

# Wind Cave

National Park  
RR 1 Box 190  
Hot Springs, SD 57747-9430  
(605) 745-4600



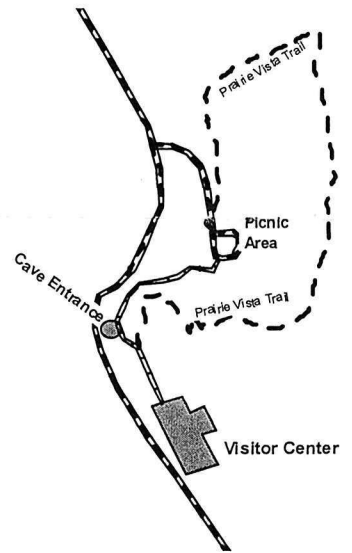
## Prairie Vista Trail

### INFORMATION



Poison Ivy

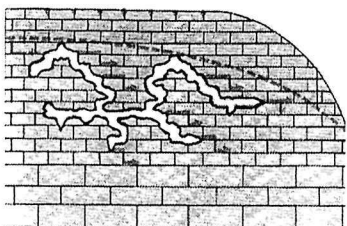
This moderately strenuous trail is about one mile in length. The trail begins near the natural entrance to Wind Cave. Following the ravine through the picnic area, the trail goes along the prairie hillside beyond the restrooms. After entering the prairie, the route travels up the hill, gradually reaching the top. Here the trail levels, offering excellent views of the park. The end of the trail descends steeply and returns to the pavement near the cave entrance. At the pavement, turn left to return to the visitor center or right to go to the picnic area. The path is rocky in some areas, please use caution. Also, be aware that you may encounter wildlife and poison ivy along the trail. Rattlesnakes can sometimes be seen and in the spring ticks are common.



### CONNECTIONS

Above and below, wet and dry, natural and unnatural, there are connections between all things. These relationships are like invisible lines that can be traced from one thing to another. Tracing along these lines can make us realize that nothing in this world stands alone. As John Muir said, *"When you try to change any single thing, you find it hitched to everything else in the universe."*

### ROCKS AND WATER



Traveling through the ravine you will see limestone outcrops on either side of the trail. Water has seeped through the cracked and broken rocks to the cave below for millions of years. The action of that water has helped to form and decorate Wind Cave. The water that travels down from the ravine may reach the cave in as little as eight hours. However, water sinking down from the highest point of the trail, the top of the hill, may take five years to reach the cave.

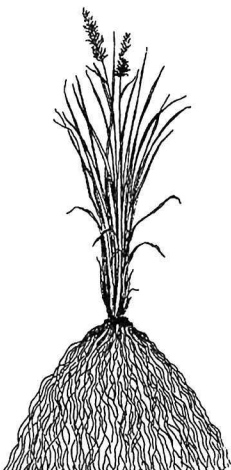
### RAVINE

Limestone outcroppings on the sides of the ravine help keep the valley shaded. Here water collects allowing many trees grow. This area is humid and cool even on the hottest, driest day. Fernlike plants and lush green shrubs grow close to the trail, indicating nearby moisture. Shade and cover allow this microclimate to prosper.

### PRAIRIE

The transition from the cool shaded humidity of the ravine to the hotter, drier prairie is remarkable. There is little shade here. The moisture that collects is protected by the space-filling rocks in the soil and used immediately by the shrubs, grasses, and low-lying plants.

### PRAIRIE ADAPTATIONS



There is a broad diversity of plants seen along the trail. Grasses with long fibrous roots dominate the vegetation because they are adapted to the extremely dry and hot conditions. More than half of their biomass is underground with their roots going down 12 feet or more. Another plant found along the path is the yucca. It is commonly found within the perimeter of the visitor center fence. This is because pronghorn, which eat forbs such as the yucca, do not often enter the fenced area. Cacti may also be seen along the trail. Look for the prickly pear and the rarer pincushion cactus. The rolling hills and swaying grasses are generally what people associate with the prairie, but the ever-encroaching forest is constantly threatening this fragile ecosystem.

## PRAIRIE vs FOREST

For hundreds of years, the ponderosa pine forest has tried to conquer the hilly prairie only to be stopped by fires and dry conditions. Realizing this, rangers at Wind Cave National Park began using prescribed fires to restore the prairie, reduce the amount of fuel for wildfires, and improve the foraging for the native animals, such as bison and pronghorn. The effects of both wild and prescribed fire can be seen along this trail. The pine forests in the distance and the grasses are healthier because of fire. The objective of the prescribed burning program is to maintain a balance of prairie and forest. Fires are also used to control the non-native plants that are invading the park.

## INVADERS



Weeds! Exotic plants! They are everywhere and are continually invading. Park managers have declared war against these non-native invaders. Visible from the trail are goat's beard (Western salsify), common mullein, and several other non-native plants. Some of these exotic weeds can affect the diversity of the prairie by out competing native species for space, water, and nutrients. They become a problem when they take over an area to the exclusion of other plants, creating a monoculture. If you search you may notice Canada thistle (pictured left) or leafy spurge. These plants kill other plants as they aggressively spread across the prairie. They propagate by air borne seeds and by prolific root systems. By controlling these invaders, the park is protecting the diversity of the prairie, which is not only spectacular to view but is essential to the survival of the animals living here.

## VASTNESS

Look around you. The vastness of this beautiful landscape can amaze and inspire you. Imagine the entire Great Plains looking similar to this, grasses swaying in the breeze, colorful flowers painting the landscape, and a few shrubs scattered throughout. A calm peaceful silence surrounds you. The National Park Service is trying to preserve this remnant of a once vast prairie ecosystem. Although some change has occurred, that change has been limited.

## HUMAN CONNECTIONS



Many of the human caused changes that can be seen from here were made during the Great Depression of the 1930's when Wind Cave National Park was home to a Civilian Conservation Corps (CCC) camp. At Wind Cave the CCC was responsible for landscaping the roadsides, constructing the elevator building, installing cave trails and lights, and assisting with building the visitor center. The CCC also created the parking lot and trails, such as the one to the natural entrance. Today we know that these changes have affected the delicate ecosystem of the cave. The major connection between the surface and the cave is water. The parking lot, trails, and buildings affect the flow of water. Water no longer seeps into the ground where these structures are located and, in other places, the water is funneled into the cave by new drainages. Not only do these changes alter the flow of water; they could allow traces of car fluids and other pollutants to enter the cave. These can affect the cave formations we know of and may change formations in places yet to be explored. As we continue to explore the cave, we find that understanding the connection between the cave and the parklands above it is important if we are going to protect the fragile beauty of this delicate environment.

## EXPLORATION

Alvin McDonald was one of the earliest explorers of Wind Cave. His grave is marked by a plaque on a boulder beneath the lilac tree, near the end of the trail. The McDonald family tried to homestead this area in the 1890's. During that time, Alvin recorded many of his experiences in a journal. In this journal, he named rooms and routes within the cave. He also systematically mapped the cave. Alvin once wrote that he had "given up the idea of finding the end of Wind Cave." This belief is still held by cavers today. Through exploration, we find more cave, but we also gain an understanding about the cave and its many connected ecosystems. Understanding gives us the methods to protect the intricate connections of the prairie and the cave, of the prairie and the forest, and within the prairie itself.

