

Bristolian Shoots Rapids On America's Wildest River



Party Prepares The Big 'River Dinosaur' ...
... River Is Even Rough On This Monster

By HOLMES ROLSTON III

LEE'S FERRY, Ariz. — It was on Friday, July 28, at an elevation of 3,107 that the command splintered the silence: "All aboard! Let's shove off!"

Buzz Belknap pushed our river "dinosaur" — a 33 foot rig built around a war surplus pontoon — out into the swift current, and 11 canyoneers aboard buckled on orange life jackets and wondered what lay ahead for 312 down-stream miles on the Colorado River.

Ron Smith headed her into Marble Gorge: Seated up front on a tarp that covered our duffle, I craned my neck upward at towering red cliffs, then looked downstream as Badger Creek Rapids came in sight. The cliffs were silent; but the river could roar!

SOON SWEEPED INTO water whipped white, I felt the raft toss, heave, and bend beneath me, and recalled the old Indian's warning to John Wesley Powell, one-armed Civil War veteran, who first ran the river in 1869: "The rocks, the rocks h-e-a-p, h-e-a-p high; the water go h-oo-wogh, h-oo-wogh; water-pony h-e-a-p buck; water catch 'em; no see 'em Injun any more! no see 'em squaw any more! no see 'em papoose any more!" I recalled the queasy feeling I had when I signed away all liability rights. Not long after, washing through Soap Creek Rapids, I had an inkling of what the Indian meant and why insurance was unavailable.

It seemed that the river had resolved early to teach us due

respect, and to remind us that here, on the third of the early river expeditions, Stanton in 1839 upset a boat and drowned a man. Our water-pony bucked, and we held on. The waves crashed over the bow and drenched us, and we held on. This was our initiation, a wild and exhilarating baptism into the muddy and violent Colorado.

THE RIVER TRIP starts here at the junction of the Paria and the Colorado because just above us is the mammoth Glen Canyon Dam, a tribute to modern man's ingenuity and constructive skill. Five million cubic yards of concrete have been poured into Glen Canyon to conquer the river, destroy the gorge, and create a spectacular artificial lake — a dubious exchange but seemingly a necessary one, granting the needs for power and water and popular tastes for "developed recreation" being what they are. Most prefer speedboats on impounded waters to rafts caught in roaring cataracts; the lake does substitute amusement for awe and wonder.

Long before the dam, Lee's Ferry was where men reached the river. Here, where Glen Canyon meets Marble Canyon, the land breaks away to give the best vehicle access to the river in 500 miles. Behind us, chaffing at the stakes to which they are tied we left two more rubber "dinosaurs," waiting for tomorrow and the voyage of a delegation of Congressmen headed by Rep. Morris Udall. Udall's grandfather was John D. Lee, renegade Mormon leader, who from 1872-1877 operated a ferry here, a service which continued until the building of the Navaho Bridge in 1929.

We move on now downstream, propelled and steered by a 20 horsepower Johnson outboard motor that cuts the duration of the trip in half. Oars are used only in emergency. Seventy gallons of gas are on board. Tied to our oval pontoon are two sausages, great long cigar shaped tubes that give stability. In the center are four fiberglass compartments that support us

and our gear. The silver and red rig draws only three or four inches of water, as we travel at seven miles an hour. Half the speed is that of the motor and half is that of the current. There are two rivermen: our skipper, Ron Smith of Grand Canyon Expeditions, and his boatman, Buzz Belknap. Both know the river well. Ron has run it for nine years; Buzz was with the first river trip upstream, a jet boat run in 1960.

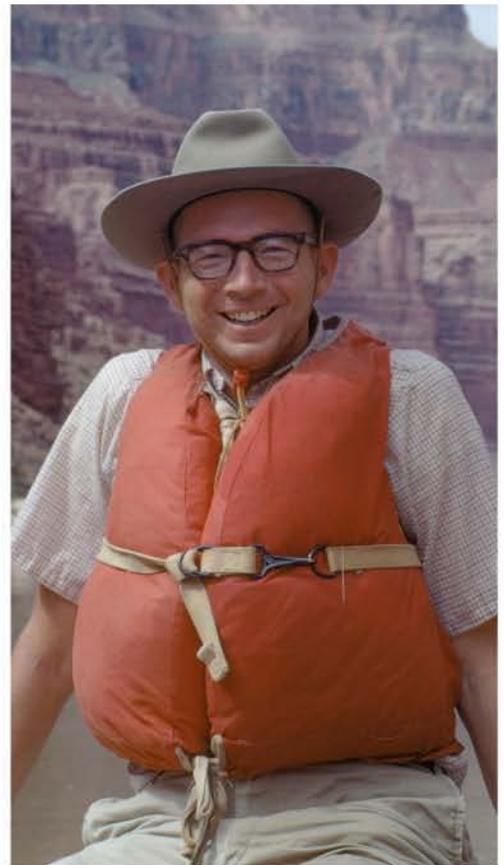
THE AFTERNOON takes us progressively deeper into Marble Gorge. We run 17 miles and put in on a large sand bar just below House Rock Canyon Rapids. The accumulated driftwood provides ready firewood and soon steaks are sizzling, cooked on a folding grill that supports griddle, black buckets, coffee pot, and Dutch oven. Water is simply dipped from the river, with assurances that the mud in it is harmless.

The night is spent under the stars, sleeping bag spread out on the sand. In the restlessness of the first night, I try to adjust to the new dimensions of time and space. Here am I, as ephemeral as a mayfly, in a canyon of canyons that could bury the East's grandest mountain, nine million years old and carved in the most ancient rocks on earth. I stare upward, realize how close I am to the precipitous walls, and hope this is not the night for the loose rocks above to tumble down.

Saturday, July 29. On awakening, I discover I have been investigated. Fresh fox tracks encircle my bed. We get off about nine. Our first white water is Tanner Wash Rapids. Bert Loper was upset here in 1949 and his body never found,

his misfortune preceded, most think, by a heart attack. Stanton lost a man, Peter H a n s - borough, here in 1889.

We are now 2,000 feet deep in Marble Gorge, one of the most majestic of the great canyons of the Southwest. The Redwall limestone rises above us, suggesting marble, for which the gorge is named. Though actually gray, it is stained red by the runoff of the overlying sandstone. As the river descends to lower strata, the change is marked by the appearance of numerous and fantastic pot-holes, recesses, undercut walls, and caverns. At Vasey's Paradise a subterranean stream pours out one third the way up the canyon wall to make a vertical green rock garden of ferns and mosses. Our lunch is on a sand bar beneath a gigantic alcove recessed in the canyon wall, Redwall Cavern.



Holmes Rolston Ready For River ...
... Lifejacket And Sense Of Excitement



Under That Spray, Maybe A Deadly Rock . . .
 . . . One Never Knows When Shooting Rapids

STEEL TOWERS, TEST borings, at "mile 39" mark the Marble Canyon damsite. We are reminded of the Bureau of Reclamation's proposal, now temporarily withdrawn, to flood with 275 feet of water the area we have been enjoying, destroying the first of the great Grand Canyon gorges. At the prospect of Marble Canyon's extinction we talk wistfully of what Glen Canyon once was. This was the place no one knew, or ever can know now. Those few who went there dubbed it the ladies choice among canyons for its calm waters beneath high cliffs of grandeur.

The quiet of the afternoon is interrupted by President Harding Rapids, named in 1923 by surveyors who while here got word by radio of his death. In the run we get swept around and thrown into the canyon wall, breaking a propeller pin on a submerged rock and being forced to use oars to pull the raft ashore for repairs.

We pitch camp at Nankowep Creek on a sand bar covered

with mesquite and tamarisk. High above, where the talus yields to vertical walls, there are Indian Cliff dwellings, 900 years old, thought to be granaries used for storage by a small tribe living on the flats below. Any existence here must have been precarious and forlorn. The hike up to see the four small cubby holes blocked out in a recess in the cliff takes two hours. Lizards skitter across the rocks at every step. There is much evidence of deer here, though the signs are not recent, for they live on the canyon rims in the summer and winter deep in the canyon. We have run 53 miles — 36 miles today. Here we enter the boundary of the Grand Canyon National Park.

SUNDAY, JULY 30. Foxes again! One of our party is waked in the night to find one nibbling on his feet. The river runners say we haven't run a "real" rapid yet, but promise us one today, Hance Rapids, adding excitement to our take-off.

At "mile 61" the canyon widens with the entrance from the south of the Little Colorado, a major tributary dumping tons of silt. The mainstream before has carried only the Paria's mud, as the dam catches all upstream silt. Now it becomes twice as muddy, recalling the Mormon settlers' complaint that the river was too thick to drink and too thin to plow.

Here the walls are 3,000 feet high, including 350 feet of green shale, then 100 feet of "marble," and many hundreds of feet of sandstone, capped by 500 feet of grey limestone. As we move, the walls are an ever variegating kaleidoscope of form and color. The south rim is visible now and in a single gaze we embrace strata from half a billion years. We are passing out of the Marble Gorge into the second great division of the canyon, the Upper Granite Gorge. We sight fragments torn from a downed airplane, lost here in 1956.

Just above Hance Rapids, we pause where sheer parallel walls, one sunlit and one in shadow, rise above our luncheon party. We reconnoiter the rapids to see where amidst the churning waters the big boulders lie. They form a "V" with the highest in the center. Back aboard, all gear is tied down for the run; we are instructed where to sit and ordered to hold on for dear life. The river seems to drop off downstream, ending in an ominous roar. Down the chute we go, into high, frenzied waves. So muddy is the river now that the white caps are gone. Wave crests are a chocolate topping on brown waters.

We ride the first of six fo waves, break over the second then the third breaks over us with a crash that drenches a

aboard. The raft bends and groans, then spins around, its bow caught in an upstream eddy and its stern still in the main stream. Then we revolve into the current again, alternately riding waves and having them dashed over us.

Glancing back we see that the river has fallen some fifteen or twenty feet in several hundred yards. Hance is past, but there is hardly time to collect ourselves before we are tossed into Sockdolager Rapids for a repeat performance.

THE HORIZONTAL sedimentary formations through which we have run for two days now give way to pre-Cambrian schist and gneiss, one cause of the new severity of the rapids. The river descends rapidly now and we journey in the bowels of the earth and far back in time, for the rocks of the sombre, narrow gorge we are entering are more than two billion years old. These metamorphics close in on us to form a canyon of a different character, often jet black and shot through with dikes of flesh-red granite. Their menacing appearance is enhanced as we look upward to see a gathering storm and lightning zig-zag across a darkening sky.

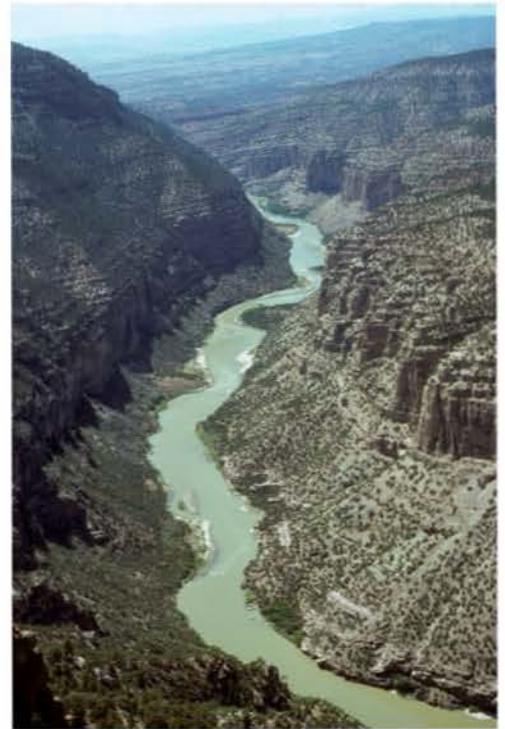
There is little loose rock now on the massive canyon walls and little pattern or order, aside from a disordered criss-crossing of the injected magma. There are no sand bars; walls rise immediately from the water's edge and afford no place to land.

We run Grapevine Rapid, where big boulders in low water reminded Powell's men of grapes on a vine. Buzz Belknap tells us how here in 1960 he watched a jet boat sunk going upstream. We pass under

a suspension foot bridge and arrive at Bright Angel Creek, having now run 87 miles, 34 of them today, and dropped 682 feet to an elevation of 2425 feet.

Our gear is unloaded just before the break of the storm. It rains, first softly, then harder. Soon we are soaked and begin to chill. Hugging the rock walls affords a double protection — a little shelter from the rain and more warmth, as they radiate into our bodies heat gathered earlier in the day. After an hour and a half the storm cuts back to a drizzle, which continues intermittently until dusk. Supper is chicken baked in a Dutch oven. Water for our kitchen is so muddy now that we mix it with lime and alum to hasten the settling of the silt. By dark, as I bed down in wet sand, the rain is over and there is a faint reddish glow beneath overhanging clouds.

MONDAY, JULY 31. A lay-over day at Phantom Ranch, the National Park Service lodge here is a mile deep in the earth. In the afternoon two boatloads of congressmen and their families arrive and set up camp next to us, crowding the beach — a symbol of the new boom in canyon travel. Up through 1965, in the hundred years since Powell first went through, barely a thousand persons made the trip. But in 1966, some 1,064 made the trip and this year to date 1,291 have made all or a part of the white water adventure. The upswing is due to the controversy over the two dams proposed in the canyon, to publicity surrounding the trips of the Kennedys and of Goldwater, and to advances in the river rigs that make the once perilous journey now at least relatively safe.



From High Above On Canyon Rims, River Looks Like Peaceful Ribbon

TUESDAY, AUGUST 1. We cannot get off as early as planned but must wait for the river to rise. The untamed river fluctuated widely in flow, from a spring flood maximum of 50,000 and 100,000 cubic feet per second, to a late summer and fall minimum of 1,000 c.f.s. Now the fluctuation is by release of the dam from 2,000 to 25,000 c.f.s., with a typical flow of 8,000 c.f.s. — not nearly as much as the 30,000 c.f.s. the river runners consider ideal, but it does prolong the water flow making trips possible now even in the fall. When the water is low, the rapids become doubly difficult, exposing rocks and increasing turbulence. By late morning the river has risen some, and our skipper decides to leave.

This is the big day on the river and we are carefully instructed to prepare for rapid after rapid in quick succession — Horn Creek, Granite Falls, Hermit Falls, Boucher, Crystal, Tuna Creek, Sapphire Creek, Ruby Canyon, Serpentine Canyon, Shinumo, Hakatai, Walthenberg, and so on. Crystal proves the most cantankerous. Named for Crystal Creek, it became a rapid of major significance last winter when a lateral canyon flood washed a large boulder fan out into the river. The rapid hasn't had time to settle down yet. Perhaps it will not. The untamed river in flood would soon flush out the boulders scattered into it, but now the flow of the captive monarch never reaches flood dimensions. We hike out on the boulder

fan. It is difficult to imagine a torrent sufficient to deposit rocks five feet in diameter and weighing tons. The river is studied with rocks cut to half its usual width, and they so lie that only a passage to the left is possible; then currents swirl below so that rocks will be hard to avoid. "If we only had six inches more water," moans Ron Smith.

THE CREW IS tense as we shove off. Life jackets buckled on, hats and glasses tied on, everything buckled down, each holding tightly into two ropes, we ride over a swell and plunge deep into a trough. Then the boat partly lifts but doesn't rise far enough and the top half of the next wave crashes over us. This further holds us down,

and more waves drench us. Then an eight footer lifts the bow high while the stern is yet in a trough. Our seats give way beneath us and we are hurled a foot or more out into the air, but hang on to the ropes that reconnect us to our seats. A couple of canteens and a camera get loose and flap in the air and I watch the six river bags tied on the sausages lift off the pontoon and then watch the ropes tug them back aboard. Pop cans float in the front compartment, now nearly filled with water.

Suddenly we come down hard, with a loud crash that jars the whole boat. We have hit a rock, a big one. A grinding crash follows as wood and fiberglass splinter. Blinded by the water, it is difficult to see just what



Colorado River Snakes Through Beautiful Walls Of Grand Canyon

has happened. We spin around, the stern pointed downstream, the bow stuck in the rapid, hung up on the rock. Some body sprawls over the front to see whether a pontoon has punctured but cannot see through the water piling up on us. The skipper shouts to get to the back of the boat and we scramble to the rear to take the weight off the front, hoping we will float free. The rock beneath us grates against the floor as the current pulls us loose. Downstream we stop to inspect the damage. The front compartment is fractured in three places, and a corner by which it hangs onto the pontoon has been torn loose, but we go on, concluding that repairs can wait till sunset.

LUNCH IS LATE at Shinumo Creek. Hidden up a narrow side canyon is a delightful plunge pool. A little waterfall pours in warm water; we soap and shower beneath the falls. An added delight is a rock corridor that runs round to the right by which you can crawl behind and dive out through the falls.

The level above us of the unconformity between sedimentary rock and the schist and gneiss of the inner gorge has been lowering. Camp is where the unconformity contacts the river, just below Elves Chasm. Flat sandstone strata are etched into a wall 300 feet above us, and a grotesque ragged butte towers high over that. Talus rocks are of every type, shape, color and pattern. I sleep on a sand dune.

Wednesday August 2. Our breakfast is interrupted by the thunderous flapping of a Bureau of Reclamation whirlybird bringing another load of ice, drinks, and the morning papers to the congressmen camped a mile up river. Our river men

are angry at the VIP treatment, as they have asked and been denied permission to use helicopters to supply their boats.

We drift down Conquistador Aisle, where the river forms a majestic promenade between cliffs that rise up and up. So muddy is the river that when, in the 100 degrees heat of the day, we pass a rapid that spews up especially fine spray, the atomized droplets evaporate in midair to leave a fine dust which rises in thin brown puffs above the water. Our clothing is now stained the color of the river and matches our well-tanned skin. The mud splash we constantly receive dries to leave a brown film of caked silt.

THE RIVER NOW turns north, as we enter the Middle Granite Gorge. Dark rock reappears, glistening like anthracite coal or the steel blue black of a gun barrel. Rapids trouble us today because of low water. At Deubendorf we wait an hour and a half in the midday sun, dipping into the river to keep cool, but the water does not rise. The pontoons have to be constantly wetted too when we wait, unless we deflate them some, for they will overinflate and burst. Eventually we walk around the rapids to lighten the boat.

Turning west, the river enters the Granite Narrows and reaches its most narrow point. We put in for the night at Deer Creek Falls, where a sidestream plunges 150 feet across the Great Unconformity, just as the tributary enters the river. We swim and begin to set up camp when a copter descends to land on the sand bar just across the creek. One of the congression-

al party failed to hold on in the Deubendorf run, was flung about the raft, broke his nose and cut his head badly with profuse bleeding. He has already been airlifted out for hospitalization and the chopper is here for two more who have decided to quit the party.

The Udall group has lost three motors in today's run and a new one has been flown in. This is why Ron has three identical motors aboard, tools, parts, and even the motor manual. There is also a radio with which we can contact passing aircraft, having them relay emergency messages out of the canyon.

The dinner fare is 40-mile stew, a delicious hodge podge—disconcerting only as we learn that its originator and the best chef on the river capsized and drowned a month ago at what will be our first rapid downriver tomorrow—Upset Rapid. The stew settles better when we learn that drownings have been remarkably few on the Colorado, only this one in the last twenty years. We are glad for the fresh water, for we are tired of drinking the river water.

WE HAVE COME today 14 miles, a total of 136 miles, dropping below 2,000 feet. This accounts for the increasing heat. At bedtime, my vision is restricted by the high canyon walls, but even so, myriads of stars appear through a ribbon belt in this rock-roofed world. I count a dozen falling stars in twice as many minutes, then fell asleep, lulled by the dull roar of the river at my feet and the higher pitched hiss of the plume falls above.

Thursday, August 3. A long day and a grand one, 49 miles.

Upset Rapids is bad only if you hit the big hole, a deep dropoff that can flip even a craft of our size. But we shoot by the hole, gasping at the turbulent hell of foam and thankful to be twenty feet to the left of it. Much of the day is spent alternately gaping at tier after tier of crags and cliffs and snoozing in the sun, as we become satiated with the vast scenery, then waking to wonder whether perhaps we are not dreaming yet of turrets and bastions on some great medieval fortress.

We lunch near Havasu Canyon, where a five foot entry at river level opens into a vast, labyrinthine lateral canyon. Here we pass from the National Park into the Grand Canyon National Monument. The Bridge Canyon dam, if built, will back water into this area. Late in the afternoon, the red rock becomes coated and plugged with a dark basaltic lava. The great eruption once dammed the river. What a mixture of fire and water that must have been! A gigantic lava pinnacle, called the Niggerhead stands erect in the river. High above us a thin plume of water pours out then hits rock, spills off it and drops again in its descent to the river.

TO INSPECT LAVA Falls we climb a high bench laden with lava and barrel cactus. This rapid is so treacherous, noted for its huge boiling holes, that, until the coming of pontoon rigs, it was never run by boat but always ported or lined. This one I spend an hour walking around to photograph, but I can get off only four shots in the moments that it takes the rapids to sweep the raft through.

Friday, August 4. Two burros are spotted at riverside about

mid-morning, descendants of animals abandoned by the early Spanish explorers. By afternoon we run our last rapids, Diamond Creek, Travertine, and Mile 231 Rapids, and are soon in the long stretch of water where all rapids have been silted in by Lake Mead below us. The water is quiet and the run becomes monotonous, though the sublime panorama is undiminished.

In the late afternoon we pass Separation Rapids, which, prior to their silting, were among the wildest of the river.

AFTER 61 MILES today, camp is an uneasy one as we are in a creek bed subject to frequent flash flooding and there is a thunderstorm brewing as we go to bed. But no higher ground is available.

Saturday, August 5. We leave not long after daylight, as we hope to cut the trip short and make the long haul 66 miles into Temple Bar on Lake Mead in one day. We ride loose and lazy, life jackets thrown aside and gear simply tossed in.

The Grand Canyon ends ab-

ruptly at the Grand Wash Cliffs, and we emerge on Lake Mead, elevation 1,000 feet. It is yet another seven hours at our slow 5 m.p.h. crawl to Temple Bar Marina, and we do not arrive until dark, barely beating a squall into port.

In over three hundred miles we have dropped 2,107 feet, run 107 rapids, and known a great adventure on a great river.

Dr. Holmes Rolston III, pastor since 1959 of the Walnut Grove Presbyterian Church, recently completed a boat ride down 300 miles of America's wildest river — the Colorado through the Grand Canyon rapids. Mr. Rolston, an amateur naturalist, recently wrote a story about the native fauna, flora and natural history of Washington County, and this is the day-by-day report of the wild river ride. His pastorate in Bristol has terminated and he will soon begin a graduate program in philosophy at the University of Pittsburgh. He took the river trip beginning on July 28 and ending on Aug. 6 after leading a Philmont Scout Expedition in New Mexico composed of members of the Sequoyah Council from June 28 to July 8.

