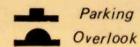


NATURAL BRIDGES

NATIONAL MONUMENT



DECEMBER 1966 NM-NB-17000

HOW TO SEE THE MONUMENT

Since approach roads to the monument are of dirt, with steep grades, they become muddy and sometimes impassable during and after rainstorms. The roads within the monument, however, are paved.

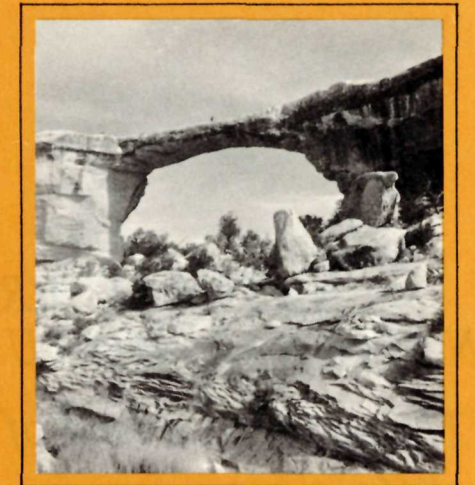
Your first stop at the monument should be at the new visitor center, where you can obtain information about the area from the park ranger. Here, too, you may examine the exhibits in the small museum, thus gaining a better understanding of the things you will see during your visit.

From the visitor center, a 9-mile loop road links the trails to the three bridges. A parking area is at the head of each trail, and there are overlooks at several places along the loop road.

Please note: camping supplies, food, and gasoline are not available in the monument; the nearest source is Fry Canyon, 26 miles from the visitor center on Utah 95.

The campground is near the visitor center. The nearest overnight accommodations are at Blanding and Mexican Hat, Utah.

The monument is open all year, except when heavy rains and winter snows block the roads. Most pleasant season: from late April through October.



NATURAL BRIDGES

NATIONAL MONUMENT UTAH

ADMINISTRATION

Natural Bridges National Monument, with an area of 7,600 acres, is administered by the National Park Service, U. S. Department of the Interior.

The superintendent of Canyonlands National Park, whose address is Moab, Utah 84532, is in charge of the monument.

THE DEPARTMENT OF THE INTERIOR—the Nation's principal natural resource agency—bears a special obligation to assure that our expendable resources are conserved, that our renewable resources are managed to produce optimum benefits, and that all resources contribute their full measure to the progress and prosperity of the United States—now and in the future.

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NATIONAL PARK SERVICE



U. S. DEPARTMENT OF THE INTERIOR

NATURAL BRIDGES NATIONAL MONUMENT

The center of a land of brilliant cliffs, tortuous canyons, and sandstone pinnacles and arches.

To make a natural bridge, Nature requires several conditions: a proper stone that will shape well (a crossbedded sandstone is best), the presence of joints or fractures in the rock, and a desert-type stream that occasionally scours its bed with a tremendous head of water and sand.

The rock of the Natural Bridges area is a crossbedded sandstone known as the Cedar Mesa Sandstone. It is of Permian age, more than 225 million years old.

Long after the land had begun its slow rise from an ancient seabed, two small streams formed on the western slopes of Elk Ridge and made meandering channels across the flat land. They gradually entrenched themselves as the land underwent new uplift. As the land continued to rise, the streams cut ever deeper channels—known today as White and Armstrong Canyons.

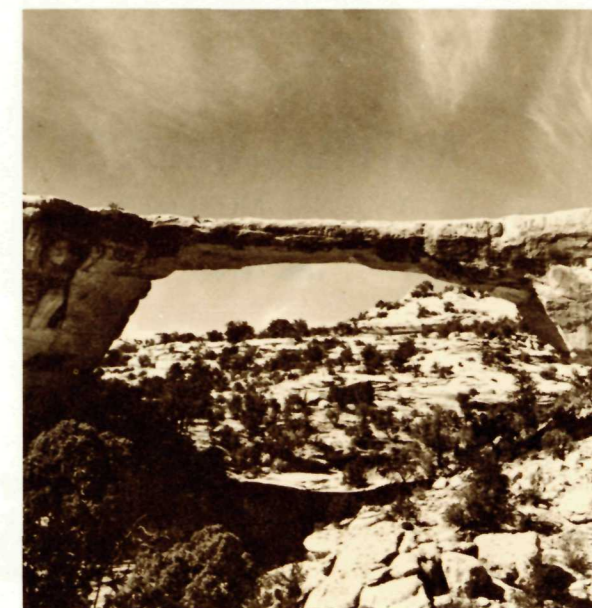
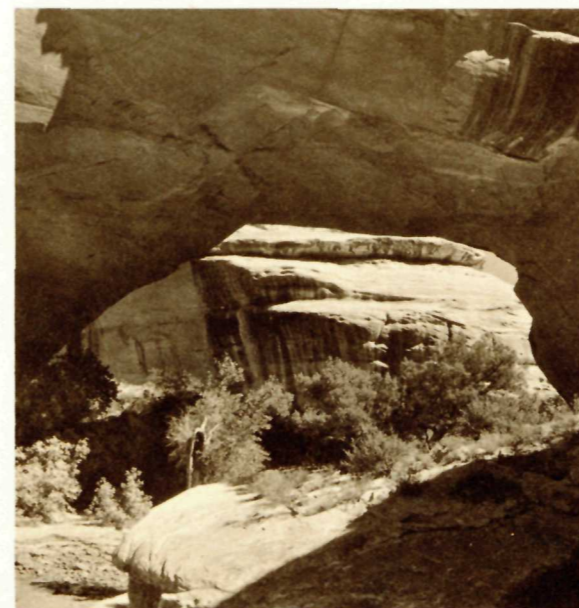
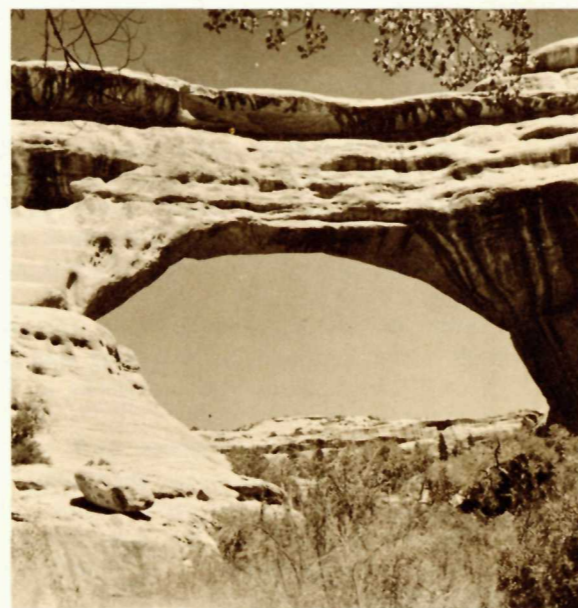
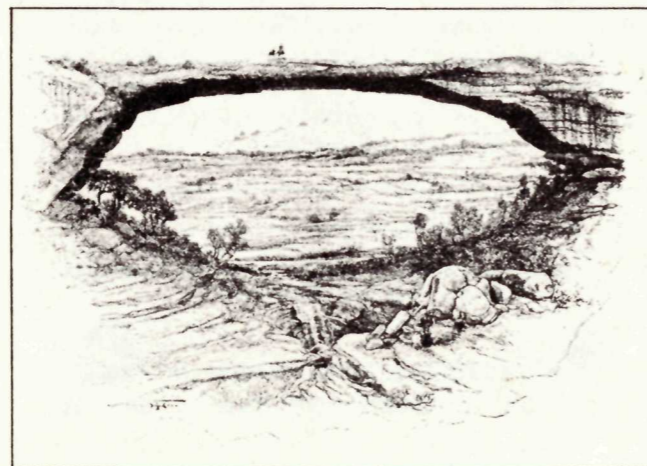
Every stream attempts to make a straight channel with an even grade from its source to its mouth. Any obstacles, such as hills or large rock masses, are gradually worn away. Thus, these winding streams were constantly trying to straighten their courses. During floods, silt-laden waters were thrown with great force against the walls of the meanders. In several places, a fin of rock around which the stream wound was so thin that over many centuries a hole was gradually bored through, and a natural bridge was born. The stream continued to cut its channel and, with the aid of other processes of erosion, to enlarge the opening. Eventually, the old meander was left high and dry as a “fossil” streambed.

Most of the natural bridges of the United States are in the Four Corners region of the Southwest, where favorable

materials and conditions for bridge-making exist. Two other types of bridges are entirely dissimilar. Tonto Natural Bridge, in central Arizona, is a “built-up” bridge created by travertine deposited by springs. Natural Bridge, in Virginia, apparently was formed when most of the roof of a limestone cavern collapsed.

THE BRIDGES

White man first saw the bridges in 1883, when Cass Hite, a prospector, visited the region. National publicity was given to the area in 1904 by the National Geographic Magazine. In 1908 President Theodore Roosevelt proclaimed the area Natural Bridges National Monument.



Bridge	Height (feet)	Span (feet)	Width (feet)	Thick- ness (feet)
Sipapu	220	268	31	53
Kachina	210	206	44	93
Owachoma	106	180	27	9

Sipapu Bridge, in its maturity, has a graceful, symmetrical span; its abutments are now far enough from the streambed that the river has little or no cutting effect on the rock. The graceful arch of this bridge suggested to its namers the sipapu—a hole through which the Hopi believe their ancestors emerged from a lower, dark world into the present sunlit one.

Kachina Bridge, at a youthful stage in the life of a natural bridge, is huge and bulky. Flood waters in White Canyon are still enlarging the opening beneath the span. On one of the abutments of this bridge are numerous prehistoric pictographs, some of which resemble Hopi masked dancers, or *kachinas*—hence the name.

Owachomo Bridge is in a late phase; it suffers no stream erosion—only erosion from rain, frost action, and sandblast. Its life expectancy is less than that of the other two; it may stand for centuries, or the fatal crack might already have started. Owachoma (rock mound) was so named for the large rounded rock mass near one end of the mesa.

The fate of all bridges is illustrated a short distance up White Canyon from Sipapu Bridge, where faint scars and damaged abutments on the canyon walls indicate where a fourth bridge may once have spanned the canyon.

When the monument was established, in 1908, an effort was made to find Indian names that would fit the bridges. Paiute Indians, who still live in the country, had no names for the individual bridges. They professed to know only a single term, which they applied to all bridges, natural or otherwise. This was “Ma-Vah-Talk-Tump,” or “under the horse’s belly.”

At that time it was generally thought that the prehistoric people whose dwellings the ruins of southern Utah represent were direct ancestors of the Hopi Indians; so it was natural, when no Paiute names were forthcoming, that Hopi names should be applied to the bridges.

ARCHEOLOGY

This section of Utah supported an Indian population from about 2,000 to 650 years ago. Thousands of ruins stud the mesas and canyons of the district; some 200 sites lie within the monument. Both White and Armstrong Canyons, however, are too narrow to have furnished enough farmland for many families at one time.

Visitors who hike to the bridges will see one cliff dwelling of about 20 rooms and several small rooms (apparently granaries) on ledges high on the cliffs. An outstanding feature is a kiva (ceremonial room) with the original roof and ladder intact. The prehistoric inhabitants were related to the dwellers of the Mesa Verde in Colorado.

Because they are fragile, ruin sites within the monument may not be entered without the written permission of the park ranger.