

Badlands

National Park Service
U.S. Department of Interior



Explore
Learn
Protect

For Ages 5-12



Junior Ranger Activity Book

Welcome to Badlands National Park!

Do you want to have fun *exploring, learning about, and protecting* this special place? Then the Junior Ranger Program is for you!

To become a Junior Ranger and earn an official badge and certificate:

1. Complete the number of activities for your age group. You may choose whichever activities you like! If you need help, just ask an adult or any park ranger.

Ages 5-8

at least 5 activities

Ages 9-12

at least 8 activities

- Activity 1 : Bad Lands to Travel Across
- Activity 2 : Are the Badlands Bad?
- Activity 3 : Badlands Bingo
- Activity 4 : Lakota Directions
- Activity 5 : How the Rattlesnake Got Its Rattle
- Activity 6 : Where's the Wildlife?
- Activity 7 : Living in the Badlands
- Activity 8 : Mystery of the Badlands
- Activity 9 : Be a Paleontologist
- Activity 10 : Share Your Experience
- Activity 11 : Park Service Time Travel

2. Attend a Ranger Program or watch one of the park films shown at the Ben Reifel Visitor Center.

3. Show your booklet to a ranger at the Ben Reifel Visitor Center. You can also drop off your completed booklet at any of the Badlands entrance stations or mail it to the park using the address on the back cover. A ranger will check your work and mail your book back to you along with a signed certificate and badge.

Extra : Look on the bottom of every page for special things to think about. Discuss the questions with your family and friends, then feel free to share your ideas with a park ranger.

Activity 2 : Are the Badlands Bad?

Many people have come to the Badlands for many different reasons, and they each have something different to say about the area. Match the person with their description and/or name for this special place.



Homesteader

They call them the Mako Sica 'Badlands' ... but they should call them Mako Washte 'Good Lands' ...

The painter's whole palette is in one bluff.



Francis Hayden, an early paleontologist

The government bets you 160 acres of land against \$18.00 that you will starve to death before you live on this land five years.



Member of the Lakota Tribe



Frederick Remington, a famous Western artist

Badlands... offers freedom; freedom to explore, freedom to get close to nature.



Peter Norbeck, a South Dakota senator who loved the area and wanted it to be protected

There are some very excellent fossils, as teeth and jaws of horses, fragments of turtles.

Wilderness Camper



[I propose a] bill to establish the Wonderland National Park.

Extra : Do you agree with any of these people? What would you name this park?

Activity 3 : Badlands Bingo

Take a hike! The Cliff Shelf Nature Trail and the Fossil Exhibit Trail are great places to explore. Cross out anything you see, smell, and/or hear in the park today.

				
Mud	Streambed	Pronghorn Antelope	Window	Sunshine
				
Yucca	Rabbit	Rain	Wind	Wildflower
		You pick!		
Painted Turtle	Cliff Swallow	You pick!	Turkey Vulture	Bison
				
Clouds	Sandstone	Prickly Pear Cactus	Fossil	Cottonwood
				
Prairie Dog	Snow	Trail	Bighorn Sheep	Grass

If you have five squares in a row and/or all four corners, ask the Ranger for the special Badlands Bingo stamp!



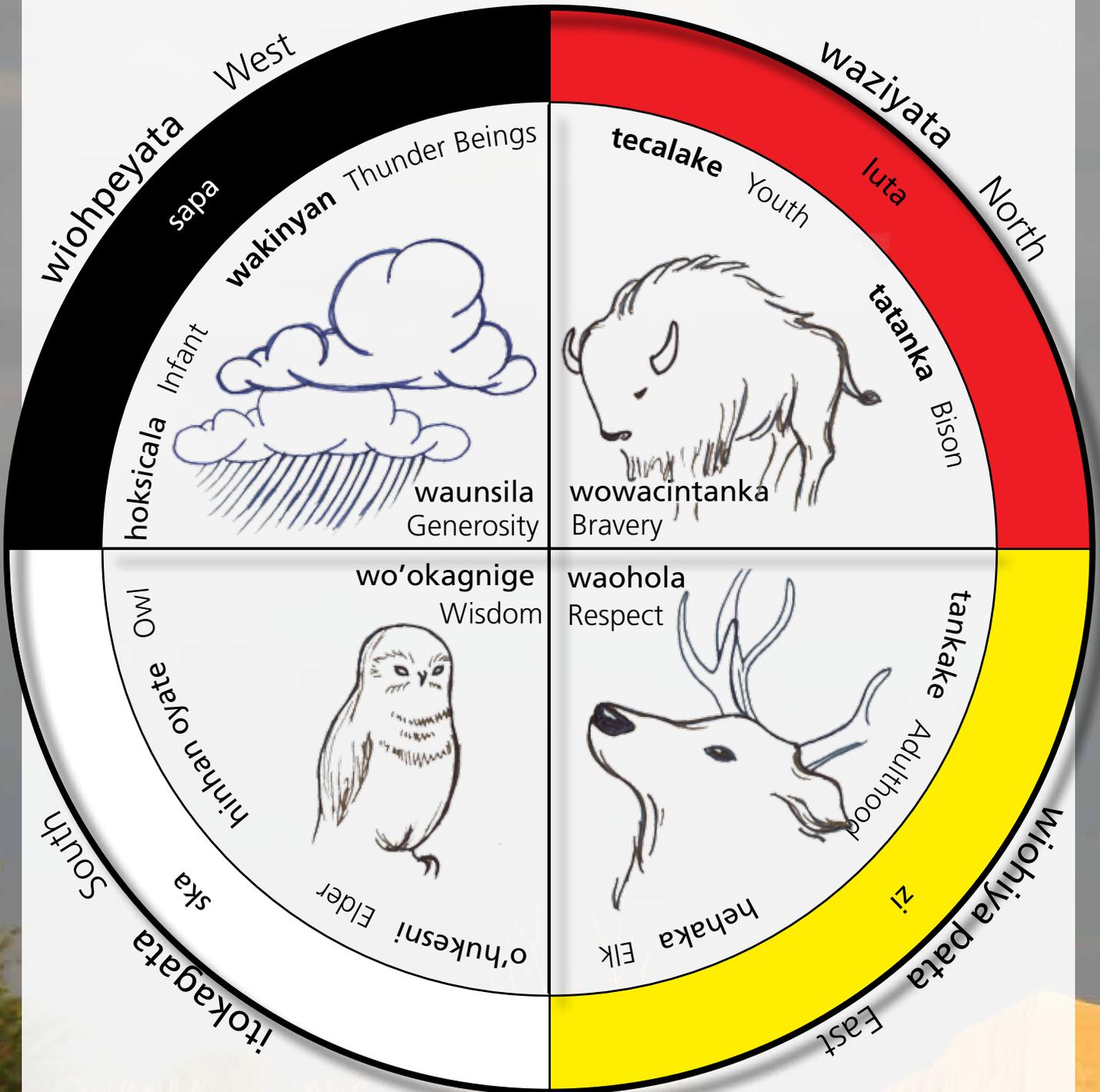
Extra : If it's summertime, you probably didn't feel cold snow. If it's been really dry this year, you may not have been able to smell a bright flower. If you didn't get a chance to hear prairie dogs yip, come back some day! There are different things to see and do in the Badlands all the time.

Activity 4 : Lakota Directions

Face west. (You can ask an adult if you need help, or look at a compass.) What do you see?

The Lakota people, who have lived in this area for a long time, believe that a different color, age, and characteristic can be seen in each of the four directions. Generous black rain clouds, for example, are born in the west.

Color the figures according to the Lakota compass. Then try saying the Lakota words.



Extra : Elders are wise like owls. Are you strong and brave like a bison?

Activity 5: How the Rattlesnake Got Its Rattle

Read the story and add your own illustrations.

A long time ago in a place not far from here, a big snake used to have a lot of problems with the people who lived near him.

Whenever he tried to sleep in his favorite dry sunny stream bed, people would walk by and wake him up.



Sometimes they would even step on him! Ouch!

Other times, he would try to find a nice dark cool place to sleep, but people would stick their hands in his home. Surprise!



The people were unhappy because they kept getting scared

and the snake was unhappy because he couldn't get any sleep.

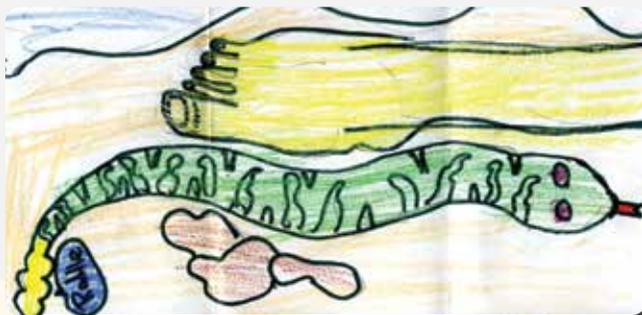
So they decided to have a talk.

When they met, one person shouted, "We need to take out his teeth!" and someone else yelled, "Tie his mouth shut!"

The snake had a better idea.

"I don't want to scare you," he said, "but I also don't want to be disturbed.

I will wear a rattle on my tail and shake it whenever anyone comes near me. But all people must agree to listen for me and stay away from my rattle!



Ever since then, the rattlesnake has politely warned people when they come too close.

So people should politely let him sleep.

With illustrations by:
Jack, age 10, from Schofield, WI
Bobbi, age 8, from Wanblee, SD
Katie, age 8, from Sparta, NJ

Extra : The non-venomous Bull Snake looks and acts just like a rattlesnake. It will even hiss and shake its tail to pretend it's rattling! Why do you think it does this?

Activity 6 : Where's the Wildlife?

Biologists study the plants and animals that live in the park today. They have a difficult job – many of the animals are hard to spot. Although a few species, like the Monarch **Butterfly** and **Red-Winged Blackbird** are very bright, most try to blend in with the landscape, like the **Thirteen-lined Ground Squirrel** and **Plains Spadefoot Toad**. Others, like the **Cricket** and the **Meadowlark**, are easy to hear but difficult to see. A few, like the **Bighorn Sheep** and **Swift Fox**, are rare. The **Black-footed Ferret** is particularly hard to see – it is nocturnal (meaning it only comes out at night) and endangered (meaning there aren't many left). It lives in **Prairie Dog** colonies along with the **Burrowing Owl** and **Bull Snake** and hides from the **Red-Tailed Hawk**.

How many animals are hiding in the grasslands?

Circle any animals you see in the drawing and/or circle any animals you find in the word search. (Bonus: Can you identify and find the plant species as well?)

T W N B Y J E D L O X P D E I E N W U H
 B G K U I L A B U L L S N A K E G H C N
 P I C R O P G Z P O E W E S A C O E N H
 A C S R D G O D E I R I A R P O F A I A
 A C U O F B U T T E R F L Y E N S T A W
 E E R W N L Q E G O K T S S E E K G S K
 G L S I E A R C H A E F T R H F M R R E
 B S R N C C N C C O C O E E S L X A T A
 L S C G U K F O E T A X H R N O L S P Y
 R H T O L B E T A D C E F I R W W S O T
 E W L I N T L R T D P O O E H E D T
 L E R S O L K U B D D H R T N I A
 J D L N C X S B A B G T E C N O
 T E A W N A L E R R I U Q S
 X O E W M T A I B T K
 O S M E E Z D M I
 D T V A S L

Extra : These are only a few of the more than 200 different types of mammals, birds, reptiles, amphibians, and insects that live among the 450 plant species growing in the park.

Activity 7 : Living in the Badlands

The Badlands can be a hard place to live. Plants and animals have special ways to help them survive the sizzling summers and freezing winters. For example:

- grasses have long roots to soak up moisture in the dry summer and store energy through the dark winter
- bison grow a thick coat of fur to stay warm in the fall, then shed the extra layer in the spring

Create a plant or animal that could live in the Badlands. Draw a picture and describe the adaptations – special features or techniques – that your new species has.



Where does your new species live? How does it get its food?

Extra : How have humans adapted to live in this environment?

Activity 8 : Mystery of the Badlands

The Badlands haven't always been such a harsh, dry place to live. How can you tell? The history is set in stone! Badlands' colorful rock layers contain the remains of ancient ecosystems. Study the displays at the Ben Reifel Visitor Center to learn about past climates and lifeforms, then use the letters from the words in the left-hand column to complete the corresponding descriptions of the rocks you see today. (Note : The oldest layers are found on the bottom.)



Badlands today.

Today, water and wind scour the clay hills and sweep through open _ _ _ _ lands.

Instead of bein__ deposited, __ock l__yer__ and geologic formation__ are being eroded.



Brule Formation

A _ _ _ _ _ ecosystem developed as the climate became colder and drier 34-30 million years ago.

De__osits of g__avel, s__ndstone, and siltstone, as well as ancient so__ls, filled with bones of early ho__ses, p__gs, and cam__ls.



Chadron Formation

A lush wet _ _ _ _ _ flourished here 37-34 million years ago.

Jaws of animals with __lat, br__ad teeth jut out of g__ay-gr__en __iltstone and sof__ clay.



sediments from Pierre Formation

75-68 million years ago, a shallow _ _ _ _ spread across the land.

Grey and black __hale containing remains of ancient marin__ life, but not dinos__urs.

Extra : Use the circled letters to find out what sort of scientist reads the rocks to learn about Earth's history : a _ _ _ _ logist.

Activity 9 : Be a Paleontologist

Paleontologists study fossils to learn about plants and animals that lived long ago. Displays at the Ben Reifel Visitor Center can help teach you how to be a good paleontologist.

- **Prepare.** _____
First you need the proper equipment.
Circle the tools you would need as a paleontologist.



- **Practice.** _____
Circle any fossils you find in the Visitor Center.
(Hint : Bones aren't the only kind of fossil.)



- _____ **Look.**
If you find a real fossil in the park today, please tell a ranger where it is.
Why shouldn't you take it with you?

Extra : Scientists have been coming to explore this area since the 1840s. At first, people collected specimens to send to famous museums back East. Today, researchers from the nearby South Dakota School of Mines and Technology work in partnership with National Park Service personnel to discover, document, prepare, and study fossils in the Badlands.

Activity 10 : Share your Experience

Your family and friends at home would probably like to learn about the Badlands too. Draw a postcard and describe your visit for them.

Hello from Badlands National Park!

Dear _____ ,
Let me tell you about my visit to Badlands !
So far, I've _____

Did you know that _____ .

_____ ?
If you ever get a chance to visit, you should
definitely _____

-- it was my favorite part of the trip!
From, _____



Extra : Postcards show the park at its prettiest. Can photographs and words ever fully show what the Badlands are like, though? Or do people need to visit to get a better idea?

Activity 11 : Park Service Time Travel

What do you learn as you follow the trail through National Park Service history?

Finish labelling the signposts with descriptions of important events, using some of the words:

Badlands, Roosevelt, Service, Park, Urban, Monuments, Mather, Lakota, Historic



Yellowstone is preserved as the world's first National _____.



The President of the United States is given the power to set aside National _____.



The National Park _____ is created to care for all parks.



_____ protected.



The Park Service adds many important _____ Sites, as well as Mount Rushmore.



Badlands is enlarged to include south unit, in agreement with _____ people.

National Trails and Wild and Scenic Rivers established. Four years later, _____ Recreation Areas are added too.



(your picture)

this year

(your name) visits Badlands National Park.

Your adventure doesn't end here!

The National Park Service will continue to care for these special places into the future. Are there any other areas or things near your home that you would like to see protected too?

Extra : The National Park Service was created to protect important sites, but also to help people safely enjoy coming to them. Is it possible for people to visit parks without disturbing the wild life or modifying the historic features? How many roads, signs, and fences need to be built?

Being a Junior Ranger

Thank you for deciding to become a Junior Ranger! You have become a member of an important group of people who have promised to help care for our National Parks.

Now that you've explored Badlands National Park and learned about the people, plants, animals, and rocks that make it important, you have one more thing to do as a Junior Ranger : protect. **How will you help protect this place? What does "protect" mean to you?**

Here are some ideas for things you can do to help protect Badlands and other special places :

_____ Continue to explore.

There are probably some really neat areas, including state and local parks, right by your own home. Ask your family and friends about their favorite spots and look through the National Park Service website at <http://www.nps.gov> .

_____ Continue to learn.

Take a virtual tour of Badlands at <http://www.nature.nps.gov/views>.

Become a WebRanger! There are over 50 games at <http://www.nps.gov/webranger>.

Check out the For Kids section of the Badlands website at <http://www.nps.gov/badl>.

_____ Continue to have fun!

As long as people – local residents and visitors, scientists and artists, Park Rangers and you as a Junior Ranger – enjoy Badlands, they will help protect this special place. Then it will be here for you and all of your family and friends to come back to and enjoy again.



Congratulations!

This certifies that

has fulfilled the requirements to become a

JUNIOR RANGER

at **Badlands National Park**

on this,
the _____ day of _____, _____

Park Ranger

U. Brennan

Park Superintendent



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

Place
Postage
Here

Badlands National Park
Junior Ranger Program
P.O. Box 6
Interior, SD 57750