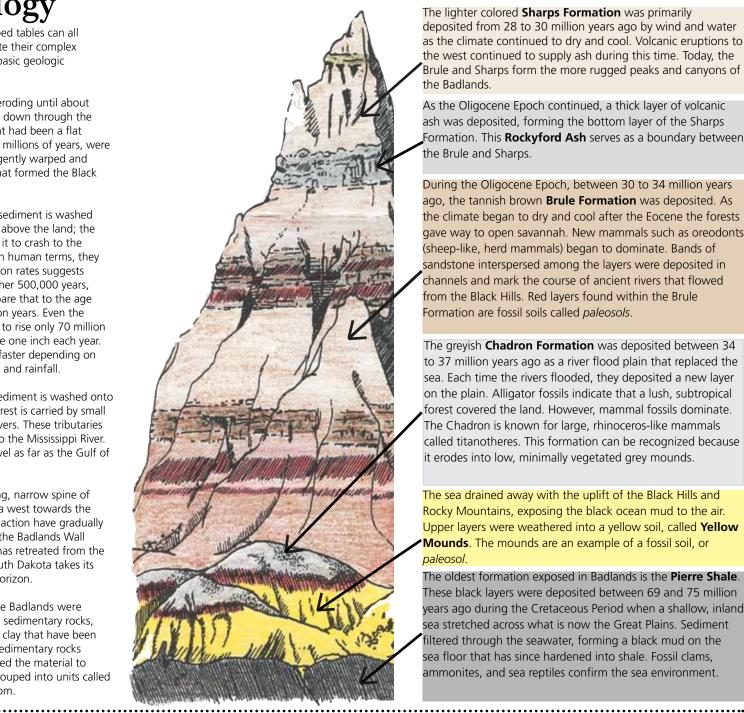
Additionally, other signs such as feces and pollen have also been fossilized and are studied to help get a broader picture of life in prehistoric North America. The area in and around Badlands National Park has had a long association with research on fossil vertebrates. Scientists have been using this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

#### Saber-tooth Cat Discovery Leads to the Creation of a New Fossil Quarry 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, now on sale from the Badlands Natural History Association.

Surveys completed during the summer of 2011 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 upper Scenic Member of the Brule Formation and was deposited by a stream system about 32 million years ago. Paleontology lab located in the Ben Reifel Visitor Center will be open to the public from 9:00 a.m. to 4:30 p.m., 7 days a week from May 19 through September 21.



NPS Photo

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.

#### Want to learn more

Scan this code with your smart phone to watch a 44 sec video about visiting the Saber Site and Fossil Prep Lab. No phone? No access? Check it out later at go.nps.gov/saber-vid



#### Future Exhibits at the Pig Dig

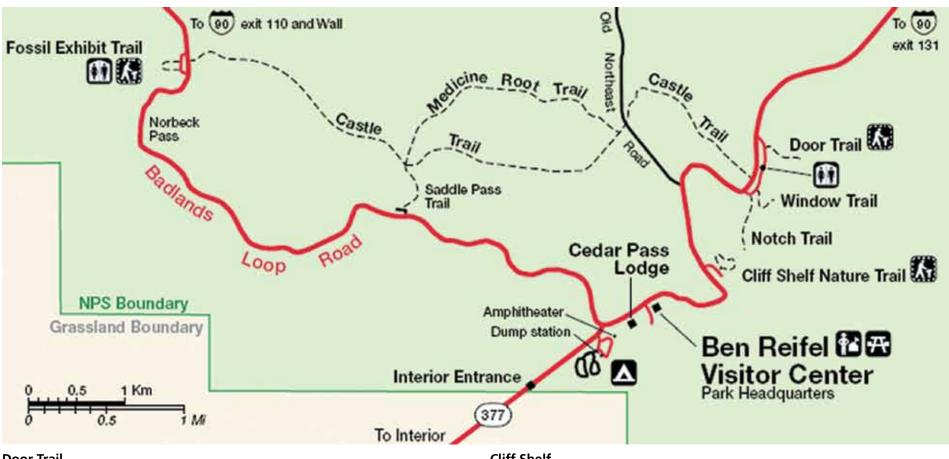
Badlands National Park staff and partners are developing wayside exhibits describing the history and scientific significance of the Pig Dig. The exhibits will be on site near the Conata Picnic Area and will feature a mural which depicts the area 33 million years ago. The exhibits should be completed by the end of 2012. Plans are also being made to include the Pig Dig within a series of scientific publications and a new book on the White River Badlands.

#### **Protecting Fossil Resources**

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

- •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.

## Hiking in the Park



#### **Door Trail**

.75 miles/1.2 km (round trip)

#### 20 minutes

Easy. An accessible 1/4 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.



.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 or 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)

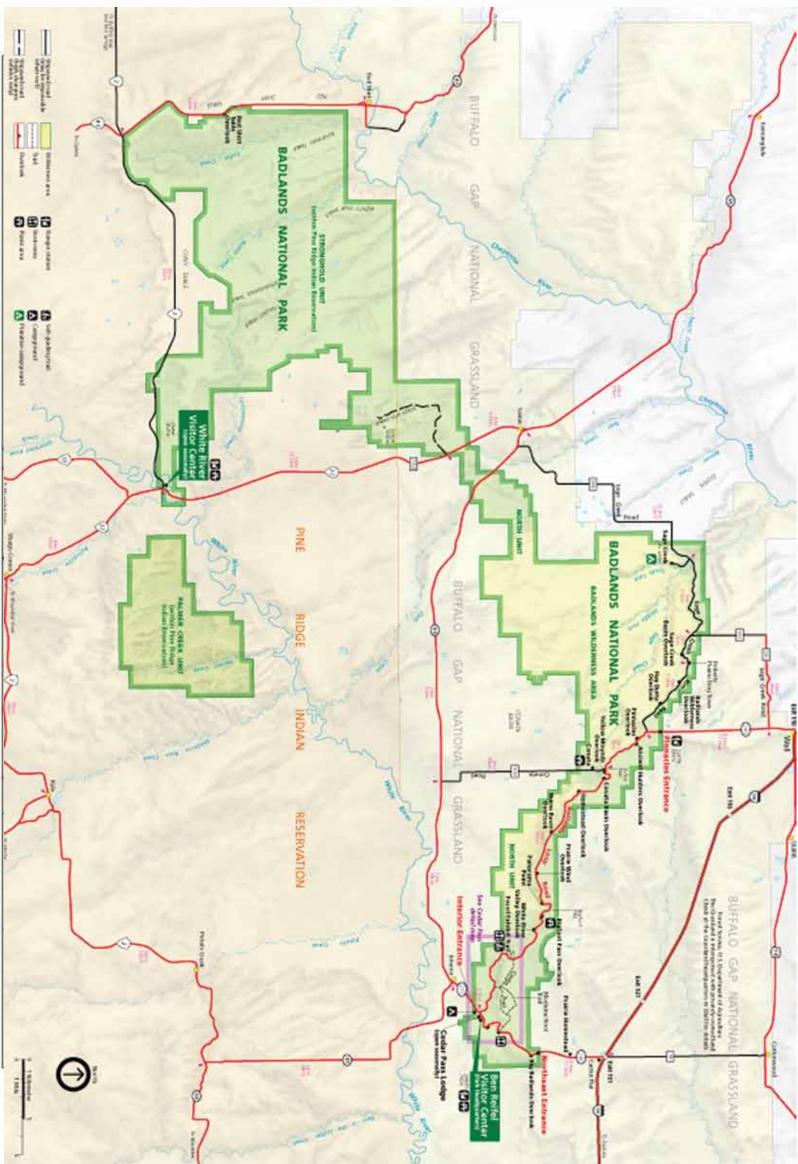
20 minutes

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

Badlands V												
Month	January	February	March	April	Мау	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**

Per Vehicle Entry Private Non-Commercial Vehicle		7 Days	\$15.00
Motorcycle Flat fee		7 Days	\$10.00
Per Person Entry Bicycle, Non-Commercial Bus Passenger		7 Days	\$7.00
Badlands Park Pass Unlimited entry to Badlands NP		1 Year	\$30.00
Interagency Annual Pass Valid for unlimited entry to designated federal fee areas		1 Year	\$80.00
Interagency Senior Pass 62 & Over US Citizen IValid for entrance to designated federal fee areas & half price on camping		Lifetime	e \$10.00
Interagency Access Pass Permanently Disabled US Citizen Valid for entrance to designated federal fee areas & half price on camping		Lifetime	e FREE
Based On Seating Capacity \$25 * \$1 (1-6) (7-	50 \$6 -15) (16-	0 \$1	& up)
IN SUBJECT OF SUBJECT	1100.00	0.000	THE SI



#### INTERAGENCY PASS PROGRAM

The following passes are available at Badlands Nationa Park

Interagency Annual Pass \$80 - Valid for one year from month of purchase This nontransferable annual pass covers the entrance fees or standard amenity fees at sites managed by the National Park Service, U.S. Forest Service, Bureau of Land Management, Bureau of Reclamation, and U.S. Fish and Wildlife Service. It does not cover camping fees, parking fees, user fees (i.e. cave tours), concession activities, or cooperating association bookstore charges

### Interagency Senior Pass \$10 - Valid for holder's lifetime

This nontransferable passport allows lifetime entrance to all National Park Service, U.S. Forest Service areas, U.S. Fish and Wildlife Service, Bureau of Reclamation, and Bureau of Land Management areas. It also entitles the bearer to a 50% discount on camping fees in federal campgrounds. It cannot be used at concession facilities or cooperating association bookstores. Identification must be provided at ime of purchase.

#### InteragencyAccess Pass Free - Valid for holder's lifetime

This nontransferable pass allows lifetime entrance to all National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Reclamation, and Bureau of Land Management areas to United States citizens or permanent residents who are blind or permanently disabled. It also entitles the bearer to a 50% discount on camping fees in federal campgrounds. It cannot be used at concession facilities or cooperating association bookstores.

## **Become a Junior Ranger!**



Looking for a family-friendly park adventure? Badlands invites Junior Rangers of all ages to participate in a ranger-led program or complete an activity book. Rewards include patches and badges.

• Junior Ranger Activity Book, Ages 5-12 Pick up a free book at either visitor center. Complete self-directed activities during your visit to earn a Badlands junior ranger badge.

 GPS Adventure Activity Book, Ages 12 through Adult

Download the pdf to your mobile device (go.nps.gov/GPS) or purchase a printed copy (\$5) at the visitor center. Use your GPS-enabled device to navigate to natural features, trails, and wayside exhibits where you will learn more about the park. Earn an "I Walked Badlands" patch.



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. 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.



• Ranger-led Discovery Walks, All Ages

Join a ranger for a 30-minute Badlands discovery walk. Meet at the flagpole in

front of the Ben Reifel Visitor Center at

badges at over 300 national parks.

Look for online adventures at:

11:00 am. Earn your choice of a badge or patch.Your family can collect Junior Ranger

www.nps.gov/webrangers.

#### Junior Ranger Pledge

As a Junior Ranger, I promise to explore, learn about, and protect special places like Badlands National Park.





View from Sheep Mountain Table



## 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.

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

- Upgraded comfort stations in the Cedar Pass Campground
- Park-wide trail improvements
- New exhibits and park film at the Ben **Reifel Visitor Center**
- Installation of restroom facilities at overlook areas
- Modernization of park bison corrals • Support for reintroduction of bighorn sheep and black-footed ferret within the park

## **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.

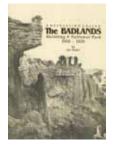
More recently, because of this unique history surrounding the development of the South Unit, the Oglala Tribal Council approved a resolution supporting a plan to establish the South Unit as the nation's first Tribal National Park. Although such an action will require Congressional approval to reestablish the South Unit as a Tribal National Park, both NPS and the Oglala Tribe support the vision that Oglala Lakota people should manage, own, and operate their lands for the educational and recreational benefit of the public and the tribe.

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 priniples 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.

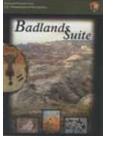
The South Unit remains largely undeveloped and lacks access points, such as roads and trails. The South Unit is a protected natural area and is not managed as a four-wheel-drive recreation area. Travelers must remain on existing primitive road tracks. Do not travel away from these tracks. We encourage 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. A list of land owners is available at the White River Visitor Center. Be prepared with alternative destinations if land owners do not grant

## Shop Badlands Natural History Association



A Revelation Called the Badlands Building a National Park 1909 – 1939 \$4.95 \*\* Author: Jay Shuler

The National Park Service and South Dakota State archives provided the photos and history of the struggle to protect the White River Badlands as a national park.



Badlands Suite \$19.99 \*\* DVD includes: Land of Stone and Light From Field to Lab Multiple Perspectives

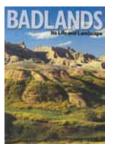
This DVD takes you on a journey into the White River Badlands of South Dakota. In three different presentations, become acquainted with the people of this place.



Wildflowers, Grasses, & Other Plants of the Northern Plains and Black Hills \$8.95 \*\* Author: Theodore Van

Bruggen

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



Badlands Its Life and Landscape \$7.95 \*\* Author: Joy Keve Hauk

Packed with information on geology, paleontology, human history, flora, and fauna, this booklet has numerous identifying photos.



Legends of the Mighty Sioux \$7.95\*\*

A compilation of forty-five legends of the famous Sioux Indians of South Dakota. All of the legends pertain to the Sioux' traditional lore, from tales told around the campfire, to legends associated with places or mountains, and battle and hunting legends.



#### Badlands National Park Road Guide \$3.00 \*\* Author: Badlands Natural History Association

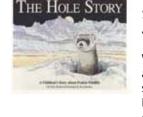
Get your personal guide through the Badlands. Geology, history, frequently asked questions, and more! A MUST grab while visiting the Ben Reifel Visitor Center.

### Check out the Badlands Natural History Association website:

### www.badlandsnha.org.

"Like" us on Facebook.

\*\*All prices are subject to change.



The Hole Story \$6.95 \*\* Author: Sally Plumb

Wonderful illustrations accompany this children's story of life on the prairie. Learn about Kit, an endangered black-footed ferret, and his struggle to survive when he gets reintroduced to the wild in Badlands National Park.

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



Badlands Heritage Celebration



Badlands Bison Round-Up

NPS Photo

CT scan of fossil found in the park. Night Sky Program





Teacher-Ranger-Teacher Program

Badlands Natural History Association partnered with the National Park Service to create a unique line of merchandise for National Fossil Day.

### 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), 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 mail back to: BNHA PO Box 47, Interior, SD 57750.

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!



- discounts in participating cooperating associations across the US
- special association mailings and announcements
  Badlands Natural History
- Association tote bag







### Come See Us!

#### How do I get to the National Grasslands Visitor Center and the Wall Ranger Station?

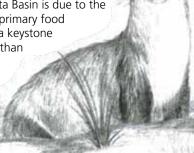
The National Grasslands Visitor Center and Wall Ranger Station are located in Wall, SD. Traveling on Interstate 90 in South Dakota, take exit 110 and follow the signs, turn left on South Boulevard (by the 2nd gas station on the left), and right on Main Street. We are located at 708 Main Street (right side of the street). What can we do?

#### **Black-footed Ferret**

Black-footed ferrets, one of the original animals placed on the endangered species list in 1967, remains one of North America's most endangered mammals. Once thought to be extinct, black-footed ferret were rediscovered and have been successfully reintroduced across the Great Plains, including one of the most successful sites in the Conata Basin on the Wall Ranger District. US Forest Service biologists work hand-in-hand with National Park Service biologists to

save these animals.

Black-footed ferret reintroduction success in Conata Basin is due to the area's large black-tailed prairie dog colonies, their primary food source. The black-tailed prairie dog is considered a keystone species along with black-footed ferrets, and more than 130 other wildlife species rely on their ecosystem. Their extensive networks of tunnels provide homes to burrowing owls, prairie rattlesnakes, and numerous other species. Other predators that rely on prairie dogs as a critical food source include the ferruginous hawks, swift fox, and golden eagles.



#### **Become a Junior Ranger!**

Become a National Grassland Junior Ranger! Pick up your Junior Ranger booklet at the front desk of the National Grassland Visitor Center and complete it while exploring our exhibit room full of hands on materials! Kids ages 5 and up are encouraged to become a Junior Ranger year round. When you complete your booklet, you will receive a National Grassland pin and a bag full of goodies to help you learn and explore some more! For those under 5 years, come spend time in our kids' coloring corner!





US Forest Service photo

## **Buffalo Gap National Grasslands National Grasslands Visitor Center**

#### Things to See & Do

The Wall Ranger District of the Buffalo Gap National Grassland is in the Wall – Badlands area. This National Grassland surrounds Badlands National Park and Minuteman Missile National Historic Site. There is much shared between these three areas

• Hiking, biking or horseback riding cross-country or on the two trails; Prairie Path and Saddle Pass Horse Trail. Prairie Path is located south of I-90 Exit 116. Park near the Minuteman Missile NHS missile silo. The path is marked with wooded posts.

- Mountain bike anywhere on the two-track roads, Prairie Path.
- Camping
- Hunting and fishing
- "Rock hounding"
- Motorized travel is permitted on designated roads and trails. Cross-country or off-road motorized travel is prohibited. Pick up a free map at the National Grasslands Visitor Center.

#### Popular activities at the National Grasslands Visitor Center

- Watch "America's National Grasslands" DVD in the theater.
- The entire family can participate in the Jr. Ranger and Families program free of charge.
- Several books, posters, and other items are available for visitors. Some require payment while a wide variety of instructional brochures are free to the public.

• StoryWalk is a reading adventure that travels along Badlands Wall. Signs are posted along the walk with pages from a book.

#### Pick up one of several check lists to guide your visit, including:

Prairie plants - there are over 250 grass species in North America.

• Grass and forbs check list, featuring 45 grass species commonly found on the mixed grass prairie of Buffalo Gap National Grassland.

- Bird watching
- Other wildlife; wildlife of interest on the Buffalo Gap National Grasslands are black-footed

ferrets, black-tailed prairie dogs, burrowing owls, swift fox, and numerous raptors.

#### **Ranger led activities**

• Join a ranger from Minuteman National Historic Site every Tuesday and Thursday at 1:00 p.m. (June 4 - September 3, 2013) for a short program in the theater. Then travel to the D-09 missile silo, located at exit 116, for a ranger led program.

#### • Come see Smokey Bear

Wednesday nights at the Badlands National Park Amphitheather from 8:15 - 8:45 p.m.

(June 19 - August 14) and stay for the evening program.

Thursday nights (June 20 - August 15, except July 4) Smokey Bear will be at the National Grasslands Visitor Center from 7:00 - 7:30 p.m. and stay for a presentation about the area.



US Forest Service photo

#### **Service First**

#### Different Agencies, Different Missions, Different Activities Allowed

Don't be surprised if you see an NPS ranger at the visitor center in Wall, or a Forest Service ranger at the Ben Reifel Visitor Center in Badlands. This is a unique opportunity for the National Park Service and the US Forest Service to provide better information for our visitors. Service First is an agreement between these agencies to acknowledge work already being accomplished together, to expand abilities to deliver a broader 'on-the-ground' program of work, and to staff the respective visitor centers with Forest Service and Park Service professionals.

The missions of the two agencies are quite different. The mission of the US Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet

the needs of present and future generations. The mission of the National Park Service is to preserve unimpaired the natural and cultural resources of the national park system for the enjoyment, education, and inspiration of this and future generations. We are building a better team to better serve the public.

#### **Hours of Operation**

Winter hours: 8:00 a.m. to 4:30 p.m. Monday through Friday

Summer Hours: 8:00 a.m. to 5:00 p.m. Daily

#### **Contact Information**

#### **Mailing Address**

National Grasslands Visitor Center 708 Main Street / PO Box 425 Wall, SD 57790

### Website

www.fs.usda.gov/nebraska

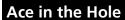
**Visitor Center Phone Number** 605-279-2125

**Fax Number** 605-279-2725

# **Minuteman Missile**

National Park Service U.S. Department of the Interior

National Historic Site South Dakota



Here you will find remnants of the Cold War, including an underground launch control center and a missile silo. Minuteman missiles held the power to destroy civilization as we know it. Yet the same destructive force acted as a deterrent which kept the peace for three decades. Minuteman Missile National Historic Site makes it possible to revisit a time when the threat of nuclear war haunted the world.

Due to innovative solid-fuel technology, the Minuteman was deployed in remote underground silos and could be launched by crews stationed at launch control centers miles away. Designed to travel over the North Pole and arrive at its target thirty minutes after the launch command was given, its 1.2 megaton warhead carried the explosive equivalent of over one million tons of dynamite.



"Ace In The Hole" President Kennedy referring to Minuteman Missiles, 1962



#### How do I get to Minuteman Missile National Historic Site?

The Minuteman Missile Visitor Center is a great starting point to check on tour availability and where you can view the park film. It is located off Interstate 90, exit 131, beside the Badlands Trading Post (Conoco gas station). To get there from the Badlands National Park Visitor Center, take South Dakota Highway 240 8.5 miles north towards Interstate 90. Just before reaching the interstate you will see the Badlands Trading Post on the left. The Visitor Center is adjacent to the trading post.

What are the hours for the Minuteman Missile Visitor Center? The visitor center is open daily from 8:00 a.m. to 4:30 p.m. except for winter when hours are 9:00 a.m. to 4:00 p.m.

#### Can we see the missile silo?

Launch Facility Delta-09 (the missile silo) is open daily from 8:00 a.m. - 4:00 p.m. During the summer season, a ranger may be stationed on site in the morning(staffing permitted) to provide informal programs and answer questions. When a ranger is not at the silo, a self-guided cell phone tour is available to guide your visit. To access the cell phone tour simply dial-in the number that is listed in the brochure obtained from the rack on the fence, and the stops on the recording will give information about the silo structures and operations during the Cold War. Delta-09 is located on the south side of Interstate 90, exit 116. Turn south on to the county road and the silo is  $\frac{1}{2}$  mile on the right.

#### What else can we see at Minuteman Missile?

Ranger-guided tours are conducted throughout the year, and daily during the summer season from 9:00 a.m. – 12:00 noon and again from 1-3 p.m. Tickets are issued on a first come, first served basis from the visitor contact station. Visitors will receive a ranger-guided tour of Launch Control Facility Delta-01 and have the opportunity to go into the underground Launch Control Center to learn how Minuteman nuclear missiles could have been launched during the Cold War! Tour space is limited so it is best to plan in advance. For more information, please call 605-433-5552, ext. 0.

#### Got Kids? Earn A Patch!

Come to the Minuteman Missile National Historic Site Visitor Center to work on a Junior Ranger activity booklet. We have programs for kids of all ages! When they successfully complete the program, a National Park Service ranger will issue a Junior Missileer patch or badge!

#### You Have Questions – We Have the "Top Secret" Answers



Because nuclear weapons sites were under tight security, most civilians developed their understanding of missiles from popular movies like "War Games" (1983) and "Dr. Strangelove Or: How I Learned to Stop Worrying and Love the Bomb" (1964). As is often the case, the "Hollywood version" of life around missiles could be misleading and inaccurate. How much of the truth do you really know?

- 1. Were the missiles locations" top secret?"
- 2. Were the missiles launched by pressing a red button?
- 3. If a missileer did not execute a launch command would their partner shoot them?
- 4. Did the missileers know where the missiles were going?
- 5. How many missileers did it take to launch the missiles?
- 6. Were most missiles aimed at cities?

The answers to these questions cannot be found anywhere on this page. **The only place to find these answers** is at Minuteman Missile National Historic Site's visitor center. It is now time for you to come visit Minuteman Missile National Historic Site and ask a ranger these questions and learn the real truth about nuclear missiles.

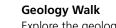
## **Ranger Programs**



### These programs run from Sunday, May 26 through Saturday, August 24, 2013

= accessible

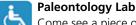
Badlands National Park is in the Mountain Time Zone. Programs are presented at several locations throughout the park. These locations are identified in the park newspaper and park brochure. You can also find them by watching for white signs announcing programs along the Loop Road.



Fossil Talk

#### 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.



#### 9:00 a.m. - 4:30 p.m. Daily (June 1 - September 21, 2013)

Come see a piece of history uncovered as the paleontogy staff prepare fossils found in Badlands National Park. The lab is located in the Ben Reifel Visitor Center.



#### 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, 2013

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!



#### 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 8:30 p.m.

Join a park ranger for a 45 minute presentation at the Cedar Pass Campground Amphitheater. A weekly listing of program topics is available at the Ben Reifel Visitor Center, Cedar Pass Lodge and at the Cedar Pass Campground kiosk. Program will start when the sky is dark!



#### Night Sky Viewing

#### Fri. - Mon. (after the conclusion of the Evening Program)

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. Program will start after the Evening Program has concluded.

Stop by the Ben Reifel Visitor Center and ask about updated program listings, special programs, and events. These will also be posted on the bulletin boards throughout the park or you can scan the code to the right for an updated listing.



#### IMPORTANT -

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

During the summer of 2013, there will be work zones throughout

#### **Visitors: Be Alert for Construction**

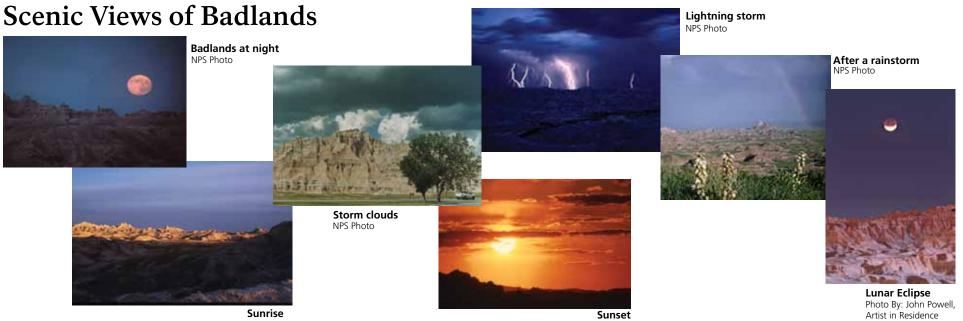


NPS Photo



NPS Photo

the park for road construction and improvement, fencing projects, boardwalk and building repairs. This year road construction will focus on surface maintenance along 240 Loop Road and include culvert cleaning, chipsealing and road striping. The Cedar Pass Lodge will undergo a roof replacement and cabin replacements will continue throughout the year.



NPS Photo

NPS Photo

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