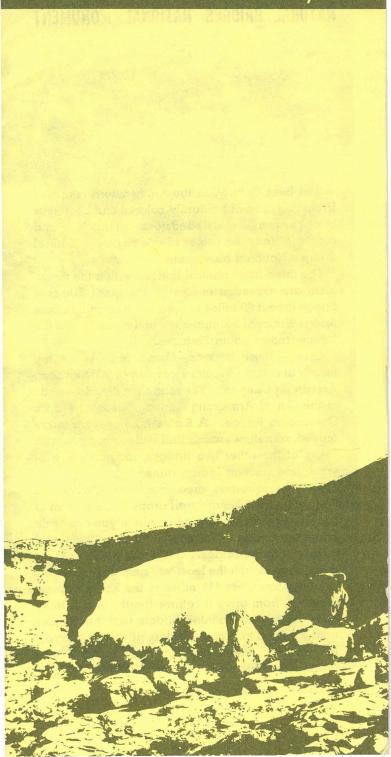
NATURAL BRIDGES NATIONAL MONUMENT/UTAH



NATURAL BRIDGES NATIONAL MONUMENT

San Juan County, in the southeastern corner of Utah, is a land of brilliantly colored cliffs, tortuous box canyons, and sandstone pinnacles and arches. Near the center of this region is Natural Bridges National Monument.

The three huge natural bridges within the monument are exceeded in size by the great Rainbow Bridge (about 60 miles to the southwest in Rainbow Bridge National Monument), but they rank with the largest known natural bridges.

One of these bridges—Owachomo—spans the mouth of a short tributary canyon of 600-foot-deep Armstrong Canyon. The road from Blanding ends at the rim of Armstrong Canyon just across from Owachomo Bridge. A 6-mile hike over an unimproved, sometimes rough trail will reward you with views of the other two bridges, magnificent canyons, and ancient Indian ruins.

The headquarters area overlooks Owachomo Bridge, and a 300-yard trail drops to the bottom of Armstrong Canyon to a point where you can walk under the bridge. You can continue on this trail 3 miles to Sipapu Bridge. But if you wish to see all three bridges with the least walking, drive your car from headquarters $4\frac{1}{2}$ miles to the Kachina parking area; from there it is three-fourths of a mile by a ladder trail to Kachina Bridge, and it is 2 miles from Kachina to Sipapu Bridge, up White Canyon. No trail is maintained between Kachina and Owachomo Bridges.

The Bridges and Their Names

The bridges were first seen by white man in 1883, when Cass Hite, a prospector, visited the region. National publicity was given to the area in 1904, when an illustrated article appeared in the National Geographic Magazine. In 1908 the area was proclaimed Natural Bridges National Monument by President Theodore Roosevelt.

When the monument was established, 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.

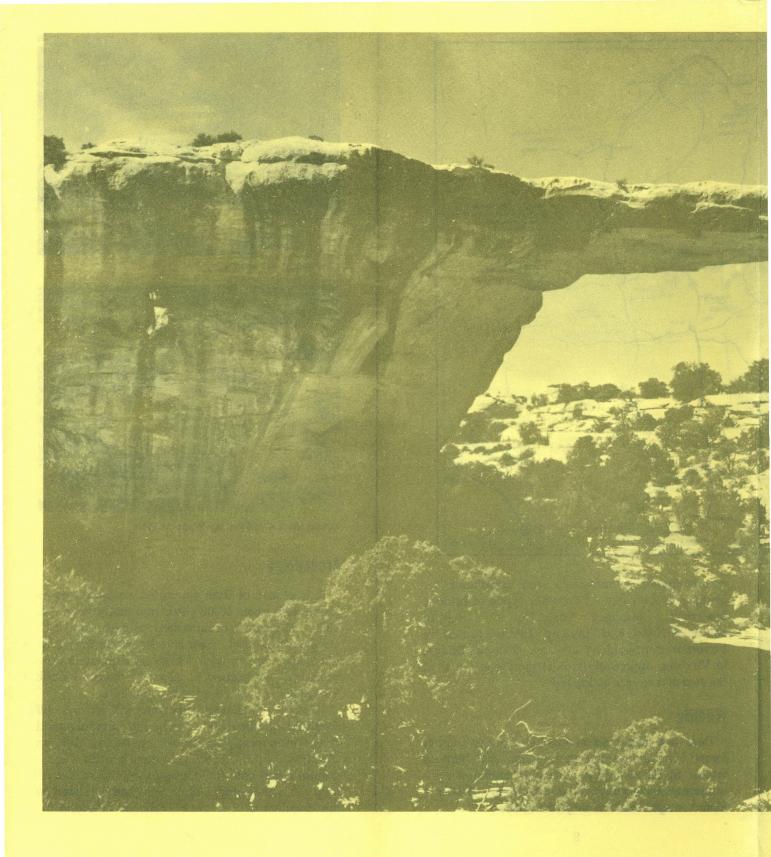
Owachomo (Rock Mound) was so named because on the mesa near one end of it is a large, rounded block of rock. It was formerly known as the Edwin Bridge.

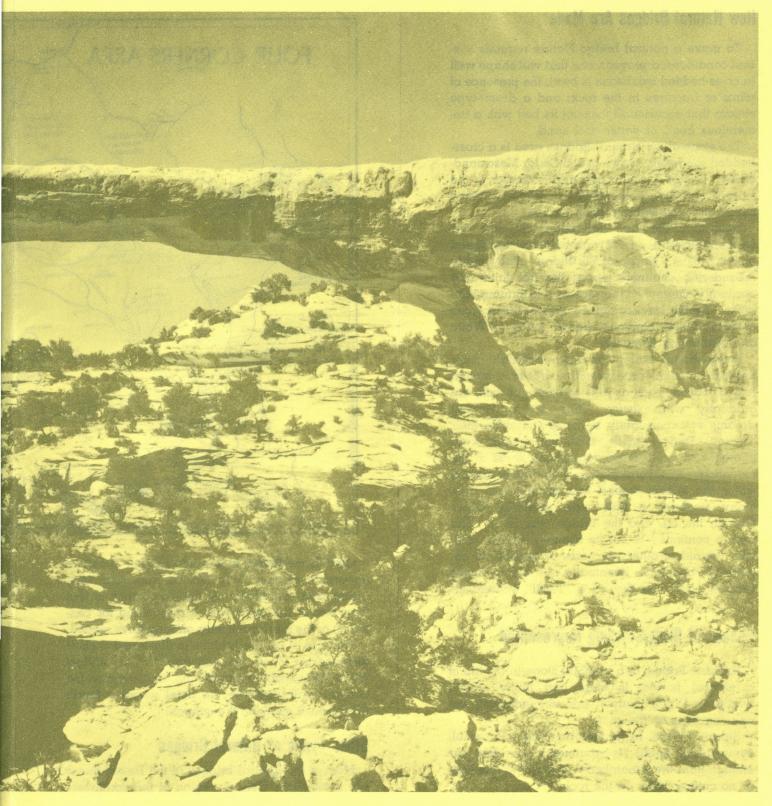
Kachina—On one of the abutments of this bridge are numerous prehistoric pictographs, some of which resemble Hopi masked dancers (kachinas). The former name for this bridge was Caroline.

Sipapu—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. This was known as the Augusta Bridge.

The dimensions of the bridges are as follows:

Bridge	Height (feet)	Span (feet)	Width (feet)	Thickness (feet)
Owachomo	106	180	27	9
Kachina	210	206	44	93
Sipapu	220	268	31	53





Owachomo is in view at the end of the road

How Natural Bridges Are Made

To make a natural bridge Nature requires several conditions: a proper stone that will shape well (a cross-bedded 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 stone of the Natural Bridges area is a crossbedded sandstone known as the Cedar Mesa sandstone. It is of Permian age and is similar to the more recent Navajo sandstone in which so many caves and arches have been formed.

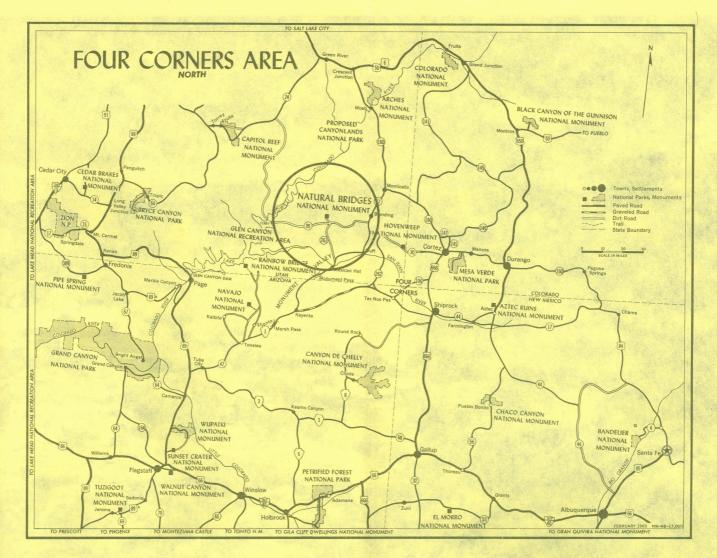
Long after the land had begun its slow rise from an ancient sea bed, two small streams formed on the western slopes of Elk Ridge. They made meandering channels across the flat land and gradually entrenched themselves into tortuous canyons. As the land continued to rise, the streams cut ever deeper canyons—known 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 blocks of rock, 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 the fin, and the bridge was born. The stream continued to cut its channel deeper, 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.

Phases of Bridge-making Represented

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.

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.



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 may already have started.

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

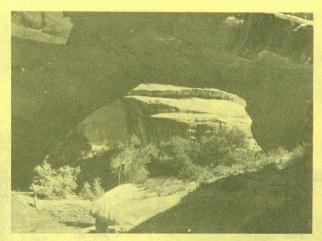
Other Types of Natural Bridges

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

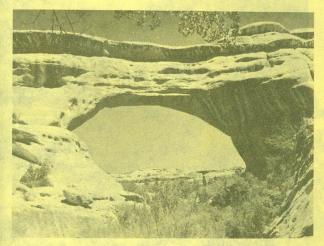
where favorable materials and conditions for bridge-making exist. Two other types of bridges are entirely dissimilar. Tonto Natural Bridge, in central Arizona, is a "built-up" bridge created by travertine deposited by springs. Natural Bridge, in Virginia, apparently was formed when most of the roof of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

Wildlife

Deer are numerous in the pinyon and juniper forest surrounding the monument; and bighorn winter in the canyons. Smaller mammals are numerous, as are coyotes and wildcats. An occasional cougar works through the area.



Kachina—a "young" bridge



Sipapu Bridge, looking up White Canyon

Archeology

This section of Utah supported an Indian population from about 2,000 years ago until about A.D. 1300. Thousands of ruins stud the mesas and canyons of the district. Few sites lie within the monument, however, for both White and Armstrong Canyons are too narrow to have furnished enough farmland for more than a few families.

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.

About Your Visit

The two approach roads from Blanding are unsurfaced dirt roads with steep grades. During heavy rainstorms they become difficult or impassable. The upper road over Bear's Ears Pass (elevation 9,000) is usually blocked by snow and impassable from late September until late May. The road via Comb Wash is below 7,000 feet and is open most of the year.

Since there are no accommodations beyond Blanding, you should make certain that you have ample food before going beyond that point. At the monument, there is camping space for those who have bedding and cooking equipment. A park ranger is on duty at the monument in summer.

Administration

Natural Bridges National Monument, with an area of 7,566 acres, is administered by the National Park Service, U.S. Department of the Interior. A superintendent (address: Arches National Monument, Moab, Utah) is in immediate charge.

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.

Developing this area is part of MISSION 66, a 10-year conservation program to unfold the full potential of the National Park System for the use and enjoyment of present and future generations.

America's Natural Resources

Created in 1849, the Department of the Interior—America's Department of Natural Resources—is concerned with the management, conservation, and development of the Nation's water, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.



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