



RAINBOW BRIDGE
National Monument, Utah

□ IN THE SEMIDESERT COUNTRY OF SOUTHEASTERN UTAH STANDS RAINBOW BRIDGE, NESTLED AMONG CANYONS CARVED BY STREAMS THAT WIND THEIR WAY FROM THE NORTHERN SIDE OF NAVAJO MOUNTAIN TOWARD THE COLORADO RIVER.

□ Colorful, symmetrical Rainbow Bridge is greater in size than any other known natural bridge. With a 278-foot span, the bridge gracefully arches to a height of 309 feet—large enough to straddle the Capitol in Washington, D.C. Thicker at the top than a 3-story building (42 feet), it is wide enough (33 feet) to accommodate the average highway.

□ It is in one of the most remote and (until recently) inaccessible regions in the United States. So rugged is the surrounding Rainbow Plateau that few of the Navajo and Paiute Indians who live nearby have ever seen the bridge.

DISCOVERY □ The first white man to view the arch was probably a wandering prospector. No publicity was forthcoming, however, until the return of the Douglass-Cummings party from Rainbow Bridge in 1909.

□ Dr. Byron Cummings, then dean of Arts and Sciences, University of Utah, and W. B. Douglass, a Government surveyor, had set out with separate parties in search of the great stone arch rumored by the Indians to be in the vicinity of Navajo Mountain. Subsequently, the two parties met and joined forces.

□ The search continued for several days. The explorers crossed canyons and slick-rock surfaces where the horses slipped and skidded. Frequently they had to retrace their steps because their progress was blocked by rimrock ledges that the horses were unable to cross. They struggled through canyons that were dry and boulder choked and others that contained water and dense brush.

□ Across a scrub juniper flat and down into the last canyon they went. This was Nonnezoshi Biko, the Indian name for the canyon of the great stone arch, since named Rainbow Bridge Canyon.

□ Men and horses were exhausted, but they trudged onward. In the late afternoon of August 14, 1909, the party rounded a bend in the canyon and beheld the largest and most beautiful of all known stone arches, Rainbow Bridge.

HOW WAS IT FORMED? □ Many millions of years ago sluggish streams flowed to the south and west across a broad floodplain. The streams deposited sand and mud in thin beds that later consolidated to form reddish-brown to purple strata—the Kayenta Formation, the upper part of which is now exposed beneath Rainbow Bridge.

□ Following this period, there was a gradual change to desert conditions. Winds from the west and northwest brought great quantities of sand, depositing it in large, sweeping dunes. This sand, now weakly cemented, has been named the Navajo Sandstone—the cliff-forming, pale-orange to pale reddish-brown rock in which Rainbow Bridge and Rainbow Bridge Canyon have been formed.

□ For the next nearly 100 million years the region was alternately desert, floodplain, swamp, or partially covered by lakes or shallow marine waters. The Navajo Sandstone was buried under 5,000 feet or more of strata.

□ Then, some 60 million years or more ago, there began a slow, general uplift of the Colorado Plateau. In places, as at



Navajo Mountain, the uplift was locally exaggerated as masses of molten rock, or magma, moved upward, doming the overlying rock.

□ The present topography is the result of erosion by streams (some of which became the Colorado River and its tributaries) cutting into thousands of feet of ancient rock layers raised high above sea level. In the earlier stages, downcutting of the streams was slow, and their paths meandered widely.

But as further uplift occurred and the tilting of the land became more pronounced, the streams acquired more force—speeding up the process of downcutting their own meandering courses.

□ Rainbow Bridge was formed during the entrenching of Bridge Creek, which flows today from Navajo Mountain northwest to the Colorado River (Lake Powell). The canyon of Bridge Creek was carved through the Navajo sandstone into the top of the Kayenta formation. As it reached the lowest levels of the sandstone and the hard Kayenta rock, downcutting became more difficult. The stream began widening its path, undercutting the canyon walls, until it cut through the base of a thin spur, or neck, of one of its meander loops.

Taking the more direct course, the stream widened the break; and a natural bridge of sandstone was thus formed.

□ The predominant color of the arch is salmon-pink, with dark streaks or stains caused by iron oxide or hematite. As rain fell on the upper part of the arch, hematite in the sandstone was washed down the sides and deposited by evaporation—leaving streaks of variegated reds and browns. The coloring becomes brilliant in the afternoon sun, possibly the basis for the Indian legend that the arch is a rainbow changed to stone.

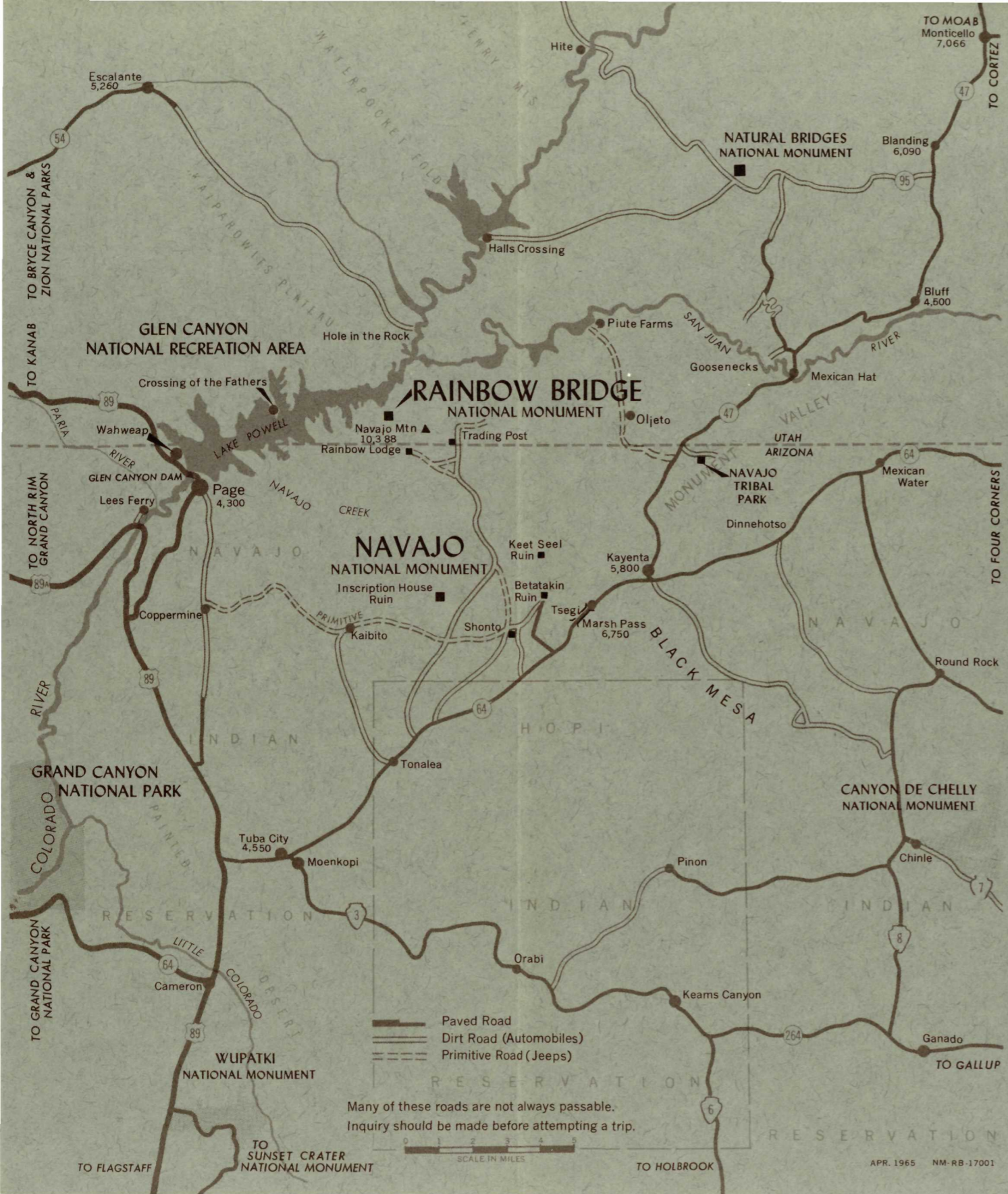
SPRINGS AND PLANTS □ Water dripping into the pools near the bottom of Rainbow Bridge Canyon is from rainwater that has seeped down through the Navajo sandstone. When the water reaches impervious rock layers in the underlying Kayenta, it accumulates but eventually seeps out along the walls of the canyon as springs.

□ Plants grow in profusion near springs. Maidenhair fern and wild orchid thrive in the shade. Growing on drier slopes are Indian paintbrush, lupine, daisy, aster, yucca, sunflower, evening-primrose, onion, scarlet bugler, and sego lily, to name only a few. In April the redbud, a shrub, blooms beautifully along the course of the stream.

HOW TO REACH RAINBOW BRIDGE □ You can reach Rainbow Bridge by trail from Rainbow Lodge (14 miles), by trail from Navajo Mountain Trading Post (24 miles), or approach it by boat on Lake Powell.

Many visitors now take the water route of some 60 miles from Wahweap or Halls Crossing to the landing in Bridge Canyon and then walk about 1 mile up the canyon to the bridge. The routes are shown clearly on the map in this folder.

□ For people who bring their own boats, there are launching ramps at Wahweap, Halls Crossing, and Hite. Concessioners at all three places provide guides, and sell boating supplies and some camping supplies. A floating development is planned for installation at Forbidden Canyon; it will include a station offering motor fuel for sale, a snack bar, and a park ranger station. However, you should inquire before starting a trip that would require refueling at this point.



- Concessioners serving the Lake Powell-Rainbow Bridge area:
 - CANYON TOURS, INC.** (Wahweap)
Box 1597
Page, Ariz. 86040
 - CANYONEERS, INC.** (Hite)
Mexican Hat, Utah 84531
 - LAKE POWELL FERRY SERVICE, INC.** (Halls Crossing)
Box 665
Blanding, Utah 84511
- For information on horseback trips to Rainbow Bridge, you may write to the Navajo Mountain Trading Post, or Rainbow Lodge, both at Tonalea, Ariz. 86044.
- For information on special boating trips on the Colorado River and Lake Powell, you may write to the following:

HARRY L. ALESON Richfield, Utah 84701	HATCH RIVER EXPEDITIONS 411 East 2d St. North Vernal, Utah 84078
ELLINGSON & QUIST 968 James Court Salt Lake City, Utah 84111	KEN SLEIGHT 6575 South Main St. Bountiful, Utah 84010
- You may arrange scenic flights over Rainbow Bridge with Page Aviation, Page, Ariz.

FACILITIES There are no accommodations or facilities within the monument boundaries. A spring under Rainbow Bridge provides drinking water. You are reminded to pack out your tin cans and other refuse when leaving. Write your name in the register—but nowhere else. The nearest town with hospital, bank, markets, churches, motels, and restaurants is Page, Ariz., on U.S. 89. **REGULATIONS** As all National Parks and Monuments, Rainbow Bridge National Monument is a sanctuary for wildlife. Hunting and the carrying of firearms are prohibited. Your cooperation is also requested in the observance of regulations that prohibit (1) destruction, cutting, or removal of plantlife, other natural features, or Indian artifacts; (2) defacing of sandstone with names, dates, or any other marks. **ADMINISTRATION** Rainbow Bridge National Monument, established on May 30, 1910, and containing 160 acres, is administered by the National Park Service, U.S. Department of the Interior. 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 the people. The superintendent of Glen Canyon National Recreation Area, whose address is Box 1507, Page, Ariz. 86040, is in immediate charge of Rainbow Bridge National 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 to the progress and prosperity of the United States, now and in the future.

U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

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