

Fig. 1. A large sandstone arch called Galloway Cave existed on the right bank about 2.25 miles upstream from Glen Canyon Dam. River travelers camped here before the turn of the century and seemed always to build their campfires in the same place, at the downstream corner of the arch. Many also left a record of their presence by writing their names on the wall with a piece of charcoal. This view shows a Nevills river party preparing for dinner on June 11, 1949. Lake Powell covers this site. Photographs, except Fig. 4, are courtesy of author.

The Lost World of Glen Canyon

BY P. T. REILLY

THOUSANDS OF PEOPLE CRUISE THE SURFACE OF Lake Powell never dreaming of the wonders beneath the waters, features that are not likely to be exposed again in our lifetime, nor in those of our children or grandchildren. In fact, they may never be seen again. This photographic collection of landforms will serve as a reminder that our world changes as dramatically in the vertical as it does in the horizontal.

Mr. Reilly lives in Sun City, Arizona. Readers may wish to refer to the following: Plan and Profile, Colorado River, Lees Ferry, Arizona, to Mouth of Green River, Utah, Sheet B; Navajo Mountain, Utah-Arizona quadrangle; Lake Canyon, Utah quadrangle; and Mancos Mesa, Utah quadrangle.

Lee's Ferry occupies a unique and important position on the Colorado River because the 1921 measurement by the U.S. Geological Survey began at the junction of the Green and Colorado rivers, plus the San Juan, and ended at the ferry crossing. This point is commemorated by a benchmark on the right bank there. The 1923 USGS measurement began at the gage well and went downstream. There is 0.62 mile between these two points.

Glen Canyon Dam on the Colorado River was constructed at Glen mile 15.2. Everything between this mile point and the head of Lake Powell in Cataract Canyon is now under varying depths of water depending on the volume of the reservoir. Both natural and manmade features in Glen Canyon are under so much water that they would be lost except for the work of those who thought to preserve the landscape through photographs.

In 1963 the Sierra Club published Eliot Porter's magnificent book *The Place No One Knew: Glen Canyon on the Colorado*. This eye-catcher awakened many people to the scenic grandeur that soon would be lost, drowned by the rising waters of the Powell reservoir. Porter showed his expertise in detailed, close-up views, rarely the long view or the hand of man. There is no doubt that man is interested in detailed beauty, but he is also interested in how he fit himself into the environment and adapted to it. The present work includes glimpses of man's markings from aboriginal eras to modern times, all lost to the reservoir.

Just 2.3 miles upstream from Glen Canyon Dam there was a large arch in the canyon's sandstone wall on the right bank (Fig. 1). It was similar to, but exceeded in size, the Great Arch of Zion. Norman Nevills frequently camped there with his river passengers. After dinner the inexperienced traveler usually rushed to place his sleeping bag under the arch and close to the wall, not realizing that scorpions scurried back and forth along the wall all night long. Stings often resulted. Experienced people sacked out close to the river, knowing it was cooler there.

Nevills, tending to add as much color to his trips as possible, elected to call this feature Outlaw Cave, supposedly after a man named Neal Johnson who Nevills said used the place to evade the law. In reality Johnson was a shifty fellow who sought to take advantage of the polygamous enclave at the ranch near the mouth of the Paria during the early 1930s. The brethren finally caught on to him, torched his boat and trailer, and drove him away. Johnson might

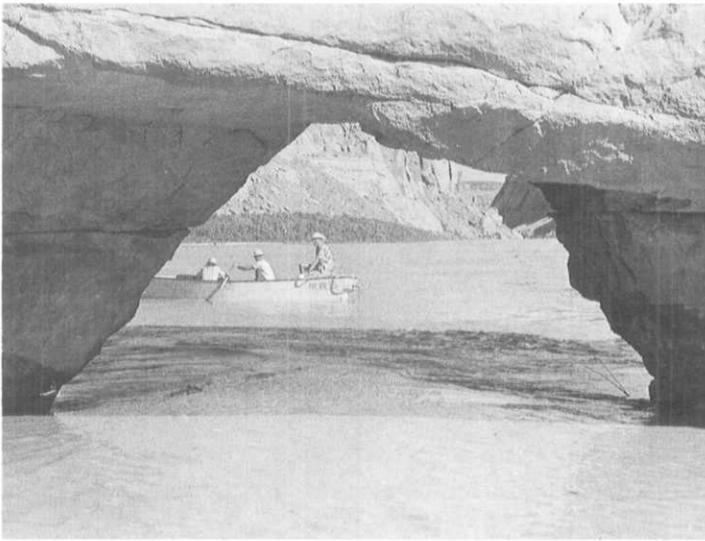


Fig. 2. In pre-dam days a finger of sandstone extended from upstream to the mouth of Warm Creek. It had a window through which boats could be run at certain stages of the Colorado.



Fig. 3. On Warm Creek about a dozen miles from the Colorado stood the base camp of the men who dug and hauled coal for the American Placer Corp. in 1912–13. The rock ruins of the camp were photographed on May 5, 1960.

have illegally trapped a few beavers, but his ambitions generally were much lower.

C. Gregory Crampton made a complete list of the names inscribed under the arch with chunks of charcoal from travelers' campfires, among them that of Nathaniel Galloway.¹ Since this feature was known as Galloway Cave long before Nevills came on the scene, there is no reason to rename it for a character of imagination.

A golden eagle had a nest on a narrow ledge high on the left bank, visible from the cave. The bird was seen on repeated trips until the increased activity of the dam builders drove it away.

¹ C. Gregory Crampton, *Historic Sites in Glen Canyon, Mouth of San Juan River to Lees Ferry*, *Anthropological Papers No. 46, Glen Canyon Series No. 12*, ed. Charles E. Dibble (Salt Lake City: University of Utah, 1960), pp. 90–92.

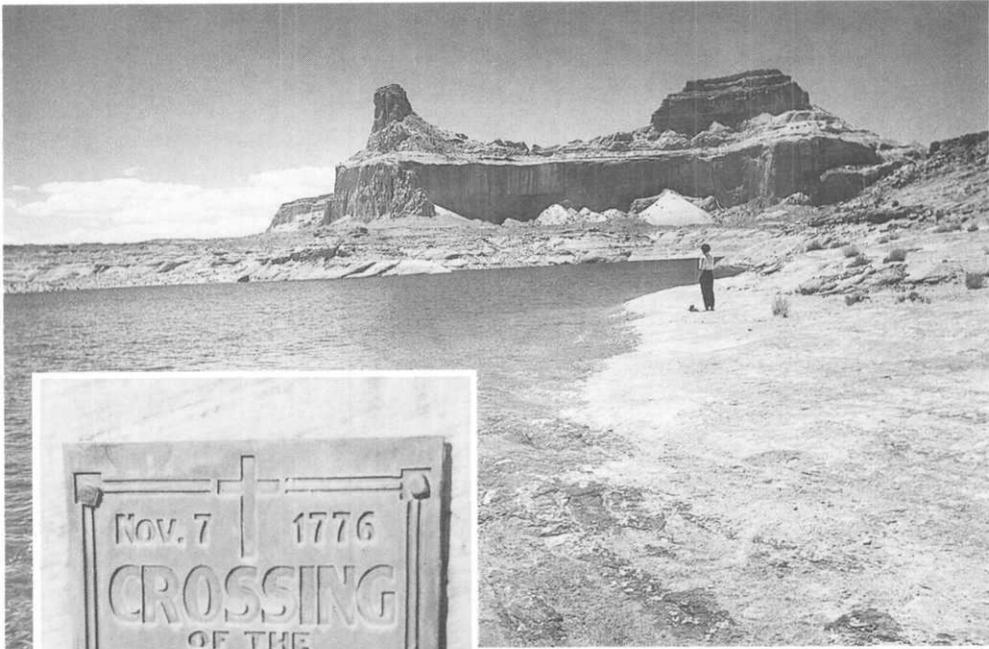
Slightly more than ten miles upriver, also on the right, was the mouth of Warm Creek (Fig. 2). Exfoliation of a sandstone finger on the upstream side had resulted in an opening through which boats could be run at certain river levels. Of course this window was covered in high water, left high and dry in low water. Now it is near the bottom of the reservoir.

Upstream in Warm Creek Canyon, about a dozen miles from the river, cabins built by the American Placer Corporation in 1912–13 housed miners (Fig. 3). The coal found in Tibbet Canyon, a tributary to Warm Creek, was accumulated at the cabins and then hauled by ox teams to the river. The failure of the steamboat *Charles H. Spencer* to return upstream due to inadequate power doomed the entire venture. Rumors circulated that a sheepman had found the cache of dynamite and blown off the roofs of the buildings. This stone-wall portion of Glen Canyon history was engulfed by the rising waters of the Powell reservoir.

The Ute Ford was used by indigenous man for centuries, but in 1776 an event took place there that in time resulted in a new name,



Fig. 4. Gov. George H. Dern visited the Crossing of the Fathers in April 1926. He was photographed by Oliver Grimes at the steps cut by the Dominguez-Escalante party to enable their animals to descend to the river—a more difficult task than the actual river crossing. Courtesy of Utah State Archives.



Figs. 5 and 6. The plaque, financed by Julius F. Stone, was placed on the sandstone wall in 1938 by Russell G. Frazier, Charles Kelly, and Byron Davies. It was removed by the National Park Service after Congress authorized construction of the dam. By 1963 the rising reservoir had created a totally different landscape, and all evidence of the old Indian ford had disappeared.

Crossing of the Fathers (Figs. 4, 5, 6). Fathers Dominguez and Escalante set out from New Mexico in July 1776 to open a route to Monterey, California. Eventually they realized that it would not be possible for them to reach the Pacific Coast before winter set in, and prudence called for a return to New Mexico. Semi-friendly Indians, through an interpreter, described the place on the Colorado where they crossed when the water was low. The Spaniards stumbled over a rough country before finally finding the elusive ford that came to be named for them. Fathers Dominguez and Escalante opened the modern era when they chopped some steps for their animals and achieved a crossing November 7, 1776.² Subsequent eastbound travelers entered the

² See Herbert E. Bolton, ed., *Pageant in the Wilderness: The Story of the Escalante Expedition . . . 1776, Including the Diary and Itinerary of Father Escalante*, published as vol. 18 of *Utah Historical Quarterly* (Salt Lake City: Utah State Historical Society, 1950), pp. 90–92.



Fig. 7. These petroglyphs, photographed on June 19, 1952, and other aboriginal records were located on the right bank at Glen Canyon mile 70.8. Some glyphs were moderately patinated and some appeared relatively fresh.

river at mile 39.3, went diagonally southeast to follow the shingle of the sandstone, and emerged on the left bank at mile 38.7. Jacob Hamblin and his companions also crossed here, and politicians even visited the site in later years.

There were many petroglyphs in Glen Canyon. Some revealed abnormalities among Indians—perhaps a result of intermarriage—that caused some children to be born with six fingers (Fig. 7). By comparing the size of the glyph with a modern hand, we might conclude that the hand of the model was traced before the full glyph was chipped into the rock. These glyphs, now underwater, were found at the upstream edge of what Nevills called Twilight Canyon at mile 70.8. The name Twilight Canyon was much more fitting than the later official name of Navajo Valley.

Coursing down from the northeast slopes of Navajo Mountain, Oak Canyon (Fig. 8) meanders to the Colorado roughly parallel to Bridge Canyon, the setting for Rainbow Bridge. It almost cut through to the river at mile 70.8 before curving around some stone dunes to enter at mile 71.3. Oak Canyon veered away from the river at a point almost opposite the petroglyphs at the mouth of Twilight Canyon.

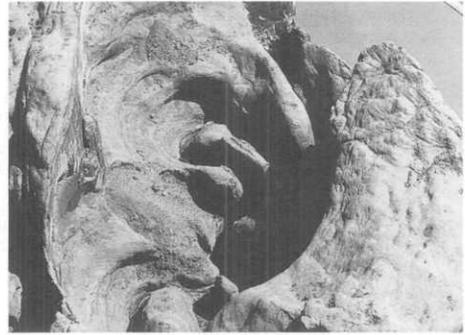
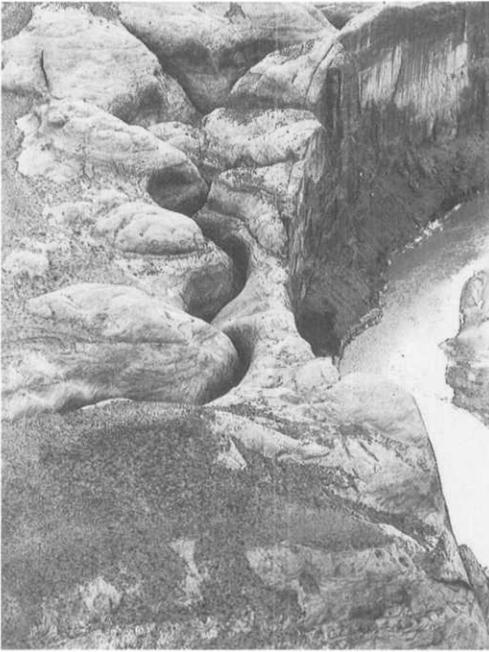
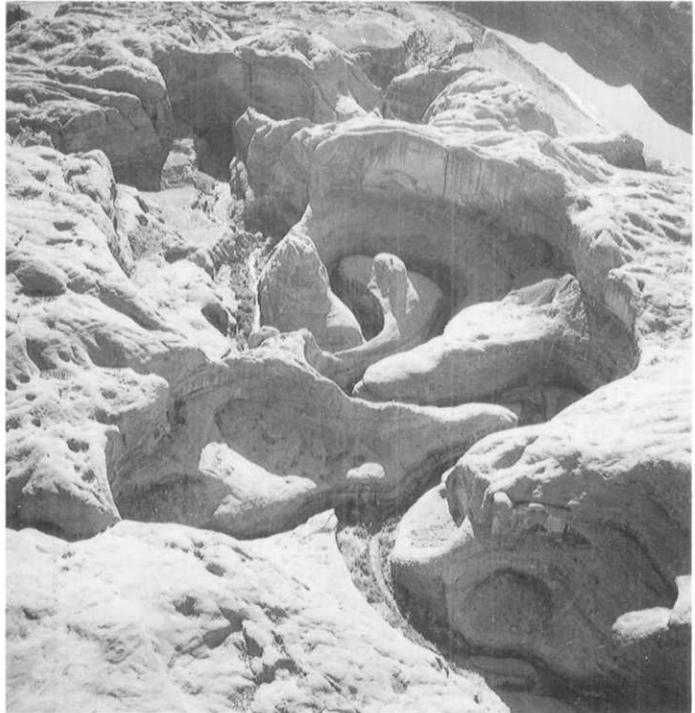


Fig. 8. The stream in Oak Canyon, left, occasionally contributed considerable detritus to the river—not enough to create a constriction or a rapid, but here the water ran faster and the sound was different.

Fig. 9. One would not believe that such a place as Hidden Passage, above right, existed until he flew over it.

Fig. 10. Sudden spot storms caused violent floods that removed detritus at an accelerated rate yet preserved some characteristics of the primitive landscape. Before the Powell reservoir destroyed this beauty it was best seen from the air. Stream flow was quite meager after a dry summer.

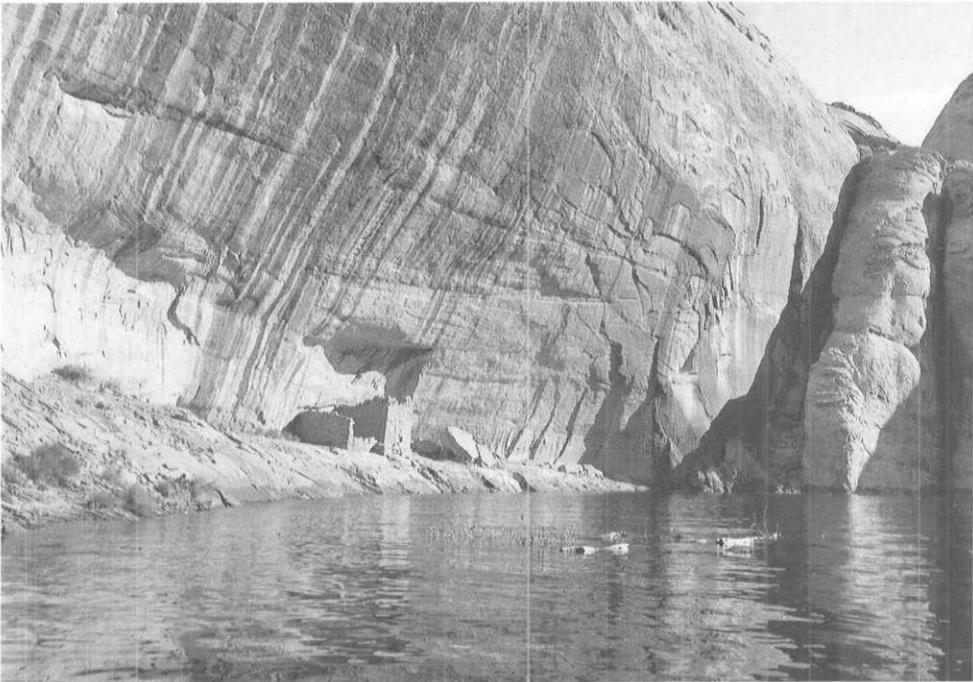


Under the right conditions a stream meandering among the dunes of Navajo sandstone could create some unbelievable twists and turns. The entries to such places rarely hinted at what might be



Fig. 11. In spring, gulches produce heavy flows; aside from cloudbursts that is when most erosion occurs. There is no trace of man in some of these scenic wonders.

Fig. 12. How did pre-Columbian natives get to such inaccessible sites (Ruín, Lake Canyon, mile 113.2) to build their dwellings?



seen, but often the scale was so immense that a more objective view could only be obtained from an airplane. Hidden Passage, a right-hand tributary 71 miles upriver from Lee's Ferry, was such a place (Fig. 9). Now the Powell reservoir covers the super-Euclidian forms and only a short bay remains on the surface.

A similar right-hand tributary six miles upstream was even more spectacular. It was unnamed until 1951 when the USGS called it Cottonwood Gulch, one of many so named in the West. A common characteristic of most of these side canyons was that their entries rarely suggested the presence of such sandstone fantasies (Figs. 10,11). Of course, this is all hidden from the present-day boater.

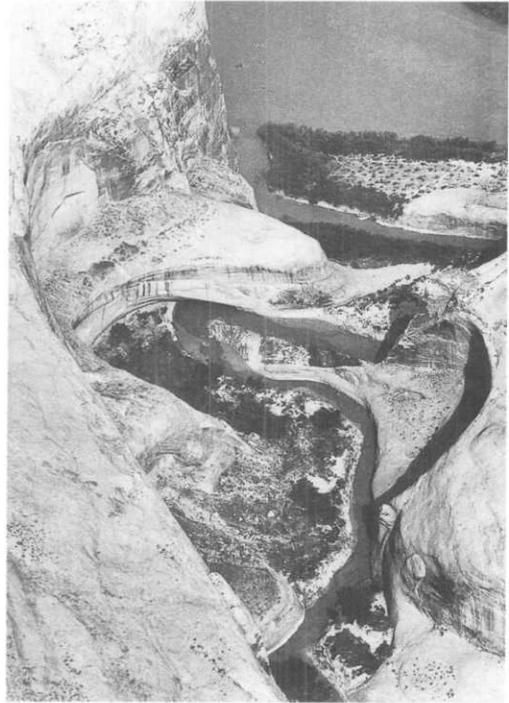
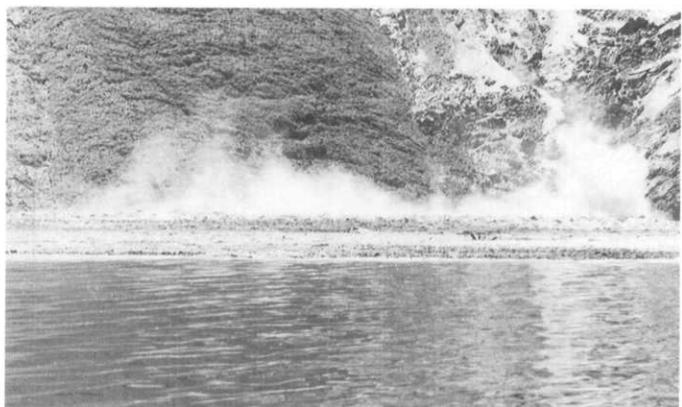
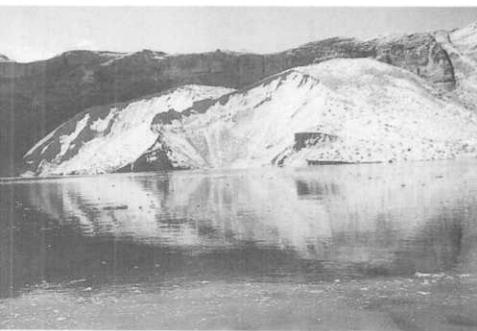
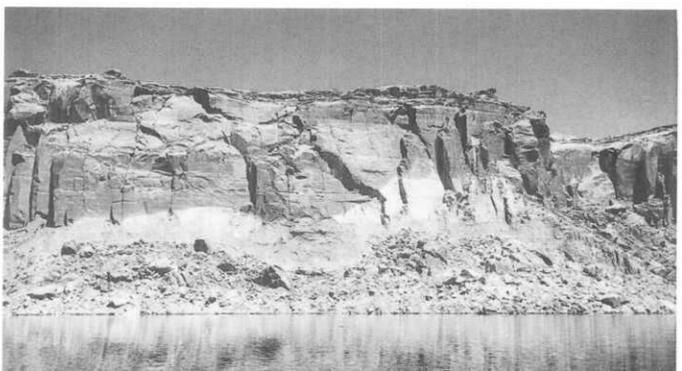


Fig. 13. Mouth of Moqui Creek. The length of a tributary appears to have had little effect in defining its character. Rather, low elevation of drainage and speed of flow seem to have created the more extreme meandering.



Figs. 14, 15, 16. Top photographs show erosion of large dunes as reservoir water rose, dislodging masses of sand that created clouds of dust. Lower photograph, taken in April 1968, illustrates slippage of talus slopes as rising water leached into cliff foundations.



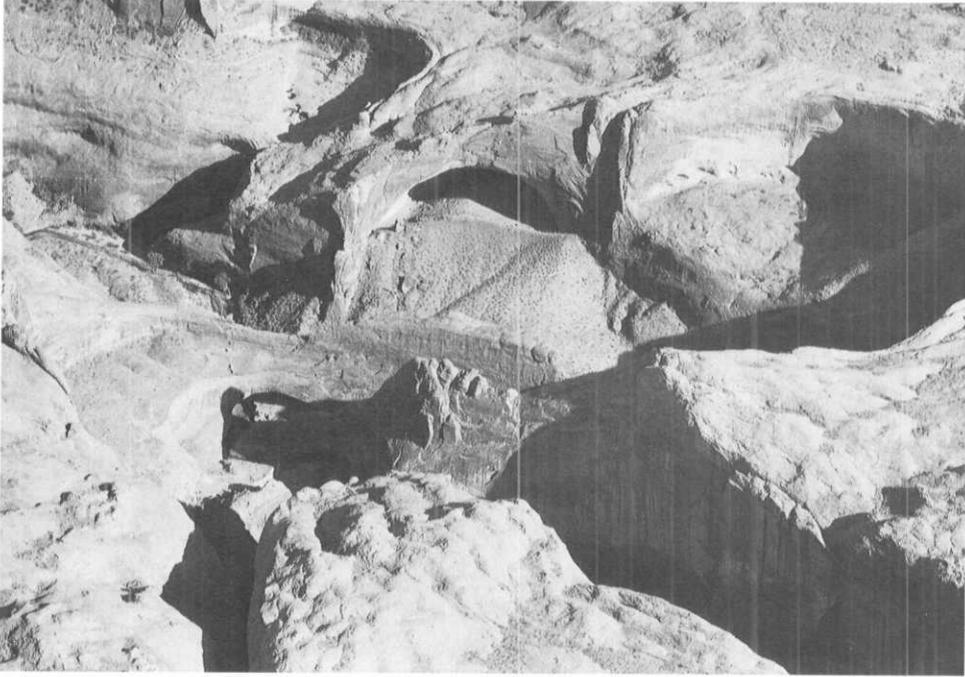
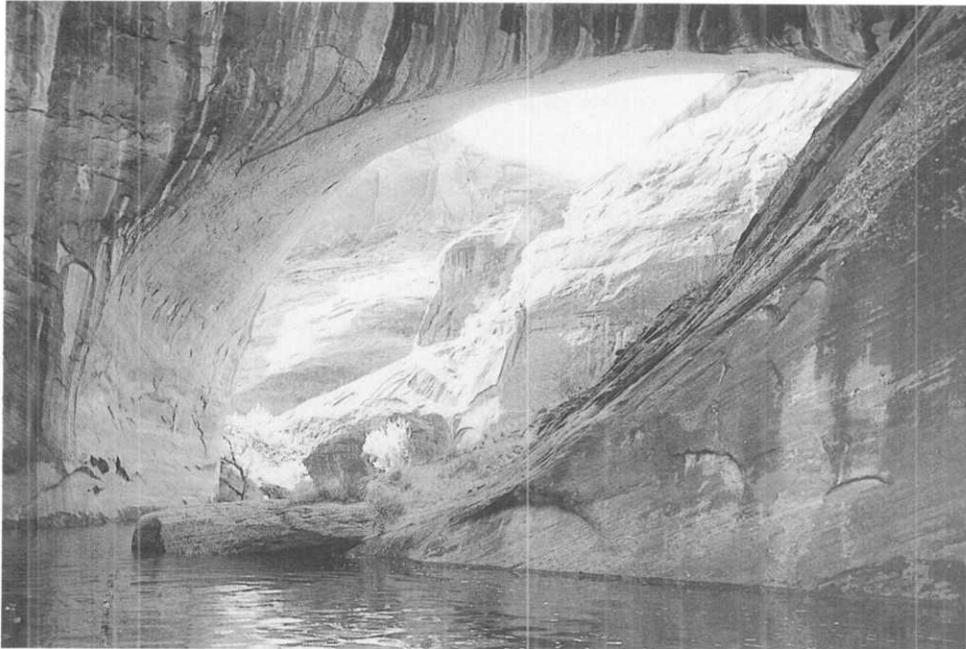


Fig. 17. Gregory Natural Bridge existed in lonely splendor, a gem in Glen Canyon's collection. A nearly perennial stream flowed under the span. This view was taken in May 1957.

Fig. 18. The encroaching waters of the Powell reservoir extended under Gregory Bridge in August 1964 and would eventually cover the structure completely.



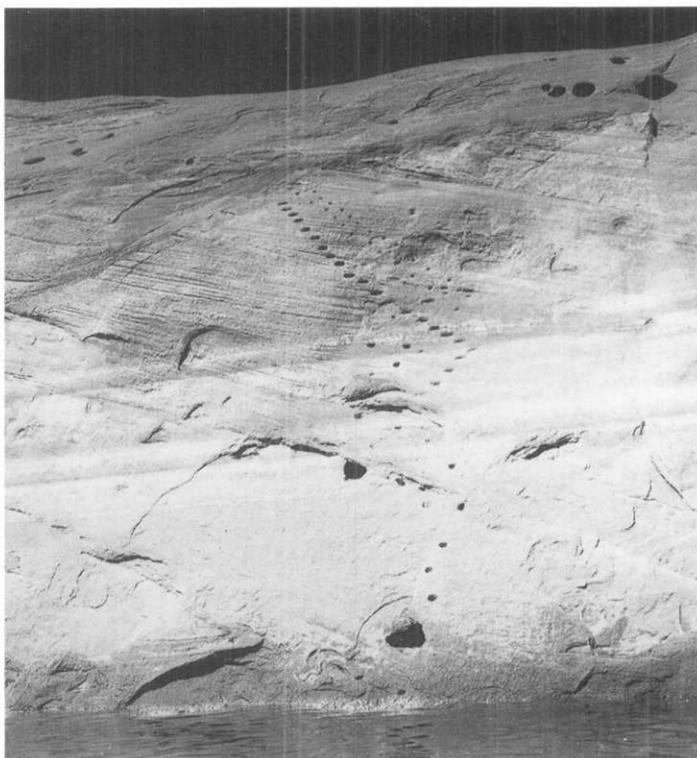


Fig. 19. Moqui steps at Glen Canyon mile 128.85 on the right hand remained well defined when photographed in April 1968. An important prehistoric route, they, too, are now covered by Lake Powell.

Another angle in Cottonwood Gulch suggests we are looking at an entirely different tributary. The views in spring and fall emphasize the seasonal differences.

The ruins of the pre-Columbian natives frequently were located in spectacular settings (Fig. 12). Not only did the aborigines build their dwellings in beautiful places, they added little flourishes with corncobs and rock inlay that showed an attempt to adorn the construction itself. A few days after this picture was taken, the rising waters of the reservoir claimed the site and it is lost forever. Lake Canyon was a left-hand tributary 113.2 miles upstream from Lee's Ferry.

Erosion is influenced by many things and few Glen Canyon tributaries responded exactly alike. Undercuts were gouged deeper, often appearing to be the beginnings of caverns. Moqui Canyon, just short of 125 miles above Lee's Ferry, was no longer than many canyon country tributaries (Fig. 13).

A short distance up the Escalante River a double-peaked sand dune reached nearly to the top of the high cliff. The encroaching reservoir had claimed about half of the downstream dune and was gobbling up the other as we watched. Great masses of sand would

slide below the surface, raising clouds of dust as they entered the water (Figs. 14, 15, 16). Today boaters skim across Escalante Canyon and never dream that the lake bottom is as new as the reservoir.



Fig. 20. Chimney of Cass Hite's cabin at Ticaboo, Glen Canyon, August 7, 1964.



Fig 21. Graves of Cass Hite and Frank Dehlin at Ticaboo, August 7, 1964.

Fiftymile Creek, called Soda Gulch by the natives, joins the Escalante River about eight miles from the old pre-Lake Powell channel of the Colorado. A half-mile from the Escalante, in Fiftymile, is a sturdy natural bridge named after the famed geologist Herbert E. Gregory (Figs. 17,18). This feature was seen occasionally by river parties, but by and large it probably was the least visited of any Glen Canyon natural wonder. In August 1964 the reservoir water extended under the span. Today it is completely covered.

Harry Aleson, who knew Glen Canyon better than the vast majority of its visitors, brought a minister to the river on October 8, 1962, and married his bride in The Chapel, a tributary that joined the Colorado at mile 118. This quite likely was the only Caucasian wedding to have been performed in Glen Canyon.

Almost fifteen and a half miles above Lake Canyon on the right was a well-defined line of Moqui steps (Fig. 19). When one thinks about the primitive tools used and sees the nature of the cutting, he becomes convinced that here was an important clue in defining native thoroughfares and migratory patterns.

Several very colorful characters lived in Glen Canyon, among them Cass Hite whose cabin was at Ticaboo, about a mile from the Colorado and 148.45 miles upriver from Lee's Ferry (Figs. 20, 21). Cass called his home "the Bank of Ticaboo" because he could pan gold whenever he needed funds. It was built beside an old Indian trail that ran along the flats of the right river bank. A magnificent panel of petroglyphs was about 50 feet behind the cabin. Cold fresh water ran out of Ticaboo Canyon, so Cass had all he needed. He was buried here, and today the gravesite, the remains of his cabin, and the petroglyphs are under water. Few boaters know the history of the place over which they skim.

Even nuclear power does not remove the need to build dams because they also provide for crop irrigation. A major question now before us is whether we can afford to build dams purely for power generation. This essay shows a small part of what we have lost in historic Glen Canyon.