

## Harvey Butchart's Hiking Log

### DETAILED HIKING LOGS (June 5, 1971 - May 14, 1972)

Route west of Cove Canyon

[June 5, 1971]

Marston had suggested that the prospectors whose note Nevills had found at the mouth of Fern Glen Canyon had reached the river through Red Slide or Cove Canyon. While I was on the river with Ken Sleight I noticed that the Redwall facing the river is rather well covered with a big red rock slide for a mile or so west of Cove Canyon. I thought this was probably the route along here.

Riffey told me that Pat Bundy had gone to the river along here somewhere and he indicated a certain arm of Cove Canyon as the route. What I couldn't see from the river was a way to get through the Supai, but I supposed that there should be a way around the corner somewhere inside Cove Canyon. Furthermore, my map of the Grand Canyon National Monument (GCNM) showed a trail going down inside Cove Canyon and immediately around the corner to the west beneath the Supai facing the river. Riffey was able to tell me that this trail ends at a mine that once produced a carload of ore, perhaps of copper and zinc. He said that there had been a ladder up 300 feet of sheer Supai cliff to the road and that there had also been a man powered hoist to bring the ore up. I wanted to know the area firsthand.

After spending Wednesday evening at Riffey's, I drove a short distance along the road that turns from the Toroweap Overlook road to go east for three and a half miles. I figured I would drive on to the trailhead by daylight, but after changing the flat tire I thought it might be safer to walk three miles rather than take a chance on a second flat. The morning was cool and clear and the whole region is fine, a most enjoyable place to walk. A bonus was that I got a good chance to see the animal tracks in the dust. When I came to the rim of Cove Canyon, I had to study the map again before I was convinced that a trail could get down. It is most interesting that there should be a gently sloping bay breaking the perpendicular rim of the Esplanade just at this one place.

The trail is still in fairly good shape as it switchbacks to the base of the sheer wall and turns around the corner to the west. It is an easy walk into wildly beautiful surroundings. At the top of the Redwall where the wall turns northwest is an incongruous patch of bright yellow clay which the mine developer called the Golden Slide. Here the trail goes along the very base of the Supai cliff, but it is nearly obliterated. It is only about as good as a bighorn sheep trail. Incidentally bighorn droppings and hoof prints are seen occasionally all over this area on both sides of the river. I saw deer and antelope as I drove through Tuweap Valley.

On the way down I lost sight of the trail just before I reached the Golden Slide. Talus filled ravines cut through the top of the Redwall on both sides of the Slide so I started down the near one. About 200 feet down, this came to an abrupt drop but I was able to climb back a short way and make my way over to the other ravine. Here one can go down through another section of the Redwall before coming to another awkward drop. On the return I checked the possibility of going up to the west to the other side of the big red slide. The east side of the residue of a great landslide has eroded into a vertical wall of rubble

punctuated with fantastic towers and recesses a bit like the patterns at Bryce Canyon. On the west side of this material, I feel rather sure that one can walk down without being stopped by a fall for a long way. As I did it, I had to leave the ravine and go along a very narrow and exposed ledge to the east. After a hundred yards of this I found a slot that took me below the fall and from there down to the river was rather simple. I had to work over a ridge or two of talus material toward the bottom. It took me two hours and ten minutes to go from the trailhead to the river.

After lunch I checked Cove Canyon. It is wider and more sunny than Fern Glen, but there are some seeps in the walls with fine ferns and monkey flower decorations. Only ten minutes from the river there is a fall that would stop even a good climber. There is no chance at all of a bypass. I returned by the same route except that I went up on the west side of the Golden Slide and found tools and a ladder. It was a fine trip.

Riffey found that Pat Bundy and another man had gone clear to the mine before getting down to the river. then they had gone along the riverbank west of the usual Lava Trail before going up to Toroweap Valley by a route that they think is easier.

#### Mohawk Canyon

[June 9, 1971 to June 10, 1971]

I wanted to allow a good long day for reaching the river, so I drove the truck to the shack eight tenths of a mile short of the road end at Mohawk Canyon before turning in for the night. It was good to sleep in the shell camper because three horses came around in the night making a lot of noise. Being alone I could eat as early and go as I wanted to, and by 5:00 a.m. I was started. Since my main interest was to see the canyon beyond where I had been before, I took no time out to look for interesting points in the upper canyon. I did notice that there is still some water in the pothole in the Coconino, but I spent little time admiring the walls and towers of the upper valley. In addition to the place where one could come down from the east rim, I noticed a place where I figure one could get down from the west too. I would disagree with George Billingsley who thought that Mohawk is a dull, uninteresting place.

Most of the way I preferred getting out of the gravel of the streambed and using the horse trail through the sage and open sandy flats. This and the decision to keep going without any side investigations resulted in my best time for reaching the barrier with the pothole and the spring where I had slept under the overhang. Billingsley and Jensen had reached this place in six hours from the trailhead when they were looking for Sears, Varin, and Wehrman, but I was pleased to see that I could do it in six and a half.

In the Supai, a rattlesnake buzzed hard and long from about ten feet to one side of where I was walking. I should have thought of my camera because I am rather sure it was the Grand Canyon pink rattlesnake. It would be interesting to show a color slide of this snake for confirmation. It was medium sized, about three feet long. This was the second I have seen in 1971, more than my average for this period. The pothole on the flat ledge well away from the streambed still had quite a bit of water, but it was down from the rim by half its depth. The spring under the big rocks in the bed nearby was useless. It just made a wet streak on the rock. It had been flowing well in the fall of 1968 and I had assumed it to be reliable. However, there was a small flow from the east wall about five minutes walk upstream from this one. It keeps alive a bank

of maidenhair fern. I believe I could have built a little pool where it comes out in the clay on top of a flat rock and gotten enough to be of use.

Billingsley had said that one uses the bench on the level of this campsite ledge but I saw that he has marked a way to climb up a bit to get on it. I went straight north at the end of the ledge and then did a bit of climbing to get on the regular bench. I recognized that this is what I had done on 9/28/68 and when I had come back I had come down to the pothole via the route a bit to the south, the one George has now indicated with rock piles. Within ten minutes along this precarious bench I noted George's cairns. There are plenty of bighorn droppings along here so that I should have been encouraged in 1968. Where I stopped and took my picture then I was only five minutes from the place George came up. If I had gone on that far I would have been curious enough to see how far I could get down. This route is back in a shallow ravine and I didn't notice it from where I stood. All I could see was that the bench went on and that I was a long way from the river. As noted in the other log, the east wall had no bighorn signs, and from the west side on this occasion I could see that it led to a dead end.

George's rediscovery was most interesting. For 40 feet it is very steep but there are plenty of little ledges. Just as you think that the bottom seven feet is going to be a hopeless straight drop, you see the stocky little tree trunk wedged in place. The upper end has been trimmed so as not to project more than a few inches above the notch in the rock and the limbs have also been hacked off leaving little stubs that make adequate footholds. This work seems to have been done by a stone axe indicating considerable age. The lower end of the little tree has a bend leading to the root system and this was useful to the early engineer. Rocks are packed solidly around this base. Probably I could have managed my pack in getting down here, but I had brought along a rope, and I lowered my pack with it. On the return I also hauled my pack up. Moving carefully along the bench and getting down with the time to manage the rope took about 45 minutes from the campsite by the pothole. About 15 minutes walk down the bed, one comes to a tributary from the east, the only one in the Redwall that cuts down to the level of the main streambed. There is a nice flow of water from this side which nourishes all the water loving plants and flowers and the sound of small falls is cheerful. Right below this junction, however, the narrow canyon is blocked by more chockstones. Sears, Varin, and Wehrman took this head on with a rope, but George found a fairly obvious short bypass. You need to back up about 40 yards and climb up to a ledge on the west side. The way down is just a bit difficult, but the whole process can be done in less time than it takes to uncoil and coil a rope. From the base of this bypass, it is straight walking down to the river, but this takes close to an hour. The side stream must be the one draining the northern most bay of the high plateau between Mohawk and National Canyons. The water soon begins to disappear in the gravel, but before it finally goes under, there are some fine bathtubs in the bedrock. The lowest water is about 20 minutes walk from the river. A word of warning. Perhaps the river would be better for drinking. I felt a bit below par as I drank this spring water on my way out, and it may have the effect of a mild physic.

I reached the river in nine hours and ten minutes at 2:10 p.m. with lots of time for reading my magazine and enjoying the scenery. I did go upriver and climb the river talus for a picture of Stairway Canyon, and one diversion was to watch three rubber boats go by. They were oar powered but they were big enough to carry five or six men apiece. The oarlocks were mounted two or three feet above the frame on top of the baloney tubes and the rower stood up. They followed the best current through the minor Gateway Rapid.

This size is too big to portage or line but the one pair of oars would give little maneuverability. At Vulcan the rower must try to position the boat at the top and then pull in the oars and hang on.

It was comfortable with very little by way of cover most of the night, but the gnats which like to crawl around the eyes and nose were a bother until it got dark. I was walking back up canyon before 5:00 a.m. and had no direct sun until after nine. The day was fine for walking with a breeze and some shade from clouds.

A big buzzing of flies called my attention to a dead doe below the lowest bypass. I couldn't see what it had died of, certainly not killed by a lion or predator. Up where the horses and cows can range, in the bed there was the skeleton of a bighorn. I couldn't tell for sure whether it was an ewe or a very young ram. I think it was the latter for horns seemed stockier than those of an ewe although they hadn't developed much of a curve as yet.

When I was within five minutes of the car, I was admiring some shallow caves and cubby holes in the limestone. Then I noticed that one of them went clear through the fin of rock forming a tunnel. On the way out I felt more weariness than I thought appropriate, but I rested five minutes or more at the end of each hour and reached the car by 4:40 p.m. Perhaps 11 hours and 40 minutes uphill isn't inconsistent with nine hours and 10 minutes going down.

The walls in the upper part and in the lower half are most awe inspiring. It seems remarkable that there is a good route through such a canyon. Birds were singing, and flowers were blooming, and it wasn't too hot. It was a grand trip.

There are several places, along the upper bypass and above at about the same level, where festoons of blunt stalactites decorate the walls below shallow overhangs. The lime charged water seems to issue from a horizontal crevice. They are uniformly about four feet long by six inches in diameter. I don't think I have seen anything quite like this elsewhere (east arm of Burnt Canyon).

Saddle west of pinnacle 5580 near Lake Powell  
[July 11, 1971]

Just west of the mouth of Cascade Canyon there is an area of little harbors behind some islands. We found a neat spot for camping here with a place to moor the boat among some submerged brush with bare rock to step out in.

On Saturday evening I went up to the top of a knob just east of where we camped. This involved walking up the bare sandstone just about the steepest slope possible for crepe rubber soles. The view east and west along the lake was fine and the vista of Navaho Mountain was super.

At five on Sunday morning I took a canteen and my camera and started up the same way while the other three were still sleeping. I had to keep rather close to the sheer wall above the lake to pass the ravines going down into Cascade Canyon. At two or three places the route took a little study. When I got up on

the flats at the 4240 foot level, I saw that I had time only to go up to the saddle north of the pinnacle which makes such a fine landmark for the location of the Rainbow Junction.

I could follow a steep talus on the west side of this saddle. At first it wasn't obvious that I could reach the top of the wall between the pinnacle and the equally high wall to the north of the saddle, but there was plenty of broken material for a ramp at the south end of the saddle. A notch in the top of the wall prevents one from going very far north along this saddle, but just before the break I found a well built cairn. At the south end of the saddle there is a minor crack going down to the talus on the east side. I didn't feel sure I could get down and up here, but I am sure a good climber would find it fairly easy. An old twisted tree trunk was lying on the ground at the base of the crack. There are no trees around so I assumed that someone had placed this here to assist in getting up.

The open area called Navaho Valley above the cleft of Twilight Canyon extends six or seven miles to the north. It was obvious from my viewpoint that one could get out of the valley to the Kaiparowits Plateau at the north end. I believe one could go east around the base of the 5580 foot pinnacle to get into the valley.

I had used more than one and a half hours to get to my highest point, 1800 feet above the lake, and I also saw some tracks that I took to be bighorn hoofprints. Three or four small birds and a raven were about all the wildlife I saw. From my height the north side of Navaho Mountain and the intervening wilderness were particularly impressive. It was a great experience even though David Haskell, a young ranger I met at Rainbow Marina, says that there are many better places to hike in that country.

Mystic Spring (?) and Spencer Terrace  
[October 2, 1971]

With Mystic Spring shown on the old west half map and with the picture in James' In and Around the Grand Canyon, I thought it would be a simple matter to locate the site with a shot that would duplicate the one in James. I had been by the spot before without seeing anything, but according to McKee the spring has been dry for many years, but now I wanted to pinpoint the same rocks shown in the photo.

The day was clear and cool but it had rained on Wednesday and from the puddles near the village, I was dubious about the road through Pasture Wash. Out here the road was dry and no new water had run into the tank 20 miles west of the village. Rocks on the last part of the drive to the Bass Trailhead seemed threatening to tires, but there is no danger of getting stuck. I drove from the pavement to Bass Camp in one and a quarter hours.

On a previous trip down the Bass Trail, I photographed what I took to be a ruined dam built by Bass in the bed of the wash where the trail reaches the Coconino. I have never seen this again and I suppose it has been removed by a flood. I was careful to watch for the ruins to the east of the trail where it starts down the Coconino. On my return I had a bit of extra time and I climbed up to the high ones directly above where the trail starts down. The best preserved is well camouflaged and the last few feet to it require a hand and toe climb. James thought that these were mere storage bins, but this one has an intact door big enough to crawl through and it is long enough for a man to lie in. If the roof rested on the present wall, it would offer head room only for sitting.

There are a lot more cairns to mark the trail than when I first used it. There is a large cairn with a tree trunk held in the center where the regular trail and the Esplanade Trail to the west join, but more often than not I have missed this junction. With all the new cairns, I was led right to it. When I was coming back this way in the fall of 1969, I went up into the bay west of Fossil Mountain instead of the one having the trail. This time I studied the appearance of the right one so that I would never make that mistake again. Where the wash comes over the Coconino fall, there is the usual black band, but in the right bay there is a broad white patch near the top of the black.

I wanted to go to Mystic Spring via the route shown on the Matthes Evans map which is around the west side of Mount Huethawali. I stayed on the regular trail until I was past the head of the cutoff near the south end of Bass Canyon and then I went down across the shallow ravine to climb to the top of the Esplanade south of Mount Huethawali. Where I crossed the ravine I encountered two and possible three mesal pits close together. Walking is faster where the map shows the old trail because of the blackbrush on the slope closer to Mount Huethawali. There is still enough burro use to maintain trails through here.

As I approached the west end of the ravine heading at the south end of Spencer Terrace, I reviewed the picture from James of the burros drinking at Mystic Spring. The map was studied carefully right on the spot, but I couldn't locate the picture even though I considered three levels. When I read the text in James, I begin to wonder whether the map places Mystic Spring correctly. James refers to the Mystic Spring Plateau as the western most offshoot of the Le Conte Plateau. I take it that the latter is called the Darwin Plateau on the map. James speaks about looking down into Copper Canyon and then riding out towards Mystic Spring. This would imply that they were going around the east and north side of Mount Huethawali to the spring which was west of its location on the map. I also looked for Seal Head Rock, shown by James on page 155 with no luck, from the base of Spencer Terrace to the east and south. To use my time and get some great views, I walked to the north end of Spencer. Three days after the rain there was water in the depressions on the bare rocks, especially where the surface dips before the final rise to the north. The air was clear and I could see an amazing panorama, but only one spot of the river, at the mouth of Waltenberg.

Siegfried Pyre  
[October 9, 1971]

Ever since Davis and Babb had climbed Siegfried Pyre, I had been eager to try. Their route is via a ravine through the Coconino on the southwest corner. For the approach they had used a route off the rim that I had found on the right side of Kwagunt Canyon near the head and had followed the Hermit to the Pyre. See the log for 8/24/70.

The year 1971 had been below normal for precipitation so I was interested in seeing what the seep springs are like in the fall too. There was still a bit of a pool at the spring just west of the base of the Coconino descent and the seeps along the base of the Coconino farther east were also showing the same amount of water as in August, 1970, a wet year. The best of these showed more of a pool than the spring at the base of the first descent. To find it, remember that it is at the head of the ravine which goes down to the head of the Redwall gorge of Kwagunt. The little stream about a quarter mile northwest of the Kwagunt Lava

Saddle was still flowing as well as ever. Jorgen and I must have entered the thicket in this drainage too high since I recall that our deer trail didn't go through beyond the water. There is a continuous trail across the stream lower down, but you don't have to go as low as Jorgen and I did on the return. On that passage we didn't see the water at all.

The party this time consisted of Al Doty, John Ritchey, Bob Packard, and myself. Doty and Ritchey are real climbers and Packard found the grips and toeholds with greater speed and assurance than I did on this climb. All of us are good hikers. They were all good sports about the locust and other thorns and we made good time. It took us 30 minutes to go from the truck parked at the E6 junction to the bottom of the Coconino and we were at the saddle where Jorgen waited for me in three hours. We found a deer trail going to the north of the Coconino spine of the graben which crosses over to the Lava Creek side south of Little Siegfried. It dodges the bad manzanita by dropping low and continues along the west base of Siegfried. We all paused at the right place for a fine view of Hartman Bridge. We also noticed the place where Davis must have charted the route off the rim above Hartman Bridge. If this route isn't too slow and difficult, it would certainly furnish the quickest way to get down to the charms of this section of the park. Perhaps a rappel and Jumars would go faster than the climb down the log that Davis pushed over a low cliff for a ladder.

The other three of the party were seeing this section of the canyon for the first time and we were all enthusiastic about the views. A big bonus of this trip was the fall color. Ritchey hadn't realized that there are plenty of maples in places and that they would put on a show of scarlet and yellow. John also called my attention to a cave opening just below the top of the Redwall on the left side of Kwagunt right close to the head of the gorge. It appears to be accessible without a rope. Using my Kaibab Coconino descent, it would be as easy to reach as Silent River Cave.

Near the top of the Davis ravine up the Pyre, the ravine splits into two fissures. I thought Davis had told me that they used the western one of these two, but I was also sure that he said the breakthrough the Toroweap summit was around on the east. Al led along a very narrow ledge by a vertical wall around into the west fissure and got above the first pitch, about 12 feet up. Ritchey avoided this move by taking hold of the rounded top of the obstruction and pulling himself up. Beyond there, Bob and I couldn't see the problems, but Al shouted back that it was still worse ahead. Bob made up his mind not to try that route. The two climbers were carrying a 60 foot rope and could have helped us, but they told us later that using the rope for a handy grip wouldn't have been sufficient. Bob decided to spend his time looking at the eastern fissure. One could start up it very easily but the sky shows through under a chockstone at the top and one feels that it only leads to a sheer drop beside a straight wall. Bob and I went up here and then found it quite simple to turn out of the crack to the right where it became steep. Here we were already on a shoulder of the Pyre and it was an easy walk to the north along the east side of the Toroweap summit block. The way to the top was just a steep walk.

Doty and Ritchey were having problems but making progress up their fissure. At the top of the crack they were 25 feet below the rim and couldn't get around to the east side because the block that separated the two fissures was sheer. They had to go to the west where they found another climbable angle to the top. Bob and I were up more than five minutes ahead of them and we proceeded to the higher north end of the rather narrow summit ridge. We had no trouble recognizing the grand daddy of all pinyon pines, the one

Davis had said was 14 feet in girth. I took my shirt for a tape line and measured the trunk about two feet above the ground. The shirt, from collar to shirt tail went five times with a foot still from getting back to the starting point. This tree is only a few yards from the summit cairn built by Davis and Babb. The cairn is surprisingly solid and didn't fall apart when Ritchey stood on it to be on the very highest point.

The hardest part of the climb for me was immediately above where I stopped last year. Here I asked Al to watch from below and direct me in finding the steps as I faced in for the descent. I am sure, however, that I could have studied each move and done it alone.

We started our hike from the highway at 6:40 a.m. and were on the summit of the Pyre five hours later. We had left our lunches and water below and with the stops for food and getting some water for the canteens at the little stream, it was 6:10 p.m. when we all reached the truck.

Siegfried would rank high among the most satisfying summits I have reached. The area is outstanding for buttes and deep canyons. The route to the top is just hard enough to be very interesting. The chief danger is from sliding rocks in the ravine. Our second ascent lacked the thrill of discovery, but one of our two ways near the Coconino Toroweap contact was a new route.

Second try for Mystic Spring  
[November 6, 1971]

After being unable to locate the photo site for Mystic Spring where the Matthes Evans map showed it, I reread James and learned that the spring was near the west end of the terrace at the base of Mount Huethawali. Perhaps his running account of going out on the Grand Scenic Divide, then climbing Mount Huethawali, then going to see Mystic Spring, and after that descending to the river, should not be taken as a single day's trip in just that order. When one comes down from Huethawali, it would be natural to go directly west to Mystic Spring instead of east, north, and then west. However, James speaks of looking down into Copper Canyon before going west to the end of Le Conte Plateau. I figured that with this routing, I could watch for the Seal Head Rock and go to the western most extremity of the plateau and walk right to the photo site for Mystic Spring.

The weather turned out fine and I got started west from the Visitor's Center about 8:20 a.m. The road was in good shape still in spite of our wet October in Flagstaff, and I reached the Bass Trailhead in 75 minutes. This was hitting the bumps rather hard. It would be better to allow at least five minutes more for the drive. There was a little fresh snow on the trail but it didn't slow me down. There was even some snow left in the shade as far down as the Supai. Walking steadily, I reached the stick in the large cairn on the Esplanade in 35 minutes.

This time I went around the east and north side of Huethawali. I noticed a couple of beaten down mesquite pits before crossing the wash which forms the upper end of Garnet Canyon and I also noticed the mesquite pits that are below the Supai cliff on the west side of the ravine. There were fresh burro tracks along here, but the storms had erased the Vibram sole prints I had seen a month ago. It was easier and faster to get to where the map had shown Mystic Spring by this route rather than to use the way shown on the map. The burro trail continued west along the rim, and I began to wonder whether perhaps Mystic Spring had begun



to flow again and that I would be led to it by the burros. I had no such luck. I walked and climbed along the west edge of the terrace at a couple of levels but didn't see the Seal Head nor the place where the picture had been taken. If there was an earthquake, perhaps Seal Head Rock is no more. The edge of the plateau is broken up into a jumble of red blocks and it is interesting to scramble through the chaos.

Views of Apache Point, Wheeler Point, and even Stanton Point are great and one can see the lower part of Garnet Canyon where the Tonto Trail ends and the obscure prospector's trail crosses the wash. However, as I stood on the spot and read the description by James, I came to the conclusion that he was letting his imagination go. The basin he calls Ruins of Paradise doesn't have towers and turrets and I couldn't see all the unusual colors he puts there. I also couldn't see that the abyss on the south side of the point was deeper than the others, and I am sure that he could not see the river.

I had expected water in the hollows of the bare rocks, but this time the exposed surfaces were dry. Just down from the rim in an angular break there was some snow water left, and I used it for my lunch. I was so thrifty with my canteen that I carried more than half of my two quarts back to the rim at 3:00 p.m. There was still some time so I tried getting down through the Supai into the Garnet Canyon drainage. This took some careful route finding and the use of cracks behind the big blocks. When I had only one more big ledge between me and the bed through which one could walk down to the Redwall rim, I found that I had to go east and cross to the south side when I came to the bedrock in the wash. Both above and below here there was quite a bit of water caught in pockets. Burros had trails down to the water and I was able to go back to the Bass Trail mostly on these. I was near my lowest point, three fourths of the way through the Supai about 1:30 p.m. and reached the truck by three.

Road to Mount Dellenbaugh and the Shivwits Plateau  
[November 13, 1971]

I was eager to see what sort of drive Visbak, Morgan, and Mooz had taken to start down Mile 209 Canyon. Roma wanted a trailer outing, so I suggested that we could pull the trailer to Saint George and then see what the road was like to Mount Dellenbaugh and on to the promontory opposite Diamond Peak. I had been considering for several years the possibility of making the top of that plateau a base camp from which I could go down to the river several different ways.

We left Flagstaff about 1:15 p.m. and enjoyed the trip to Saint George via Page and Kanab. We were in showers of rain in the late afternoon and we wondered what the road would be like when we got off the paving. However, it cleared up in the night and there was no sign of mud until we were in the woods near Mount Dellenbaugh.

I had to ask for guidance in getting out of Saint George on the road south. You go south to Seventh Street and turn east. It is paved until you get to the Arizona line. As you get up out of Quail Canyon (Mokiah on the Grand Canyon 250,000 map) the road is quite winding and steep and therefore slow. If you follow the rule that the side roads are marked with their destinations on signs and the main road is left unmarked at forks, you will have no trouble. I did stop and consult the map a few times, but we got down to Diamond Butte and recognized it. About a mile or two south of this butte, the big fork is well marked. A sign says

that you have come 46 miles from Saint George and that the road to the southwest goes to Mount Dellenbaugh while the east fork goes to Mount Trumbull.

I felt no hesitation in passing by the turnoff to Andrus Spring but I was a bit confused when I came to a fork that didn't seem to have any sign at all. Two and a half miles on along the fork to the east, we came to the first shut gate with an old sign announcing that this was private property and that permission to pass could be withheld at any time. We began to wonder whether the west fork were not the main road. When we had returned to the fork, we saw a sign that had fallen down saying that this road led to Pigeon Spring and Pakoon, so we went back to the gate and proceeded. This road proved to be the correct route and there were several other gates to be opened and closed.

As we came nearer Mount Dellenbaugh, we came to a fork with no sign again. The map indicates that the right route swings to the east around Dellenbaugh so we went that way. The other road must go to Oak Grove Ranch. Very soon the road became much worse since the surface is covered with lava boulders and there are many loose and buried in the roadbed. You come out of the woods into a clearing where there is a large corral and an airstrip to the south of the road. You can drive down south along the airstrip and come to a group of metal buildings where the Lake Mead National Recreation Area maintains a ranger camp during hunting season. A Jeep road used to go south of this camp to very near the top of Mount Dellenbaugh, but now even a four wheel drive vehicle can go only about halfway to the top.

We drove on past this airstrip and came to a ranch where a very vocal hound was tied to a dog house. One can go on through the grounds through one gate and meet the main road again, but we turned around and tried the other fork. It joined the road south of the ranch and before long, southeast of Mount Dellenbaugh, we came to a ravine where the road is cluttered with the worst bunch of boulders we had seen on the whole ride. I was fairly sure that I could keep up enough headway to make it down and up the other side and in this I succeeded, but just barely. By this time Roma was determined that we should turn back before we got into real tire or car trouble, and I went along with her. When we had the first chance we turned around and made it back to a clearing.

After we ate an early lunch we met a couple of men, Gasich and Espin or Esplin, who were in a four wheeler starting to look for a couple of deer hunters that were three days overdue. Mr. Esplin works for the Waring Ranch and knows the country. He told me just where the Price Point Trail leaves the rim, about a third of a mile southwest of the Price Point bench mark (6588) and he also showed me where the trail down to the Snyder Mine leaves the rim. One should go out along the Jeep trail which leaves the road just south of Kelly Tanks and then proceed along the rim to the north of the Jeep road end about a third of a mile. Esplin also told me that Kelly Spring is dry but that at this time of year there is water in Kelly Tanks but that this can't be trusted in the summer. He told me how Georgie White and Harry Aleson left the rim when they tried to raft down the river like James White. It was from some point, but I failed to note it. I had the impression that they did not walk down through Parashant Canyon as I had formerly supposed. Esplin also said that when Chet and Pat Bundy and their friend had come out Separation Canyon that they had gone down to the river and had gone up Parashant Canyon to get home. He rather thought that they had done something like this twice, but he was not clear about the details. He also said that the ranch owner, Waring, now lives in Flagstaff.

I would have liked a longer visit with Esplin and if I had been my myself, I could have offered to go south along with them and the two rangers who had come from the station to help look for the lost hunters. As it was, Roma and I drove to the Ranger Station and she sun bathed while I climbed Mount Dellenbaugh. I walked from the ranger camp to the top in 47 minutes and got back in about 40. The view from the top is outstanding. The Uinkaret Mountains are about the most prominent landmark but one thing that I noted with the binoculars was the road that must go down to the Ridenour Mine. I was fairly sure that I could identify Dr. Tommy Mountain. It is all great country and I am as eager as ever to see it all up close.

We drove back at a good clip and reached Saint George before 5:00 p.m. If I remembered how to take all the right turns and should have a four wheel drive, I believe I could cut down Jorgen's estimate of eight hours from Saint George to the head of Separation considerably. I believe I could do the 89 miles to Mount Dellenbaugh in a bit more than three hours and then do the next 25 in something like two and a half hours. I would be doing it in less than six hours.

Diamond Creek, Kelly Tanks, Separation Canyon, and left bank Tonto  
[November 25, 1971 to November 28, 1971]

For the first part of this trip, there would be little to change from what I said in the log for 2/8/69. Bill Mooz and Jorgen Visbak developed maladies at the last minute and couldn't come, so I drove to the river down Peach Springs Wash after my last class on Wednesday. There was nothing to do besides sleep so I ate at Seligman and arrived about 10:30 p.m. The road was as bad as I have seen it except for a couple of times when I wouldn't drive it at all. There was a superflood in the late summer, and they had to start all over making part of the road. Even when I drove at less than 10 mph, the truck pitched so that the kayak came rather loose on top.

The river seemed quite high and I could launch the kayak right under the pavilion. Still when I was rowing only my pack over, there was no problem in getting across the swift part of the current. I cached the kayak near the now empty barrel of gas and a lot of half pint cans of outboard motor oil. This time I went up to the Tonto via the talus filled ravine inside the mouth of the side canyon, but then to get through the Tapeats, I contoured along the top of the granite to the right and finished the climb where Jorgen, Bill, and I had found a break. This combination seems to be best and I was on the burro trail after 35 minutes of climbing with another 20 minutes to cross the river and cache the boat.

I stayed closer to the bed of the ravine when I was heading for the break in the Redwall, and this time I saw two mesquite pits. I took fewer pictures and didn't inspect the cave again, and I got to the north side of the Supai knoll where Bob and I had eaten in an hour less time. I had seen some rain pools in the bedrock of the ravine only a little way above the burro trail along the Tonto, but I saw no more before I reached Kelly Tanks. Crossing the upper Supai terrace after I had eaten lunch was more complicated than I had supposed, and the top cliff of Supai seemed to be continuous except around to the right where a great slide from the Coconino and higher had made a passage. I assumed that I could have gone to the left around a corner and could have found another break, but I went up the sure way over the slide. Here I found myself climbing up steep slopes of Hermit Shale and soon I was so high that it seemed a waste to go down to the base of the shale and go up the Coconino and Kaibab where I had intended. Instead I tried going into the ravine a couple of miles east of Kelly Point. This worked out although there were a couple

of steep little stairwells in the Coconino. I was on the rim of the Shivwits Plateau at 3:05 p.m. after leaving the truck at 7:05 a.m. Then I headed northwest through the pygmy forest with the sun as my compass. In 45 minutes I hit the Kelly Point Road but long before this I saw hunter's boot tracks in the soil. By 5:25 p.m. I was at Kelly Tanks, only one of which has any water. Mr. Esplin had assured me that there was water here. I could have melted snow for water for there were shallow banks in the shady places all over the plateau. the night was clear and cold enough to freeze a film of ice over half the pond, and I kept a fire going all night.

I had fallen about two hours short of my goal of going down to spend the night at the Snyder Mine, but I felt that I had pushed quite hard to make it as far as I had in one day. On Friday I headed down the draw to the west of Kelly Tanks and then walked the rim to the south. When I saw that the ravine was getting deep, I dropped down and followed the bottom. Near the bottom of the Kaibab, I was stopped by a sheer drop and had to find a bypass to the north after some climbing. At least two more detours were needed. When the canyon widened, I could see more than one way to descend a scree slope right from the rim to the bed. Two or three of these routes come down from the north and are quite accessible if one would go southwest from the road south of Rodger Tank.

When I came to the bottom of the Hermit Shale and found the top cliff of Supai to be a sheer 100 foot cliff as far as I could see along the right and the left, I acted on a hunch and went south because that would take me closer to where I had topped the Redwall in June, 1966. This turned out to be the wrong choice since I had to walk for well over an hour before I could even see a place that looked rather possible. There had been some rain pools in the bed of the Kelly Tanks ravine, so I figured that at the worst I could go back there to spend the night. Then in the morning I would try some more to find the break through the Supai, this time on the right side of the Kelly Tanks arm and perhaps have time to come back up to Kelly Tanks or even over to the Snyder Mine by Saturday night. Either way I would have time to reach the kayak and cross to the truck by Sunday morning. Looking across to the north I could make out a place where a minor graben had occurred and where one could get through. Trying to use that break and still have time to reach the mouth of Separation Friday night was out of the question, so I continued around to the south side of the Supai rim of the big indentation north of the Kelly Point promontory. After careful study near the point I found safe passages on about three levels where ledges looked discouraging. I finally got down to the place I had reached on 6/7/66 and even found a nice pool of rain water in time for lunch.

As I went on through the Redwall narrows on a gently sloping gravel bed, I was watching for the overhang on the right where Jorgen waited while Homer and I went up to check the escape from the Redwall. Jorgen, Bill, and Homer had missed seeing this two years ago last September. Again I missed seeing it too, and I think that a flood has piled gravel in this part of the bed so that the alcove is buried.

A little farther south there is a minor tributary coming in from the east, but this is not to be confused with a bigger one still farther south. On the impulse, I left my pack and canteen and tried going up this arm. Right at the bottom one has to go up a bank to the right of a sheer fall, and a little farther up there was a rain pool that I could bypass by walking up a few yards on a not too steep granite slope. Fifty yards farther there was a bigger pool that needed quite a climb for a bypass. I could have gone down beyond the pool and I am sure I could climb out the Redwall on the south a little farther on. As time was passing, I

contented myself with a fairly challenging climb up the Redwall right where I had started up on the north side. This whole experiment took 45 minutes, and it almost made me walk down to the river in the dark. I was very happy to find the Marston, Jordan, Strathern Party there and ready to cook some steaks. Ranger Jim Baily was there too, and we had quite an evening gabfest. I had wanted Jim Jordan to ferry me across the river about 8:00 a.m., but his boat was high on the bank. We tried pushing and pulling with a rope until we were afraid there might be some injury to the boat. The water kept on falling until 11:30 a.m. Off and on I had been helping drill a hole in the granite, but at this time four powerboats came back down the river. I had my pack ready and was able to get one of the boats to get me across the river. I went up the opposite wash and climbed to the top of the Tapeats as soon as I was sure there was a way, but when I came out on the point for a last look at the party, it was 1:00 p.m. I had eaten, but I realized that I had my work cut out to make Diamond Creek in a day and a half.

I recognized Bridge Canyon City, only a bare platform now, and I saw where I had stayed in the short canyon just west of Gneiss to wait for the boat instead of using my air mattress in the cold water of June, 1966. Even though I hustled all the way, I was just able to reach the bed of Bridge Canyon by 6:00 p.m. when it is getting about as dark as it will be before the moon sets. I still had more than a quart of water, so I got my soup and supper without going to the spring at the foot of the Redwall in upper Bridge. When I woke about 11:30 p.m., I recognized that I would have to go to the spring for more water before starting to the Ervin Spring on the east side of Mile 234 Canyon, so I walked by moonlight up to the Bridge Canyon Spring. This took an hour each way and for the return the moon was behind the western rim. I felt quite relieved when I found a cairn I had built to mark the turnoff to my pack and bed.

At 6:20 a.m., I began eating my breakfast in bed, and by 7:10 I was leaving. A note on the Bridge Canyon Spring is in order. I remembered that they had built a concrete basin to hold the water, but my search by moonlight showed only a pipe and a seep in the crumbling bedrock. I also found some timbers nearby. Perhaps the pipe had led down to the basin and perhaps this is now buried under tons of gravel and boulders. I was able to scrape out a hole about one half inch deep and fill my canteen by sucking the water into my mouth and then dropping it into the canteen.

I once suggested that the Tonto Trail along this part of the canyon is only twice as long as the corresponding river mileage, but a more realistic estimate would be to multiply the river mileage by at least three. It took me two and a quarter hours to get from the bed of Bridge right where the old trail goes up to the east rim of the Tonto over to the Ervin Spring. I kept on pushing, but when I didn't get past Travertine until 4:15, I knew I was in for some late walking. Darkness caught me shortly after I was through 228 Mile Canyon, but the moon was behind the heavy clouds and I couldn't see whether I was on the trace of a trail. Even in broad daylight I had missed the trail numerous times, so I was not alarmed when I would leave it at night. I was only slowed down and also had more trouble with cactus after the moon was giving me all the light. I went on around to the east of the little butte just above Diamond Creek and got down the ravine which lines up with the break separating this knoll from the main cliff. I had done this before, by daylight, and the burro droppings were reassurance that I had chosen the correct ravine. I had walked almost two hours by diffuse moonlight when I reached the truck by 7:45 p.m. I found it easier to travel by the weak light from all over the sky instead of going from bright moonlight into deep shadow as one does on a clear moonlit night. To conserve time near the end, I ate some salty meat as I walked and almost ran out of water before I got to Diamond Creek.

The burros are still plenty thick along this section of Tonto, and I also saw mescal pits in two places, one not far from the head of Gneiss, I believe.

It was a satisfying trek with two rim to river routes completed, and the weather held although I felt a few raindrops on Sunday afternoon. I had a dry road for the drive home, but it will take me several days to get the knots out of my legs. The Tonto part would have been more enjoyable if I could have started at 3:00 a.m. on Saturday and could have camped with the water from the Ervin Spring right on my route. Still the two hour moonlight hike for water was interesting, but it would have been a disaster if I hadn't found my bedroll and had had to sit by a fire without much sleep for the rest of the night. I also intend to check with Jorgen as to their route through the Supai in getting up Separation. I believe that it is easier to see the best place from below than it is from above.

Redwall west of White Switchbacks and ruins in Pipe Creek  
[December 11, 1971]

Ellen Tibbetts had told me about going down the Redwall to the west of the notch at the top of the White Switchbacks of the South Kaibab Trail. She and Jim Sears had noticed the possibility when they were walking the Tonto Trail between Indian Gardens and the Kaibab Trail. Later she had gone down this ravine alone with a pack on her back and had reported no obstacles. At the bottom of the Redwall there is a big drop of at least 60 feet, but this can be bypassed by going to the south along a bench to the long talus slope.

Another lead that I wanted to follow was the information from Charles Bame, a Flagstaff teacher, that there are Indian ruins under a Tapeats overhang on the east side of the Tapeats amphitheater in Pipe Creek. He and Larry Bowen had come down here by the break in the Tapeats on the west side, the place that Billingsley had rediscovered. After finding the ruins on the east side at the base of the Tapeats cliff, they had given up the idea of getting down through the granite and walking out the Bright Angel Trail.

These two objectives would combine to form a relatively short hike, a good one for a day when I was supposed to get home around 6:00 p.m. for a bridge party. The highway to the south rim west of the San Francisco Peaks was hazardous with snow and icy patches so the drive was slower than usual, and after getting the permit, I didn't leave the rim until around 9:00 a.m. It was cold and snowing most of the time while I was getting down to the head of the White Switchbacks. I saw at once that the lower, northern one of the two ravines going down to the west is the one to use. The snow on the rocks slowed me down a bit since I couldn't see the footing very precisely. There were two or three spots where I had to look a bit for a bypass out of the direct line of the bed, but I assumed correctly that one goes down the ravine until there is a clear need for the turn to the left. Where the talus filled ravine changed to a 60 foot nearly straight drop, I looked for the way to the south. It was simple with even a deer trail. About 150 yards in this direction one comes to a slope offering many choices to get down to the Tonto Trail. It took me an hour to walk down the Kaibab Trail to the top of the ravine and 50 minutes to get from here down to the Tonto Trail. This would go a lot faster in better weather.

At this place along the Tonto, although one is well back from the river, he gets a fine view of the lower part of Bright Angel Creek. The new engineer's home just south of Phantom Ranch is particularly noticeable. West and south around one hill, I left the trail and started down the swale leading to Pipe Creek. This drops off into lower Pipe Creek farther north than I had realized. It is to the north of the junction of the two arms of Pipe and one gets a fine view of the Bright Angel Trail coming away from Garden Creek down towards the bed of Pipe.

The Tapeats, on the south side of this valley, makes several shallow caves or overhangs, and I was pleased that I could go right to the one with a couple of imperfect pictographs. A light colored soft rock has spalled off since the pictographs were put there, but part of a deer with fine antlers still shows in red clay, a picture of the same sort as those near the head of the Bright Angel Trail. From here one follows the base of the Tapeats cliff to the south with one detour down 60 feet into the granite and back up. There is a bit of trail construction showing at one place. Just before it is possible to walk down to the Tapeats Amphitheater, there are a couple of alcoves in the cliff. On terraces only about 20 or 30 feet above where I had walked on 1/31/68 are some Indian ruins. A huge rock has fallen on a wall in the northern alcove. The southern shows a large room outline and about six storage bins, one a double decker in good preservation.

I left via the Billingsley slot on the west and walked the Tonto back to the Kaibab Trail. Using the trail around and up the switchbacks, I got back to the top of the Redwall in 45 minutes instead of the 50 that I took to get down to the same place.

Haunted Canyon, Redwall Ravine west of Sturdevant, and the Miners Trail between Kaibab and Bright Angel Trails

[December 17, 1971 to December 20, 1971]

I had been to the end of Haunted Canyon only once and that about 20 years ago. I recalled having climbed quite high while Boyd Moore watched from below, but what seemed like the top 30 feet had turned me back. I wanted to review the area and see what sort of climber I had been at age 44. After getting my hiking and camping permit it was 4:40 p.m Friday evening as I was starting down the South Kaibab Trail. The top two and a half miles were covered with snow, and there was snow in the shade almost to the edge of the inner gorge. The dark of the overcast moon less night slowed me all the way down the inner gorge. I had been careless and had brought no flashlight so I used the light of the men's room at Bright Angel Campground to cook my soup by Sterno canned heat. The wind blew all night and I was glad to have the shelter to protect the flame.

In the morning I called on the ranger, Bob Cornelius, to explain the change in my plans. On the permit, I had said I was heading for the Tower of Ra, but the cold night at Bright Angel Campground had persuaded me not to try to sleep as high as the top of the Redwall. They now forbid all camping in Phantom Canyon, but Bob thought it would be all right since I wanted to camp well up in the open valley above the Tapeats Fall.

It took me a little over three hours to go up the granite at the north end of the campground and go over the ridge that projects from the base of Cheops Pyramid and then down to Phantom Creek above the fall. This

time I couldn't locate much of the trail. I think I got too low at first and then got too high. As I came within the last half mile of the descent into the creekbed, I saw for my first time a very beaten down Indian ruin on a high ledge. It is now completely inaccessible for a climber of my ability and strength, but Al Doty or John Ritchey might be able to get to it. On the return I found much more of the trail, but it seems more obscure than it did ten or fifteen years ago. I had no trouble walking to the overhung campsites about seven or eight minutes walk upstream and on the north side. A flood had washed across the terraces in many places, but these campsites were unaffected. Some dry grass had been freshly burned, but I had a very comfortable bed on some unburned dry grass. It felt warmer at night than the Bright Angel Campground. There are two good overhangs both of which show cow chips and signs of former use as camps. They are only about 50 yards apart.

On Saturday I ate an early lunch and started on without my pack at noon. It took about 25 minutes to reach the junction of Haunted and Phantom Creeks. About 150 yards from the junction on the east side of Haunted Creek I found the same steel barrel that Lynn Coffin had asked me to check. A 40 pound rock was holding the cover on it, and the same two sleeping bags were in it, in good condition still. Some food and pans were in the barrel also and these looked quite recent. Bob Cornelius knew nothing about this cache.

I have just checked the new map and it repeats the error on the old showing a permanent flow of water only below the junction of Phantom and Haunted. Actually, the entire flow often comes from the spring in Haunted about halfway from the junction to the end in the Redwall. I noticed the shallow cave in the shale in the salient high above the spring, and I also saw that one can get up on a high ledge above the cave. There is an Indian ruin in this cave, and here is where Euler found a couple of split twig figurines after Beck had missed seeing them. Boyd and I had found a penciled inscription of a name and a date like 1926. Boyd and I had used the whole day to investigate Haunted Canyon, but on my shorter time allowance, I didn't climb to look into this cave again. I did, however, go up the only real tributary of Haunted, a dry streambed from the west but there is no chance to climb out this one. An impressive elongated tower of Muav shale marks the mouth of this tributary.

The very end of Haunted looked only vaguely familiar. On the east side of the boxing is a crevice with parallel vertical walls that a good climber might go up. On the west there is a stream course that comes down over a smooth vertical fall. Between these one can easily go up a brushy slope to the base of an almost vertical cliff. I had the wrong mental image of this cliff. It tips back a bit with some breaks in the surface. I must have climbed some of this difficult pitch when I was 44, but now I wanted no part of it. Instead, I made a delicate move and got into a crevice to the west of the face. It became narrower higher up, and a strong climber might chimney up to the top of the Redwall here also. I was now a bit past my deadline to start back, and I am rather sure that my strength would give out if I tried getting through the Redwall here. I turned back at 2:50 p.m. and reached camp by 4:45 with plenty of time to get supper. Here, I spent 13 comfortable hours in the sack.

On Sunday I got away by 7:40 a.m. and headed over the ridge into the canyon that is just west of Sturdevant Point. From clear across the Grand Canyon this ravine had looked promising, but from just across Phantom Canyon on my way in, I had become discouraged. Now I just wanted to cross it off one way or the other. Near the end there is a fork, and the east fork is obviously impossible. However, the



closer I came, the better the west fork looked. Actually, it went very easily. It is about as hard as the west fork of Vishnu Canyon (i.e., not hard at all). The broken slope continues into the lower Supai, but about 300 feet from the bottom of the formation, there seemed to be continuous vertical faces. Buddha Temple seemed very close but inaccessible. I got down and back to camp before noon.

By one I was ready for the trek back to Bright Angel Campground. This trip went off smoothly in two hours and 40 minutes.

I spent almost three hours Sunday evening talking with Cornelius and a friend of his who works at Phantom Ranch, Peter Bjerke. Bob says that the bighorn sheep are not too uncommon any more and that he has seen them more than once with binoculars. Peter reported that the USGS engineer, Roy Starkey, said he had seen a steam engine somewhere up Phantom Canyon, but Bob was skeptical as he says that Roy hasn't been up the canyon even as far as the fall.

Bob also told me of a trail that was completely new to me although he had learned, after finding it for himself, that a couple of other rangers had found it first. It goes up from the River Trail well to the east of Pipe Creek in the ravine that is one bend west of the south end of the new footbridge. For the first few yards it follows the bed of the wash, but then it veers to the east and goes by switchbacks up a very steep and jagged slope. There is quite a bit of trail construction still showing and there are numerous cairns with a stick propped up in the middle. Bob couldn't guess why anyone had built it here. My conjecture is that some miners wanted to pan gold along the boulder and gravel beach that is so prominent below this trail. Before the River Trail was blasted out of the solid rock, this beach would have been well nigh inaccessible from either the South Kaibab or Bright Angel Trails. On the way out today, I came from the inner gorge on this trail. Constant attention is required to stay on the trail but it is a logical path through a difficult area. If we should name it anything, my candidate would be Gold Panner's Trail.

I walked on out in a total of four hours and 40 minutes.

Down Matkatamiba Canyon to the Colorado River  
[January 20, 1972 to January 22, 1972]

We had conflicting reports about getting up Matkatamiba Canyon from the river to the top of the Redwall. Since I had already been down to the rim of the Redwall, it seemed that a personal investigation was indicated.

Jorgen Visbak and Bob Dye joined me in the effort. We got a rather late start and had to find a campsite in the dark on Thursday, a few yards up the Topocoba Trail from the junction with the Hualapai Trail. The night was rather cold and we all felt cold beneath where the wet ground took heat away even through the ensolite pads. We intended to reach the Sinyala Spring Friday evening, but when we met Jay Hunt in the village, we stopped and had quite a visit. The Indians have shown him a great deal about water holes in upper Havasu Canyon and he could tell me more than I could take in and remember about such things. He rounds up cattle with the Supais and has learned what rough country the horses can cover.

Starting on near 10:00 a.m., we were going up the Ladder Trail, quite a trick now with the ladder replaced by a single short pole. I went up first with the others holding the stick and showing me where to put my feet. Then Bob came up and Jorgen handed him the packs. I went ahead to scout the route and didn't see Jorgen manage the bad place without help. The mesa is cut up with blocks and ravines and it is rather slow to get to the old horse trail at the foot of the rim cliff. We then had the problem of heading the numerous arms of Carbonate Canyon. Some were just tedious, but the two forks of the arm involved real problems in route finding. Bob found a good water pocket in the south fork of the north arm.

When we were through with Carbonate the going was easier, but Jorgen's knee began to bother him. About 4:30 p.m. we reached a place where the Supai bedrock formed fine overhangs with level sand beneath. It is in line with a huge slab that is standing edgewise in full view up on the slope. It is about a half mile north of Ukwalla Point just east of one ravine and about 15 minutes walk from the next, the last that separates the walker from Mount Sinyala. We found water pockets in both of these ravines. There were signs of previous camping at this overhang. Jorgen saw a piece of modern glass pottery, and I found a bit of obsidian. Jorgen was afraid that he would hold Bob and me back. Since he had enough water for the night, he stopped at the overhang.

Bob and I went on hoping to reach the Sinyala Spring before dark, but when we found the good water in the canyon that goes into the bay between Ukwalla and Point 5394, we filled our canteens and returned to Jorgen to spend a comfortable night. When we went on in the morning, Jorgen was still being careful of his knee. Hunt had warned us that the spring might not be reliable at all times of the year, but we found the pool eight inches deep with a lot of ice in the overflow pools. After lunch, Jorgen went out along the Redwall rim of Sinyala Canyon to look down on the river, and I took Bob up the fault ravine to the saddle between Sinyala and Matkatamiba and then out on Matkatamiba Mesa to the canyon at Mile 148.5. Bob got ahead and found a different way down from the one I remembered from the spring of 1964. There were still some possible variations different from either of these ways. We scrambled down over the top rim of the Redwall on the east side to try to reach the cave I had photographed almost eight years ago. We found the last few yards of the wall too steep for safety, and Bob just checked a small opening that went in about 30 feet. We reached Jorgen and his fire in time for an early supper. Bob found a good overhang at the base of the bottom cliff around the point to the north, and I scraped out a bed under an overhang high above the spring to the southwest. It was a warm night.

Jorgen again decided to favor his knee and do something slower than our dash to locate a route down the Redwall in Matkatamiba. Bob and I went up to the saddle in 35 minutes and then were surprised to find that we needed an hour to go from there down to the Redwall rim in Matkatamiba. Towards the bottom and at some other places, we found good burro trails. A clear trail led us south along the rim. It was a bit of a detour when we came to the next tributary but we could get to the bottom and across where there was quite a bit of rock bending. We had noted that the Redwall tilts up to the west so that one encounters it in the fault ravine 200 feet above the same layer at the actual rim of Matkatamiba, but where we crossed there is a local deformation. The ravine farther east is impassible beneath a large chockstone. When Bob went up into the narrows he found two good pools of water. We had found some pools, mostly frozen solid in the upper exposed Redwall in the fault ravine, but I couldn't find the seep in the exposed shale that I saw in 1964.

Soon after we got up on the south rim of this short side canyon, we heard a repeated shout. We shouted back and saw Jorgen clearly against the sky about 1100 feet above to the west and possible 2500 feet away. He had heard me talking to Bob as we walked but he never did see us in spite of our calling back. It was now 11:00 a.m. and Bob and I had agreed to turn back after eating at noon.

It was at this side canyon where we saw fine exposures of the brown conglomerate about 10 feet thick that I had noted west of the Tanner Trail, in Red Canyon, and along Granite Park Creek far to the west. This may all be one formation since it is just above the Redwall (Basal Conglomerate).

Less than a half mile south of this arm, which certainly doesn't lead to the bed of Matkatamiba, we found a place where a landslide has left a steep ridge of debris from the bed about halfway to the top of the Redwall. Furthermore, there is an easy walk down the Redwall to the top of the talus, so we didn't have to go to the head of the south arm of Matkatamiba. When we reached the bed, we had 35 minutes to go before noon. Travel was easy and fast, and the Redwall narrows was as impressive as any we have seen. When noon came we were making such good progress that I couldn't bear to give up then. There were a few isolated barriers in the way, but the bypass was always quite obvious. No burro signs were seen in the bottom, but the bighorns use it freely. One can be hasty and choose the wrong way down some of the chockstones, but if you look carefully, there is a perfectly safe route.

There was a short chain of running pools about halfway from the descent into the canyon and the river, and then soon after a major barrier, a continuous stream began. At this place Bob went down by the chimney technique, and to do this I left the Kelty and canteen above. On the return we found a simple way up on the west side of the bed. By now it was 12:30 p.m., but we scented victory and didn't want to turn back. It was smooth hustling from here on except that the water entered a final chute over a fall to reach the river. We first tried a bighorn trail on the east of the chute, but we found it difficult to descend at the end, so we doubled back and used the west side. A few yards from the river, we were able to get down to the muddy sand. There is no delta at the mouth, but we could walk around to the exposed ledges just west of the mouth. The main current of the river races by next to this ledge with waves about three feet high. It was now 1:10 p.m. and we had left camp at 8:30 a.m. We were able to get up on the bighorn trail just west of the mouth and it took us 40 minutes to get back to the pack which held both of our lunches.

It appeared that we might get benighted on our way back to the Sinyala Spring, so I urged Bob to go ahead at his own rate and that I would follow at mine. He was 15 minutes ahead of me when I reached the west arm, but I got from the river back to the spring between 1:15 and 5:20 p.m. with about 15 minutes taken to eat lunch. Bob was waiting with a fire going, but we decided to start immediately to join Jorgen at the overhang camp. It was dark before we reached the water pocket ravine, but we located it without fumbling. It was slow to move safely over the steep bare rock, and we were relieved when we reached Jorgen after traveling two hours from the spring. The next morning we took six hours to reach Supai via the Apache War Trail instead of the ladder route. Jorgen had found his knee perfectly fit again, but I was down a bit with bad digestion. In the night at the end of Hualapai Canyon some animal dragged off my pan of cooked rice and left it clean about 50 feet away. We walked out on Tuesday morning in two hours and 40 minutes feeling quite elated at finding the route down Matkatamiba so easy. This must have been the way the Indians traveled from Kanab Canyon to Supai.

Third try for Mystic Spring picture  
[January 30, 1972]

I was more than half convinced that the map location, from Waltenberg, of Mystic Spring should be correct. Bob Packard went with me and took a keen interest in the old sport of picture identification. When I suggested that we might be close to the site for the picture on page 148 of *In and Around the Grand Canyon*, he recognized at once the rocks in the foreground. We made good time down the trail which was free of snow although the day was quite cold.

First we looked carefully at the place where the map showed Mystic Spring and Bob led me down a couple of levels below where I had looked before. Then paying attention to the phrase "Standing in front of the spring" on page 154, we went north to the first extension of Spencer Terrace to the west. We couldn't see the river from here, so it was not the place that James was describing, but we found several very deep water pockets holding a good deal of water, the only places like this we saw for the day.

Next we went north around the bay to the full western reach of the terrace. Here we had a good view of the river south of Garnet Canyon and the valleys below seemed to agree with the James account. There was much gray and purplish sandstone below to the north. We ate lunch at a place that had a superficial resemblance to the spot where the burros were drinking at Mystic Spring, but the real identification was still lacking. We went a little farther north and then doubled back along the south side of a bold Supai cliff. There was a definite seep spring here with one icicle and several drips, but the place didn't match the book picture. A little farther to the east we found a couple of good mesquite pits.

We were now ready to give up the search for Mystic Spring, but I wanted to prove that the picture on page 102 had the wrong caption. We set out at a good clip for the Grand Scenic Divide. At first Bob was hard to convince. He thought that the mountain in the Maude picture was also Fossil Mountain, but as we got out farther north on the Grand Scenic Divide, he became more and more sure that I was right. Time was running out and we didn't get the foreground to check, but we were sure that we had identified the mountain as Huethawali.

When we started from the Bass Trailhead, we saw a VW van parked there, and down on the Grand Scenic divide we found fresh footprints. A solo hiker had preceded us. There was a distinct burro trail going along the Hermit below Fossil Mountain. East, below the Divide we could see two stretches of the river, one of which was Serpentine Rapid. The day was calm and we could just make out the roar of the rapid. As I was walking along the level top of the Divide, I was wondering where the hole goes through, the spot of light that can be seen from the Bass Trail below the Redwall. If I am ever down here again, I should try to remember the location of the hole.

When Bob and I turned back toward the trail from near the end of the Divide it was 2:45 p.m., and I predicted that it might take us until 4:30 to reach the trailhead. We were both in good shape and the day was invigorating. We arrived at the vehicle by 4:00 p.m. We had gone up the final 500 vertical feet in only 15 minutes.

Although we had failed in our main objective, we had reproduced two of the pictures in James and had found two water sources and some mescal pits. Both Spencer and the Divide furnish unsurpassed views.

#### Routes off Great Thumb Mesa into Matkatamiba

[February 12, 1972]

Since it takes the average walker a day and a half to get from the Hualapai Hilltop to the Esplanade of Matkatamiba Canyon, it would seem interesting to find a way down off the mesa top. I drove the pickup up the Jeep trail from the Topocoba Road about five miles from the junction and I could have gone over a half mile farther to where the ledges would ruin anything less than a four wheeler. I noticed that the Topocoba Road is distinctly better before it reaches the Park boundary. It isn't too bad after that until it gets beyond the junction with the Great Thumb Mesa Jeep trail. I got the pickup over the bad places, but it seems worse than it used to. The sharp cornered blocks seem as though they would wreck the tires, and there are rough and steep places where it seems that one has to keep up some speed to get by with just the rear wheels for propulsion. I noted that it took me a half hour to drive five miles. I could walk that distance in little more than one and a half hours. Since I broke a window of the shell camper against tree limbs, I believe I'll allow enough time to walk this five miles unless I have a Jeep.

With my early start, I was able to park north of the head of the Enfilade Route on the east rim. I wanted to go to Paya Point first, so I walked about 45 minutes north along the road before heading west. In due time I sighted a corral and an old shack with a cattle tank (dry) nearby. I kept to the south of the deepening ravine and reached the rim east of Paya Point above the drop of the wash over a fall consisting of both the Toroweap and the Coconino. In 1959, when Allyn and I were walking the Esplanade, I thought I had seen a place where there might be an access from the rim, east of Paya Point, but now I could see that I was mistaken (Ohlman and others have been down east of Paya Point on the north side of the promontory)

George Billingsley had flown along the rim very recently and he told me at first that there was no way down. When I suggested using a rope, he indicated that there would be two or three places but they were all in Matkatamiba itself. Thus I started south from Paya Point looking mostly across the canyon. I could see a place that looked good where the top of the Coconino looks beveled and the lower part is covered with talus material. Furthermore, much of the Toroweap is covered, but there may be one ledge where a rope would be needed for about 25 feet.

As I turned east on the north side of the bay that bounds Paya on the south, I could see that the entire Coconino is covered at one place on the south side of the bay and also at one place on the north side. The approach to the former was impossible, but I went down to the drop in the bed and then followed a bighorn trail to the immediate vicinity of the likely place. The Toroweap is broken by a bench in about the middle, and I decided that one could get down to the slope covering the Coconino with two moderate rappels, each about 30 feet high. It took me two hours to walk to the truck and this could be shortened by choosing a better route.

The main bed of Matkatamiba through the Toroweap and Coconino looked interesting but I couldn't see it well enough to tell whether it offers access to the Esplanade. This would be grist for another day's hike. I have only begun to find the points of interest in this whole area. It wouldn't hurt my feelings if they would

build a good fast and scenic road out onto Great Thumb Mesa so that I could spend my time down below in the maze of canyons through the Supai rather than use as much time at the wheel of the truck as I spend on foot.

Observations: A seep spring beneath the Coconino in the wash that is east of Paya and south of Panameta. (Not to be relied on in hot weather.)

A buck with fine antlers near a tank on the Topocoba Road. A coyote near the south end of the mesa. It crossed the road as I was driving south in the evening.

Antlers that had been dropped south of Paya Point and antlers still connected with part of the skull in the bed of the deep ravine south of Paya Point.

From Great Thumb Mesa into Matkatamiba  
[February 19, 1972 to February 20, 1972]

On February 12, I had seen from across the canyon a possible way off the rim. George Billingsley had flown along here and he agreed that this was a real possibility, and he also recommended the place where the main arm of Matkatamiba comes out on the cliff. He said that if one could walk to the east at this level, he would reach a place where the Coconino is covered.

I thought I was getting an early start when I left home at 5:42 to pick up two coeds who wanted to get to the south rim for a trip down the Hermit Trail. Perhaps I wasn't fully awake, because I parked in front of their address but on the wrong street, one block west of Beaver where I should have been. No lights were on anywhere, so after a wait of ten minutes I took off for the canyon. When I was 25 miles away, it dawned on me that I had gone to the wrong address so I turned around and reached their apartment over an hour later than I had agreed to pick them up. At Grand Canyon I waited for them to get the permit and then took them to the head of the Hermit Trail.

Furthermore, when I reached the beginning of the Jeep road to the mesa, I got cautious and left the truck on the main road. Thus, I started at 10:50 a.m. with almost seven miles of walking along the road. After a lunch stop at the junction of the road W2A and W2AB, I walked nearly an hour along the road toward Manakacha Point before turning north. I had intended to keep on the high ground to the west of the Matkatamiba drainage and head directly for the place I had seen the week before. When I found myself getting down into a draw, I remembered that Billingsley had said that he thought there is a way to get down to the Esplanade right at the end of the upper valley. He thought you should be able to walk to the east along a ledge to a place where the Coconino is covered by a talus. Near the end I succeeded in bypassing a couple of drops in the bed and I could see that I was below much of the Toroweap. Then my hopes were dashed when I saw that there was nothing but a sheer wall to both right and left and an awesome fall directly in front. However, this trip wasn't wasted, for a few minutes above the end was the only water I had seen. A pool in the limestone was frozen solid to a depth of several inches except that there was water from melting only half an inch deep at one edge of the ice. I used the suck squirt method and soon had a full canteen. This was about 3:00 p.m., and I figured I could make out for dinner and breakfast without more water.

Backtracking up the ravine was helped by locating more of a game trail than I had seen on the descent and I climbed out at the first tributary from the west. Since I was rather close to the rim, I had to cross more than one side valley and it was nearly 5:00 p.m. when I reached the deep ravine where I knew I should get through the top limestone. By this time I was rather tired with my full Kelty and the climbing rope and Jumars. When I saw the very steep slope I would have to cross, mostly covered with loose scree, I was so discouraged I told myself that the place I had scouted the week before was preferable even though it would take two rappels. After a weary retreat up the loose material to the top, I ate dinner without the usual soup in order to conserve water. I enjoyed the evening view from the Dome to Fishtail Mesa with Mount Akaba as the striking feature in the foreground, but after eating I started back toward the truck in defeat.

In about 15 minutes I realized that it would be like a death march to go clear to the truck before stopping, so I found a good spot under a juniper and bedded down. It didn't begin to freeze the water in the canteen and I was quite comfortable in less than I had brought. Before morning I had decided to give the route another try and get a refill in the canteen at the same waterhole before trying to reach the truck. I left the pack and even the rope at the edge of the mesa and started down the second time hoping to find a ropeless route. I reasoned that if it really needed a rope, the place of the previous week would be preferable.

This time I turned the corner to cross the first bay at the very foot of the cliff and had no real problem. At the next promontory I started down the gypsum clay slope and found a sheep trail near the bottom. This required care at places but I was soon where I could see the desired route through the Coconino. A branch from the main trail led me down to a near crack through the top Toroweap cliff. When I followed the track around a corner to the east, I came to a place where the bighorns jump a four or five foot gap in the ledge. It would be impossible for a man to jump here because there is an overhang in the way about four feet above the level you are standing on. I considered trying to hold to some slight knobs in the steeply sloping wall below the gap, but I decided that life is too short already. I retreated to the main trail above and went farther east hoping for a better way.

There was none, but I had a good look at the place where I had been stopped. I considered the possibility of getting down straight in an angle just before the place where the sheep jump. When I went down the second time to investigate this, I found a second crack through the lower cliff which made it unnecessary to do anything heroic. One caution to anyone using this lower crack is that a slab standing up edgewise in the lower part of the crack isn't really solid. One can pull it loose from below, but even if it were gone, this route is quite feasible. It was a simple walk across and down through the Coconino. After a short distance on the bare sandstone, the rest of the route is on a slide that is cut away steeply on either side. I had brought nothing with me except the camera, but I figured that I could do without water as long as necessary to go down on the Esplanade to intersect the route that Cureton and I had covered in 1959. Even if I never came back, I had another route from the rim to the river at the mouth of Matkatamiba.

I had left my pack on the rim at 7:10 a.m. and I was back on the rim by 10:15, but I spent an exasperating 15 minutes locating my pack and canteen. It was at a higher level than I had thought. When I was coming back up the Coconino, I noticed a big passage behind a fin of the sandstone. It is the only natural arch or window that I have observed in the entire park in the Coconino Sandstone. Since it hadn't frozen water on

the top of the mesa, I was surprised to find the waterhole of the previous day completely frozen to the bottom. I spent a lot of time chipping ice and stuffing the mush ice into my canteen. I ate with no water but what I could melt in my mouth and it was almost 1:30 p.m. by the time I left the frozen pool and it was after two when I got back to my pack at the bottom of the descent to the bed of the canyon. I followed the bottom and rather soon came to a well established horse trail along the bed. This made progress easier until the trail went off to the west where the valley was opening out. I tried to keep the sun to my right and by 3:10 I came to the Manakacha Point Road somewhat east of where I had left it. It took me 45 minutes to reach the road fork. After taking five or ten, I went on to reach the truck by about 5:30 p.m.

After what had seemed a fiasco on Saturday evening, I had had the thrill of finding what I feel to be the only ropeless route down to the Esplanade for many miles. In addition to spotting another window on the way up the Coconino, I also noticed a small cave near the rim on my way from the descent route back to where one can get into the bed. It went beneath a block of limestone where there is a crack. I looked beneath the rock where it was dark and tossed a pebble. It seemed to go down rather straight for at least 20 feet. Not being a caver, and also since I was short of water, I didn't get out the rope to investigate it further.

Beyond the Boucher Trail toward Vesta  
[February 26, 1972]

The plan was originally to go off the rim west of Mescalero Point and get down the Coconino east of the Diana Saddle and climb Vesta the way Doty did it. When Ritchey dropped out at the last minute, I thought it might be interesting to approach Vesta along the top of the Supai beyond the Boucher Trail. The way Doty went needs two climbing ropes, and I didn't have time to get hold of another (can be done with no rope).

Bob Packard and I left Flagstaff about 6:45 a.m. and after getting the permit, we left the head of the Hermit Trail about 8:35. I hadn't been down here for several years but I could see no changes in the route to the Dripping Springs fork. The spring 270 feet to the right of the trail at the base of the Coconino is still running a neat little flow out of the pipes that have been installed and there is a little basin deep enough for dipping a canteen.

The big change is in the Boucher Trail. It has cairns all along it and it has been used so much that one can follow it almost everywhere. There are a few awkward steps over big rocks, but it surely goes much faster than it used to when one had to hope he could find a deer trail for guidance. It took us about 75 minutes to go from the Dripping Springs Trail to the place to start down through the Supai and we were two hours getting from the head of the Hermit Trail to this place.

There were no consistent deer or bighorn trails beyond at this level. Progress with safety demanded attention to the footing, but there was no bad brush as there is along the Hermit Shale on the north side of the canyon. The view upriver to Granite Falls was outstanding when we arrived at the northernmost promontory. The river was clear and green this time. It took an hour to go around the bay above Travertine Canyon. We had an early lunch soon after we rounded the point with a good view of Vesta.



By now it was clear that we wouldn't get around Boucher Canyon in time to try to climb Vesta. We continued along the slope until we could look through the Vesta Saddle at the Coconino descent that Doty had used. Our view wouldn't have confirmed his discovery that this offers a free descent until the very bottom where he had to use a rope. I got a picture through the notch showing the south end of Vesta and another from where we had lunch to show the north end where Doty had climbed to the top. We could see that one could get up through the lower third of the Coconino rather easily, but from there on it might take some careful route finding and then some real climbing. I didn't get a very good view of the possible route up to the top of Vesta along the east side about a third of the way from the south end to the north.

I looked at Marsh Butte from our route and just about eliminated it from the realm off free climbing (it has been free climbed, 12/21/79).

There is a place in the Tapeats on the north side of the river just east of the rim of 94 Mile Canyon that suggests a way to get down to the river. Since Jim and Jan said that they had seen no way to get through the Tapeats in 94 Mile Canyon itself, this place might be of importance for a person trying to go along the Tonto to Crystal Creek (it goes and so do several places in 94 Mile Canyon).

There were plenty of deer and bighorn signs but we saw no wildlife. I heard a few pinyon jays and some canyon wrens. The weather was perfect, but it was getting warm enough to warrant more than two quarts of water for the entire day. I got a small refill on the return at the base of the Coconino. Both of us felt the exertion but as usual, Bob came out at the top before I did. In fact, I took about 35 minutes for the last mile, a vertical of about 1000 feet. I wanted to prove that this way of reaching Vesta is impractical, and we found that it was that. To do it this way, one would have to carry water for a two day trek (Bob later did this).

Glen Canyon, Mile 13.5 to Mile 0, Secret Canyon, and the Klondike Trail  
[March 18, 1972 to March 19, 1972]

Pat and Susie Reilly came up Friday evening and we got an early start on Saturday. The ranger at the Visitor's Center told us how to reach the easier way down to the river below the dam, on the north side downriver from the transformer yard. The gate to the ladder was padlocked so we had to walk about ten minutes to reach the rim. At first I tried a place that led down to a sheer wall but I got some directions from a couple of young fishermen far below. We had to go about 100 yards upriver from where we were and here we found the metal posts cemented in the rock with ropes fastened to them. These helped make it safer, but one could get down the cracks and slopes without aid, and we thought that this might have been an old Indian route that could have connected with the canyon on the other side where Jim David had found an old access to the bottom. We were down by 10:20 a.m. and had the boat blown up and ready to take off by 10:40. Roma and Susie had walked to the rim but they lost sight of us shortly before we got to the bank and we were out in the water before they found us again.

The two man inflatable bore our weight all right except that the back end had little freeboard. When Pat tried going through a riffle stern first in the approved manner, the boat shipped some water in the waves and we had to land to empty it. We were carrying Dock's notes on the Faatz inscription, the nearby

petroglyphs, the various dam sites, and the Wetherill Flattum first night camp. There was no question as to where we were along the river since we identified all the bends as we reached them. At the proper distance below the two ends of Ferry Swale, we landed and began looking for the inscription at what we both thought was Mile 10.4. While Pat improvised a repair for one of the rubber oarlocks that had broken, I went up and followed the wall downstream. There was no inscription for about a tenth of a mile, and I gave up in favor of eating lunch. When I took quite a bit longer to finish than Pat, he started looking downstream about where I had left off. He found the inscription on the wall just upriver from the bed of a little wash. An impressive arch is outlined in relief against the wall a bit to the east from here. One walks up to the right from the Faatz inscription to see the petroglyphs. These appear to be very old and are of heavy bellied sheep and square shouldered anthropomorphs with some other designs thrown in. The incisions are mostly dots pecked into the wall instead of uniform grooves. I was interested in the question of how the Indians reached this part of the river. We thought that there is a fairly good chance that they could have come down from the right rim directly above this place and then near the bottom they could have used a talus that is about Mile 10. As I read the map mileage, I would estimate that the inscriptions are at Mile 10.2 instead of at Mile 10.4

There were a few places where the current bore us along at six or eight miles per hour, but there were also long stretches where our oar power was necessary for any real progress. Pat pointed to some gravel on a right bank bench that had holes in it where the early miners had mined for gold. At mile 8.8 on the left bank, we noted a spring and got a needed refill for the canteen. After our lunch and the warm day, a quart apiece would have been rather slim water rations.

Downstream from here we were thrilled by seeing a beaver slap its tail and dive. A few minutes latter, we saw a beaver, possibly another individual, swimming with a stick in its mouth. It was on a collision course with the boat, and when it was only about 30 feet away, it slapped the water and dove. We couldn't see where it surfaced.

We noted that the left bank at Mile 7 would have been an attractive campsite for Wetherill and Flattum, but we didn't take time to stop and inspect the area. Perhaps I'll run the river again with time to do this right. Pat spotted the wall shown in the James book, *In and Around the Grand Canyon*, on page 234, from memory (Pat was way off). It would have been interesting if I had carried the book along and had checked Gene Foster's mileage 5.8. We also noticed the dam sites.

Several boats went up the river under full power even though the river was quite low. The Charles Spencer boiler was half out of water. The wind came up as we rounded the curve near the big sandslide and it blew the light boat upriver when we stopped rowing. There were small whitecaps, and to keep the water out of the boat, Pat, who was sitting at the buoyant bow, had to do all the rowing along here. We landed and walked to the parking lot as soon as we reached the upper ferry site. It was 5:30 p.m., but if the wind hadn't been against us, we would have arrived quite a bit sooner. It was a pleasant and interesting trip, but I would rather have that boat to myself so that I could move around a bit. As it was, we were both quite cramped and the circulation in my legs was poor.

Besides the possible access at Mile 10 on the right bank, there is a long chance that one could chimney up a crack at Mile 5.4, right bank. If one made it up about 40 feet vertically in the crack, he could likely walk

up the rest of the way and come down the Spencer Trail to the ferry. The trip was through a beautiful canyon, and if one pays just a little attention to the right channel, there is no problem of safe navigation. I would like to repeat this trip with Roma for a passenger.

We spent the night at Cliff Dwellers and started back to Wahweap in the morning. Our boat was in the going before nine. As we were getting to the Padre Bay section, we noted a man on shore waving a white flag and we found that his trouble was a lost drain plug. We went directly to Rainbow Marina and reported his predicament to the ranger who called headquarters at Wahweap.

We ate using the gas stove for heating some items at a little cove in Secret Canyon near the mouth. I was eager to go up Secret Canyon to see whether we could land and walk very far. It is still impressively narrow, but we were able to use the motor almost to the end of the water. There was some driftwood and we had to raise the motor to get over one log. I got out on a sandy bottom in less than a foot of water and found that I needed to walk through a 50 yard pool about one to two feet deep before I reached real dry land. Here I put on my shoes and needed to walk only six minutes to reach the place where a chockstone drop had stopped me in April of 1965. I returned to the boat and told the others the score. Then I picked up a light timber and returned to the barrier. When I leaned the log against the wall at the chockstone, I was able to get up. From above I was sure that this was the place I had been before, and I walked on for 15 minutes. There were open places where redbud trees were blooming and then there was one more spooky narrow slot. I also recognized a huge overhang where I had taken a photo in 1965. As the time was running out, I checked a dud of a possible Indian ruin before turning back to the boat.

We next proceeded to the steps carved in the bare sandstone just west of the mouth of Driftwood Canyon above the submerged Klondike Bar. Pat had come up the old miner's steps from the river before the lake was very full, or actually when there was just the river. We were both eager to follow the trail on up, but there was only time to explore about 15 minutes beyond the steps that can be seen from the lake. A little beyond these, we found more steps and several cairns. On the flat above the lower bare rock slope, I saw men's footprints in the soil and a big cairn that pointed me to the west. A hundred yards farther west I came to a steel fence post with a new sign saying that it was a survey marker. I could see that one might go up higher on talus slopes on both sides of Klondike Butte. My impression was that the route on the east side offered better chances of getting to the top of the Kaiparowits Plateau. The possibility of tracing the old trail out to the top was intriguing to both Pat and me. Pat's knowledge of the mining activity at Klondike Bar and his location of the old trail was invaluable and we both regarded the day as most interesting.

### Sinking Ship

[March 25, 1972]

John and Micki Carrol had visited the Sinking Ship twice without finding the Indian ruins, so I agreed to go with them and see the place again. It had been six and a half years since Reider Peterson and I had climbed it.

We parked at the paved picnic area to the southeast of the Sinking Ship and walked down into the depression and up a bit before going off the rim. This route is brushy and I didn't find much of the trail I

had remembered from former years. John Carrol seemed to be a bit more effective at locating some pieces of trail, but my theory that the hotel people had built a good trail for their guests to take a stroll around the Sinking Ship is no longer supported by evidence. In fact, there seems to be very little left of any deer trail around the base of the Sinking Ship, and the walking is looser and rougher than I had remembered. There is a good deal of up and down walking.

On other occasions I had noticed a metate under an overhang on the east side here and a flat piece of sandstone, but it wasn't a clear cut metate. I should have photographed the rock I had thought was a metate.

It soon became clear why the Carrolls hadn't seen the ruin I refer to in my guide book. They had turned back too soon. Before you see them, you have to start into the bay that is just below the notch between the northern most tower and the middle one. I saw the storage bin that is against the base of the northern tower and then noticed the more complex set that is a little to the south of the scramble through the notch. We went up and inspected this set of two or three rooms. Some rock seems to have fallen from the floor area since the structure was built, but the builders probably used a short juniper log across a little fissure to form part of the floor. Two of these rooms were big enough for a short person to lie in. Adobe clay still holds the rocks together. The bin I saw first, down to the northeast, has lost all of the clay. It is a bit large for a typical bin, but no one could lie down inside this room.

We had to go quite a bit lower to get around the base of the north tower. The views of the buttes to the north across the river are superb from here and Coronado Butte is also most impressive. There was no clear deer trail along the base as I had thought but we stayed close to the cliff. Finally when we were almost to the south end of the last high tower, we came to the ravine where Reider and I had come down using a rope. Just a little farther I recognized the place where we had started the ascent. It doesn't seem a bit obvious that one can go up clear to the top on this route, but I recall that it wasn't particularly hard.

We followed the trail that still shows quite definitely out to the top of the plateau immediately above the saddle south of the Sinking Ship. I walked to the car while the Carrols headed directly for the highway. I got to the parking with just a bit of a fumble by staying just too low and walking about 150 yards past it before I saw my mistake. I then drove more than a mile down the highway to pick up my guests, but they hadn't reached the road yet. Then I drove back to the parking and waited a few minutes. This time I found them.

This is a most interesting loop trip when one has less than two hours for a hike. With the climb to the summit, it is a most satisfactory achievement.

Fourth try for Mystic Spring  
[April 15, 1972]

My color slide of the picture in the album belonging to Bill Bass finally came from the processing lab and I was sure I could go right where the parallax would be right and find the old spring site. The reproduction of the original black and white picture was rather imperfect, but I thought I could line up the skyline with the right part of Huethawali and also get the rim of the Esplanade in the right place.

One thing that was absolutely certain from the picture is that the spring couldn't have been where it was shown on the old west half map and also on Dock's reproduction of a map where Waltenberg had placed it, exactly where the Matthes Evans map had put it.

Saturday turned out to be a perfect day for a hike, clear but cold enough to preserve some snow in the shade at the level of the rim. I had thought about the possibility that I would need more than two quarts of water for a full day of hiking, but my worries were over when I found rain water in the pockets on the Esplanade. There was a little at the top of the Supai in Garnet Canyon and lots of good pockets, some deep enough to immerse the canteen, on the west side of Spencer Terrace as I approached the broad north end.

At this distance north of Huethawali, the south rim was lined up at the right position on the west profile of the mountain, but I could see that I needed to be lower than the top of the Supai to get the level rim of the Esplanade across the mountain close to the bottom of the Coconino. I also couldn't see any good candidates for the foreground in the picture. At first I went down to the west at the neck just south of the wide north end of Spencer. Then I followed a burro trail to the west at the level just below the top of the terrace until I could see the river about a mile upriver from Elves Chasm. This is the area that fits best the description given by James in the book *In and Around the Grand Canyon*. This area was disqualified by the position of the skyline against Huethawali. I could also see that I needed to be quite a bit lower to get the rim of the Esplanade right. I didn't go right to where Bob Packard and I had eaten lunch although the foreground in the picture had some similarity with that vicinity. To get lower, I went high and walked to the east to descend at the neck. I passed the spring Bob and I had found. It was still dripping very slowly. To record its location, I took a picture that paralleled the cliff and showed Wheeler Point in the background and a large pinyon in front of the spring. I also faced the other way for a second picture and showed Havasupai Point and Fossil Mountain as the background. I would like to go through the rest of Bill's album and see whether there are any similar pictures that would serve as locaters of the spring called Mystic.

Back at the neck just south of the wide north end of Spencer I was able to descend although it took some care and route finding. I worked my way west at the foot of the massive cliff at what appeared to be about the right height for the perspective in the picture, but I couldn't see anything remotely resembling the right foreground. There was also the difficulty that I couldn't recognize any of the features showing in the picture on the face of the cliff rimming the Esplanade in front of Huethawali. The north side of Huethawali agreed with the picture, but this was all I could recognize as being right. For the rest of my time, I worked my way west and down to the middle of the Supai where there is a well established burro trail. Around below the northwest corner of Spencer Terrace the burro trail goes to a rare break, a fault zone, and goes lower. I would have liked to go down to the Redwall rim for views of the river and then go around into Garnet Canyon where I know it is possible to get up to the Bass Trail, but time was running out. I found a way and got up on the north side of Spencer. The natural route back led by the spring near the two mesal pits Bob and I had found (fox seen on the Esplanade east of Huethawali).

Matkatamiba Canyon

[April 22, 1972 to April 23, 1972]

Dr. Jon Thomas came from Wickenburg and stayed with us Friday evening. We were up soon enough to get the permit and start west about 8:15 a.m. With some trepidation, I drove the road up on the Great Thumb Mesa and I got back also without ruining any tires. I saw fresh tracks going north on W2AB at the fork, and I knew that they had been made the day before by the Fields. Jon and I stopped the pickup where the telephone line crosses the road W2A so that we would know which way to walk if we came back to the road with the truck not in sight.

I might have used a compass on this trip, but we left the truck heading toward Mount Trumbull. Then we used the high point Elliot for a destination. The idea was to stay on the high ground and we kept to the west of the ravines going down into Matkatamiba. This worked very well because we reached the rim north of 6010 from the road in one hour and 45 minutes.

As we were taking off the packs to eat, we got the greatest thrill of the entire trip. About 40 yards away, standing in a group against the rim were five bighorn rams and another, the largest of all, was lying down in front. They regarded us with interest and stood while I got the camera ready. I got about three pictures before they decided to take off at a gallop to the west. I ran and got another shot of them disappearing behind some rocks.

After lunch we noted the large cairn which Billingsley had built near the big crack that they had used to come up to the rim. Again I looked down past a chock stone and saw that we would have to lower the packs by rope about 25 feet. The chimney climbing down looked a bit hard since the crack seemed to be rather wide for good bracing against both walls. Jon would have taken it in stride, but he was quite willing to respect my judgment and go around the longer, easier way to the west and down. We went down the mostly loose material at the angle and then went around the corner to the base of the Kaibab Limestone cliff to pass the scree slope and then went down the bighorn trail. We used the same crack I had found before, but I had to take off my pack and manipulate it through the crack on the descent. On the return I was able to stand out far enough to keep the pack from catching, and so could Jon with a broader pack. I next noticed something that hadn't occurred to me when I was discovering this route. The place that had stopped me when the ledge gives out can be bypassed not only by another crack to the west, but one can walk down a simple slope just a little farther west than this crack. I can't imagine how this escaped my observation before. We now used the simple slope and proceeded east to the place near the solid wall where the final descent is made through the Coconino.

On the Esplanade we turned southeast and entered the short ravine. We saw the slight remains of a fire out on the smooth bedrock where all trace will be erased by future storms. This must be where Billingsley, Jensen, and Varin camped. It is near the first good rainpool. There were plenty of these scattered along the bed of the canyon from here on down and some are deep enough to furnish water through long dry spells. This ravine drops into the main arm of Matkatamiba over quite a fall. The young people had taken this head on, and Jon was able to get down a stiff drop while I handed his pack down to him. He stood against the wall and let me step on his shoulders and I got on down with some help from a small tree. Billingsley, Jensen, and Varin had built a cairn to mark this turnoff from the main bed. On our return I led Jon up canyon about 150 yards farther and we found a simple way up and back around into

the same ravine. Once I went too high and had to descend some. We came back to the bed at the place Billingsley and the others had camped.

Less than a quarter of a mile from where we entered the main bed we noted some ruins under an overhang on the east side of the bed. The walls seemed to be without mortar and no complete rooms were outlined. We didn't spend much time looking, but we missed Billingsley's other ruins and the petroglyphs.

In getting down to the spring below the big drop, there were two initial barriers to pass. This may have been the one where Allyn concluded that we couldn't go on. It is very possible that the barrier that discouraged Allyn is farther up in the main bed. This one can be passed by getting down some of the short drop on the right and then going left across the face to the broken rocks on the west. At the next, much greater drop, one can go up high on the right and follow a game trail to a slide where it goes back down to the bed.

We seemed to be getting quite low in the Supai Formation, and I was beginning to wonder whether Billingsley's big drop around 200 feet would be a gross exaggeration. I was prepared for a shock and when we arrived, it came up to expectations. An exact measurement might put the height to 150 feet, but it is clearly out of the class of the other barrier drops. The view from the top is striking, the red walled valley looking across to the north rim, the rich grove of cottonwoods below, and the ferns and columbines growing on the perpendicular walls right below. There is a lot of seepage both from the lower part of the main wall but even more from the slot canyon that comes in from the left. We found several cairns that Billingsley had built marking the crack to the left of the brink where one can get down to the narrow ledge that goes under the overhang of the main bed. At one place Jon and I handed down the packs. Most of the walk around to the east is safe enough, but before one comes to the slide, the ledge narrows to a four inch track in the steep dirt. The whole ledge is only three or four feet wide and the footing is precarious. To complicate things, the overhanging ceiling prevents a man with a pack from doing much better than a crawl. I passed here with only a few scrapes of the pack against the ceiling, but the idea of getting across with his pack rather bothered Jon. I put mine down and carried his pack across the bad part holding it in front of me. On the return both of us crossed without removing our packs. We arrived at the lowest pools of running water at 3:00 p.m. after four and a quarter hours of actual travel from the truck.

We left the packs here and I changed to my light oxfords for some more walking. We promptly encountered another barrier fall. Jon came down a bit of a drop on the west and I did a similar one on the east. The footing was so bad where I came down that it was time consuming. I should have gone high on the landslide where we had come down to the spring, on the east side of the bed, and continued for several hundred yards. Then I could have come down easily beyond the last barrier in the Supai. The Redwall shows before one reaches the junction with the large tributary from the east.

By now I could see that there would be no time to investigate the fault on the east side of Matkat and Jon was very willing to go along the west Redwall rim and get down into the main bed below the obstruction. We had a burro trail of sorts along here and soon found the first way down. It is easier, if anything, than the way Dye and I had gone down. It took five minutes for us to walk the bed to where Dye and I had entered and then we walked on to let Jon see the most impressive narrows, only ten minutes farther. When

we returned, we climbed out on the east side almost exactly opposite the southern descent route from the west. It was simple and the burro trail still is showing here.

I passed the barrier below the spring by going high on the slope to the west. It had some burro signs for some of the way, but before I got down, I was moving very slowly on precarious footing. The best way is to stay high on the other (east) side.

We had a fine night with the right amount of bedding. Owls and frogs furnished interesting sound effects, and I heard a mosquito several times. I scraped several ticks off me but Jon never seemed to be bothered by them. We broke camp at 7:00 a.m. and reached the truck by 1:45 p.m. in about five and a half hours of actual walking time. I showed Jon the Enfilade Point ruins before we headed back to civilization. I also pointed out the way down to the river.

It was a fine time for a trip, plenty cool, and with lots of spring flowers.

### Mystic Spring

[May 6, 1972]

After studying the pictures I had duplicated from the one in Bill Bass' album, George Billingsley had gone right to the place. You can easily walk along the pavement of bare Supai west of the highest part of Spencer Terrace to where the rim turns sharply to the west as the end of the terrace widens. Jon Thomas also had told me that Bass used to have a camp under an overhang near here, but I had been along here twice before without seeing anything that was like the pictures. Even with the pictures showing Mount Huethawali in the background, I couldn't tell which way I should move to get the foreground right. Billingsley gave me quite explicit instructions, so I knew that I should be down about 20 feet below the broad pavement that forms the west rim of the neck and then walk to the south. I found the place he mentioned that is rather hard to pass, a projection that gives very little shelf for walking. Beyond this point I could see that I was at the right place. The skyline on both sides of Huethawali was right and the foreground rocks matched too. Directly ahead under a fine overhang was the old Bass camp with three pails lying around. There were some walls that may have been to form a terrace. Leading away from one side of the overhang was a small cave about six feet deep where someone had left a blue plastic air mattress. North of the overhang is an intriguing tunnel that leads to a circular pit in the 20 foot high sandstone. It is big enough to accommodate two or three small redbud trees.

The spring itself is about 20 yards south of the overhang. According to the picture in James' book, the main pool of the spring was quite close to the 20 foot cliff, but now this area is covered with soil. The only water now seeps from the base of a two foot ledge that forms the west border of the place where the burro in the James picture is drinking. As George had said, there is a cup or two of water in a little basin about a half inch deep by six inches across. The rock down slope from this little basin was wet, but there was no perceptible flow. About a yard to the south there was another small seep, but this water merely kept the soil wet.



There is another wall outlining part of a room quite close to the spring and a constructed trail leads south of the spring along the ledge until it reaches a break where it goes up on the bare pavement. There is a fairly distinct burro trail south along Spencer Terrace.

Walking down from the rim and around the north side of Huethawali is mostly easy. Without hurrying, I came from the rim to the vicinity of the spring in about one and a half hours.

All of the water that I had found standing in holes along the pavement as one approaches the spring was dried up. I didn't go to the other seep northwest of here to see whether the slow drips were still active.

Evidence that the Indians used the whole area isn't hard to find. Besides the ruins one passes near where the trail starts down through the Coconino, there are mescal pits in at least four locations. The first one is about 50 yards northwest of the big cairn where the trail comes to the base of the Hermit Shale. The next pair are west of the trail where it turns north along the north branch of Garnet Canyon. The next cluster is above the west base of Spencer Terrace where it joins the main plateau north of Huethawali. There is another pair near the seep spring near the southwest part of the wide north end of Spencer Terrace.

After having a leisurely lunch at Mystic Spring, I climbed down about a third of the way through the formation and walked the broad bare pavement to the south. I wanted to check for any other water sources. Although there were many places where the rock was stained white by old seeps, I don't think there was any other spring. Then I walked out to the end of Huxley Terrace and got a fine view of Shinumo Creek. I hustled to get back from the end of Huxley to the rim between 2:15 and 4:00 p.m. There I had the pleasure of a second visit with Mike Armour, his wife, and two friends. It took me two and a half hours to drive from Bass Camp home.

Second try for Vesta  
[May 14, 1972]

John Ritchey, Lee Dexter, and Bob Packard went with me. We started rather late from Flagstaff, about 7:15 a.m. since I had been getting back from Lake Powell the night before, and Ritchey and Dexter were up even later getting back from a spectacular climb south of Kingman.

The new feature in driving out on the Park Boundary Road is that they are removing the telephone poles that we have been using for locating the best parking. The first sign of poles we saw were the bases that were pulled out of the ground but were still lying there. Then we saw the whole pole lying on the ground, but the first number was 330. We were able to read the numbers where they lay up to 350, and we parked on a rise a little west of 355. This would be about one and a quarter miles west of the gate through the drift fence. Lee gave us a compass bearing at right angles to the road and we veered a little to the west. In 35 minutes we came to the rim right at a large cairn, but it was the marker built by some of our student hikers a couple of years ago. I led the party east and north along the rim to the two cairns, a small one built by Allyn and a large one put up by Al Doty. This marks the top of the Jerry Bortle route.

Immediately below the rim one turns to the east for a few yards, about 40. Then you go down to the west through a crack and come to the steep slope with the little ledges and the crack over to the east. We tied

my rope to a pinyon and used it for a hand grip all the way down to the ledge. My memory of this was clear except that I wasn't sure which tree we had used for a rope anchor before, something like 11 years ago. At the short but straight drop near the bottom, I used a leg rappel, but I didn't need more than a hand grip. The others only held to the rope, and on the return I pulled up with the rope twisted once around my hand. One could carry a short rope and tie much lower than we did. With four of us and the need to wait until a person was out of the way for fear of falling rocks, it took us about four times as long to pass this place than it would have taken one man. On the return, Lee climbed this pitch without touching the rope, and Allyn has done this too. Clement and Tadge could have come this way. Below this pitch the way goes down a slide through the next ledge and then turns east. You go along about two thirds of the way to the saddle before finding a bighorn trail down. At the bottom of this, you need to use your hands, but there is a good grip.

Doty said his way was straight down the break east of the saddle and involved a short rappel at the bottom of the Coconino. After we had gone down the red part of the Toroweap, we came to a drop in the limestone. Bob scouted to the south and I went north. I shouted that signs looked good, use by animals particularly. I soon found a walk through the ledge, and farther north, just as we came to the end of the ledge under a big shallow cave, there was another break that took us into the Coconino. There was a broken slope through all but the bottom 60 feet of Coconino north of us, so we inspected it. Lee got down a chimney without his pack, but John said that Bob and I wouldn't like this place. We scouted to the south again needing to go back up some of the formation. There is a high talus covering the lower Coconino and we headed for it. I overshot it at a higher level, but Bob found the break. I feel sure I could climb down without a rope, especially if I would lower a pack by a cord, but we used John's perlon here since we had it. Doty surely didn't see this or he would have needed no rope.

Then we faced a problem of getting off the talus to the south. I thought that we would have to go down to the foot of the Hermit to do it and started down by myself. The others stayed together and Bob found a place, not at the very top, but rather high. On the return they came along a lower level, but still above the bottom of the Hermit.

On the talus the first thought was that we would have to go to the bottom of the Hermit to get past, and I started down by myself intending to cross at the bottom and then join the others. When I was quite low, I shouted and found that they had succeeded in getting past the talus and were about to eat lunch. I also stopped in the shade and ate. Then I discovered that I was already below the first big cliff of Supai and couldn't get back up to the Hermit to the south without going back where I had been. I shouted that I would go down to the bed of the valley at the Redwall rim and go up the other side to the saddle south of Vesta. Just a few yards beyond here I skidded and fell on my back. This is quite common, but this time I landed on a sharp rock that jabbed my back low on the left and hurt quite badly. I kept on going down for a short time, but I could feel it getting worse and could tell by my sense of shock that I had broken a rib or two. I shouted to the others that I was going back to the truck and they heard me. It was already so late that they would have taken until 4:00 p.m. to reach the top of Vesta, but they also felt that they should help me as much as possible, so they returned too. Besides the weakness of shock, I couldn't breathe deeply and thus had to move slowly. It felt a little worse when I had to use my hands to pull up a few places, but I could do it without too much pain.

I was prepared to use my Jumars to climb the short vertical place on the Kaibab pitch, but I was unable to make out by giving the rope a twist around my hand. Lee Dexter did this place without touching the rope, as Allyn has done before him.

We were all remarkably successful in getting back to the truck without missing the way. At the rim Dexter consulted his compass and gave us the direction, about 60 degrees to the left of the sun. John walked with me most of the way while Lee and Bob went off at a faster pace. We found their tracks and followed them until they seemed to be going too far to the east. They hit the road within three telephone poles of the truck. John thought I was also heading too far to the east and he left me a short way before we came to the road. He missed the truck by only one pole to the west. When he honked the horn, I didn't have to change direction at all, but I was the last to arrive.

Besides the fossil footprints I observed, there were also a couple of mesal pits at the base of Diana about 100 yards northeast of the saddle. The material has slid down the slope so that it doesn't make a cup now, but the small stones show the effects of fire.

Even using the Bortle departure from the rim, one should get an early start. It would be best to sleep next to the truck and leave by seven or before instead of at 9:45 as we did. Now that we know the route, I could do it a lot faster. I would want a rope at the steep pitch in the Kaibab, but I think I could do the rest free. Perhaps there would be a place on the north end of Vesta that would require help for me to get up the place where Al did a pull up.

I would also like to go back here with the thought of getting down to the rim of the Redwall in Topaz. There may have been a bad drop below where I saw it, but I would like to make sure.

The fossil footprints are on the largest and lowest of several huge blocks of Coconino Sandstone that have rolled down the gully southwest of the long talus. They are the most impressive I have seen, not excluding those on the Eminence Break descent to Marble Canyon. Unfortunately, they don't show individual tow or claw marks, but they are big and form a straight track about 25 feet across the vertical face of the detached block. There are several sets of tracks with some crossing others. The big ones here are about six inches long and are about two inches apart on the same side. I didn't inspect them from close up. There are some other small ones near the chimney where Lee went down.