

Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (January 18, 1980 - October 22, 1981)

Clay Tank (Lost) Canyon

[January 18, 1980 to January 20, 1980]

Last year when I took Joe Hall into lower Grand Canyon by boat, I had walked up Clay Tank Canyon (Lost Creek on the river map) and had noticed a way to climb to the break in the highest cliff south of the "k" in the name Tank on the seven and a half minute quad map. From map study I figured that one should be able to walk down the bed of the wash that reaches the river at mile 247.6 and scramble up to this notch. My only real problem would be to find the way to the road that turns into a Jeep trail at the water tank near the east border of block 14 of the map. The best map I had of the Buck and Doe Road was the Williams Quad 1:250,000 which doesn't show any road to the northeast going nearly that far.

Friday and Saturday were perfectly clear and I had an uneventful drive to Peach Springs with a gas stop at Seligman. To get a permit, I stopped at the Tribal Administration Building and was directed to Beecher's home or else the Wildlife and Outdoor Recreation Office. The Beechers were not at either place, so I talked the receptionist at the administration building into taking \$10 to be given Mrs. Beecher later.

Some snow was still lying by the road in shady places and there were two or three places on the road that made me wonder whether I shouldn't be using the four wheel drive, but I got through all right. I could identify the water tanks shown on the Williams Quad. On the way back I checked the drinking troughs and found water in both. I didn't see the catchment basins but I suppose they are at a distance and the water runs into the big metal tanks underground. There must be a float type valve to control the height of the water in the troughs although I didn't see these. The tank on the west side of the road was almost empty and the little water in the trough may have been rain and snow.

I had decided not to drive off the Buck and Doe Road for fear of getting stuck and I reasoned that the best place to leave the car would be at the flat leading to Clay Tank Canyon or at the beginning of the road leading to the nameless canyon which goes near the notch above lower Clay Tank Canyon. I began looking for such a place about five miles north of the second water tank but two miles later, 35 miles from US 66, I saw a streambed in a meadow that looked probable. A pool of water at a rocky place quite near the main road encouraged me to think that I could find more water for camping down the canyon where the walls would be steep. Water had been running in Milkweed Canyon and in a minor wash farther northwest. The valley floor was a broad terrace with quite a lot of green and not too much sage brush. A nearly cubical structure made of gray material like roofing aroused my curiosity about 45 minutes walk from the car. Quite soon I came to a corral and the biggest clay dam and cattle tank I have ever seen. Water covered about a third of the area which could be flooded and wild ducks were using this body of water.

I had been able to step through a partially fallen fence near the edge of the arroyo easier than opening a stretched wire gate, and I faced the same problem just beyond the clay dam. I put my pack and camera under one part of the fence and crawled beneath the bottom wire nearby. When I picked up my stuff, I

forgot the camera until I had walked for 20 minutes. Recovering it wasted 40 minutes. A little to the north of where I had turned back, I came to a road. If I had been open minded, I would have recognized this as the one I had intended to follow to the tank at the head of the canyon going to the access notch for the descent into lower Clay Tank Canyon. I had been thinking that the big cattle tank with the ducks was the one shown on the Spencer Canyon Quad and that I should follow this bed down to the notch. When the road diverged from the wash, at first I followed it up a steep grade, but when I saw that it was leading clear away from the wash, I scrambled back down and went down the bed. I was still looking for a pool for camping any time after 4:30, but the bed consisted of gravel and boulders and no water showed. Since there were snow patches, I knew I could get water by melting. About 4:30 I came to a place where snow had melted and frozen ice three quarters of an inch thick on a sloping rock wall. It would be faster to fill my pan with ice than with snow, so I decided to camp here if nothing better showed in the next 15 minutes, but I had gone far enough to make sure that the canyon I was in did not conform to the bends of the canyon I wanted. The right canyon has a bend heading due south for a short distance.

I was using my light down bag inside my regular weight bag, but still I got cold in spots during the night. Once when I was awake, I came to the correct idea of the road I had crossed. I decided that the canyon I was in must be the upper part of the main arm of Clay Tank Canyon and that I should go back and follow the road east if I still wanted to complete the passage to the river. After the wakeful night, I dropped off and only woke up at 6:50. Before going on I had to melt ice out of my pan and melt some more to start with a full canteen, so it was 7:10 when I started walking. Incidentally, after all these years I got an idea about preventing one's canteen from freezing at the neck. Usually only a little ice freezes in the canteen overnight. If one lays the canteen on its side or puts it upside down, the freezing will occur where it doesn't seal the cap and make drinking difficult in the morning.

It took me about 45 minutes to get back to the road and then about 75 to follow it to the metal tank shown on the Spencer Canyon Quad. There is also a very new clay dam tank that has been bulldozed in the drainage, but no water had collected in it. The metal tank was supposed to catch the runoff from a plastic lined basin uphill from the tank, but this black material had disintegrated and vegetation had grown up in the cracks. There was about six inches of water in the bottom of the tank, but not enough to get into the cattle drinking trough outside. I didn't feel that I could climb out of the tank if I did get down into it for water. I decided to walk down the wash and melt snow if I didn't come to any pools. This time the bends in the bed and the tributary ravines matched perfectly with the map and I knew that I was in the correct canyon. A very faint truck or Jeep track matched the Jeep trail shown on the map. My bag had collected so much frost and dew the first night that I sought some kind of protection for the second camp. I found what I wanted, a big and thick juniper with some level ground beneath the boughs. This worked and there was no frost on my bed in the morning. I slept warm and even had to take off a jacket I had gone to bed wearing. Most of the time from 6:30 to 6:30 I was asleep.

I had reached this campsite with snow for water and the tree for protection early enough to be through lunch by 12:15. When I walked down canyon 247.6, all the bends continued to check. In fact I held the map in my hand and kept track of my progress. Where the bed makes the horseshoe bend and turns clear south, I tried going over the low ridge. The cliff below on the east side looked formidable and I went back and followed the bed. On the return, however, I believe I saw some hope for getting through, but by then I was tired and preferred the easy, longer walk. I was carrying only a light day pack, so that it was easy to

keep up a good pace. I reached the pass leading to lower Clay Tank Canyon from my campsite in 75 minutes and my campsite was about 45 minutes beyond the metal tank.

The notch was caused by a fault that accounts for a similar notch directly north across Clay Tank Canyon. I feel sure that one could go up through this second notch and down into the canyon reaching the river at Mile 251.9. It must be not more than 80 feet from the bed of Canyon 247.6 up to the pass and several hundred feet from there to the prevailing surface on either side of the notch. If the world lasts long enough, stream piracy will occur and the bed of 247.6 Canyon will drain into Clay Tank Canyon.

The descent from the pass was steep, especially near the top, but there were no problems worse than watching one's footing on a rockslide. I took an hour to get down to where I was sure that I had connected with my position last spring and then came back up to the pass in 75 minutes.

When I came down from the pass to the bed of the wash, I noticed something I had missed on the approach, about the largest and deepest mesquite pit I have ever seen. Also, only a few minutes walk upstream were three rainpools with water just deep enough to nearly fill my canteen by immersion. This extra water made it unnecessary to melt so much snow when I got back to my campsite about 5:20. I had just enough time to get my supper and have everything shipshape before dark. I had walked with only a break for lunch from 7:50 a.m. to 5:20 p.m. and although I was tired, I felt that I had done better than on the previous three backpacks. In the morning I started back to the car about 6:50 and got back in four hours of actual walking. My shoulders got sore sooner than on the previous day and I took in addition to the four hours, two fifteen minute breaks.

When I reported to Mrs. Beecher that I was out, she told me that the Tribal Council has declared some parts of the reservation off limits for hikers. I didn't stay long enough to hear more since she didn't seem to want to invite me into her house.

It seemed like a fairly rewarding hike since I had rounded out my list of access routes to the river to an even 100 and completed my 156th route through the Redwall.

Milkweed Canyon

[March 14, 1980 to March 19, 1980]

Bill Mooz, Jorgen Visbak, and I had a fine trip by boat planned to go to the mouth of Surprise Canyon and hike for a week. Chad Gibson had been corresponding with me about a long hike through the entire canyon from Lee's Ferry to Pearce Ferry, and I invited him to join us when Jorgen's friend, Ted Rado, couldn't come. Jorgen and Bill arrived a few minutes before I got to South Cove with the 19 foot powerboat, and we checked that it would start with a little help from an aerosol can. Before the 2:00 p.m. deadline, Chad appeared, but he took a seemingly long time to assemble his stuff for a long backpack. When we finally got under way, we had to proceed slowly because of the mostly small driftwood in the high level lake, 1204 feet (only 23 feet under the maximum possible height). Then when we seemed in clearer water, I gave the prop more power and the transmission promptly broke. The day was windless so that we could consider paddling the half mile back to the landing. After a few minutes of this, we were given a tow by a pair of young men in a runabout.

After just a bit of discussion, we towed the boat to Peach Springs and got a permit from Mrs. Beecher to spend six days in Milkweed Canyon. We parked my boat and Jorgen's and Chad's cars at the police station and still had time to go out the Buck and Doe Road in my Jimmy and turn off on the spur to Milkweed Springs. Within six tenths of a mile this spur crossed Milkweed Creek three times and ends at a corral and ruined tin roofed house. We had a good meal and a campfire near the car.

On Saturday morning, I was ready to move before the others even though I had spent more than an hour to drive back to the boat at Peach Springs to get my can of quick start fluid just in case I might have a problem getting the Jimmy to start after standing for five or six days. I also tilted the prop to let water drain out and picked up the Time magazine that I had intended to read on the hike. Then while the rest were having breakfast, I walked down the creek to locate the trail that Kurt Meyers had said was a fine bypass for the big drop. He had said that it begins beyond the power line and before you enter the lava narrows. He also built a cairn, which was now swept away by floods, and he said that there was a white rock that serves as a natural marker. I couldn't see the white rock nor the cairn, but when I was about 100 yards north of the power line, I came to a break in the cliff just west of the creek. A little ravine comes down here and leaves the cliff with a narrow point. Right next to the end of the cliff, the Indians have placed one strand of wire between two poles to form a sort of gate. There is no further fencing around. After a little search, I found a sketchy trail going up to the north with an old horseshoe lying on it.

When the other three arrived about 9:30, we proceeded up this trail but near the top of the slope it disappeared. Jorgen and Bill went to the east and Chad and I went on toward the top of the hill. We came on a trail again and Bill and Jorgen caught up. At least twice the trail got down at the west end of a cliff and then turned east. Eventually, it got down to Milkweed Creek a little to the south of the junction with Westwater. When we returned on Wednesday, we followed the trail accurately through the lower half and then got onto a burro trail that was lower and farther east, right close to the rim of the cliff above Milkweed. Then we went to the top of the knoll and before we reached the power line, we overshot the place we had come up from the creek but doubled back down to the creek at the right place. While Jorgen and Bill went on down Milkweed along the stream, Chad and I went up Westwater Creek about a mile. It is quite different from Milkweed having a steep and uniform gradient and the bed is clogged with huge rounded boulders. We had to take to the slope beside the creek but we came down to the bed to eat our lunches. We needed 50 minutes to get there from where we had left our packs near the end of Westwater and only 30 to get back since we went east on the slope clear away from the creekbed. Something that impressed all of us was the prevalence of water. We had to jump from rock to rock frequently to reach better walking on the other side of the creek. The main narrows through granite cliffs begins where a minor tributary comes from the west near the northeast corner of block nine on the Milkweed NW Quad map and it ends near the southeast corner of block 34. Not long after we passed the end of a running stream from the west that comes through blocks four and three, we reached a place where the stream drops over a barrier fall with no bypass nearby. We saw that Bill and Jorgen had written NO for going on and had put an arrow pointing up a side ravine. Near the top of the ravine, we found numerous cairns that Bill had built to help us find the tricky route over spurs and along the steep slope beneath the rim of a plateau. We soon saw Bill and Jorgen looking back at us from where they had come back down to the stream. I didn't think that it would be necessary to stay up on that difficult footing so long and led Chad down a ravine successfully. This big detour was on the east side of the creek and it required quite a bit of

time. When Chad and I came to where we had seen Bill and Jorgen, they had gone on. We were a little confused by a couple of cairns that we found at the foot of a ravine from the east. We thought it possible that Bill and Jorgen had gone up this ravine, but we learned later that this was where they came down. After a break for me to inspect the climb up the ravine and for Chad to see whether his feet were blistering, we went on. Chad had a very heavy pack and was glad to call it a day before we left the narrows. We had a good night with conversation beside a campfire. In the late afternoon, here and on the rest of the trip, we were attacked by biting flies. They were easy to kill as they would start poking a bill into the back of my hand, but there were lots more.

On Sunday Chad and I had walked less than half an hour when we came to Bill and Jorgen still getting breakfast. Their camp was just a few yards upstream from the mouth of a side canyon coming in from the southeast near the boundary between blocks 34 and 35. This side stream seemed to have about two thirds as much water as the main stream. On Wednesday morning I went up this side canyon to get a look at what had impressed George Billingsley so much. there was a five foot fall about 150 yards from the mouth and a 20 foot fall about 40 yards farther. The water flows over bare red granite and about one mile farther up, there is a 60 foot fall. Travel up the bed stops here but farther down, one can get up the steep broken slopes on either side. Billingsley must have seen more of this canyon than I did. He also worked out a route from here up to the main plateau near Bender Tank.

Chad and I walked on before Bill and Jorgen were ready to go. He stopped at the northwest corner of block 25 where I saw the place Billingsley had come down from Bender Tank. We ate our lunch back from the bed and Jorgen just happened to notice my pack near the edge of our terrace or they would have passed by. I was glad to get my cup that Bill had spotted on the ground at their camp and had put in his pack to bring to me. They told me that they wanted to go down Spencer and have a look at the travertine terrace and also visit the Meriwitica Spring area and also take a quick look up Spencer to the junction with Hindu Canyon. I told them that since I had seen all of these attractions, I would spend my time in upper Milkweed and that we would get together for the walk out to the car.

I used Sunday afternoon to go to the top of the plateau to points of elevation 4759 and 4842 in block 31 of the Hindu Canyon Quad. This ascent of two and a quarter hours was relatively easy since there was a burro trail much of the way. I was a little surprised to see the footprints of other hikers on this route. The prevalence of water worn boulders about the middle of the east boundary of block 25 made me wonder whether this might be an ancient riverbed. I got back sooner than I had planned and had time to read my magazine and eat an early supper.

On Sunday I walked back upstream in Milkweed and started up the dry canyon to the northwest about a half mile from my campsite. I finally left the bed and went southwest up to the base of the topmost cliff. Walking was slow and precarious, but I made my way south past the point of elevation 4541 to look into the big canyon east of the Meriwitica Road. I had a fine view of the entire area and figured that I could get along the difficult slope ahead and down into the bed of this major canyon. However, I thought it would be more expeditious to go down and come up the bed of this canyon. When I did try this route I was stopped by impossible cliffs only about 15 minutes up from Milkweed. Then I found a way south of the bed to climb to the first rim. The view up the valley convinced me that there is no route to the very top

in this valley. I carried my pack upstream and camped just a few yards south of the site Bill and Jorgen had used Saturday night.

On Tuesday morning I put my big pack down at the foot of the slope just upstream from the mouth of the little canyon cutting through the "o" of the word Reservation on the Milkweed Canyon Quad. At the base of the Tapeats cliff, I went to the right around the corner and soon came to a clear break through the Tapeats. It was routine hill and dale walking through the blackbrush to the lower end of the canyon coming down from Harding Spring. This goes into the bed of Milkweed on the level well above the barrier in the narrows that occasioned the difficult bypass up high on the east slope. This leg took me 90 minutes on Tuesday with a day pack, but on Wednesday with the others to inspire me, we did it with our full packs in 79 minutes. On Tuesday, I went up the rest of the narrows of Milkweed along the creekbed and then came back to the Harding Spring Canyon over the rolling plateau in slightly less time, about 30 minutes. There was plenty of time so I went up Harding Spring Canyon to a cave on the red cliff rather high up. It had a flat floor about large enough to sleep four if they crowded, but there were no signs of previous use. I noticed an Ocotillo high in this canyon and saw several kinds of flowers in bloom including loco and a small cactus. I heard a canyon wren and another songster and a flock of pinyon jays. There was a raven high in the air and several small lizards on the ground. There were lots of signs of burros including passable trails in very useful places. I saw one live burro and one jackrabbit and a cottontail the next day. On the way out we saw several Indian paintbrushes in bloom.

Tuesday evening threatened rain. When I was about ready to eat my soup, Chad came around the corner and instead of going on to where we had camped the first night where he thought he might be protected from the rain, he stopped to camp with me. He told me that Bill and Jorgen were camping with Bill's tent for protection only a little way downstream where they had stopped the first night. I left my soup for later and went down to confer. I thought that I could put my tent fly over my head if it rained in the night, but fortunately there were only a few drops.

On Wednesday morning I went down to the other camp again and then went up the canyon of the waterfalls for a short distance until I was stopped in the bed. After Bill and Jorgen got organized, we all started for the car using the route I had learned on Tuesday. With our packs we did it faster than I had done it with only a lunch. This time we noticed a miner's drill rod, point down in the soil of the terrace just south of the bed of Harding Spring Creek.

The weather didn't seem too threatening, but we thought that we had done most of the interesting things in Milkweed, so when it was still early as we approached the lower end of the trail that goes up the ridge between Westwater Canyon and Milkweed, we continued to the car. It took us around two hours to reach the car although we missed some of the trail.

Clear Creek

[April 26, 1980 to April 29, 1980]

Alan Doty went to Flagstaff with me and spent the afternoon and evening with a friend while I attended the Friday session and the banquet of the Math Association. Before 10:00 p.m. we were on our way driving toward the Grand Canyon. We turned off on the Wilaha Road to sleep inside the Jimmy. Both of

us could get room enough on the floor when Al put the spare tire and the tool box outside the car and we piled our duffel on the seats. It was comforting to have the roof over us when we could hear the rain outside. We had lots of time before the Visitor's Center opened at 8:00 a.m. Tom Davison let me come behind the scene and get my permit for Clear Creek without waiting in line. There had been no rain in the canyon and the weather was fine for our stay until we were on our way out.

I didn't want to strain myself on the descent since we were going on over to Clear Creek the same day. We got down to the campground in two hours and 40 minutes. I made the acquaintance of the new ranger, Barb Carolus. She told me that a stay at the Phantom Ranch Dorm would cost us \$9.50 per night. She seemed pleased to meet the author of Grand Canyon Treks, and she suggested that if we wanted to break the trip out, we could count on staying at the ranger house just south of Phantom Ranch. I was glad to accept since all the space at the campground is reserved weeks ahead of time at this time of year. We ate our lunch near the campground bridge and then started on about noon. We kept a slow but steady pace up the grade out of Bright Angel Creek Canyon and I told Al about the old days when I could go a lot farther in a day than I can now, how I once put down my pack on the trail near the bottom of the Tapeats and went back past the campground and on up to the South Rim with just my canteen and my lunch. Then after draining the radiator of my leaky old car, I went down and over to Clear Creek where Boyd Moore had a fire going in the darkness of November to guide me to his campsite. I had added onto the generally regarded strenuous trip from the south Rim to Clear Creek the hike up near the base of the Tapeats and the hike down and up the South Rim.

In the bedrock wash between Sumner and Bradley, we noticed that the two obvious rain pockets were dry but when we looked over the five foot drop 50 feet farther down the bed, we saw that there was stagnant water about six inches deep. It had a lot of algae in it and was tinged a yellow color, but we trusted it and got a refill in the canteens.

Alan was already feeling sick to the stomach before we got this water and we rested here before going on. There are some overhangs here and a quarter mile farther back that would provide a roof for a wet night. When we had proceeded about a quarter mile, Al felt so bad that we returned to the vicinity of the water pocket and camped for the night, stopping about 2:30. I had my Time magazine along so I could spend the time all right and Al was content to lie on his pad with his eyes shut. About 4:30 he felt well enough for us to go down the wash to see what it is like. Our trip was along the sides of a triangle, back along the trail, then down one arm into the main bed to the impossible drop into the Inner Gorge, and then back in the main bed to our campsite. We found a little good water at two places, the best being just a few yards before the bed comes to the drop off.

In the night I was thinking that we ought to return to civilization because of Alan's health, but in the morning he assured me that he felt all right. We got started on by 6:35 and reached Clear Creek in less than the four hours I had suggested. Again Alan felt like lying on his bed, weakened by nausea. After a long rest and some lunch, he felt better and we went up to Cheyava Falls which was really booming. I have never seen pictures that make the falls look better than they do now. Clear Creek was difficult to ford with at least five times its normal amount of water. Flowers were out as fine as I have ever seen them. I noticed redbud trees in full bloom that I hadn't remembered being in Clear Creek. I had suggested two and a half hours as a fair time allowance to go from the foot of the Clear Creek Trail up to Cheyava

Falls, but I noticed that Alan and I needed only about two hours to get there and one hour and 40 minutes to return. We took no more pictures because we were worried that it might rain on our unprotected packs. We also met a lot of people some of which had looked in vain for the Indian ruins on the ledge to the south of Cheyava Falls. I met the Olson family of Tucson just as they were leaving the vicinity of the falls and they were surprised and pleased when I pointed out the ruins which are still perfectly preserved.

Alan and I were scrambling along the slope on the west side of the creek across from the falls and somewhat south of the falls when I noticed a rock wall about three and a half feet high. It seemed to have been built as a windbreak for a bivouac. When we got back to Phantom Ranch I learned about a ruin at Clear Creek about which I had been ignorant all these years. A red haired girl who works at the ranch had broken her leg while trying to climb up to a storage bin on the east side of the creek right across from where the trail first reaches the creek. I have yet to see this granary with my own eyes. Hiking is so popular now that a well defined trail has been trampled all the way to Cheyava Falls. Of course it crosses the creek frequently and with the water so high, we must have made slower time than normal. The key to finding the ruins south of Cheyava Falls is to look at the shale cliff forming a promontory about 300 yards south of the falls. This ledge is about one third of the way from the base of the cliff to the top.

The flowers and falls were unusually fine, but the mice, mosquitoes, and little biting flies were also exceptionally prevalent. This was true both at the rain pocket along the trail and at Clear Creek. In December there were mice but no bugs.

If we had gotten back from Cheyava early enough to move camp down the creek and up into the Cape Royal arm Sunday night, I believe I would have favored going after Hawkins Butte on this trip. On Monday morning Alan suggested starting for Hawkins then, but I was afraid that he would have another attack of indigestion at a more remote place and I ruled that we should return to Phantom Ranch. One group of hikers that we met on the Tonto was the science club from Everett Junior High at Wheatridge, Colorado. They had corresponded with me numerous times over the past several years. We made better times than I have made for the previous two times, four hours and 40 minutes from creek to creek. I spent a pleasant afternoon and evening visiting at the Ranger Station and at Phantom Ranch. I was particularly glad to meet Terri Mische, the young lady manager of Phantom Ranch who has climbed Brahma Temple.

It was stimulating to match information with Gale Burak who hiked down to spend the night with Barb Carolus Monday afternoon. People encountered on the trail that I would like to remember are the canyon guides, Bob Topping and Larry Powers, and the sponsor of the Junior High Science club from Colorado, Mike Sipes.

We were glad to be in soft, dry beds under a good roof when it rained a bit on Tuesday morning. It seemed fine as we started up the Kaibab Trail, but sleet and rain hit us above Cedar Ridge. I put my tent fly over my head and pack. We walked up right behind two mule trains, and for most of the way, I could keep up with them because they rested quite often. Then at Cedar Ridge we passed them briefly because they take quite a rest while the tourists have a chance to patronize the johns. We had to let the mules go by quite close above Cedar Ridge and then they pulled away. I was gratified to be able to return from the campground bridge to the rim in four hours and 32 minutes, quite a lot faster than I have done it for several years. Perhaps I should give the credit to the fine breakfast of eggs, fried potatoes, sausage, and

orange juice that Barb had fed us. David Chatfield, a hiker from Sacramento who works for Friends of the Earth, walked up with us and accepted a ride all the way to Phoenix where he was to catch a plane.

My little canyon books have paid off in more ways than just the royalties. Everyone I met, or almost everyone, was familiar with them and seemed thrilled to meet the author. I was invited to give the evening talk to the tourists at Phantom Ranch and was invited to visit with a number of people in the back room at the ranch afterwards. I met the ranger, Glenn Fuller, there and again when I was reporting in at the top on Tuesday.

Hall Butte

[October 9, 1980 to October 14, 1980]

Jack Shellburne had arranged by phone and letter for me to meet the plane from Fresno on Thursday morning. Republic has recently taken over Hughes Airwest, but I found the right gate well ahead of time and recognized Jack and Mel Simon without trouble. We went directly to Bright Angel Lodge where Jack and Mel paid for Thursday night and breakfast at the Phantom Ranch Dormitory. We got permits for a very ambitious plan, to Clear Creek Friday night, mostly rest on Saturday, up the Redwall to climb Hall and Hawkins on Sunday, up around Deva or Brahma on Monday, Tuesday night at Cottonwood, and out the South Kaibab Trail on Wednesday. Jack and Mel got started down the trail by 4:30 while I went to visit with Tom Davison and then Chad Gibson with whom I had dinner and spent the night. Tom came and ate with us at the Red Feather and then talked a while at Chad's room.

I woke up early and left Chad's room in the dark. I didn't eat any breakfast until I was down at the River Ranger Station at Bright Angel Creek. The walk down the trail took from 5:15 to 8:17 a.m., about my slowest time. My pack weighed about 31 pounds and I was in frequent pain from ramming my toenails against the ends of my shoes. I also had to apply some tape where my shoes were chafing. Friday was still hot and it took me a bit over eight hours to get from the campground over to Clear Creek. I had hoped to be able to pick up some more water at rain pockets by the trail east of Sumner Point, but they were bone dry. Only about four weeks before, there had been a rain that put down an inch of water in 20 minutes. This had caused rockslides that had closed the lower part of the Bright Angel Trail and the River Trail, but the unseasonal heat had dried up the waterpockets. In a couple of places this flood had damaged the Clear Creek Trail too. I was so tired and dehydrated before I got to Clear Creek that I lay down for a few minutes in any shade that I could find. When I reached Clear Creek, I couldn't see Mel and Jack and I was so weary by 5:40 p.m. that I prepared to camp at the nearest bed site. Mel came looking for me in a few minutes and led me to where he and Jack were installed about 200 yards away where there was smooth ground for at least four small tents.

It was good that Mel could cook my soup on his gas stove and that Jack could let me use his toenail clipper. My pack was over its usual weight with items that I didn't use, but I didn't have these things. Friday night was fine and we slept with only the minor annoyance of being raided by mice and a skunk. On Saturday I was ready for a rest but Jack and Mel went up canyon to try to find the split figurine cave. They saw the scenic wet arm of Clear Creek and the fall in the shale just beyond the fork, but they didn't locate the cave in spite of getting up and going along the base of the Redwall. On their way back they saw

a Grand Canyon pink rattlesnake. After I had finished my Time magazine, I went a little way up canyon and met them when they were almost back.

On Sunday I ate and left camp before the others to go down canyon and up the tributary north of Wotan. I had wondered about the flowing water in this creek, but it was just as copious as it has ever been. This time I noticed a good place to sleep under an overhang on the north side about a quarter mile east of the source of the water. A place had been smoothed for one person to sleep, and there were bits of charcoal in the dirt. If I ever go back to climb Hawkins, I'll use this site. I noticed that it took me an hour and forty minutes to go from camp to the place where I could leave the bed and head for the slope up to the Wotan Angel's Gate Saddle. I had said that I would wait for the others here, so I spent my time going back to meet them. When we got back here the second time, I had lost 50 minutes. I led Mel and Jack out of the wash to the southwest toward the saddle, but Jack soon decided to drop out and return to camp. He explained later that he had turned his ankle slightly, but the main reason he didn't go with us was that it was against his Mormon religion to work at anything hard on Sunday. The route up to the saddle seemed familiar and I led Mel. The place where I had put down my big pack in August, 1979, was over to the east of where we had just come up the ravine and Mel suggested going up directly where we were. I had some trouble with the necessary moves, but with Mel below to check a fall, I made it. I didn't relish the thought of getting down the same way. Before we went on, I went over and looked down at the place where I had left my pack last year. The one right place was vertical for 10 feet, but there were some good holds. Still when we returned, I preferred having Mel go down first and advise me where to place my feet. Jim Ohlman calls this place a breeze, but it is just about the limit of what I can handle alone. Above this place, one also has to go up with a lot of use of the hands. I was carrying two half gallon canteens and a lunch in a day pack, and this was all right. To get a full size pack up these hairy places, I would want a rope and pull the packs up. I wish I had taken pictures of these key places in the route. It is a most intriguing Redwall route with several places that seem to be the one way past the difficulties.

We figured that we would still have a chance to climb Hall, the closer of the two buttes (Hall and Hawkins) if we made the top of the saddle by 11:00 a.m., and we just made this deadline. It was good that Mel had brought the Vishnu Quad map since I had had the wrong idea that Hawkins was closer to the saddle than Hall. Going along the Redwall to the east along the base of Wotan was slow but not the worst such travel I had seen. We ate lunch when we had passed the bay and were heading south toward Hall. We agreed that we should turn back at 1:00 p.m. or very soon after if we were to get back to camp in daylight. All three of us had had at least a brush with agave thorns and we didn't want to be stumbling back to base getting spiked with agave and cactus. Mel insisted that we would make the top of Hall within the limit, and we just did. I was afraid that there would be a difficult gap between the north end and the higher south end of Hall, but there was a narrow, level walkway connecting them. The cairn, presumably built by Doc Ellis and his friends, was at the south end. The views from here are stunning! We took several pictures and left within minutes. On the return, rain fell. The cloud effects and the spotty sunshine over the distant canyon were really something outstanding. We tried getting under shelter from the rain a couple of times, and really waited for ten minutes at the second place, a little below the hardest part of the Redwall descent. The return went smoothly and we joined Jack at camp by 5:40 p.m. He had been working on supper and I was glad to accept his soup and eat in a hurry since the weather was really getting bad.

The night was a rough one. It rained so hard that we had thoughts of what we would do if a flood came through where we were sleeping. My rainfly over the ridge rope was quite low over me and it let some water through onto my bag. My toes were getting wet about the time the rain stopped, and I was relieved that water didn't flow along the ground under my bed. Mel and Jack had tube tents with open ends and they got wetter than I did.

Monday was fine and sunny. Since I didn't relish the thought of going clear to the South Rim in one day, we stopped at the rain pools. It took me five hours to walk back here to the center of the bay between Sumner and Zoro from Clear Creek even with the day cool and comfortable. I told Jack that the pools would be in the tributary just west of the main wash, but when I got near, I thought that they should be in the next wash west of the one coming down from the Redwall break at the base of the wall to Sumner. There was plenty of water where the rock had been dry in this bed from the Redwall break and none in the next ravine to the west, just beyond the good rain shelters under projecting ledges next to the trail. I had figured on using these shelters instead of our tents if we should have a rainy night, but the evening got better and better. Mel and Jack slept on a flat rock in the bed below the trail while I started the night under the overhang. We were visited with mice in the night at both places. Incidentally, these critters were so friendly at our Clear Creek camp that they would brush against my hand in the night if I had it out from the covers. I was too warm under the overhang and spent more than half the night in the middle of the trail where I finally felt too cool and had to put on my Dacron longjohns.

Mel and Jack could walk a lot faster than I, so I got a much earlier start than they did. Mel had walked by himself the previous day and only caught up after Jack and I had reached our camp east of Sumner. He had seen his second rattlesnake in only three days, and this time he had stepped down only six inches from the coiled snake. Naturally, he was shaken by this encounter and the necessity for stepping back without disturbing the snake. It was another pink one.

I got to the bridge across Bright Angel Creek from the ranger station in one and a half hours on Thursday and ate breakfast at the bridge. They were doing some blasting and I couldn't go to the faucet for water. I refilled my two quart canteen from Bright Angel Creek and didn't feel the worse for drinking that water. I didn't find out what kind of construction (sewage) was going on but a helicopter was coming down with supplies. There was a small pile of pipes near the helicopter landing site and they had prepared a road from there going several hundred yards for the use of two pickup trucks. It surprises me that there is a chopper big enough to bring down a pickup (the big machines came by raft). I should have asked about this operation when we were reporting in at the backcountry office. Tuesday was cool enough for good walking, but I lost a little time when it began raining and sleeting hard enough to make me get out the tent fly and use it as a poncho. I couldn't do nearly as well as I did last spring and it took me not quite six hours to come to the South Rim. Mel and Jack caught up with me while I was eating lunch above the one and a half milepost. They took the car key and waited for me at the top. The thing that bothered me most of the end of this trip was a bruised right foot. The ball of my right foot is still sore on Friday, three days after I finished the hike.

Surprise Canyon

[December 8, 1980 to December 13, 1980]

After Jorgen got back from Europe, he suggested that we have another late fall hike together. I wasn't free until December 8th, so we planned a visit to Surprise Canyon. It had been the objective last spring when my 19 foot boat motor gave out. Now our transportation was a fourteen and a half foot fishing boat with a seven and a half horsepower motor that can only accommodate two fair sized men and their gear. The weather was bad Saturday and Sunday, but we went on Monday anyway. We met about 2:40 p.m. at the Meadview Ranger Station and left Jorgen's car several blocks from there next to ranger housing. There was no hitch in launching at Pearce Ferry. The only problem with a larger boat is the grade into the water. It is so gentle that one would have to back the vehicle far from shore to get water deep enough to float the boat. I was a little clumsy in recalling all the simple moves in starting the new motor, but we finally got the motor going. It carried us along close to 10 mph on the calm lake. Only for short periods waves ruffled the water and we shipped some spray. With the late start, we didn't try to reach the mouth of Surprise Canyon. I thought about stopping at Quartermaster, but Burnt Canyon is only a mile farther and it has the advantage of a deep water cove and no mud bank to cave in on the boat during the night.

Near the shack in the saddle between the two coves there was plenty of space for our beds. Something has wrecked the shack since I was here previously. A good part of the tin roof has been torn away and a big piece of the corrugated iron is many yards away near the water west of the shack. A paper and a ball point pen are in a broken bottle under the ramada. Ron Hilliard left his name and Tucson address only a week before we were there. The night was clear but not too cold although frost formed on the wet life buoy cushions in the boat. The only negative note was that rats or mice raided my food in the night. Jorgen is one of the numerous good sleepers and we didn't get the boat started until 9:10. I found that I had to do quite a bit of bailing since the bilge hole plug seems to be defective. We had used nearly three gallons of gas getting to Burnt Canyon, so I switched to the second tank. I should have finished the first can before the switch and then there would have been no worry about getting back to Pearce Ferry the last day on the third can. I had taken ten gallons of gas in jerry cans and plenty of two cycle oil. My experience on this trip shows that the seven and a half horse motor takes the load, we had about eight miles per gallon. The great advantage of the 19 foot cruiser was that we could go two and a half times as fast and be better protected from the cold breeze too. (After getting home, I found what was wrong with the bilge plug, so the leakage was stopped.) When we beached the new boat about 100 yards into the mouth of Surprise on gravel and rocks, we figured without the rise of several inches in the lake level. The boat had taken quite a bit more water in four days than it had overnight at Burnt Canyon. The trouble was that I hadn't learned the trick of tightening the screw in the middle of the plug to expand the rubber.

The only people we saw after leaving Pearce Ferry were about 20 river runners in a private party. They had taken over a month to get where they were, up canyon from Triumphal Arch. Since they had just been through a couple of very wet days, they appreciated the fine weather on Monday, and for that matter, it was fine all through our trip except for a threat of rain Friday afternoon and evening.

The present high level of the lake with a strong flow last summer has resulted in new sand and mud bars. The mouth of Surprise Canyon seemed to be completely stopped by a new bar. We went on and about a half a mile upriver checked the possibility of climbing up to the Tonto before coming back and descending to the bed of Surprise. The map didn't show clearly how far we would have to go north at the higher level before coming down to the bed. A few inches of water covered a low place at the east end of the bar, but Jorgen found a fairly deep channel at the west end where floods from the creek had cut a

ditch. With the motor up, we pushed the boat through and then used the motor again for about 100 yards before the skeg hit bottom.

We tied up and then carried our packs around the bend from the boat before eating lunch. It was 1:00 p.m. when we really got started. The water in the creek gave out after we passed a place marked by a grove of cottonwoods. There would be short stretches of flowing water and then dry rocks again. We decided that we would camp wherever we found water after 4:30. When we came to more about 4:00 next to a good terrace on the east side, we decided to call it a day. About 9:10 the next morning we walked north along the terrace and within seconds after my remark that if there would be signs of prehistoric Indians, it would be at such a terrace, we came to a couple of mescal pits. There were smoke stains on the ceiling of an overhang a few yards away. There were also some old cow chips here. These things are about 200 yards north of the mouth of an east side tributary even with the number 77 on the left border of the Amos Point seven and a half minute quad. It took us about an hour to walk from here to the mouth of the Amos Spring Arm. Here we found a good campsite next to the wall just upstream from the junction. We left our packs here while we went up the big tributary.

We had carried a moderate amount of water all the way up Surprise although I had remembered water off and on in the bed as far as I had gone in the spring of 1979. The longest that we were ever without water in the bed was perhaps 45 minutes. I knew nothing about water in the Amos Spring Arm. Since the bed at the end was dry, we carried some water as well as our lunches in my day pack as we started up the side canyon. We found pools and trickles in the bed fairly often as far as we went, into the base of the Redwall, so we walked back with empty canteens. There were a few pools that forced us to find very local bypasses, and three places where we had to use longer and harder bypasses, two on the south side and one on the north. The gorge was narrower and more impressive than the main canyon. A scattering of bighorn droppings encouraged us to think that we might be able to walk all the way through the Redwall. However, when we were above the Devonian and had passed the north side tributary northeast of the I in Plateau we came to a chockstone blocking our way in spooky narrows. One of us could have helped the other up this nine foot difficulty, but without a rope the other would have to stay below. Furthermore, our time allowance had just run out. We went back a little faster needing only two hours for the return trip. At a place high on the south wall there were vertical columns of travertine like open air stalactites. The night here and for the rest of the trip was warmer than for the first two nights when there had been a little frost.

On Wednesday after we had walked around to the north side of the bend near the e of Surprise, we looked up at the west wall where Billingsley had thought a Redwall ascent should be possible. It probably would go for strong and daring climbers, but neither Jorgen nor I felt the urge to try it. I finally recognized the place I had reached in May, 1979, and now I knew that I had been as far as the west side tributary that had been my goal that day. This junction is just south of the C of the word Canyon. The last part of this tributary is a jumble of big rocks on a steep slope, and on the former trip I had thought that this was just a minor ravine. Billingsley had suggested the presence of a Redwall route on the south side about a half mile into this side canyon. We learned more about this canyon on our way back. Our objective for the day was the junction just north of the word Canyon.. We found places for our beds here. Jorgen smoothed out a place under a big rock where dew would not wet his bag while I located a clearing on a terrace south across the side stream from him. We still had time to walk up the main canyon that afternoon and we reached the second south side tributary beyond our campsite. This is about halfway from our camp to the

mouth of Twin Springs Canyon. This side canyon comes in at the level of the main bed and looks interesting too.

Jorgen found some good fossils in the main bed. One showed a bit of the stem of a crinoid and another reminded me of the fringe at the end of the stalk. He also noted some chunks of sandstone that seemed heavier than normal rock. There were clear tracks of a raccoon and we saw fish in the stream, four inch midgets.

Actually, when we put down our packs at the second campsite in Surprise Canyon, we explored the west side canyon before going up the main bed in the late afternoon. It is fairly steep and rough and required some route finding. It is also one of the narrowest and most impressive canyons I have been in. There is lots of moisture with monkey flowers, mimulas, growing so thickly that one can't see his footing in some places. The seeps along the walls sustain a lot of maidenhair fern. This is especially true of the west fork that we took first. We came to a pool where I thought I ought to take off my clothes and wade. Jorgen succeeded in getting along the west wall with dry feet, but just around the next corner he saw that he would have to wade too or give up. He waded in bare feet while I wore my shoes and socks. At the end of this pool at first I thought that I was stopped by a chockstone, but on looking better, I found grips and toeholds and got up. Here Jorgen waited to guide me down. Some 40 yards farther, around the next bend, there was an impossible barrier formed by a 25 foot high chockstone. We returned to the fork and went up the other branch with similar results, stopping below a high fall. These two arms are about as narrow and spooky as anything off Glen Canyon.

We had planned to go down to the boat by Friday evening, but we knew that no good campsites were near the boat, and besides, we wanted to see the west side canyon where I had turned back in 1979. It is on the map just south of the word Canyon. We spent an hour going up it and decided that Billingsley's suggested Redwall ascent on the south side about a half mile west of the main bed was not for us. There were difficulties in the bed with bypasses. This time we ran in order not to over stay our schedule. The canyon was still dry and open, very different from the others we had investigated on this trip. When we were coming north along the main bed, somewhere on the east side, an overhang near the end of a ravine had intrigued us. When we walked closer, both of us recognized that there was a passage forming a natural bridge. On our way back, I kept the map in my hand and kept us located at all times. We wanted to pinpoint the location of the natural bridge that we had seen. The bed of Surprise is about 90% boulders and gravel and one has to watch the footing constantly. Although we thought that we were watching, we both missed seeing the natural bridge (ten minutes walk south of mescal pit camp). In one way the boulders are a help. One has to cross the stream every few minutes and the boulders form good stepping stones. There was only one place where my shoes got a little wet.

Near the mouth of the side canyon with monkey flowers, I climbed up about 100 feet on the north side and looked at a shallow cave just big enough for one or two beds. The floor was level and the ceiling showed smoke stains.

We slept Friday night near the mescal pits and rigged shelters against the possible rain. About noon the sky had begun to get hazy until the sun was no longer visible. It looked very much like the beginning of a winter storm. Snow higher up would mean a steady drizzle below. I had my tent fly over a tight rope and

my poncho beneath for a ground cloth. Jorgen was going to be under a slight overhang so we made his poncho into a neat shelter for the exposed side. The moon showed a few times, but when we retired, I thought we were going to have a miserable night. However, nothing came down and by 3:00 a.m. the stars were showing. Saturday was not at all bad.

The motor started easy enough but we had to take our time to get through the narrow channel at the west end of the bar. We had filled the empty gas tank from the jerry can before starting. The other held out for 40 minutes. When it went empty, I should have disconnected the hose and hooked the other in place while the motor ran on the gas already in the carburetor. As it was I had a hard time getting the motor started again, but still we got from Surprise Canyon to Pearce Ferry in three hours. It seemed colder than it had when we were going in on Monday and we had to wear all the wraps we had. The landing on the trailer was easy with such a small boat. We got away from Meadview about five and I got home by 10:30. Near the mesal pits against the wall were quite a few cow chips. Evidently there is a walkable route down from the Shivwits Plateau.

Jorgen's shoes were hurting his ankles on the way back to the boat and we took almost a half hour longer to get from the mesal pits to the boat than it had on Tuesday. The lake had risen several inches and the boat was only resting on the bottom because quite a bit of water had leaked in. It took an hour to get everything shipshape and bailed out.

Surprise Canyon

[December 31, 1980 to January 4, 1981]

My trip with Jorgen had left me with a desire to see how a cow could walk down into the lower canyon and also to locate our natural bridge. Jim Ohlman had expressed the wish to go to Surprise Canyon with me, and if he were along, I wanted to go back to the Amos Spring Arm past the chock and see whether we could go on through the Redwall. My invitation and his rejection were so close to the starting date that there was no chance to invite anyone else. His reason was that his father had to go to the hospital. As it turned out, it was good that I was alone.

I left Sun City quite early and went through Kingman too early to eat lunch there. Taking the Stockton Hills Road, I got to Meadview around noon and sampled the fare at their cafe. At the Pearce Ferry ramp I talked to a man who was staying some time in his motor home and told him not to worry about my parked car and trailer before Thursday, January 8. This time I had the oars and it was easy to take the boat to a good depth for the motor and also to land at the end of the trip. The motor worked fine and there was no trouble with waves.

I kept the Belknap Guide open and was oriented until after I had passed Maxon Canyon. Then it seemed that I was going too far and had somehow missed seeing Lost Creek and Surprise Canyon. I thought I recognized the place where Jorgen and I had considered going up on the Tonto and walking back to Surprise. I was so confused that I headed downriver for half a mile before turning back upstream. A sighting that confused me was to see one of the Spencer Bells before reaching the mouth of Lost Creek. Another observation is that one can get a fleeting glimpse of Triumphal Arch from about Mile 257.5, substantially downstream from the stretch, 256.6 to 257, where one can see it best. I also noticed the

perhaps farthest downstream deposit of lava at Mile 254 as well as quite a large chunk inside the mouth of Lost Creek.

When I finally got back upriver to the mouth of Surprise, I was in for a shock. The lake had fallen more than a foot since Jorgen and I were there and the channel was too narrow and shallow to float the boat into the lagoon. If I had had a companion, perhaps we could have lifted the boat over the bar. Without giving that idea a thought, I went upstream to where Jorgen and I had considered climbing to the Tonto. I remembered having seen a place to get down off the Tonto on the east side of Surprise without having to go very far north. There was a good place to moor the boat and a clear patch of sand several feet above lake level, so I decided to stay there Wednesday evening and later decided what to do for a trip. I spent an hour climbing up to the Tonto bench although I didn't seem to be above all the Tapeats. Some of the climbing was a bit of a challenge even without my four day pack, so by morning I decided to use my four foot inflatable.

On Wednesday I had rejected the idea of dragging the fishing boat through the shallow channel for fear that the lake would go down further and trap me in the lagoon. On Thursday morning, it was several inches lower so that half the channel was above lake level. I figured that it couldn't get any worse, so I tried dragging the aluminum boat up through the channel. It stuck solidly when it was less than halfway into the lagoon, so I went back to the method of using the three and a half pound inflatable that was intended to be a child's swimming pool toy. It supports me quite well when I have only a day pack on my back. The few yards I paddled with a full pack in the Sun City lake didn't prepare me for the 100 yards of cold water in Surprise Canyon. The pack high on my back forced my chin hard against the bow of the little craft and water almost came aboard beside my chin. My hands began to hurt from paddling in the cold water, but after a pause I got used to it and with patience I finally landed. I deflated the boat and hung it and my tennis shoes in a tree above flood level, I hoped.

After all this delay in getting past the lagoon, it was 9:40 when I started up the streambed. I kept the map in my hand and was also aware of my location. About 200 yards south of the granite narrows near the a in the word Canyon on the Spencer Canyon Quad, I checked a terrace on the east side and found another mesal pit. I also marked on the map the top of the granite at stream level near the o of the word Canyon. It seemed that the top of the Tapeats occurs south of the beginning of the word Surprise on the Devil's Slide Rapids Quad. Returning on Sunday, I watched for places to go west to the Tonto which could be part of a through canyon route. On the east side, one is quite close to the river, near the e of the word Surprise of the Spencer Canyon Quad, but the route to the west is north of the boundary between the Spencer Canyon Quad and the Devil's Slide Quad. This is only about a quarter mile before one reaches the end of the Tapeats. I marked the spots of water or surface streams on my map, but they are frequent enough to make canteen water unnecessary. It seemed that Devonian limestone occurs at stream level just across the border on the Amos Point Quad. I reached our camp at the two mesal pits in three hours and 20 minutes while taking a few pictures and making notes on my map. On the way back on Sunday this lap took two hours and 52 minutes.

About 3:15 on the north side of the e in the word Surprise on the map, I checked a terrace on the east side and found more cow chips and some bits of charcoal. Just south of here three impressive towers crown a fin thrusting from the west into a big bend of the creek. Billingsley's suggested Redwall route is across

from the old campsite. Just south of the letter n in the word Sanup, a steep tributary comes down from the east and near the bottom there is an alcove topped by a flat ceiling. This may have been what Jorgen and I took to be a natural bridge (no the natural bridge is ten minutes walk south of the two mesquite pit campsite). There is a white stain on this ceiling and I may have mistaken this for light coming through from above. On my return I got a picture of this alcove which I will match with the one we took of our former natural bridge. (Added later after seeing the new picture: the pictures are of different places, and the order of my slides in December shows that the natural bridge is downstream from the mesquite pits.) I was quite weary when I reached the site where Jorgen had cleared a bed beneath the rock and I put my bag here. Clouds had been getting darker during the late afternoon, and I was relieved to see all the stars about midnight. The mice or ground squirrels were too active during the night for me to have my best night's sleep.

As usual, I ate my breakfast in bed and got started by 7:45. By 9:25 I found another good campsite about four minutes walking time west of the end of Twin Spring Canyon. It had smooth dirt next to the wall on the south side and more cow chips were around here too. There is a lot of water in the creek along here, and for the previous mile the canyon is narrower but it still has plenty of trees of a type not seen in the eastern Grand Canyon, probably some sort of ash or alder. The beauty of Milkweed Canyon seems rather ordinary in comparison. Up near the Redwall rim one can see many neat round cave openings. A very few might be reached without prohibitively long rappels, but it would be a chore to find routes to the rim above these caves. There are a few caves that might be reached from below. There were some birds, the commonest being wrens and flycatchers. I saw one ouzel doing its peculiar dipping curtsy.

It took a little less than two hours to go from the previous night's camp to this site, and by 9:45 I was ready for the main project, walking up Twin Springs Canyon. I reasoned that the need for a canteen would be no greater than it had been during the rest of the trip, especially when I saw water flowing down Twin Springs Canyon. I took my lunch but no canteen. There was water in the bed for the first 20 minutes but the bed was dry from there on. Progress at first was as slow as it had been in the main canyon, but after the canyon became narrow, about 10 to 15 feet wide at the bottom, the bed became smooth gravel and sand and so even that it might have been raked. In this exceedingly narrow and deep canyon with such a gentle grade, I half expected an impossible barrier around each bend. In an overhang at one bend, I thought at first that I might have found walls of an Indian ruin, but on looking closer, I saw that sheets of travertine had been deposited by drips from above.

Turning to look ahead, I saw a huge chockstone wedged about 12 feet above the bed. I advanced and found no fill beneath this chockstone and the bed was gently rising and smooth all the way through the Redwall, almost one and a half miles. It was by far the best walking I had seen anywhere on this trip. When I got into the open valley above the Redwall, I knew that I had found the route for a cow to come to the lower canyon from the plateau above. I figure that the top of the Redwall at stream level is on a line connecting the 88's on the sides of the Mount Dellenbaugh map. I turned back at 11:45 at the latitude of the 89's. With an early start from the lake, I could reach the mouth of Twin Spring Canyon the first day and probably reach the road end above Twin Creek Canyon the second day. The three springs shown on the map make this seem like a sensible plan even if no one had a car waiting at the end of the road. When I returned to the water in the lower Redwall narrows I had gone unusually long for me without water, three hours. Here I ate lunch and considered how amazing it is to find the combination of such good

footing through such a narrow and deep canyon, about 15 feet wide at the bottom and 500 feet deep. I could stand with legs apart and almost touch the walls by leaning first to the left and then to the right without moving my feet. I tried to match the bends with those shown on the map, but I had to give that up. The aerial pictures didn't show the meanders correctly down at the bottom of the canyon. It was like lower Jumpup in that there were many bends not shown on the map. It was a great experience, and if I had carried a canteen, I could have walked at least another hour further north.

On Saturday I started up the main canyon. At first the boulders were the same and I began to wonder why Billingsley and his party had had to swim. Then the bed became bare rock and the water flowed along a chute at the bottom of an inner trough. I could see the pool where they would have had to swim. A letter from George says that he climbed along the north side above the water while the other two were below in the water. If George came through with no advance information, I would say that he lucked out again. I wonder whether they carried a rope for possible rappels. If they had come to an impasse in Surprise Canyon, George could have led the party over to Twin Springs Canyon. (In a letter from George replying to my question after I got home, he says that Pete Gibbs had led a party of 12 through for Ron Smith the year before, but he doesn't say whether he had any precise information about the route from Gibbs.) After the short trip up the main canyon, I had time to explore one or two tributaries. The one that appealed to me was the one from the south where Jorgen and I had turned back in December. I had to do some hand and toe climbing to get as far as I did, but I came to the inevitable waterfall beside a high chockstone. This estimated half mile took me about a half hour each way. It is an interesting place with a lot of mimulus and ferns. I also noticed a nearly sure way up the Redwall on the southwest side near the mouth. If I had had a little more ambition, I would have tried it. All that I could see, about 90%, looked like my kind of a scramble. One might go up here and then head for Amos Spring. My guess is that I had done the hardest move in getting where I did. It was bad enough to make me want a cairn to show the exact place to get down. Near the bottom of this pitch, on the way down, I found a safer way to go under a leaning rock. I would need to haul my pack up with a rope.

I also checked another tributary on the south (left) side of Surprise before I reached the place Jorgen and I had slept. I couldn't go far at all because of a high fall. However, there is an easy ravine on the northeast side of this tributary very close to the main bed of Surprise. It seems to lead up to a bench that would get one past the fall where I stopped. I felt sure that the upper basin in the Redwall would be impossible, and by this time I was getting eager to reach the campsite near the junction with Amos Spring Canyon. On the way I looked again at the fake natural bridge and got to the campsite with time to read my Reader's Digest before it was late enough to get supper. The mice were active here too and I worried about the sky in the late afternoon, but again it cleared during the night.

Without bothering with the map, I made good time down to the lake in the morning and was relieved to find my rubber boat just where I had left it. This time I got the weight farther back and managed to ship some water over the stern where my knees rested on the rubber. I had to pull over to the side and dump the water and start again. I finally made it to the bar without taking in more water and found the boat tied to the only tree in sight just where I had left it. The bilge plug was in right this time and there was no water to bail. The boat had been in plain sight for four days to anyone coming up the lake. I had plenty of food and could have explored Maxon and Salt Canyons on day hikes, but now I was in the mood to sit back and enjoy the scenery and then get back to the comforts of home.

Maxon and Salt Canyons

[February 13, 1981 to February 16, 1981]

My real project was to go up Surprise Canyon again and reach the road end above Twin Creek Canyon. The start was fine. I left home on schedule, about 6:30 a.m. and reached the Pearce Ferry launching beach by noon. The only hitch was that I had no rope for a painter for the boat. I realized this before I got to Kingman and bought a 50 foot clothesline with very little delay. I ate lunch out of my pack at the beach and got away in the boat a little after one. The lake was calm and driftwood was only a slight problem. For the first time I reached Surprise on one, three gallon tank of gas, getting over 10 miles to the gallon and averaging around 13 mph.

With my new inflatable I was prepared to tie the boat outside the silt bar and proceed up the lagoon after blowing up the Sevylor. When I got there I found that the lake was even higher than it had been in early December, and I could have rowed across the bar at either end. I raised the motor and went into the lagoon along the channel at the west end. Not having to blow up the inflatable saved a good many minutes. I tied to the same tamarisk tree we had used in December and left the boat near the deep water at the far end of my 50 foot line. This was good, because when I came back, the lake had fallen and left the midsection of the boat resting on a rock with only the stern in the water. I found that I could lift one end handily and get it into deeper water.

It was four by the time I was ready to walk. I carried the map in my hand and kept track of where I was for a while. I hoped to find the natural bridge that Jorgen and I thought we had seen. I thought that I was looking up at every side canyon and ravine on the east side, but I still failed to locate the overhang. I just checked my pictures again. The processor put my bridge picture before the one of the mesquite pit. By 5:30 I was ready to stop and camp. This was about a quarter mile south of the top of the Tapeats. Right across from where I slept on the east side, I discovered a fine overhung ledge of Tapeats in the west wall. There is room for two protected from a rain. The only catch is that the beds are about six feet above the bed of the stream and have driftwood lodged by floods slightly higher. Mice were not around my pack where I slept the first night nor for the next two nights.

I got away about 7:05 a.m. and made steady progress. I was still watching for the bridge, or so I thought, but I was not very observant since I walked right by our campsite near the mesquite pits without realizing where I was. I had discontinued map reading for every bend. The mouth of Amos Spring Canyon gave me my orientation again. I did notice the overhang on the east side that is north of the crest of towers. I was in sight of the west side tributary that I had reached on my one day trip away from Joe Hall when I noticed that the sole of my left shoe was splitting loose at the toe. I sat down and considered the situation and finally turned back. I was afraid that it might get worse and become a real handicap. This frustration and change of plan shook me so that I was fairly sure I wanted to go home the third day instead of the sixth as planned. I stopped for the night quite early at the mesquite pits after having overlooked the place when I was passing the mouth of Amos Spring Canyon. It seems to be easy to walk Surprise watching one's footing and not seeing much else. The afternoon sky became more and more threatening. Rather than rig my light tarp for a crude tent, I decided to walk down to the Tapeats overhang and stay dry in the night and trust that flood waters wouldn't come up six feet. As usual, by midnight, the sky was clear.

Also by morning I was ready to try a couple of one day hikes. First I tried getting the boat into the lagoon at Lost Creek with the idea of landing and walking farther up the dry bed than I had been two years ago. With an oar for a paddle I was able to get the boat into the open water but the dense jungle of tamarisk still thwarted me from getting out of the boat and walking. The climbing route along the west side of the delta is still the best there is. I was not too keen about repeating Lost Creek, so I moved on to Maxon Canyon (Reference Point Canyon on the map). First I tried to get around the jungle and lagoon on the east side, but the footing seemed slow and precarious. I could see the west side and it looked better from a distance. A thing that caught my eye before I landed was a short trail just east of the delta. It was indeed a man formed narrow trail and there was a surveyor's white metal pipe. It leads east about 30 yards to an open grassy terrace that has been used as a campsite for river runners. A big fire pit is on bare ground just west of the terrace. When I had made poor progress for a half hour along the rough slopes on the east side of the lagoon, I rowed over to the west side of the delta. It was quite a bit easier here and in 40 minutes I was down in the streambed south of the jungle. I had combined scrambling up and down on the granite with some walking at the edge of the jungle.

Something that was soon apparent is that the granite up in Maxon Canyon rises much higher than it does just across the river to the north. Then I noticed that there is a fault with a throw of several hundred feet that parallels the river for a half mile or so. A ravine to the west inside the mouth of Maxon marks the fault. The Tapeats right next to the river is at the same elevation as the Tapeats on the north side of the river while it stands several hundred feet higher south of the ravine. Downriver the fault goes into the riverbed and continues up Salt Creek but the throw diminishes and seems to end farther up Salt Creek. This is the fault that forms a notch in the Redwall on the south wall of Lost Creek and a similar notch on the north side of Lost Creek.

Lower Maxon Canyon has flowing water above ground for two stretches and it is a real struggle to get through the resulting tangle of brush. I tried forcing the branches aside, breaking them, and even crawling. There is also a place or two where a jumble of great boulders form barrier falls. The bypasses are fairly evident, but this is not the easiest canyon to explore. At one angle, the bed seemed to be going up fast so I took a shortcut up a scramble east of the bed and came down a short distance to the creek. The best way to keep out of the nearly impenetrable jungle was to stay on the granite of the right bank. After another sharp angle where I was forced into the brush again, I came out above all the water into easy walking. Now I could go up the gravelly bed at nearly 3 mph and I reached the top of the granite just at 3:00 p.m., my self imposed deadline. It had taken me 40 minutes to get from the boat to the bed above the delta and two and a half hours for the entire trip to the top of the granite. I got back in two hours.

To camp on the terrace just east of the Maxon Canyon delta, I could tie to tamarisks and step out of the boat on rock instead of mud. It was a good clear night and no mice although I had seen a rock squirrel during the return down Maxon the previous afternoon. There were fresh beaver cut trees in the delta and I heard numerous heavy splashes in the water during the night, clearly beaver and not just fish. There were lots of ducks in the lagoon and coots there and in the river.

I was in the mood to go home Monday, but decided that there would be time for half a day to explore Salt Creek. I moored the boat at the east edge of the delta and had to do a short climb to get up the rocks to

where I could begin walking. Within yards I had to cross a nice little stream. I might have worked the boat in a few more yards and been at the stream. Progress along the east side of the lagoon and tamarisk jungle was a lot easier than it had been at Maxon Canyon, especially after I had climbed to the top of the Tapeats and found what might have been an old burro trail. Another ravine from the east had running water just where I came down to get into the bed of Salt Creek. There were some stretches with running water in the bed most of the way up the bed. There were also pockets of rain water left by the last storm over two weeks before. Spring was in the air. The canyon wrens were singing now and cottonwoods had new green leaves.

From a distance, it seemed that there might be a route up through the Redwall in line with the fault, but from close in, I was fairly sure that a 40 foot wall stops one near the bottom. Just as I was thinking that the lack of bighorn scat would indicate that no route up exists, I came across some droppings. There was more higher too. The arm that I could follow the farthest bends to the east. The upper end of Salt impressed me as few places in the Grand Canyon have. There were a profusion of striking towers and blank walls. I tried to bypass an impossible wall in the bed by going to the north but found a long rock wall ahead in that direction. I moved to the south to get a look into the bed of the main canyon. I could see that a clear trail follows a shelf on that side into a fine amphitheater, but the wall ahead must eliminate this as an access route up through the Redwall. The bighorns must go into the area for feed and then go back the same way. It had taken me two and a half hours to get up here from the boat, and I got back in two. I noticed a way out of the bed to go west above the Tapeats not far north of the upper end of the delta. It is a great canyon for a scenic, dead end hike. (Billingsley found an Indian ruin in Salt Canyon.)

Hawkins Butte

[February 21, 1981 to February 24, 1981]

Doc Ellis, Jim Ohlman, and others have climbed Hall and Hawkins and I figured it was time for me to do likewise. I had succeeded on Hall last October and Hawkins is just as easy. I took Scott Baxter with me since he is interested in getting to know more about my experiences in the Grand Canyon with the objective of writing a book.

After a bit of lunch and a short stop at the permit window, we got started down the Kaibab Trail a little after noon.

On the road north from I 40, I picked up a couple of hitchhikers who had done something unusual. They had walked the road from the South Rim to the Topocoba Trail and had seen Supai the hard way. On the return they must have hitchhiked the regular road and along the highway. I have heard that Indians working at the south rim sometimes drive this road out to Manakacha Point and go down to Supai via the rope route. I suppose this is no longer true when a cable bars drivers from Great Thumb Mesa. I know that the Kolbs and others have led burros and walked this Topocoba Hilltop Road.

I felt fine while going down the Kaibab Trail and I talked a lot. I was surprised when we got to the bridge across Bright Angel Creek in only two hours, a lot faster than I have been doing this lately. The weather was perfect for our whole trip and the trail has been improved since last October.

While we were eating another snack outside at Phantom Ranch, Myla Morchek came by with Keith Green. She remembered me from last year when we had an evening visit with a number of people including Gale Burak, Terri Michee, Teresa Balboni, and others. Tom Davison has told me that a girl named Susan has climbed Brahma, but Myla Morchek says that Terri Michee has also. Our permit said that we would sleep at Sumner Wash on the Tonto Trail. Myla and Keith had just been up the Redwall in Sumner Wash to try to climb Sumner Butte, but Keith had said the loose nature of the rock along the ridge to Sumner had scared him and he had given up. They said that they saw no water in the Sumner Wash water pockets. Scott and I carried quite a bit of water, about two quarts apiece, but we were relieved to find plenty in two pockets about 50 feet below the trail. We had a warm night under the overhangs about 200 yards back along the trail. There were mice but we got partial protection for our food by putting our packs in a tree.

We had walked one hour and 15 minutes to get to this place from Phantom Ranch and it took me three more hours to reach Clear Creek. I was walking a lot better than I had on the recent trips when it took me almost eight hours to go from Bright Angel Creek to Clear Creek. Perhaps I was in better shape since I had just hiked for parts of four days in the previous week. Maybe I could still approximate what I used to do when I would get out on a hike every week at Flagstaff.

Since Scott and I had plenty of time, we went up Clear Creek and looked at the ruins opposite the mouth of the Cheyava Falls arm. I hadn't remembered how much more impressive the ruins are along the base of the cliff to the south than the one right at the angle where I used to sleep. At one place in a ruin to the south was another stiff wire that must have held a tag saying that the Gila Pueblo had made a surface collection there as well as at the projecting angle where I camped.

After we rested in the pleasant sun near the foot of the trail for quite a while, Scott going over his notes and me reading Time, we walked down to the tributary from Cape Royal. I began to worry about the dry state of the bed, but finally there was plenty of water. Just before we reached the narrowest part, Scott was up on an extensive terrace and noticed a couple of good bed sites under overhangs. We decided to stop although it wasn't as far along as my proposed place a little beyond the spring. He smoothed out a place under the ceiling and then decided to sleep in the open on the grass. I stayed under the overhang and slept warmer than he did. In fact the only night I used my quilted underwear in bed for warmth was the last night near the Tonto Trail under the sky.

There is enough hiker traffic up and down Clear Creek to keep a fairly clear trail. Near the mouth of the Cape Royal tributary, it goes right along the rim of the mesquite pit. Before we turned in for the night, Scott walked up the bed past the narrows and observed a very likely route out on top of the Tonto to the south. When we started up here the next day, we soon came on a clear deer or bighorn trail (Indian ruin north of this across wash). I am now finding as much evidence of bighorn sheep as of mule deer in most parts of the canyon, including Clear Creek. We saw some droppings on our way to the saddle west of Angel's Gate, but I didn't see any sure signs that they follow the climber's route through the Redwall. I know that they could do this type of climbing. I set our pace and reached the saddle in just under two hours from our camp. Walking the slope above the Redwall wasn't fast and I took one hour and 43 minutes from the saddle to the top of Hawkins. Scott went around the west side of Dunn Butte to check the way that Ohlman and his friends had climbed Dunn. On the return from Hawkins I came this way too and no way

looked feasible to me. Incidentally, the footprints of the climbers of Dunn were still visible in many places. Our return from the top of Hawkins to the saddle took five minutes less than the trip over. On the way out, we had paused to consider the possible way up the Redwall south of Hall Butte down the west side of the promontory. We know that one can also go down the east side into Vishnu Canyon.

*Another Redwall route that seemed highly possible is in the ravine southwest of Thor Temple. I would guess that it is the best approach for climbing Thor. I would like to go back and check off three more Redwall ascents.

We got back to our camp early and moved up to the creek at the foot of the Clear Creek Trail where we ate our dinner before carrying our packs for an hour and then sleeping up on the Tonto. It took us about three hours to walk from there to Phantom Ranch on Tuesday. Myla Morchek invited us in to have coffee and eat our lunch at their table. She wanted us to stay for a real dinner of spare ribs Tuesday evening, but we got started on and while Scott went out at his rate, I got from the Bright Angle Creek bridge to the rim in four hours and 39 minutes, five minutes behind my time with Alan Doty last April, but much better than I was able to do it in October.

It was a good trip and I found Scott Baxter's house interesting and his companionship very pleasant.

Surprise Canyon

[April 26, 1981 to April 29, 1981]

The main problem about my going back to Surprise Canyon was how my right hip would take the backpack. Just a few weeks ago I was walking around the house in pain and needing a cane. Contrary to the predictions of some friends the trouble had subsided and I could walk the sidewalks without much bother. The inactivity had of course weakened my stamina. I had to go at this time because of commitments for the next two weeks, and after that the weather would be unpleasantly hot.

I hooked the boat on behind the Jimmy and got off at 6:30 a.m. Sunday morning. The Sands garage mechanic had done a good job and the vehicle had power on the hills and made better mileage per gallon than it had on the previous two trips. I got to the Pearce Ferry ramp by 11:30 and met a party of USGS river runners from Flagstaff. One was George Ulrich who had given me the fancy picture constructed from satellite pictures taken from 530 miles above the earth. It shows the Grand Canyon from Lake Mead to Lake Powell. We agreed, contrary to Andy Rooney, that the boat traverse of the Grand Canyon is still high adventure.

On the way into the canyon, I encountered a party with three big inflatables moored where George Bain had told me to look for ancient Indian rock art and mescal pits. I stopped and started up the slope to see the goodies with others to show me where to look. Then I considered how this might throw me off schedule and that I might not reach a good place to sleep that night, and I went on. This little detour cost me something in that the gas in the first fuel tank gave out when I was only 50 yards from the bar at the mouth of Surprise Canyon. The lake was three or four feet lower than it had been in February and the current was too swift for me to row to the bar. It took me some time to get the second tank going and get to the bar. Blowing up the three pound inflatable was also time consuming and I didn't put in enough

pressure to support the oars properly. Eventually I got to the head of that kind of navigation through the Surprise Canyon lagoon. One big flaw in the upriver trip was that I hadn't put in the bilge plug well and I had to bail frequently because of the leak. When I got the fishing boat up on the bank, I pulled the plug and put it in tighter from the inside, and on the return trip there was so little leakage that I didn't need to bail at all. My mooring rope was 50 feet long, and in order to make it reach I had to drag the boat up as far as possible on the sand. At the very farthest upriver end of the bar grew the only tree for mooring. I also had some difficulty in landing from the inflatable since I had to get out into a foot of soft mud. When I had deflated the boat and parked it high enough in the granite to be above any rise in the lake level and had changed from my very muddy tennis shoes into my hiking boots, it was already 5:20 p.m. I walked until seven to find a flat ledge under an overhang in the Tapeats. It was several hundred yards south of where I had slept on the previous trip. On Monday when I went on, I didn't recognize the former bivouac site and when I was coming back on Wednesday I saw it but I missed the place I had slept Sunday night. There had been a prediction of showers for Sunday night, but no rain fell for all four days.

Again I looked carefully at every ravine on the east side to try to locate the natural bridge that Jorgen and I thought we had seen. The only place it could have been was the one with the big overhang as far north of the big bend to the east as this bend is north of the junction with the Amos Spring Arm. I recognized the place we had slept near the mesquite pit by a landmark on the west side of the bed, a house sized cubical boulder. I also saw the end of the Amos Spring Arm and the other landmarks. It was only 2:30 when I reached the place Jorgen and I had slept for our farthest north night and I used this bed site again.

I was worried about my right leg since it felt worse than it had when I set out. I rested a good bit and I spent the afternoon of my arrival at the old site lying around reading Time. Along about 8:00 a.m., after my 6:15 start that morning, I had decided that I wouldn't be able to carry out my main project of walking up to one of the springs at the head of Twin Springs Canyon, and I actually walked back toward the boat for seven minutes. Then I thought of checking the Redwall route in the left side tributary about halfway from my campsite to the junction with the Twin Springs Arm. Sleeping out during this early heat wave was very different from what it had been in the winter. On Sunday night, my quilted Dacron underwear and socks sufficed for the entire night. On the other two nights I used my light weight down bag. The famous silence of the Grand Canyon was broken by birds singing much of the day and by little frogs croaking like big ones for much of the night. Beavers had been active near where I had left my inflatable but mice didn't bother me at all. Humming birds were bold and curious in their near approaches and a humming bird moth went from flower to flower near my bed. I didn't notice any of the oily and pungent little trees which used to poison my skin in the spring, but again I came home with red and itching wrists. There was a slight threat of rain again on Monday morning, but the rest of my stay was hot and clear.

On Tuesday I started walking about 6:15 and reached the tributary halfway to the Twin Springs junction in 45 minutes. I decided that I would turn back at 9:00 a.m. so I carried only two quarts of water and a reel of adhesive tape. When I had gone into the side canyon about a quarter mile, I started up the west side before I came to the difficulty in the main bed. I had a little difficulty with the climbing so I marked the top of this passage with a cairn. On the return I went farther south and came down the bed using the route around the barrier fall that I had spotted in February. My conclusion was that the more direct way I had used for the present ascent was superior. Most of the way up the Redwall was just rough walking, but three more places gave me the problem of route finding finger and toe holds. The route was up to the

northwest to the crux near the top. At one stretch for a few yards there was a well defined sheep trail and near the top I found old sheep droppings. The end of the climb was on a promontory connected with the main rim by a slender isthmus. This was probably not the true top of the Redwall since I had to go higher as I walked south and went through another member of the limestone. Above this in one area I noted quite a thickness of what Ohlman has told me is the basal conglomerate. It seems remarkable that this rather thin deposit appears sporadically but so extensively, from east of the Walhalla Plateau to Surprise Canyon. There were some more limestone ledges higher still, but I concluded that this rock was part of the Supai. I reached the first big fork in this tributary before it was time to turn around. The way to the top of the Supai seemed simple in more than one place. I would estimate from the map that I had gone about one quarter of the way to Amos Spring by 9:00 a.m. This Redwall climb might be a logical part of the Lee's Ferry to Grand Wash Cliffs route below the North Rim.

I got back to my pack and the bed by 11:30 and took a long rest through the heat of the day. My right hip was a little worse for the workout over the rough going and a couple of places I used a knee for climbing instead of the feet. To kill the time I finished the current issue of Time and then started through it a second time. About 3:45 I started back and stopped where sand made a level bed north of the big bend around the fin topped by three towers. On Wednesday I got off for my earliest start, by 5:35, and reached the head of the lagoon in five hours. I noticed that I took three and a half hours to go from the mesquite pit campsite to the end, the same time that Jorgen and I had taken in December when we started fresh from camp. This time I had rested about 15 minutes after walking for three hours without a break. Also on this occasion I had random pains in my right hip when I stepped the wrong way.

I easily found the tennis shoes I had hung in a tree and the inflatable boat was not hard to find either. Again I had some trouble managing the boat because I had not inflated it tightly and I had put the pack in the wrong end. I felt that I had to kneel as I rowed and before I reached the bar, my knees were giving me fits. I had a struggle, but not a desperate one, getting the fishing boat down into the water. The lake had dropped about five inches in three days. A malfunction of the electric starter had me worried for a little, but I got everything going and reached Pearce Ferry after 4:30.

I was under power coming down the lake from the mouth of Surprise Canyon by noon, but I must have spent a half hour where I had seen the people looking for the rock art on the brown boulders. I got out George Bain's letter and sketch map and studied them on the site, but still I was only about one third successful in finding the goodies. When I followed the burro trail west to the patch of very green mesquite, I finally saw a couple of boulders with designs cut through the desert varnish and the two big mesquite pits beyond about 75 yards northwest of the grove.

Getting into Surprise is far easier at a higher level of the lake. I think that future visits by me will be when I hear that the bar is at least partly covered. At this time, however, I saw bare footprints in the mud at the head of the lagoon. I think that someone had waded through the mud at the base of the east wall. I also saw Vibram shoe prints going both ways far from the mouth of the canyon. I wondered whether Tony Williams had come down from the rim and had walked to the mouth and back.

It was gratifying to know that my bad hip hasn't put me on the sidelines completely even though I did feel worse at the end of the trek. I had walked seven and a half hours one day and five the next.

209 and 214 Mile Canyons

[July 15, 1981 to July 18, 1981]

I got Scott Baxter at Parks Monday afternoon and we drove to House Rock Valley where we spent the night. We had a short visit with Jim Ohlman who was pumping gas at Marble Canyon Lodge. On Tuesday we proceeded to Saint George with a brief stop at Pipe Springs National Monument which Scott saw before the ranger opened up. The interstate bypass for Saint George confused me about where to buy gas and leave town to go towards Mount Trumbull and Parashant, but after asking some questions we learned that the best way is to leave the freeway at the first exit west of town and go through a new subdivision called Bloomington Hills. About 22 miles south of Saint George, my left front tire went down so fast that I nearly jammed into the steep hillside before I got the car over to the right. Scott had an easier time loosening the bolts than I would have. He was also a good man to have along when it came to opening and shutting the wire gates and especially when we wanted to go through a heavy wooden gate that was down in the mud too. We went back to town and stopped at the Goodyear shop where I got two new six ply tires for the front wheels and found the usefulness of my credit card to pay that kind of bill. It was at least one and a half hours later when we finally left town the second time. Jorgen had once said that one should allow eight hours to go from Saint George south past Mount Dellenbaugh to the vicinity of Rodger Tank at the head of 209 Mile Canyon, but we came to the end of the driving for us. about four miles north of Rodger Tank, in less than six hours. The road seemed worse than it used to, and I am not surprised when we heard from Buster Esplin that more people used to come that way in years past. We had a slight problem in driving on a slick muddy surface at the places along the road where there had been spotty thundershowers. However our principal worry was from the lava boulders in the road near Mount Dellenbaugh and Price Point. A couple of times Scott got out and tried to guide me so as to avoid the wors boulders. We would have been helpless without four wheel drive. When we were almost two miles south of Shanley Tanks, we came to a place so rough that both of us were willing to walk some extra miles the next day rather than to take the chance of getting hung up on the rocks.

I was also worried about the weather. It seemed to be tending toward a general storm rather than just the afternoon buildup of clouds and light showers. I played with the idea that we should head back north in the morning rather than getting stuck in the deep mud which is possible after a big storm. When we talked with Buster Esplin on the way out the next Sunday, he said that it can get so bad that people have had to climb out the window when their cars are so far down in the mud that they can't open the doors. However, by morning I decided that we should take the chance that a big storm might hit us and go ahead. Both of us had rain gear, and we did use it for a half hour or more.

I read my odometer incorrectly and thought that we were closer to Rodger Tank than we were. When we had walked south along the road for about an hour and 40 minutes, we began to think that we might have overshot, so we turned down the next draw. When we got the view in the more open canyon below the Kaibab, we could see that we had come down the draw immediately north of the drainage from Rodger Tank. Walking was slow in the brushy narrow streambed and finally we came to where it dropped off in quite a fall, in the Toroweap, I believe. We tried walking the slope to the south of the fall and soon found a way to get down to the bed again. From map study and my experience in Surprise Canyon, I thought that it might be possible to go clear to the river in one day even though Jorgen had said that this would not

be possible. When we saw how long it took us to reach the junction with Price Canyon, I began to agree with Jorgen. Jorgen had also said that there was one big drop which would require a real bypass. We figured we had found it in the lower Supai at a fall where the wall was as smooth as the side of a quarry. It was clear that we should go along the slope to the south and get down about a quarter mile away. When we were well along on this detour, Scott saw a place that might well have been some old constructed trail. At least rocks seemed to be moved to the side for a few yards. There were a few short barriers where we had to slide down among rocks in the bed and where I felt safer to have Scott help by handing my pack down to me. We found rainpools almost everywhere that the bedrock showed. When Jorgen, Homer, and Bill came through it must have never been dryer. After some more trouble with my right hip quite shortly before this expedition, I was glad to be able to walk hour after hour that first day. Then I began feeling ordinary weariness and was glad to have water for an early camp. Scott thought he could find us a better place than where we first stopped. He reported back in less than an hour when he had located a place for smooth sandy beds with a good rain shelter across the way. I found that I could construct a rough bed site under the overhang and spend the night with no thought of having to move, but the weather looked better and better and I ended by sleeping at the better place in the open. This was in the lower Redwall.

The heat hadn't seemed too bad the first day since there had been some rain and cloud cover. We got started quite early on Thursday, about 6:10, since we figured that it was going to get hot. That day was also somewhat wet and cloudy, and the narrows through the Devonian formation gave us some shade. These narrows are impressive. If we hadn't known that my friends had come through here years ago, we would have felt a lot of relief when no impossible falls appeared. I was experimenting with a kind of loafer instead of regular hiking boots. They were fine in that I got no blisters, but the soles of my feet got somewhat sore and by the third day, the shoes were beginning to break up. I tried tape to keep the insoles from coming out, but on the fourth day I gave up and just walked any way that I could in shoes that were coming apart. We got to the river a little after noon and relaxed in the chilly water and then rested in the thin shade of some catclaws to read our magazines for a couple of hours.

Around three we went on along a good burro trail for a time. There were lots of burro signs, but none real fresh. Perhaps they had airlifted the burros out of this part of the canyon too. Near Mile 210 at the lower end of the Granite Park island, we had to walk along the broken rock forming the immediate riverbank. When I walked up this way with Jorgen, I thought that we had used burro trails almost all the way. Perhaps there was one higher on the slope. Then when it began to rain again, we found a good shelter down near the river and sat it out. Before we had moved on, the river rafts, both oar and motor powered, began coming by. One of the river men recognized me as his former math teacher at Flagstaff. Finally, Scott asked the last boat for a ride down to Mile 214, and they pulled in below us. They, the Diamond Company, not only took us downriver but also invited us to join them for a fine meal, their last on the river before they would end the trip at Diamond Creek the next day. We had plenty of goodies such as vegetable soup, big New York steaks, corn on the cob, and pineapple upside down cake. The campsite was just right for us since it was about 100 yards downriver from the mouth of 214 Mile Canyon. I had purification tablets for the use of river water in our canteens, but that wasn't necessary since we found a rainpool in the bedrock just above the river in 214 Mile Canyon. We ate our own breakfast up on a shelf above the sandy camp of the regular party and got off the next morning when only a few of the dudes were awake.

Mile 214 Canyon is quite a little steeper than 209 Mile Canyon and the lower part is more open so that one can see how high the Redwall is above river. I realized how far we had come down from our first night camp to the river. About an hour and a half after we started, we came to a low barrier cliff in the bed. Scott climbed up directly while I went up a rough slope to the north. On top of this cliff, we could see burro trails especially on the south side. There must have been a fairly easy bypass if one left the bed to the south soon enough. Later on we approached a much higher barrier cliff across our path in the bed and also far around on both sides. There was just one chance, a 50 foot wide broken corridor on the south side of the bed. There was nothing else to do, so we went up there. Scott headed for some shade near the wall and ran into the constructed trail that George Billingsley had said was here. Many places on this trail still showed retaining walls. It became faint where there was no need for so much work and I missed the way a few times. Scott was a little smarter in following the trail, but we both would have had no trouble in getting up the right way to a notch near the top of the Redwall. From there to the Snyder Mine, one has to use his own common sense. I think we would have been smarter if we had stayed lower and farther east than we did. We used the map to figure that the mine is on the south side of a prominent knoll. Up the last of the Redwall and across these rolling hills to the mine, I was feeling the heat. If we had had to go another half hour to get into the cool mine shaft, I might have really been in trouble. We had seen some rainpools in 214 Mile Canyon but not as often as in 209 Mile Canyon. Scott had left the trail to inspect about the highest of these pools when he saw two big owls perched in a tree just watching him.

In the late afternoon I had recovered enough to feel like going down to see Shanley Spring and make sure that it had water. When I got close to the dropoff above the spring, I took Scott to the south side of the little gorge as I had remembered doing with Jorgen. Then when I saw no trail here and some across on the north side ledge, I backed away and went over there. There was a constructed trail down near the wall on that side, but there was no spring. We passed two places that may have had drips at one time, but they were bone dry. Instead of persevering and looking intelligently for the spring as I might on a first visit, I rather panicked and concluded that there was no water here. Scott advised me to go back to the mine and wait for him to look some more. He found a couple of adequate rainpools in the mouth of the bigger arm that comes in farther south. He brought us plenty for the night. After I had spent a fairly good but short night in the shaft while Scott slept out under the stars, Scott went back to the pools and filled all of our containers starting down there about 4:20. By 6:10 we were on the way. After the first day I was using the system of walking for 25 minutes and resting for five, but on the stiff climb from Snyder Mine to the rim, I had to rest more than that. The final steep part was a miserable talus rather loose and near the angle of repose. There was a deer trail near the top and some signs of trail construction and civilized trash. There must have been a horse trail up here when they were working the mine, but it is gone now. It seemed harder to keep one's footing than anywhere else I have been. There were deer droppings along her and at one place I am sure I saw bighorn droppings. On the Kelly Point Road we also recognized coyote and bear dung.

When we got to the top, we had a two hour rest for eating and getting cooled off for the nine mile hike to the car. Scott had carried water in his pack, and it was a good thing. I had carried a gallon away from the mine up to the rim, but that much needed supplementing soon after I had eaten lunch. It seemed plenty hot even up on the Shivwits Plateau at 6000 feet and I was resting more often, about 10 minutes of progress followed by five minutes of rest. Scott seemed a bit worried by the direction of the Jeep road which we intercepted where it came down a bare hill to the rim at a notch. We found that it continues well

beyond where the map shows it ending at the rim. We were walking within sight of the rim and when we came to the road, we realized that if we had gone down the slope to the west where the valley drains into 209 Mile Canyon, we would have been on the road much sooner.

Over two hours from our start after reaching the rim, we came to the junction with the Kelly Point Road and soon found Kelly Tanks. They were all dry this time although there was one rather skinny cow here. We could tell when we were approaching Rodger Tank since the road turns from northwest to north here. Rodger Tank itself is back hidden in the trees. We had seen an arrow outlined in stones beside the road just a short distance north of where we left the road to go down 209 Mile Canyon and strangely both Scott and I missed seeing this on our way north although we were looking for it. Around six there was more shade and I began walking farther before the rests. Finally, Scott recognized the rough boulders that had made us turn the car around and almost at the same time he saw the car.

The most interesting thing that happened on our way north on Sunday was our chance encounter with Buster and Lola Esplin at the outlier ranch where the much smoother of two alternate roads goes through the heavy wooden gate. Buster assured us that one can drive to the head of a fairly good trail down to Amos Spring and he said that there is another spring farther down the valley below Amos Spring where there is an old rock building. He also assured me that one can climb out to the rim at various places at the head of Twin Springs Canyon, thus contradicting the information passed along by Georgie White Clark.

The other very interesting event while we were driving through the woods was the sight Scott had of a hawk swooping down and killing a rabbit.

We had a good visit with Tony Williams at Jacob Lake. When we got to Parks, we looked up my log and found that we had missed seeing Shanley Spring on this trip. I had written that it formed a pool at least 13 inches deep and several feet across back in a little cave. The way down to it is indeed on the south side of the slot where the dry bed drops over the little cliff. We could have had good water instead of the greenish brew from the stagnant pools.

Between the spring and the mine, I saw a big mesquite pit and Scott picked up a fine artifact made of stone. It may have been a projectile point.

Thor's Hammer bay and Papago rim
[September 19, 1981]

Jim Ohlman had told me about a fine route down the south arm of Grapevine Canyon below Thor's Hammer. There is a parking area called by that name that offers a convenient place to leave a car. One of the best displays of Grand Canyon pictographs is under an overhang about 50 feet below the rim and perhaps 200 yards to the west of the parking. Chad Gibson had been there before and he was able to take me directly to the place. The pictures and designs cover the wall and ceiling for a good many yards. The dark maroon paint was put on apparently with a fine tipped brush in dots and very narrow lines. One design would appear to be a map perhaps having to do with the local route down into the canyon.

A clear animal trail led from the pictographs down to the east into the bed of the bay or drainage. There seemed to be a problem right at the top of the Coconino until we got close and could see that the fault had made it possible to climb down a slope that had trees growing on it. There were no really discouraging difficulties until we were down near the base of the Coconino and had only about 50 vertical feet to go. Here there was a 20 foot drop over big chockstones with a vertical slot on the east side where Ohlman and the other students had chimney climbed down. The crack seemed inconveniently narrow at the top and rather too wide near the bottom, and the walls seemed rather smooth where I saw them near the bottom. If I had had a rope to hold to as I climbed down the crack, I would have done it gladly, but I didn't feel in the mood, and I called for a retreat. We took one and a half hours to get down here including the detour to see the pictographs and another one and a half hours to get back to the car.

We were through with this main project by 10:00 a.m. so we drove to Moran Point and spent the rest of the day until 4:15 walking the rim to look for Indian ruins. I didn't see any that I hadn't seen years ago, strung along the last half mile of rim before we reached the head of the east arm of Papago Canyon. Two were defensive ruins out on promontories. The western one of these is on a detached tower that seems difficult to climb to even though the break is only a few yards. I feel sure that I got on top of it when Norvel Johnson and I were out that way about 1967, but it didn't seem easy and I didn't try the climb this time. There is a small storage bin about 30 yards southeast of this, about 40 feet down from the plateau. We chanced on two rectangular rooms about 30 yards back from the rim. We also found the bigger promontory with the defensive wall approached by an easy scramble down from the rim. There were several room outlines on it north of the breast works. On the next promontory to the east, there was no wall for defense, but there were a couple of room outlines. I still didn't locate the overhang where David Hunt showed me the charcoal design on the ceiling, the one I photographed the first time I was there and then never saw again.

After following the rim from 10:15 until 5:15, we walked back along the road and reached the car in less than one hour.

I had a permit for a three day trip to try to climb Brahma by the approach from near Ribbon Falls, but I felt rather weary and had acquired some blisters on my left heel and dropped out on that ambition.

Wall Creek

[October 19, 1981 to October 22, 1981]

The plan for this trip was to climb Brahma using the Redwall break opposite Ribbon Falls. Jan Jensen had found that the Redwall is quite easy here, and I had checked it in August, 1972, but I had forgotten that it is quite a chore to get up from the trail near Ribbon Falls to the base of the Redwall. In September I had secured a permit to use this route to climb Brahma, but after the day with Chad Gibson when I had turned back instead of going down the chimney at the base of the Coconino, I decided that I wouldn't be up to the climb through the top Supai on Brahma, and I gave up the project. This time I picked up Scott Baxter at Parks at 9:00 a.m. and felt sure that he could get me past any difficult climbing we would find on Brahma. We got our permit and made good time down the South Kaibab Trail from 11:00 to 1:30. About halfway down some other hikers showed us a baby rattlesnake. It was only about 15 inches long and as

thick as my little finger, but Scott pointed to the spiky horn on its tail that would grow the rattles. It didn't try to coil and strike at us.

We ate lunch near the River Ranger Station and inspected the fancy new restroom building there and at the campground. They are not open yet since the sewage treatment plant is not yet ready for operation. Then we went through Phantom Ranch and looked up Myla Morchak who greeted us most enthusiastically and urged us to stay with them on our way back. We didn't think that this would fit with the schedule. I figured that climbing Brahma would take all Wednesday and that we would want to sleep farther up Bright Angel Creek. As Myla's guests we enjoyed lemonade and Scott had a beer. Then we walked up Bright Angel Creek for a couple of hours and found a good place to put our beds near a spring from the east wall. Thus there was no question about having to purify water from Bright Angel Creek as the Park Service signs now say.

We figured on using the second day of the four that were available to let me rest for the big push on Wednesday. However, at a fairly late hour we packed up and moved on up the trail. I lost my bearings and took Scott almost to Wall Creek thinking that the route up to the Redwall break was still a little way ahead. Towards 3:00 p.m. we bestirred ourselves to check on the start of the route up to the Redwall break at the northwest side of Brahma. When we reached Wall Creek, I knew that we had overshot. We carried our packs back south to a place where they bring mules down to the creek to let them drink. This is just north of where the trail starts up the hill across from Ribbon Falls. Then we went up the slope on the south side of the wild gorge through the Quartzite and get high enough to see for sure that this was the place. I could point out to Scott exactly how I had been through the Redwall to climb Deva. He thought that sometime in the future he might try coming off the South Rim and up here to climb Deva and get back to the South Rim in one day. He has done a one day ascent of Sumner Point and only a little over a week before our trip, he and another man had tried the feat of starting from the Colorado River at the mule bridge and running from there to the summit of Mount Humphreys in 24 hours. On that occasion they came up to the head of the Kaibab Trail in two hours and two minutes and reached a place near timberline in about 21 hours. The wind and weather were so bad that they decided not to go the rest of the way for fear of hypothermia. After this reconnaissance of more than an hour, we ate early and went to bed. I was worried at how long it was taking me to get over stiff and sore muscles, and I decided that this route up from near Ribbon Falls was going to be longer and harder than the way up from the rain pools in Sumner Wash. Also I was afraid that in my present poor condition that the ascent of Brahma would be so tough that I would have a hard time getting to the rim on Thursday. Scott had to get one Thursday evening in order to teach rock climbing techniques to a group of Navy men.

I was content to use Wednesday to see more of Wall Creek than I had seen in 1972. From where we slept it took less than 15 minutes to walk north to the mouth of Wall Creek. Instead of going high on the north slope above the creek as I had nine years ago, we went in just above the rocky narrow mouth. A deer trail suggested this move. We were able to follow this dim trail through the entire creek bottom on the return, but on the way in, I led Scott up above most of the quartzite gorge along the north side. We were still not high enough to dodge the whole cliff system. Just as our bench was getting cliffed out, we came to a damp ravine with a lot of cane and travertine where we could get back down to the bed. It was a lot easier to stay down as we did on the return trip.

The narrow creek bed filled with willows, vines, and cottonwoods was really charming and both of us didn't miss the thrill of climbing Brahma too much. In places we saw fresh beaver cuttings and we watched a small doe both up in the high bench on our way in and also down below on our return. I gave Scott Herm Pollock's information about an impressive spire of Redwall about 200 feet high, near the south wall before we could be sure that it was detached from the wall. This spire is back in a bay on the south side of the canyon about halfway from the mouth up to the source of the water.

When we had been going for over two hours from our camp, we came to the fork where the main arm comes down from the southeast and where there are lots of huge boulders making further travel difficult. I saw that the water came down from the north wall and saw the nice fall over some travertine rather near the main creekbed, but Scott first noticed the foot of the main Redwall cliff. We had not brought our lunch and didn't want to take the time to see how far we could climb toward the source of the water. Scott wondered whether we might be able to climb up the entire Redwall in the big south fork, but that investigation will have to wait. We went down the canyon consistently near the creek in a half hour less than it had taken us to come up. We had a close encounter with a pink rattler about three and a half feet long. It rattled but didn't coil.

After lunch we walked down to Phantom Ranch by 4:45. Myla welcomed us and gave us free lodging and a dinner of roast beef and all the trimmings. I got acquainted with Dave and Janet Lyman, and Dave played me a game of chess. They asked a lot of questions about climbing Shiva Temple.

I felt fine when I was walking out on Thursday and got to the rim from the bridge to the campground in five hours and 2 minutes. The weather had been great all the way.

Scott had called my attention to the palm on the west side of Bright Angel Creek which had interested Donald Davis in 1972. I wonder whether it could have started there from a pit that someone had thrown out?