



Jewel Cave

National Monument

SOUTH DAKOTA

Jewel Cave is a small but interesting cavern. The walls of many of its underground chambers are lined with a solid coating of dogtooth calcite crystals which sparkle like jewels in the light; hence, the name Jewel Cave. Because of this unique formation and an attractive range of color, the cave and a protective surface area of 1,274.56 acres were set aside as a national monument by Presidential proclamation on February 7, 1908.

HISTORY

The area was originally recorded as a mining claim, known as Jewel Lode, after its discovery by two prospectors, Albert and F. W. Michaud, on August 18, 1900.

While out prospecting, the Michaud brothers were attracted by the noise of wind coming from a small hole in the limestone cliffs on the east side of Hell Canyon. In the hope of discovering valuable minerals and locating the source of the wind, these men, in company with Charles Bush, enlarged the opening.

The Michaud brothers believed they had discovered a cave which would be of great interest to tourists in the Black Hills. They built a log house nearby for the accommodation of visitors. However, they were unable to attract enough people to make this venture a financial success.

When the area was established as a national monument, the land was a part of the Black Hills National Forest. The area remained under the administration of the United States Forest Service until April 1, 1934, when, by Executive order, the President transferred the area to the National Park Service.

GENERAL DESCRIPTION

Jewel Cave National Monument is located on a high, rolling plateau ranging from 5,200 to 5,800 feet above sea level. The plateau is broken by many gulches and ravines. The entrance to the cave is on the side of one of these ravines known as Hell Canyon.

The National Park System, of which this area is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.

The main passages of Jewel Cave are supplemented by side galleries and chambers of various sizes. The first chamber is of dense, fine-grained limestone, and somewhat resembles the Gothic style of architecture. About 500 feet from the entrance the walls and roofs of a number of galleries are lined with a thick crystalline calcite. The rooms and chambers have different colors, ranging from a peculiar light-green tint to darker greens and bronze.

Boxlike cavities along the walls and ceiling of the cave are covered with minute crystals which stand in bold relief from the ground mass. These attractive crystals have a color range from a light brown to a deep chocolate shade. Clumps of crystals of various sizes and shapes are found in the walls and passageways.

GEOLOGY

Jewel Cave is found in a formation known as the Pahasapa limestone of Mississippian Age. The formation is exposed in many places about the Black Hills, and most caves in the area are found in it. Earth forces which formed the Black Hills cracked and fractured the limestone and thereby provided channels for the movement of percolating waters. This water, aided by gases from the air, dissolved the limestone from the walls of the fissures through which it flowed, thus forming the passages, galleries, and chambers of the cave. This process continued until the source of water became depleted or was diverted to other channels.

The formation of the jewel-like crystals was the last step in the development of the cave features. After the galleries had been formed, seeping water saturated with calcium carbonate appeared on the cave walls. Tiny projections of calcite, or of a similar mineral, acted as nuclei. On these calcium carbonate deposits grew as slender pyramidal crystals, their shapes suggesting canine teeth, hence the name dogtooth calcite or dogtooth spar.

WILDLIFE

Wildlife found within the monument area includes common rodents, such as ground squirrels, marmots, and chipmunks. Porcupines, coyotes, and rabbits are also frequently seen. Occasionally, deer and elk are observed from the highway. Mammals found in the cave are two varieties of the little brown bat, the lump-nosed bat, white-footed mouse, and bushy-tailed wood rat.

Birds are present in fairly large numbers, especially on the timber-covered tablelands. An abundance of both prairie and mountain bird species is represented.

PLANT LIFE

The rough terrain is covered by an excellent forest of ponderosa pine with some trees measuring more than 40 inches in diameter—well above the average for western pines of the Black Hills region.

Many herbaceous plants and grass species may be found. Scattered clumps of boxelder and snowberry grow in several of the ravines. Mountain-mahogany and other brush types thrive along the dry hillsides.

Wildflowers bloom profusely during the spring and early summer. The first to appear are crocus, shootingstar, and ground phlox, then the evening-primrose, horsemint, larkspur, monkshood, yellow sweetpea, lupine, wallflower, bluebells-of-Scotland, Canadian anemone, early goldenrod, and fireweed.

In early June the roadsides and grassy meadows are filled with Mariposa lilies, and scarlet mallow covers the road shoulders. Later in the summer the spreading dogbane, blue vervain, wild sunflower, New England aster, black-eyed-susan, yucca, ladies-tresses, green-headed coneflower, purple coneflower, and wild geranium may be seen.

HOW TO REACH THE MONUMENT

The cave is located in the Black Hills of South Dakota near the southwestern boundary of the State. U. S. 16 crosses the southeastern section of the monument.

It is accessible from the railroad stations at Custer, S. Dak., and Newcastle, Wyo., both on the Chicago, Burlington & Quincy Railroad.

ABOUT YOUR VISIT

A park ranger is on duty at the monument during the summer. Several cave trips are made daily under the guidance of the ranger.

The entrance fee of 50 cents, which includes Federal tax, is waived for children under 12 years of age and for groups of school children 18 years of age or under when accompanied by adults assuming responsibility for their safety and orderly conduct.

A trip through Jewel Cave will appeal to those who wish to experience primitive cave exploration. Although ladders and steps are installed for safety and convenience, development has been kept to a minimum. There are no electric lights, but the ranger will provide gasoline lanterns. The trip is not recommended for those in poor physical condition. Old clothes and stout walking shoes should be worn.

No hotels or tourist cabins are located in the monument, but these facilities, as well as garages, may be found in towns nearby. Ask the ranger for highway information to those towns. Near monument headquarters is a good public campground with free wood and spring water.

The following brief of National Park Service regulations, which are designed for the protection of the natural features as well as for your comfort and convenience, is for your guidance. Complete regulations may be seen at monument headquarters.

Camping.—Camp only in the campground. Keep campground clean. Combustible rubbish shall be burned in camp-

fires, and all other garbage and refuse shall be placed in cans provided for that purpose.

Firearms.—The use of firearms on monument lands is prohibited.

Fires.—Light only in designated places. Extinguish completely before leaving camp, even for a temporary absence. *Be sure your fire is out when you leave it.*

Specimens.—The removal of rocks, minerals, or cave formations, or the picking of flowers, shrubs, or other vegetation without written permission from the superintendent of Wind Cave National Park is contrary to regulations.

Trash.—Please help keep the area neat and attractive. Carry debris until you can burn it in camp or place it in a receptacle. Be a good outdoorsman; leave a clean camp.

Wildlife.—The monument is a wildlife sanctuary. You are requested to refrain from molesting wildlife in any manner.

NEARBY POINTS OF INTEREST

Among the many historical, scientific, and scenic attractions in and near the Black Hills are Badlands National Monument, Devils Tower National Monument, Mount Rushmore National Memorial, and Wind Cave National Park—all units of the National Park System. The park ranger will be glad to help you plan your trip to include these areas in your itinerary.

ADMINISTRATION

Jewel Cave National Monument is administered by the National Park Service of the United States Department of the Interior. The superintendent of Wind Cave National Park, whose address is Hot Springs, S. Dak., is in charge of the monument.



UNITED STATES DEPARTMENT OF THE INTERIOR

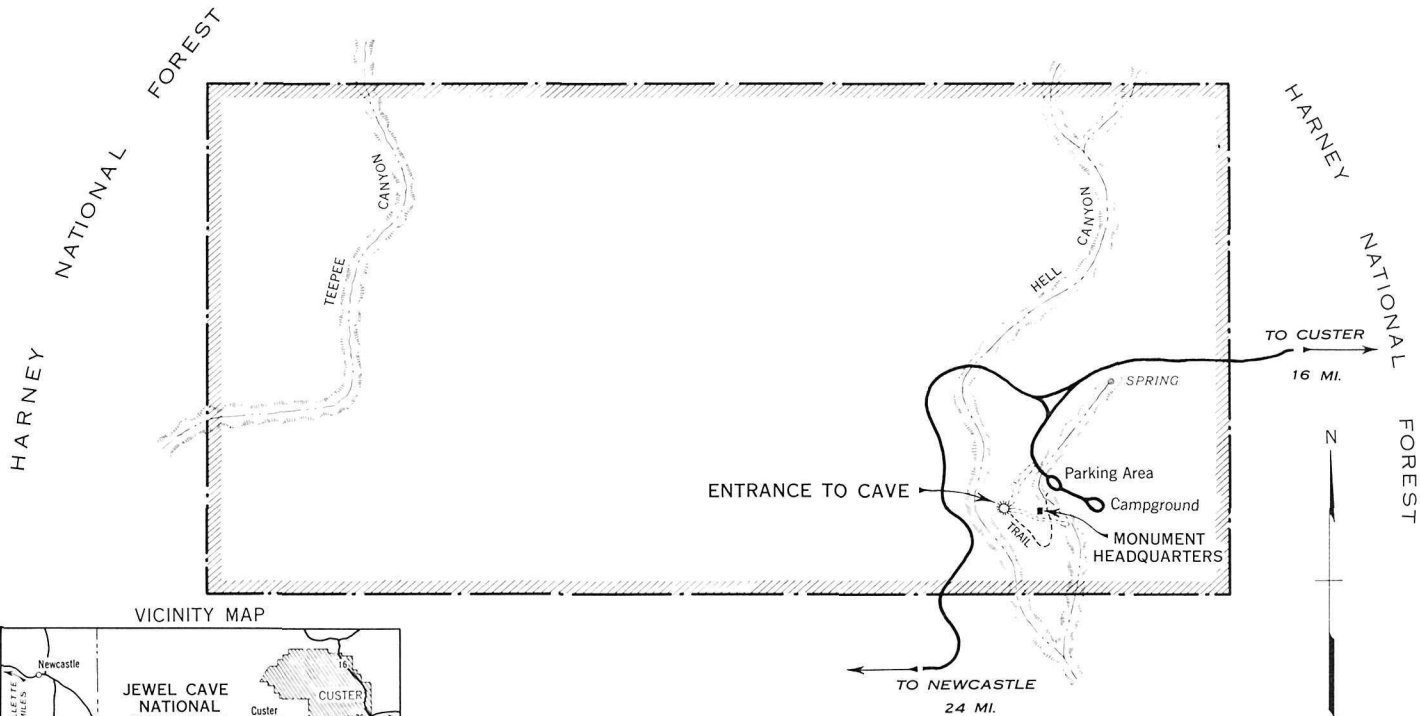
Fred A. Seaton, *Secretary*

NATIONAL PARK SERVICE

Conrad L. Wirth, *Director*



JEWEL CAVE NATIONAL MONUMENT



VICINITY MAP

