Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (May 27, 1972 - February 19, 1973)

Glen Canyon, Mile 13 to Mile 0 [May 27, 1972]

We were planning to take Joe and Sally Hall for a two day trip on Lake Powell when we found that the outboard motor needed a new part that would not be here for ten days or so. A second trip down Glen Canyon below the dam seemed most attractive. Bob Packard was glad to accept my invitation and Roma was quite willing to drive around to Lee's Ferry to pick us up.

We considered going around the transformer yard to get to the descent trail on the north side of the river, but we used the same approach as when Pat and Susie Reilly were along. From the turnaround, Bob and I walked south along the west side of the rocky knoll and it took us about 30 minutes to get to the rim and find the head of the trail. This time I wasted a couple of minutes by getting east of the trail. We were down to the river in only 15 minutes more. We found a better way to reach the water than Pat and I had used. A ramp slopes down to the west.

There was quite a bit more water in the river for most of the day than Pat and I had had, and it kept on rising through the day. The ranger at the desk at the Visitor's Center said that they had been letting as much as 26,000 cfs through the power plant, but this may have been for only part of the day. Some campers we talked to at Mile 10.4 said that the fluctuation was about five feet in depth.

Our first stop was not more than a mile below the start, on the left bank, to inspect the access route that Jim David had discovered when he was in Page as a high school student. Someone has rigged it with ropes and a long cable at the top, but Bob and I found it more than a match for our climbing powers. At the bottom we went up an easy talus of broken rocks and soon saw the need to go up a steep crack over at the east side. Our rubber soles might have held on the smooth bedrock, but we felt better with our hands braced on the vertical walls. Above this place one needs to get out of the main wash to the east and then come back into it farther up. A simple scramble over breakdown material leads to another narrow crack where the nearly vertical climb is helped by two ropes, one tied around a projecting rock and the other to a piton. After another easy scramble one arrives at the foot of the hardest place. A long cable comes down here. The only way to do this without a rope or the cable would be to get into an uncomfortably narrow crack and try to chimney up. I couldn't see myself going up so far in that 15 inch wide chimney so I tried the cable. After I had gone up 15 feet using very meager toeholds to support part of my weight, I came to where there is nothing but smooth rock. My grip on the cable was getting weaker and I was afraid I would start to slide. Bob and I agreed that if we had been wearing gloves, we might have taken the chance of losing a firm grip on the cable, but as it was, both of us decided to come down at the same place. There would have been only about 60 feet more of climbing above this place and there seemed to be enough platforms to stand and rest. It did seem like the most precipitous place that I have ever seen that was ever regarded as an access route (Doty and I needed Jumars).

There were a lot of boats up from Lee's Ferry and between some waves caused by the current and the wakes of boats, our little two man shipped some water at least twice. We stopped at a sand beach about Mile 10.4 to tip out the water and eat our lunch. Some people in two boats had set up a two night camp behind the dune here. In our visit, a man told me that he had heard that there are four ways to get down between Lee's Ferry and the dam. I should have asked him his source. Bob and I soon found the third, the way the Indians had reached the petroglyph site near the Faatz inscription. Just about Mile 10 on the right bank we started up on a talus that is soft sand covering a rock slide base. At the top, there was an easy climb up to a ramp that rises to the east. As this ramp ends, one can go up the sandrock steeper to the east and then double back on a steep ramp to the west. Then one gains a lot of altitude over broken rocks and turns east at a high level until he is out on the rim. It took us 45 minutes to get to where we could see the top of Tower Butte and most of Navaho Mountain. Then on the descent, we missed the way by getting too far to the west. This route is east of the major ravine that supports some greenery.

Precisely at Mile 5.8, Bob was holding the James book In and Around the Grand Canyon and he recognized the picture on page 234. Gene Foster was right.

Route to Vesta [June 11, 1972]

What with getting the permit after 8:00 a.m. and picking up Donald Davis who was camping outside the park boundary, we didn't get started away from the truck until 9:40. Even the uprooted telephone poles have been removed so that we had to note the mileage from the drift fence. I parked about 1.7 miles beyond the gate, which was probably farther than we should have gone. With a compass we tried to maintain a course at right angles to the road, and we reached the rim well to the west of the place to start down. After 55 minutes we were ready to leave the rim.

We used the rope at the usual steep part of the Kaibab and got down without incident. Since the second person must wait until the first is out of the line of rolling rocks, this is the part of the trip that is faster for a man alone. I remembered the way off the lower ledge and we proceeded through the saddle and down the two breaks in the Toroweap. I pointed to the fire blackened soil and rocks at the mescal pit at the base of the cliff off Diana. On the return, Donald noticed a burnt slick next to a low overhang nearby.

Donald was having an off day for climbing. He had been slower in getting down the Kaibab than I at a couple of places, and when we faced the place that Packard had found to get through the Coconino, Donald didn't want to trust his weight to the 50 foot quarter inch rope I had brought for this place. With the short length, we needed to tie it lower than we had tied John Ritchey's rope, and I used a block of sandstone with a little flange on top. I let my pack and water down on the rope and then came down myself. Donald tried starting down but didn't trust the layout. Finally, I went ahead to get more pictures of the fine display of fossil footprints on the big block of Coconino that has rolled to the bottom of the Hermit. When I was returning, Donald was below the Coconino. He had made the prime discovery of the day, a safe and ropeless way through the Coconino. It is about 50 yards east of the Packard route and involves nothing more difficult than chimneying between big blocks of Coconino. Going up between these rather smooth blocks requires quite a bit of effort and I still prefer Packard's way with a rope for

support. The Davis route requires ducking under a block that has fallen across a crack and some clever route finding where the cracks lead into each other at right angles.

It was now well after noon and we could see the futility of trying for the top of Vesta. As a very acceptable alternate, we tried going down to the Redwall in Topaz. Donald talked me out of trying to descend the ridge of talus material where we had eaten our lunch and where I had broken my rib on the previous trip. He could guess that the lower end of the slide had eroded into a rubble wall. We went up to where we could get into the bed of the fault ravine. There were numerous small barriers that were quite easily passed until we began to think we had it made. Then in the lowest part of the Supai we came to one more big drop in the bed. The top of this barrier is formed by a couple of chockstones. I went along a ledge to the right (west) and got down to the next level below while Donald found a somewhat harder way closer to the bed of the ravine. Then I followed the bench, with bighorn droppings to encourage me. One more big one and we would be down to the talus going to the rim of the Redwall that now seemed quite close. I came to a place where the cliff was broken into about three or four minor descents. These would be easy for a sheep to jump down, but I couldn't see myself getting back up this way.

Across the bed to the northeast, there appeared to be a more likely way down, but it didn't look very sure and safe to me. Furthermore, it was now nearly 3:00 p.m. and we would have to turn back. About 100 feet of rope would make this descent sure, but it is obviously better to keep to the Hermit and contour if one just wants to climb Vesta.

We had a bit more trouble arriving at the car than usual. Although we used the compass again, we came out on the road about eight minutes walk west of the truck.

Nankoweap via Kibbey Route [June 12, 1972 to June 18, 1972]

Donald Davis came from Fairplay to go with me and we started for the north rim in late afternoon. After getting the permit and organizing our packs, we left the ranger center by 9:00 a.m. and parked at the Greenland Lake area. I had previously walked to the point of the rim to the south of the depression that leads up to the rim, but this time we walked north along the highway and then went toward the rim. We got too far to the north and I started down there with the result that I had to go east through some bad walking before I came to the Coconino break. We had wasted time on the rim and more below the rim. I had brought my 120 foot rope and Jumars with the idea of rappelling to save the long walk from Silent River Cave on the north side of the Kibbey promontory to the south side along the top of the Redwall. The rappel seemed a long way down and we went east along the south side of Kibbey looking for a more appealing site. We found a place where a man without a pack could make it down ropeless. The route is to the east of a small tower at an angle of the lowest easy scramble. There is a six foot drop where we used a dead but strong shrub and about 20 yards farther east I came to the crucial place, a crack with a large fir sending a limb almost straight down. With the aid of some toe holds and a dirt bank that comes up in this crack, we could get down, but we let our packs over the edge by the rope. Next one needs to go farther east on this brushy bench about 50 yards to where there is a ramp in a crack. Near a big ponderosa pine Donald found a spring when we were returning. From here there is a fairly clear deer trail that goes down an easy slope for about a third of the Supai. Before you come to another bad drop, the trail turns west

along the contour. The bench becomes very narrow and the footing is precarious around into the rubble filled ravine that goes clear down through the entire Redwall.

Along the way through the upper third of the Redwall, Donald checked a couple of cave openings and I went to the opposite side, the east, to check a larger opening. Mine went in and up to another opening, but no light is needed. There were some cave formations in it. Down where one turns the angle at the bottom of the Redwall, we came to the obstruction that was left by the 1966 flood, a consolidated pile of clay and rubble. I moved across carefully where the deer have stepped, but it looked so bad to Donald that he balked until I carried his heavy pack across. As before, it was necessary to stay in the woods on the right side of the ravine below this obstruction for about 150 yards. The walk down canyon is through beautiful firs through a fine part of the Tapeats. The short tributaries on the north, walled in with named summits Kibbey, Hancock, Sullivan, and Hayden looked inviting, but we didn't explore them at this time. Donald later checked the base of the Redwall for cave openings and discovered a seep in the Muav below Silent River Cave. The spring north of Ehrenberg Point was running as well as ever and we made an early camp here.

Since I woke up early, I got off before Donald on Wednesday morning to go over the pass between Alsap and Brady. The hardest part of this is making progress over the rock slides. At the top one can go a short way east along the south side of Alsap to where the ledge ends above an awesome drop. I saw one rather dubious crack in the rest of the Redwall upwards towards the Supai of Alsap, but nothing that I wanted to try climbing. Donald came up to the same place later and went up the Redwall and made the first ascent of Alsap. He used a crack system in the Supai on the northwest corner of the tower. From the ledge I had noticed a deep alcove on the southeast side of Brady and when I went down from the pass, I angled across under it. From below I could see that it is a natural bridge of the same order of dimensions as Keyhole. I continued down to inspect the window through the fin that extends south from Alsap. At its base is a shelter cave. Since the west end of the window is inaccessible, I followed the base of the Redwall around to the east side. The window is a hole about 30 feet wide by 80 feet high and slopes up to the west. If I had had a bit more nerve or persistence, I could have climbed into the hole, but as it was I could look up and see that the roof is cut in two by a vertical hole. I angled back to the west so as to get through the Tapeats below the Alsap Brady Saddle. From the east base of the Alsap Window the south approach to the Alsap Novinger Saddle looked quite feasible. There was one level that was hidden behind a promontory, and on Thursday we learned that this section was quite impossible for ordinary non technical climbing. I walked down the south fork of Nankoweap Creek until I came to one little pool of good fresh water. No spring seemed to be feeding it, but tadpoles were living in this water. I got a refill and headed up over the terrace to the south of Novinger. I had to cross one deep ravine in the shale but the next one I came to led on to the fork north of Alsap. I got back to camp early.

I had been able to shout to Donald when he was west of Alsap Window and when he was almost up the Redwall in climbing Alsap, I began to worry about our splitting up and went back up canyon to look for him. I found no trace in the first tributary above camp and then I was somewhat more disturbed by finding his water cache untouched. I met him coming down from the Alsap climb when I had gone a short way up toward the saddle.

On Thursday we started together to try to reach the Alsap Novinger Saddle. The climb to the Tapeats was immediately below our camp, but we soon found that the ravine doesn't cut through the Tapeats. The projecting corner just west of the bed seemed to be a distinct possibility. Without my lunch and water, I was able to use an old pine and get past the edge of a vertical wall. The next trick was to get the packs up. The steep shale above the angle was about the worst footing I have ever seen, and I decided that I couldn't even get down safely. It would be safer to climb out of danger and walk to the west. I had noticed a ravine quite close, but at the worst I could get back down the Tapeats far to the west at our route of the previous day. When I checked the ravine just west of here, I found it easy except at one place. By taking a couple of friction steps without good holds, I could get by here also. Donald didn't relish this move, but he had his web climbing straps along and we looped them around a small tree so that he could come up from below.

He seemed better able to keep a good pace so when he stopped to look for a hummingbird's next, I went on across the shale slope into the bed of the ravine. He went on up the ridge and kept to the south base of Ehrenberg. I discovered that the Redwall at the head of my ravine was impossible, and after some shouting I got out of the ravine and joined Donald. As he had guessed from his Alsap climb on the previous day, the Redwall wasn't too bad from the Ehrenberg Alsap Saddle up Alsap, but Ehrenberg is only for the technical steeple jacks (Walters, Ohlman and Kirschvink did it free). Just before I went along an exposed ledge to the really easy part, I was buzzed by my first rattlesnake for over a year. (Donald saw another the very next day.) With only a little route study needed in the broken north side of the summit block, I was up.

Donald had been busy moving around, but he met me when I came down by the same route. It was good that I hadn't tried to go directly down to the Novinger Saddle because the limestone is precipitous for a short way. We crossed below the Redwall and had little trouble getting to the saddle. Donald had spotted the best way through the Redwall to ascend Novinger and the small amount of Supai offered no difficulty. Near the northeast end, Donald called my attention to a hole where the earth was kicked up. We think a bolt of lightning struck here.

While Donald checked some cave openings, I went down to the south of the saddle to see whether I could get through it. I came to a place where it became a chimney and gave up. Donald found a cave that has about 400 feet of passageways. We got down to the north easily using the same break in the Tapeats. I had fun sliding through some bare soft shale and then committed the biggest boner of the trip when I reached the dry streambed. I turned up canyon and walked away from the spring for over five minutes. If I had even looked down the bed, the spring was about 30 yards away.

Two of the four nights we were at this spring, rain seemed a distinct possibility. Donald found a place under an overhanging rock where both of us could bed down a few minutes walk east of the spring and about 150 feet south of the bed by a little seep among tall yellow columbines. The birds around this valley were fine too. Donald located a Cooper's Hawk's nest and taught me to recognize the notes of the towhee and gnat catcher. We also noticed rock wrens and canyon wrens.

On Friday I went down and around into Mystic Falls fork of Nankoweap while Donald went up to explore for caves in the Silent River and Hayden tributaries. I crossed the broad terrace to get into the next fork

north and came down to the bed at a nice oasis. There was a grove of trees higher than this, but there was no more water until I came near Mystic Falls. The flow over the fall is permanent but not very great. However, the sight of water dashing into spray in this part of the canyon is breath taking even when you know what to expect. After the real show pieces in Havasu, Deer, and Thunder Creeks, there are very few falls worthy of note in Grand Canyon. Cheyava doesn't often live up to the billing of the Kolbs, and upper and lower Ribbon Falls are about the only others that tourists get to see. Mystic Falls in Nankoweap and what I call Clubb Falls in the Supai of upper Shinumo just about complete the list of perennial falls. If Royal Arch Creek had a bit more water, it would classify high, but of these three, Mystic Falls is the only one to be seen from a good accessible viewpoint.

I cut across the corner made by the creek to approach the fall for a closer picture and stumbled across a circular Indian ruin with a bit of broken pottery nearby. Then I went northeast to get a close look at the fine cliff dwellings that Beck discovered. They are high on a ledge under a natural ceiling of Tapeats. The ledge is reached by a talus at its west end and walking along here is difficult because of falling blocks, brush, and sloping fill material. First there is a neat granary and then at the end of the line four perfectly preserved rooms. The doors are only big enough to crawl through and are set about two feet above the floor. I noticed that at least one has sticks protruding from the wall on the inside. I didn't observe whether the ceiling had smoke stains and I didn't see any sherds. I got back to our appointed new campsite at the junction of the main arm and the north fork before 5:00 p.m. and then had a long anxious wait for Donald to come along about 9:30.

On Saturday we went up the Nankoweap Trail together. Donald thought Bill Breed had been shown a shelter cave at the base of the Redwall by Melvin McCormick where there had been a reed boat at one time. Really, Bill had been shown from the air, a cave or hollow in the Supai. Euler had flown this area in a helicopter and had seen no ruin. However, this lack of discovery would be clear if the ruin were out of sight in the back of a cave. My main purpose in Little Nankoweap was to see what the lower end of the valley is like. I had thought that one might get down from my route when I had walked all right, but that there might be a barrier drop in the narrows above this place. It turned out that the walk through the narrows has no obstruction and that a good clear deer trail goes up to the top of the Redwall where I had been. If I had come down and then gone up to the Nankoweap Trail at the west end of the valley, I could have done in three hours what took me eight the other way. The only sign of previous use was a mescal pit that Donald found near the base of the Redwall at the upper end of the valley.

We had come to the top of Tilted Mesa by the deer trail south of the regular old horse trail. To return we used the horse trail and found this better. In the lower part of the Redwall, the old trail is gone with the rockslides, but here someone has built a system of cairns to use the deer trail. The whole thing is much better marked and has been improved by use since I first used the Nankoweap Trail. There should be no hesitation about using it now. After Donald and I had cooled off in the stream and had eaten dinner, we left for our upper campsite at the Ehrenberg Spring about 7:15.

When we had been going about 20 minutes, we noticed that we were heading for the valley south of Novinger. We thought we had already missed the turnoff into the right canyon and climbed up on the terrace. I soon saw that this move would take us over into the Mystic Falls arm and then we looked at the map. The arm north of Novinger and Alsap turns right rather close to Novinger. I didn't recognize this

stretch since I had turned over to the other arm higher up and Donald had come along here in the dark. When we realized our error, I went back into the bed immediately while he continued along the terrace. By doing this he saw a distinct complex of old dwellings forming more than a half circle around a court. The moon and Donald's carbide light helped us to get back to the upper spring, but it seemed like a long drag of over two hours.

Our climb out might have been more pleasant if we had started an hour or two sooner before the sun became so warm. I seemed to have lost a lot of pep, perhaps from an inadequate diet for nearly a week. Donald spent quite a time checking cave openings and found some more goodies while I plugged on up to the truck. I went a bit too far east for the most direct way up to where we had left the rope and I wasted some time in the brush. Likewise, at the Coconino I started up too soon and had to descend 30 feet. As has happened before, I saw the bit of retaining wall on the return while we had missed it on the descent. I was also careful to come out on top near the end of the point and I noticed the 100 yards or more of trail out in the soft earth there.

Wall Creek, Manzanita Canyon, route to Clear Creek [August 2, 1972 to August 5, 1972]

I needed a rest from climbing Wheeler Peak, so I didn't leave until Wednesday. My projects were going to be combined with meeting the scouts from Westfield, New Jersey at Cottonwood Camp.

The trip down the South Kaibab Trail and up to Cottonwood was uneventful except that when I went down to the river to see whether I would see George Billingsley, I did run into Bill Gillenwater. This was my first trip up the North Kaibab Trail since the pipeline was finished. It is in the best shape ever with the fine new bridges. There are now only five bridges since the trail has been put over a hill without going across to Ribbon Falls. Hikers still find it better to use the stepping stones over to Ribbon Creek and then use a bridge to get back on the main trail north. The heat came up to expectations and I dipped my shirt in the creek about every 20 minutes.

The scouting party and their friends were at Cottonwood Camp when I got there. They were waiting until a cooler time of day to proceed to Roaring Springs. I visited for an hour and then felt ambitious enough to go up Wall Creek, an item I had never carried out. I should have talked to Herm Pollock first, because I missed the major attractions. I climbed the rubble slope to the north of the creek and then went down in the bed for a time. Ravines cutting the slope down from the north made going slow high up, and the vegetation in the bed made travel difficult there. Thickets cut off good travel next to the bed. When I had done this for an hour and a half, I had reached the part of the valley where great blocks have lodged making progress still slower. I could see that I wouldn't get back to my pack before 7:15 p.m., so I returned via the high route. I learned, from Herm Pollock, the next day that the real attractions are a waterfall and a 200 foot tower in the Redwall.

On Thursday I got off to a slow start and then talked to Mrs. Pollock for a time. She didn't confirm my impression that her son had gone up Manzanita to the north rim. She said that he and a companion had helped each other and had succeeded in getting above the waterfall. Manzanita was a pleasant contrast to Wall Creek for walking along the bed. There was a little water flowing intermittently, but mostly the bed

was dry and open. At one place I noticed a small flow coming down over a 50 foot wall from the north side from a spring. There were no barriers of any consequence until I reached the fork. Water came over the fall in the south arm and the north was dry, but both looked unscalable. Beck and Dunn had gone up a place in Modred that looked impossible for me, but I found out later that Jeff Pollock had not scaled either of these walls.

I backed down to a place where I could scramble quite high on a consolidated slide, but when I tried going forward to the top of the fall in the north fork, I soon came to a vertical wall and had to give up this idea. Farther back, again on the north side, there is a big slide that obviously takes one much higher. I got up here and had some difficulty passing a couple of ravines where the slope is bare and steep, but I was able to come down in the bed of the north arm. I followed the bed, with only one minor bypass, until I could see that the Redwall at its end is hopeless. There was still time after my lunch to do something. I went up out of the bed on the east side of the north arm with the idea of trying the Redwall at the point that splits the two arms. I could see that this would be slow, and I wasn't sure that I could get through the shale cliff to attempt the Redwall. Furthermore, the very bottom of the Redwall here is not at all sure to be climbable. If I were to try the complete ascent to the north rim, I believe I would put my hopes on crossing to the south of the wet (south) arm. There is a Redwall break there which may connect with broken Supai and Coconino.

Instead of continuing with this idea, I tried the Redwall across the north arm (on the west side of the north arm). A slide covers all the shale and half the Redwall. This went all right with a few places that require pull ups. Right near the top 30 feet I thought I could follow a ledge to the south into a broad ravine and walk up the rest of the way. When I got around this corner, I saw that I would have to go down a 20 foot wall to get to the easy part. Back 40 feet there was a chance to go up behind a flake. This worked until I had only five more feet to go, but a yellow jacket began to harass me. The second time that it had darted in and landed on my hand convinced me that it meant business. I think its stinger didn't reach through the handkerchief I was wearing and through the hair beneath. I gave up after doing 98% of the Redwall. It would have been rather late to start anything then, so I went back the way I had come and had a long visit with Mr. and Mrs. Pollock. For one thing I learned that Jeff had gone up above the falls using the same route I had picked. Mr. Pollock walked back to Cottonwood with me and pointed out seven or eight Indian ruins. He also said that about 18 unbroken pots have been taken out of Bright Angel Canyon, mostly by people who didn't turn them in.

On Friday I started early down to Ribbon Falls to see a ruin which Herm called the most photogenic of all. He told me just where to stand to look for it. I spotted it where he said to look and then climbed up to it. It looks better from a distance. It was just a poorly preserved storage bin.

I next tried a route through the Redwall that had been done by Jan Jensen, south of the one I had used when I climbed Deva. I went up the slope to the north of the narrow gorge immediately upstream and across from Ribbon Falls. I thought that there might be an impassible fall in this narrow part. On the return I learned that this is the case, a sheer drop of perhaps 200 feet. After a time, I found a deer trail down into the bed. The lower barrier is in the Shinumo and there is an upper impassible fall in the Tapeats. The bypass was on the south side of the canyon near the convex angle. When I got back into the

bed, I put down my Kelty which contained my lunch. The way steepened and some big blocks had to be bypassed.

The bed was now going up to the south. Near a shale cliff, a slide had covered the shale on the west side. I followed it up to the base of the Redwall and even up through the lowest member. I was afraid that the ledge I was following might lead to a jumping off place, but it went with no break back to the bed. The top forks but the west part is obviously impossible. The right route requires some pull ups, especially one at the very top. In the Supai I angled to the west and found only a couple of places where one has to scratch for a route. The saddle is about a third of the way through the Supai, and it took me only 15 minutes to go over to where I had been when I came up from Clear Creek and had turned south along the west side of Brahma.

I returned the same way and ate as soon as I reached the pack. I checked the lower bed of this canyon on the return and then went out to the north again.

The heat was pretty bad most of the time I was down there and I soaked in the creek before returning to Cottonwood.

There were plenty of fine swallowtail butterflies and some birds in evidence and I was surprised to see four deer, a doe and fawn in Manzanita Canyon, and two more in the main canyon. I thought they should have been up in the north rim's coolness.

Another thing I noticed for the first time was a pinnacle that looks a bit like the Olympic Torch. It can be seen for only a short distance as one is going south in the narrows and is approaching the place where the trail and the pipeline are protected by a cemented rubble wall.

There were beaver signs in Wall Creek, but I saw none in the main Bright Angel Canyon as I had in years gone by.

Something that I should defend against was the infestation of my crackers and gingersnaps by hundreds of red ants. Perhaps I should keep such things in plastic boxes.

Climbing to Wall Creek Spring [April 3, 1972 to April 5, 1972]

Jerry Hassemer and I spent April 1 7 at the Grand Canyon on a trip that we had ambitiously planned to include cave hunting in Wall Creek, upper Bright Angel, the Transept, and perhaps Cremation Canyon. Wall Creek, however, tied us up so long we never reached our other objectives. I will focus this report on Wall Creek, since we accomplished nothing of importance otherwise.

In 1953, Art Lange observed that Wall Creek had its source in an inaccessible recess above a travertine apron on the lower part of the Redwall cliff along the north side of Wall Creek Canyon (West. Spel. Inst. Tech. Rep't #4, 1954). In 1964 I visited it and confirmed Lange's description. Jerry and I wanted to see if we could climb to the actual water source and determine if an explorable cave existed. We regarded this

as a one day affair, which proved naive, as it took three one day trips out of Cottonwood Camp to reach the source. We should have set up our base camp in Wall Creek; this would have saved three or four hours of travel time each day. We tried several variations of routes into Wall Creek but never made a final conclusion which was best. It is most direct to start up at the south end of Cottonwood Camp, walk for a few hundred yards below the Muav ledges overlooking Wall Creek Valley, go up the first available talus to the base of the Redwall and traverse to the spring. This involves some gully crossings. It is also feasible (and preferable at night) to follow the bed of Wall Creek from the Kaibab Trail. This is brushy and requires some stream hopping in the lower narrows, but there are no drop offs. The cascades below the spring are best detoured by a talus ridge to the west of them.

On April 3, we began work at the spring. The flow pattern down the symmetrical travertine half dome looked very much as I recalled it from 1964, but on seeing it again, I revised my estimate from 30 to 40 feet high to 50 feet or more. Our best approach seemed to be to climb to a Redwall ledge to the east of the spring, then drop 15 feet from the end of the ledge to the top of the mound. About 200 feet east of the falls, a minor buttress gave us a starting point about 15 feet up the otherwise shear Redwall face. The first technical pitch was a 20 foot, nearly vertical to overhanging wall to the right of a two inch crack. We found someone had beaten us to it a few years before; a line of several quarter inch bolts and a piton were in place. We unfortunately could not reuse most of these as the nuts and hangers were gone, and Jerry had five sixteenth inch Star bolts that were incompatible. Setting several new bolts, and with two chocknuts in the crack, Jerry neared the top of the pitch (about halfway up the cliff) by evening. I took the last shift and was able to clip into two old hangers just above. The upper one had a rusty steel carabineer, still usable, lettered PH20. Evidently Pete Huntoon had been our predecessor. We found no sign that he had gone any higher than this or had reached the spring.

Next day I did most of the leading, setting four more bolts on the more sloping pitch above. A good climber would probably have done it free, perhaps by layback; but we were too conscious of the exposure and the absence of help to take chances in the interests of esthetic technique. We stopped for the day about 15 feet below the ledge, where the rock became more vertical and rather disturbingly cracked. That night we found Keith Wilson awaiting us in camp. (He had originally intended to meet us at the South Rim but had been delayed by snow storms.) On April 5, Keith took the lead. He boldly free climbed the final pitch, using two chocks for safeties, then set a bolt for belay rappel anchor above the ledge. I joined him by Prusiking up the rope. Jerry decided not to come up as the afternoon was now well along; he took some photographs from below.

I had an odd misadventure on the ledge. Though it had probably 70 feet of exposure, it was easy walking, two to six feet wide except for a few feet where the footing narrowed to five inches. Keith crossed this, but I did not want to follow until I had cleaned and widened it by pulling out an obstructing mass of loose slabby rock. The disturbance turned a one and a half inch scorpion out of the moist crack. We threw it over the cliff, but apparently overlooked another which somehow got into my clothes, through coveralls and Levis. About two minutes later, while sorting gear, I felt a sharp wasp like sting in the small of my back, then another on the left buttock. Searching my pants I found and killed a small scorpion. It fitted the general description of the dangerous (neurotoxic) Centruroides species said to inhabit Grand Canyon about one and a quarter inch long, straw colored, very slender. We considered a quick descent, as that ledge would be a very bad place to collapse from a poisonous sting. However, after some minutes I still

had not developed any symptoms beyond mild local pain, and decided to carry on. Within two hours the pain died away and I suffered no aftereffects.

We set a final bolt above the west end of the ledge to rig the 15 foot drop to the spring aloove. We found that the wide spread of flow over the travertine mound is directed by a travertine dam curving several feet along its lip. Most of the water is shunted to the west side over the low point in the dam. Behind the dam is a calm, sinuous stream, four or five feet wide and one to two and a half feet deep, with a fine silt bottom. The floor of the recess through which it flows is about 15 feet wide and 30 feet long, with coarse grasses, maidenhair and other ferns, and a large datura plant. At the west rear is a short blind pocket with a slit bank above shallow water. The stream issues from the east rear via a three foot wide crawlway, trending N 30? E (true). Keith lighted a carbide lamp, waded in a few yards, and reported that further penetration would be a swimming proposition, with four inch air space over two to three feet of water. A vertical joint above the east side of the crawl was too narrow to enter. There was no apparent air flow and we decided not to soak ourselves trying to get further.

The water could be lowered by knocking out the travertine dam, but the cave prospects do not justify such gross vandalism. The dam has at times been higher than it is now. The slit in the rear has a waterline a foot above the existing level, and hints of others two to three feet above present level. These lines may be quite old, preserved by semi consolidation from destruction by the rodents and ringtails whose signs we saw in the aloove dust. The water flow seems to have been very steady in recent times.

Our 120 foot rope was not long enough for a double line rappel directly from the alcove, so we rappelled from our bolt at the east end of the ledge, leaving an aluminum carabineer of mine as well as Huntoon's old one further down.

The wet winter has brought on many rockfalls throughout the Canyon. A very impressive one, which must have happened not more than a few weeks before our visit, took place about a quarter mile down canyon from Wall Creek Spring. An oblong block at least 20 by 15 by 10 feet fell from an overhang above a seep in the lower Redwall on the north side. In going about 750 feet vertically and 1000 feet laterally, it made about 10 major impacts, leaving craters and trenches up to six feet deep, 15 feet wide and 30 feet long, and skipping over intervening oak brush. The devastation would do credit to bombs or bulldozers. At bottom it leaped 50 feet across the bed of Wall Creek, missed some trees, and smashed against a huge boulder in the opposite wall, leaving a four by five foot bruise and splitting into two major slabs and about five lesser blocks. But for this obstacle it might have rolled well up onto the south slope.

In 1964 beaver signs were conspicuous all along Wall Creek, and there were active dams in the willow and backslider thickets almost up to the base of the travertine apron. Since then the population seems to have crashed, and at first I thought they might be extinct in Wall Creek. However, a few must remain; near the place where Wall Creek cuts into the Precambrian sediments, we saw cut willow shoots that had barely begun to weather. I saw no evidence of beavers along Bright Angel Creek as far up as the old powerhouse site, and wonder whether there are any surviving elsewhere in the drainage since the 1966 flood.

I noticed a peculiar plant on the west side of Bright Angel Creek a mile or more above the Clear Creek Trail junction it appears to be a young date palm. It has perhaps a twelve foot spread but has not yet begun to show a trunk.

Direct route to Hartman Bridge [August 9, 1972]

Donald Davis had noticed a break in the cliffs between Points Atoko and Naji across the canyon from Siegfried Pyre. After he had climbed Siegfried out of the north end of Lava (when he had found the pot cache), he came back alone and succeeded in getting down through the Redwall. He had told me that the main difficulty was in the upper Coconino where he had passed a drop by means of some dead tree trunks that he had pushed into place.

I drove to a clearing east of Jacob's Lake Tuesday evening and then went to the ranger station for my permit early Wednesday. Leaving the truck about 8:45 a.m. at the paved parking west of Hartman Natural Bridge, I looked at my compass and headed east. It took 35 minutes to reach the rim north of where I needed to start down. Shortly after crossing the main valley, I spotted an Indian ruin. The lowest course of rocks showed the neat rectangular shape through the pine needles. Attached to one end of the rectangle was a second room that had a rounded outline. I could find the place where I came out on the rim and perhaps locate the ruin again.

One can start down through the Kaibab almost anywhere along here, but there is a persistent ledge that has to be passed in particular places where there are cracks. I went down through one and in the evening came up through another both in the neighborhood of the 8000 foot elevation figure on the new map. The Coconino forms a deep and narrow ravine but it is wide enough to offer some choice of route at a few places. I soon saw the dead tree trunks that Donald had used. The upper ones might have slipped into place by nature, but the lowest and largest had fairly surely been placed there by someone, namely Donald. There may be a bypass for this abrupt declivity. I wonder whether Donald tried a parallel slot to the north. It might seem a bit brushy and steep to get over into it, but I have a feeling that deer can go up and down through it. Incidentally, there was no established deer trail through this way, as there is west of Point Atoko, but I saw enough evidence of deer tracks below and above this Coconino break to make me think they use it occasionally. There are some rough spots in the bed through the Supai, but they can be bypassed easily in the wood to one side or the other. A cairn, presumably Donald's, showed where one should go from the bed into the woods on the south.

The Maxon geological map indicates a dotted line through this tributary presumably indicating a graduational instead of an outright fault. However, at the head of the Redwall gorge, a clear fault shows with the left side 40 feet higher than the right.

Donald had told me where one should start down through the Redwall, out near the point between Hartman Bridge and the tributary. I made a few false moves before I got started right off the rim. The way down is to the north of a pinnacle but not right next to it. After you go down a ravine, you need to go up another to a ledge that takes you around the base of the pinnacle to the south. I got a view of the natural

bridge before I realized that I was getting too low. On the south side of the pinnacle you can go down easily to the south beneath the sheer cliff.

From many places along this Redwall descent I could see the pot cache cave. A feature that caught my eye was a block of Supai Sandstone about as large as a room that had fallen and lodged on top of a limestone tower above and to the north of the cave.

I had studied the picture of the pot cache cave from below in Euler's article and I had no trouble locating it and climbing up to it. It was a most satisfying route into the canyon and with a little practice on this route, one should get from a car to Juno ruin, say, in about five hours. This is similar to the rappel route off Cape Final, but the Davis route needs no rope, and it is surely the best for visiting the natural bridge. I would disagree with Davis and think that the Indians surely must have used it.

In the evening I came to the road about ten minutes walk south of the truck. The eight and a half hours of walking time took a lot of energy and the next day I didn't feel ambitions.

Information from Herman Pollock [August 3, 1972]

I had told Mrs. Pollock that I would be back from Manzanita Canyon about 4:30 p.m. and Herm was there with her when I arrived. We had quite a long friendly chat. It went mostly with Herm asking me a simple question about pictographs or something after which he would open up and tell me far more than I knew. He sprang facts and fancies on me for an hour with machine gun speed, so I don't recall all of his statements. Some are as follows:

The pictographs that Billingsley saw in the east arm of Fishtail near the top of the Supai are about 30 feet above the ground and are almost life size. They are not like those in Davis Gulch and the Escalante country, with bodies shaped like a keystone for a bridge. The very best displays of pictographs anywhere around are along the walls of Snake Gulch not very far from the road end. Herm was quite interested in finding any pictures of men with two or three feathers coming up from their heads. He had heard from a man in Albuquerque that two feathers denoted the deity but three merely a chief of the tribe.

Pollock was enthusiastic about the number of ruins in upper Bright Angel Creek and he walked down to Cottonwood Camp pointing to about seven or eight along the way. He said that about 18 unbroken pots had been found in these ruins or in caches, such as one under an overhang near the mouth of Wall Creek. When the Mormons first reached Lee's Ferry, they found two wagons of Spanish type still loaded with very rich silver ore. They took the ore to Salt Lake on orders from Brigham Young. A sheepherder in Houserock Valley deserted his sheep and found an extremely rich silver mine but died a few days after his employers found him. He was raving that he was the richest man in the whole world when he died, but he was unable to tell his friends where the mine was. It has never been located since then.

When the first white men reached the mouth of Nankoweap Creek, they found two boats covered with skin. These might have been the same as the boat of reeds that Melvin McCormick talks about being at a ruin in Little Nankoweap. Perhaps they were skin covering a boat of reeds.

Herm Pollock has climbed the Redwall on the left wall of Bright Angel Creek where the slide covers the formation, and he also went up quite high in the Supai. His son, Jeff, and another man went up Manzanita above the falls in the shale by using the slide on the north side of the lower canyon. They didn't try to go up the Redwall.

Herm told me about some places up in Utah that are tributaries to the Paria but I didn't understand what was especially noteworthy here, except that Buckskin Gulch is terribly deep for its width.

My observations of Manzanita Canyon [August 10, 1972]

I had figured on going down into Manzanita Canyon on this day and reaching the place I had been the week before. Even on the rim I felt rather hot and I didn't seem to have any strength in my legs. The previous day had tired me unduly. I settled for studying the canyon from the rim in the same way that I had done it in 1968.

I drove out E4 after experiencing a little difficulty in seeing where the fire road leaves the highway. Mostly it was second gear driving about 15 miles an hour. I had to go out around a tree to dodge a fallen log across the road. At another place I dragged a log away from the road.

The place to park is a bit more than a mile from the fork where one road goes to Point Ariel and the other goes toward Obi Point. The best chance to get through the Coconino is on the south side of Manzanita about halfway from the head of the canyon to Komo Point. One should get through the Kaibab east or west of here. The Redwall break is a bit farther west. The Redwall of the point between the forks is possible.

Interview with Melvin McCormick [August 12, 1972]

Melvin McCormick had flown with Bill Breed and George Billingsley over Nankoweap and had tried to point to the cave where he had seen, about 50 years ago, a reed boat sealed with pitch. Bill had thought the place was in the Supai north of Tilted Mesa at the head of the Little Nankoweap and George had gotten the impression that it was near the base of the Redwall. Years ago McCormick had told me that it was north of the trail along Tilted Mesa which I assumed must place it in the Supai. At my suggestion, Bob Euler had been by here in a helicopter at the time of the work on the Marble Canyon Damsite, but he had seen no indication of a ruin. Donald Davis and I had been to Little Nankoweap, but we hadn't given the search for the ruin much of our time. I thought I had better see McCormick again and talk to him about this.

The first thing he said was that the pilot of the plane was flying so low over the ridges south of Saddle Mountain that he was thoroughly upset by the chances they were taking. He didn't have much time to get their bearings. As he looked at the USGS map, Melvin first indicated the place as being in Little Nankoweap, but when I pointed out the difference between the main Nankoweap Canyon and Little

Nankoweap, he said he was sure the place was on the north side of the main Nankoweap Canyon. As he looked at the map, he wanted to put it down quite close to the river, but when I suggested that it might be within a mile of the river, he said that it was that the cave from below looked like a capital D lying with the flat side down, and that there were hand and toe holds cut in the rock leading up to the cave mouth. I also asked him about the ruin where they had seen three skeletons in a sitting position. He was even more vague about the location of this ruin. He knew it was near a grove of cottonwoods and was facing the east, but he couldn't seem to locate it any better than that.

Ten or so years ago, he had told me that he had climbed Chuar Butte, so I pulled out a couple of pictures of this butte and asked him about the route. On this subject he seemed to be more sure of himself. He said that the route was along the ridge that extends to the north, but he didn't say whether it was to the west or the east side of the ridge. He may have meant that it switched back and forth. He said the way is quite safe, once you find it. I should have asked him how many men went to the top with him. His information didn't tally very well with what I know of the country when he began to talk about Poison Creek which he indicated on the map as the same as Carbon Creek. I know about a couple of seeps in the Carbon Creek drainage and I figured that at least one of them might be very poor water to judge by the amount of alkali deposited. His story is about a man who was with his father. The two had eaten some dry onions before they drank this water. When they threw up, the onions were green. Then McCormick talked about how the water flowed quite a distance and looked clear and attractive, but it was still just as poisonous all the way to the river as it had been at the source. Perhaps there was much more water in the area then.

All in all, I got the impression that Melvin McCormick has forgotten the Nankoweap Basin so completely that he can't be of much assistance in finding the boat or the skeletons again. The only details about which he keeps to the same story is that he actually saw them, and his description of the boat and the skeletons hasn't changed since I first talked to him.

Ayer Point [August 26, 1972]

Donald Davis had gone down the Hance Trail and followed the rim of the Redwall to Ayer Point in June. He had not only spotted some interesting cave openings but had reported the discovery of fossil footprints in what he took to be a block of Supai Sandstone. I wanted to see the latter for myself since I have never seen any footprints in the Supai Formation. I got my permit for a loop trip, down the Hance Trail, along the Redwall rim, and up the Old Trail.

The day was pleasantly cool. Flagstaff had a light shower in the early morning, but the forenoon was mostly clear. I parked at the overlook above the head of the Old Trail and walked the highway to the turnoff to the Hance Trail. This only took 15 minutes and in another five I was going down the proper ravine to the Hance Trail. We went down here just last spring when we climbed Coronado, but things looked a little different this time. There seem to be more cairns and I was able to keep on the trail without a miss clear to the bottom of the Supai. Ten and more years ago, I wouldn't be able to do this and I often found alternate sections of trail on either side of the streambed. It took me a half an hour to get to the base of the Coconino and another half hour to get to the Redwall rim.

The views from the Redwall impressed me, especially the two routes through the Redwall on the east side of the gorge. The farther south of the two, which Dan Davis found when he missed the trail, may be easier than I made it. From across the canyon, the trail route looked somewhat different from what I remembered it to be. Along this whole way, the eastern part of the park north of the river was grand. I could count eight or nine peaks that I have climbed from the same viewpoint.

When Joe Hall was visiting us recently, we talked about the number of peaks that could be used as memorials for people connected with the Grand Canyon, such as Maxon and Clubb. I made a guess that there are nearly as many unnamed summits as there are named ones, but of course the finest have long since been named. One such unnamed point is beyond the headland where I turned the angle to go into Mineral Canyon. I decided that it could be climbed from below more easily than from the rim I was on. It reminded me of Tyndall Dome.

The head of the Redwall gorge of Mineral Canyon is an interesting place for a geologist. There are strange bends in the rock with limestone deposited almost like travertine. There were some cave openings facing east, at least one of which should be accessible. The chocolate brown conglomerate above the Redwall is well displayed all along the west side of the gorge of Red Canyon. I got a picture of it in place resting on a red non laminated fine grained sandstone.

Donald had said that the fossil tracks are a few hundred feet beyond the head of Mineral. I was on the lookout for a likely block. I was beginning to wonder whether this would be my third failure in finding something that Davis had seen, but just north of a minor ravine I happened to look at the right block. There was the foot wide, puddly looking tank tread. I couldn't see the bird like tracks until I noticed a similar block about 15 feet up the slope. It had the tank tread and also the small tracks. The large tracks were curving in just a few yards which led me to believe that the animal was moving slowly. Perhaps the traverse, indistinct tracks on each side of the central streak were made by flippers. This deserves the study of an expert, but I thought of a sea turtle as the sort of animal that would leave such a track. The small tracks appear in three places on the block although two of the spots are probably continuous under a thin sheet of sandstone. The peculiar thing is that they don't seem to follow a definite sequence. They are also deeper than seems right for a very light small creature. The thing that Donald won't like to hear is that I am sure they are in a block of Coconino Sandstone rather than in Supai and thus are not nearly as unusual as he had thought. Still they may be new to science or at least I have never seen any tracks like them. (Supai, McKee and Beus Ohlman had seen similar tracks near the Kaibab Trail.)

I saw the cave openings at the depression separating Ayer Point from the mainland and I could see that the largest one could be entered very easily. I don't know whether this is the one that Donald Traced for 250 feet because I didn't look into it.

The dip before one goes up on the flat surface of Ayer Point was surprisingly deep, and I found that I preferred to use my hands for a few yards in the getting up on the north side. I would go along with Donald's suggestion that Ayer Point be included in the summit list, and thus my collection of bagged peaks goes to 62. I had built a small cairn on the highest place, or rather a few yards from the place which is occupied by a dead juniper. I ate a late lunch under an increasingly wet looking sky out on the edge of the mesa. I had the best chance to study Asbestos Canyon over and see how it fits into the area. My

position gave a perfect view of the diabase sill where the asbestos mines were drilled. A fault between Asbestos Canyon and Sockdolager Rapid has offset the sill by its whole thickness. This has been noted on the Maxon map along with some other faults that I hadn't noticed.

When I was crossing the notch in the top of the Redwall over to Ayer Point, I wondered whether there was a Redwall break to the west, and from the north side up on the mesa, it looked promising. I had been intending to get over to the Old Trail along the Redwall rim, but I decided to try to get down to the Tonto here if possible. When I started down, I found it one of the easiest places of all the Redwall breaks I know. It is quite a bit like the break to the west at the top of the White Switchbacks on the South Kaibab Trail. There is one bare but short cliff which is easily bypassed to the south. From high up I could see a burro trail going in my direction and I was able to find its beginning, but I soon lost it. It may have been higher on the slope than I thought.

I now think that I would have made better time if I had gone down the wash to the Tonto Trail immediately, but as it was I stayed rather high on the side hill. When shale cliffs began forming beneath me, I backtracked slightly and went to a lower level. It had been sprinkling for some time, but now it really began to rain and I found shelter for ten minutes under an overhang. Then I went down to the Tonto Trail and proceeded up Hance Canyon. Along here were two of the few live burros still in the park. Here also I saw quite a large brown bird that let out a loud Kre e e, the noise that was supposed to represent an eagle when I was a boy scout in the eagle patrol. The sound was uttered while the bird was flying.

The trail led me into the bed of Hance well below the junction of the two forks but south of the inscribed names at the highest showing of Tapeats on the west side. I was walking in the dry bed well after it had stopped raining when I was startled by the noise of running water. I got out on the west side of the bed and soon saw very muddy water coming along at a deliberate but inexorable pace. There wasn't enough of it to be called a flash flood, but it had the feature of full volume right at the forefront of the water.

When I reached the place where the trail goes out of the bed of the east fork of Hance, I could see great changes, huge rocks and smaller boulders still in a matrix of clay where the trail had formerly followed an open bed. Above the Redwall the trail seems to be clearer than I had ever seen it. I was able to stay on it almost all the way through the Supai. There are some new cairns along here, but not many. It still requires more attention than the New Hance Trail. Near the base of the Coconino, I became confused and probably didn't use the best route. I followed the bed with one diversion to the west about halfway through the Coconino and came out just a few yards west of the parking where I had left the truck.

This was a most interesting loop trip and I owe Donald Davis a thank you for a fine one day trip.

Newton Butte [September 16, 1972]

If I could get a real climber to go, I wanted to take him to Newton and have him help me up. My invitation was relayed to Lee Dexter and he looked me up Friday morning at the office to say that he wanted to go. I had already invited Jim Ohlman when I was thinking that the destination would be the hole through the end of Grand Scenic Divide, but he agreed to the change in plans and came. A young

man who lives at Tusayan, Scott Thyony, had been in visiting and talking about canyon hiking, and I invited him to meet us at the permit desk Saturday morning. He was there and he quickly agreed to the destination. Newton.

Jon Thomas had told me that it is easier to go off the west side of Shoshone Point than the east side, so we looked at it first. From what we could see, we didn't agree. We went down in a shallow bay that may have been the same one Al Doty had showed me, but at first I would have said that Al's was farther southeast. We came to the same sort of drop over a Kaibab ledge with a small tree trunk in place as a crude ladder. Where we started down this time there were a row of heavy picnic tables right close to the rim. I should go back and check the next bay to the southeast to be sure of my bearings here. I seemed to find the tree ladder harder to come up than when I was with Al.

When we got down to the top of the Toroweap, I made the mistake of taking the men north to the end of the point. We could see that we were quite high above the Coconino with no way down the cliff. Back where we had come down from the rim, there was an easy way and we didn't lose much more than ten minutes on this goof. From here to the end of the point where the route starts down the Coconino there is a deer trail.

The route through the Coconino seemed a bit more difficult than I had remembered it when I was with Al, but this may have been because Al and I were traveling light. I recall that I didn't even have a camera, just one canteen, because we were coming back as soon as we got through the Coconino. Jim Ohlman got down all right without removing his full scale rucksack, but the rest of us were carrying day packs. The slow and careful moves start at once. I have described this route in the log for 12/6/70, so I don't need to go into details. We were a bit confused a time or two and we appreciated seeing the cairns that Al had built. Some of the way was quite impressive exposure and many moves have to be made with care. Once I said that I might feel like going across the Kaibab Trail and getting out the easy but slower way.

In the Hermit we followed the crest of the steep ridge directly north of Shoshone. When the Supai began to show, we had to go to the east to get down a broken slope and then we continued along the ridge to the notch above a small butte. We detoured around this to the west and got to the saddle north of Newton in about 95 minutes from the rim or 105 from the truck which had been parked south of the cable across the Shoshone Point Road. I figure that this is about 45 minutes less than I would need to walk down the Kaibab Trail and across following the Redwall or the base of the Coconino.

We picked out the right place to begin the climb up Newton from quite far away. I had remembered rather vaguely from Doty and Sears that it was around on the east side less than halfway to the north end. Quite a large block has broken loose and before trying to go up. I had figured that we would make the top in a lot less than an hour from here if we could do it at all, so I drank lots of water and left my canteen as well as my lunch behind.

The very first move up 25 feet to the top of the fallen rock requires strength and agility. Lee did everything according to accepted procedure. He anchored Scott, the strongest of the other three men, to a stout bush by nylon slings and then had Scott give him a hip belay as he climbed using a crack that became narrower toward the top. Just below the hardest move at the top, he placed a large nut in the crack

and ran the rope through a carabineer so that a fall would be checked in less than ten feet. Scott and Jim accepted only a belay from above after Scott had jerked out the nut. I was able to climb up the first eight feet but then I used my Jumars, mostly as grips on the rope for the rest of the way. I am not sure that I still have the strength in my hands and arms for the top of this crack.

We weren't sure how we should go on above the shelf. At the north end there is a foot wide crack going straight up, but it doesn't begin until you would be nine feet above the bottom. I went south along the ledge and found a cairn near the end of this catwalk. Lee came over and inspected both possibilities here, a fairly steep ramp to the right with the last five feet about vertical and another four or five inch crack going nearly straight up at the very end of the shelf. Here again, the bottom five feet would be the hardest with a slight overhang. Lee figured that he preferred the wider crack just north of where we had come up by the big rock. After he had felt for holds to do the bottom nine feet and hadn't reached the beginning of the crack, I talked him into going back to the south end of the ledge and using the ramp. He had Scott belay him again and he placed a piton near the beginning of this pitch and a nut higher up, just before the move up the vertical five feet at the top. The difficulty here was that there was nothing to do besides place the hands flat on the surface and trust to friction while pushing. The other two young men made this with some effort and the assurance of the belay from above, but I swallowed my pride and Jumared.

There was one more pitch that involved some difficulty. We could walk up a safe crack to the right that led to a juniper above the last few yards. As usual, these few yards looked difficult, so we tried a steep place to the south. I could get up the lower half here, but there was a five foot gap where the rock seemed too smooth for comfort. Lee managed this with care and a belay. I went up with the rope as a grip. We then went north along the ledge to where another ramp was easy at first but managed to get too hard for me. The others handled this rather easily, but I was glad to pull on the rope for a couple of yards.

From here we could see the last of the wall rather near above us with a pinyon pine growing right on the top. I figured that we could go rather directly up here angling just a bit to the north. I got started on the final pitch but I thought I would feel better with a rope hanging down, or even someone below with a knee for me to stand on. I told Jim that he could do it, but in the meantime, Scott had gone north at the lower level and claimed to have found a scrambling route to the top. Jim did go up where I had been scouting, but Lee and I followed Scott. I was so far back that I had to spot my own route to where the others were waiting, and I crawled underneath a fallen slab at the hardest place. Lee had done the same, but Scott had another way, slighter faster if not so safe.

We walked to the highest point together and found the aluminum rod left by Brad Washburn as well as a small cairn a few yards to the north. It had taken us four and a quarter hours to get from the rim to the top of Newton. We had started up the real climb of Newton at 11:00 a.m. and it took two hours for this climb. The cairns helped quite a bit, but there was still some route finding and with all the belaying, time passed. The day was fairly warm and I regretted having left all my water below. I accepted one drink from Jim's GI canteen.

It took us an hour to get down to the packs and after a quick lunch we were ready for the walk back up Shoshone Point by 2:30. We got to the truck about 5:00 and at the end Jim was having more trouble

keeping pace than the rest. He and I both felt some muscle cramping. I was able to get home in time for our bridge party.

Access routes to Phantom Canyon and Johnson Point [October 21, 1972 to October 25, 1972]

Will Morrison, a 22 year old student, went with me. He is a good hiker and companion. We got down the South Kaibab Trail to the Ranger Station in two and a quarter hours.

On Saturday morning I ran into numerous friends and acquaintances at the permit desk. Homer Morgan and Howard Booth were there and several friends from Flagstaff. The weather was cool enough for pleasant hiking and the record precipitation was over.

After an early lunch at Bright Angel Creek, I led Morrison up the slope just north of the campground. There are lots of loose rocks and care is required, but we made steady progress and found more of the old prospector's trail than I had at times in the past. For one thing where I used to climb among the large rocks at the foot of the ravine through the Tapeats, I crossed to the right side of the ravine and found a dim trail there. A horse would still have a hard time, but a wild burro would easily do anything that we did along here. As I approached the divide leading down into Phantom Canyon, I skirted to the right of the highest hill instead of going through the saddle immediately next to Cheops Plateau. I liked the new way, but on the return we went through the saddle and even found a trace of a trail on the southeast flank of the knoll.

We saw one cairn on our way to the bottom of the valley but on the return we were able to find more of the old trail. More of it has been obliterated by loose rocks since I first saw it. It goes well below the Indian ruin on the high ledge and then rises sharply as you leave Phantom. We went from Bright Angel Campground to our campsite ten minutes upstream from the fall in less than three hours. My time on the return was two hours and 40 minutes, but I was hobbling down the long slope at the end with a painful knee.

After relaxing for over an hour, I left Morrison at the overhang campsite and took a climb to look at the Redwall where Merrel Clubb said he had climbed when he was attempting Isis. I am sure he must have been confused. He said he and his son looked at the south side of the point projecting from Isis and found it impossible. (They may have used the promontory pointing east. Walters and Packard went up here.) Then they came around to the north side, or rather the east side and succeeded. It looks far worse than the Stanton routes up and down the Redwall near the Tower of Ra. It seems hard to believe that the Clubbs went up here when Merrel said that they couldn't climb the second wall of Supai. The college students that succeeded in getting up the Supai and then to the top of Isis agreed that the place where Clubb said they climbed is out. However, someone good should attempt this before we decide that the Clubbs went up the west side of the point instead of the east side as Clubb had told me. I recall only one instance when Clubb was confused about what he had done. He thought that he and Kit Wing had come down through the Kaibab and Coconino west of Point Ariel when they must have used Obi Canyon, the next ravine to the west. Clubb didn't write the record down and he was not clear on where he had gone through the Supai on the way to the top of Vishnu.

On this late afternoon hike I went up the ravine to the north of our camp and returned to the bed via the ravine to the south. This is a rugged area of crags and very complicated geology. There is a lot of red sandstone exposed here and along the approach trail southeast of Cheops that appears to be quite different from the accepted formations. I had used one hour and 20 minutes for this loop and when I got back, my left knee was hurting quite badly so that I was sure that I shouldn't continue with the announced objective of trying to climb Manu Temple.

On Sunday morning I told Will that I felt good enough to do some minor walking connected with the stock trail that goes below Sturdevant and Johnson Points. We got away just after 7:00 a.m. and went up the slope on the left side of Phantom right south of camp. I had been told that Porter had found a way out of the bed of the Phantom Creek gorge up the left or north side. Will and I went down the creek which drains the west side of Sturdevant Point, which we could call Sturdevant Creek. Beginning below the Tapeats there was water flowing in this bed, presumably a result of the recent record rain. A succession of two falls stopped us from staying in the bed, but we were able to climb around them to the left. The descent to the bed required care, but once we were in the bottom, it was easy to continue down to the bed of Phantom Creek.

We next walked upstream through a very impressive narrows to the fall. Only yards from the fall there was a pool that was three and a half feet deep. I managed to follow Will in climbing by this, but after starting along the smooth rock on the return, I shed my clothes and waded through the pool. I also found that I couldn't climb the wall on the right side just a few yards downstream from the fall, the place I had gone up about 25 years ago. Will went up far enough to see that he could do it. I believe my main trouble was in the first long reach. In 1947 I am rather sure that there was more gravel here to get me started.

When we were through looking at the fall, we found it quite easy to go up a talus on the left side below the narrows. This must have been the way that Porter got above the fall. It is far easier than our way through Sturdevant Canyon.

We were able to identify some of the old stock trail as we continued east. Consistent with my previous observation, we found no surface water in the grove of cottonwoods and reeds south of Sturdevant Point. When we came to the canyon draining the big bay south of Buddha, we decided to see if one could go down it to the bed of Phantom and Bright Angel Creek. Where we went down, we had a bit of difficulty getting through the lowest cliff. I went upstream for a short distance and Will went along a ledge to a point where we could see a break. There was also a fair flow of water in this bed. When Will was still above me, he called that there were two deer not far from where I was. I watched them as they dashed by higher on the left slope. One appeared to be an ordinary mule deer buck with the velvet still on the antlers. The smaller one had slender antlers with sharp angles and a white rump. This may have been the first white tail I have ever seen in the Grand Canyon. I'll have to ask some expert whether the white tails are known to be in the canyon.

We continued down canyon to a big drop where we stopped for lunch. Then we noticed that there was a bypass to the right. We would have to go quite high, then near the base of the top cliff, and then down to the bed to a place over a quarter mile away and much lower. When we got a good look at this lower bed,

we could tell that it drops over another big fall into the bottom of Phantom Canyon. This is far down in the granite and schist and isn't far from the confluence with Bright Angel Creek. I was right in telling Jacobsen not to try this as a shortcut.

The last project for the day was to climb Johnson Point if possible. On the west side a long talus takes one up over all the Bright Angel Shale. The sky began to threaten rain. Will had left his sleeping bag out beyond the overhang. He seemed to be trailing me rather far back, and I suggested that he go back and make sure that our bedrolls be kept dry while I went on, and he agreed to this. On the high bench I turned to the south and saw several places where a climber like Doty or Dexter would be able to go up. The limestone had a lot of fractures and many little holds. I tried going up about halfway from the talus access to the bench and the end of the point. When I had gone up about 15 feet, I chickened and came down. Quite close to the end of the point there was a better place with a walk up as high as I had climbed before. Then I had to hold to the sharp rock and go up almost straight for some yards. When I had passed two places like this, I came out on the easy slope up the crest of the ridge. There may be an easier way than I had used. On the east side, the ordinary talus slopes go farther down, and perhaps one could reach a bench here that would connect with some slide that covers the lower cliff.

It was only 2:20 p.m. when I reached the top of Johnson Point. Both because I felt a little trepidation about descending and because I wanted to cover more territory, I followed the Redwall rim around the bay south of Buddha. It took from 2:20 to 4:30 for me to reach the top of the Redwall descent in Sturdevant Canyon. I got to camp about 6:00 p.m., just before dark.

Some further words about observations may be in order. One was the sighting of a hairy woodpecker down in the narrow Tapeats gorge of Phantom Canyon. At least I would call it a hairy woodpecker if I had seen it back in the Midwest. It was the only one I have seen in the canyon and perhaps the only one I have seen in northern Arizona.

As we were climbing out of Buddha Canyon, I spotted a little pediocactus in bloom. It had two little star shaped purple flowers, very pretty. I don't think I have ever before noticed any kind of cactus flowers in October.

In the same canyon that drains the bay south of Buddha, I spotted a big mescal pit from a distance. We walked up to it at the base of the cliff that forms the rim of the Tonto. Will Morrison hadn't seen these before and he was quite impressed with the labor required to pile up such a great number of small rocks. It is on the east side well above the bed but below the level of the broad open valley. Something that impressed me this time was the great contrast of easy walking along the top of the Redwall on the projecting points like Johnson and Sturdevant versus the difficulty of following the rim below the Supai cliffs. Great and small blocks bar the way below the red cliffs, but enough time seems to have elapsed to reduce almost all such blocks to soil out on the flat surfaced promontories. One who would like to repeat my route along the rim from Johnson Point to the head of Sturdevant Canyon should allow for the slow progress among all the fallen boulders and steep shale slopes. I was pushing right along to cover this course in two hours and 10 minutes.

Another NAU student, Dave Meyers, joined us at our campsite Sunday evening. He had walked up Phantom Creek and had been helped up the difficult climb near the fall by another hiker who was up for the day only. He had a heavier pack than either Will or I had and he weighs only 130 pounds, but he and Will walked out together while I made a poor third with my bad knee. It was so weak and painful near the top of the South Kaibab Trail that I began looking for a stick to use as a cane. The last one and a half miles took me one and a half hours.

This was the ideal time of year for backpacking in the canyon. We slept quite warm and still there were no ants. We were surprised when I noticed a small scorpion under our overhang campsite. It came across the ground where Will had just been sleeping.

North Canyon to Vasey's Paradise [November 23, 1972 to November 26, 1972]

Jorgen Visbak and Ed Herrman had arranged to hike with me during the Thanksgiving break. They came to our house Thursday morning and Wednesday evening, respectively. I had developed a cough at the last minute and I thought that going up on the south side of Shiva and around the Tower of Ra might be too rugged and cold and perhaps a bit chancy for water as well. I talked them into going down North Canyon and visiting Cave Spring Rapids and continuing along the river to South Canyon.

We didn't leave Flagstaff until about 8:30 a.m. and by about 11:00 we were getting some more gas at Cliff Dwellers. We left the highway about 11 miles west of Cliff Dwellers and went past the Kram Ranch. Previously, I had gone out the road that goes along the south side of Rider Canyon and had walked south to North Canyon from there. This time, when we came to a fork that went southeast, I turned in that direction. We soon came to a steep and winding grade that took the road down to the bed of North Canyon where it is already about 60 feet deep. Jorgen and I scouted the road to the bottom to see whether the truck could make it. Then we drove down and up where the road went along quite a hillside for a few yards. The outward tilt might be too much for a top heavy camper. We used the lowest gear, but we made it across and up the other side without spinning the wheels. The roads were drier than I had expected. When we came to the next fork, we also took the right hand and drove southeast to a fence. Obviously this would not lead us to a good place to get into North Canyon, but we hoped to look into Marble Canyon from the rim. There was a road along the north side of the east west fence, so we drove toward the rim. We got right to the rim by car and ate lunch directly across from Tiger Wash. I could make out Stanton's Marble Pier quite a little way up the canyon on the other bank.

We went back to the gate through the fence and retraced our track to the fork. The north fork angled northeast so we followed it about two miles to a stock tank and parked. It was still a little walk north to the rim of North Canyon and we could see that we were too close to the river to descend. We had to walk west about 15 minutes before we could get down. There were only minor drop offs with obvious bypasses in the bed until we came down through a bit of the Supai. I believe we entered the canyon at the farthest east place and we were farther down canyon than where I got to the bed in 1965 on June 11. The walk down the bed was rather long, over an hour, to reach the Supai. As before, we got down a small part of the Supai to where there were good rain pools and overhangs. It was only 3:30 but we gathered driftwood and spread out our bags. After a half an hour we started down the bed again.

Quite soon we were stopped and continued along a low ledge beside the increasingly awesome narrow canyon. We could see where there was a big drop with no possible bypass, so we made our way out to the river for the view. We went back at a higher level beside some interesting erosional features a bit like big baseball caps resting on a wall. The footing became worse at the higher level and we got down where we had been before reaching camp. The day had been cold and overcast, but now it cleared up and Ed's thermometer registered 42? before we retired. It didn't frost in the night and we were free of dew under the overhang.

On Friday morning we got away from camp at 7:45 a.m. and proceeded along the bottom of the Hermit Shale around the corner away from North Canyon. We soon came to the place where I had turned back in 1965. It was still early and we attacked it with determination and soon found a reasonably safe place to cross the shale slope, not too high up in fact. For a few yards I was scraping small steps before I advanced. Even before Mile 23, we saw a couple of places where it seemed that one might go down to the beach. I tested one while Ed was taping his feet, but I came to an impasse. At Mile 23 there is a sort of double ravine. Probably the easiest way down is on the slide between the two sides, but we got down the bed of the north one and then worked our way out on the slide material which forms a dividing ridge. We were down by the river in time for lunch. The river was clear and green and the sun was warm. The weather remained fine for the last three days of the trip. We could sun bathe as we ate.

We had averaged a little less than a mile an hour up on the Hermit Shale but down along the beach we could go a bit faster. There were only a few places where we could walk a good sandy beach, but even the big rocks didn't discourage us. I had a tendency to be wary of getting caught by a cliff coming into the water, but Ed led and seemed to be the optimistic type. He guessed right most of the time, but once he had to turn back and climb to a higher ledge. I had led Jorgen to a still higher ledge in the Redwall and we came down ahead of Ed. However, most of the time, Ed was waiting for us whenever there was a difference of opinion as to the best route. The Redwall definitely shows above the low stage of water at Mile 23 and before we went much farther downriver, we were walking the beach below quite a Redwall cliff. When we did have to get up on it to go past a break in the beach, it was a 60 foot climb. By the time we reached Mile 24.5 opposite Stanton's Marble Pier, we would say that the Redwall is 80 feet above the beach. The river was the lowest I have ever seen it, on Friday afternoon, the day after Thanksgiving. But we could see that it still comes up 10 feet higher when they are running more of the generators. There is a line of tamarisks at this higher level. The old driftwood can be found 50 or 60 feet above the low water level.

When we were well past the Marble Pier and were approaching Cave Springs, we came to a neat cave with level sand in the two arms. I wondered if it was the one with the tools left by Fred T. Barry and his companions. However, George Billingsley came in today and in our conversation he told me that the tools are still in the cave which is actually at Cave Springs. When I get my picture back, I can compare it with the one in the Kolb book and see whether this cave was the campsite too good to pass up.

At any stage of the water besides the very lowest, we couldn't have gone along the base of the Redwall cliff to the beach at Cave Springs. As it was, we had to take our packs off to use the very slight shelf just above the water. Just south of this cliff was a thicket of cane or reeds, the only ones we saw between Mile

23 and Mile 31. There was no water issuing from the reeds, but a few yards farther south, a nice little spring was coming out of the rocks and sand only a foot or so above the very low river level. It was clear and decidedly warmer than the river. On a hot day of summer, I suppose the spring would seem cool, the average temperature of the rock at this elevation. I could fill my canteen by catching the spring water in a cup. The next morning when the river was up, there was no spring to be seen.

We looked for caves in the area and found a number of very shallow ones in the Redwall to the south of the open rockslide. They didn't have anything in them and the beds were of broken rock rather than smooth sand. Jorgen found a smaller but deeper cave at a lower level right close to where we were building our campfire. It was only high enough to crawl or crouch in, but the bed was smooth sand. I elected to move my bed from where I had first set it on some level gravel near the fire down to the straight cave. There was only a narrow rock ledge in front of the shaft and the deep water was sloshing the driftwood around directly below about 12 feet down. When I woke up about midnight, I noticed that the river had come up five or six feet and I looked out occasionally for the next hour. When it rose two more feet in the hour, I moved my bed back to the higher terrace. I slept better after that, but in the morning I found that the highest water must have been about 1:00 a.m., when I moved. A mouse nibbled at my cookies and was looking at me when I woke Saturday morning.

Billingsley tells me that the cave with the tools was near Cave Springs Rapid but higher than we looked. We should have seen it as we left on Saturday since we went up the talus to the top of the Redwall. Perhaps my picture of the rapid where we camped will show whether we were mistaken about the location of Cave Springs. We had only the one spring and it was covered by normal river level.

We saw that one can go up through the Supai at Cave Springs and also at one or two places between there and the route we used at Mile 23. I am not so sure that it is possible to get through the Supai at Mile 26.7 opposite Tiger Wash, but we are sure that one can get down to the river through the Redwall here. It is a lot harder to get down off the Redwall from the north at Mile 30.4 where the fault occurs. One has to go up and well back from the river to find a safe rock slope. We saw no signs that Indians or others had been along the Redwall bench that we had used. There were no ruins nor mescal pits. Thus it is all the more surprising to find the ruins on the bench upriver from the mouth of South Canyon. There were no traces of burros nor even of deer. We saw no droppings that could have been deer or bighorn sheep. Perhaps the latter have been hunted to extinction since the day that the Kolbs saw a dead bighorn on their 1911 trip through Marble Canyon.

We got down to the river at Mile 30.4 for lunch and again enjoyed the sun. In fact we stayed there for an hour and a half since we didn't want to get to our evening camp too early. The walk along the Redwall rim was just as slow with side ravines to pass as it had been all along. A new experience for this trip was to see old human footprints in the sand along the way from Mile 30.4 to Vasey's. Perhaps the college hikers left them a couple weeks ago. There were a lot of rather fresh human tracks in the sand at South Canyon.

We left our packs at the top of the Redwall and went down the ravine about 200 yards upriver from the mouth of South Canyon. Cavers and other hikers have used this route so much in recent years that they have established a fairly clear trail, at least as good as any deer trail. Down below, on the way up to see

the skeleton, there is a still better trail where river parties come up. The skeleton, incidentally is showing its age. It doesn't seem as fresh as it did ten years ago, but the bones are still arranged logically. Ed had heard from a river runner that the skull had been removed and taken to the Smithsonian, but I had to discourage this belief.

We also went down the near crack to the sand slope to the beach and over to see Stanton Cave. Ed Herrman had already been to Vasey's once before, but their party walked the beach below the cave and failed to notice it. Now of course there is a heavy gage wire fence with a barred door sealing the interior of the cave. Someone has used heavy wire cutters to open it just to the right of the door. One can see the trench cut by the archeologists and read the sign left there explaining what has been found.

We just had time enough to walk the rudimentary trail along the Redwall rim around into the bed of South Canyon. There were plenty of rain pools where the bed is bare at the top of the limestone, so we camped on a sandy place a little beyond the water. There was enough wood around for another friendly evening fire, but we retired around 9:00 p.m. so as to be able to get the show on the road early.

I woke the others a bit before six and we were walking again by 7:15 a.m.

Ed had come down to Vasey's with a group of cragsmen armed with pitons and ropes. The men at the Buffalo Ranch had told them that the route to Vasey's was from the upper end of Bedrock Canyon. They did a lot of technical climbing to get down and it took them a long time. I wonder whether this employee of the state of Arizona was really that uninformed or whether he was seeing whether the men would really tackle something that appears impossible.

We went into Bedrock Canyon a short way after bypassing the fall in South Canyon. The bypass is now clear with cairns and a bit of a trail. When we got to the top of the fault ravine, I led the others around to the east toward the river. When we got beyond the point and looked back, we saw the talus covering the Coconino and decided to do the rest of the route not the way I had done it before. Hassemer had told me to go east at the top of the talus, so we did. There were some footprints in this direction, but we didn't continue over to the place that looked the easiest since it was harder to reach then to go up through the Kaibab Formation only a little to the east. There was one place where we had to use our hands, but it was really quite safe and easy. There was no cairn where we topped out so we built two, one right at the rim and the other higher on the terrace in plain sight from a distance.

A bigger cairn out on the point to the west indicated another route. We didn't take time to go down here and see how hard this route is. It connects with the talus that covers the Coconino where we had come up, but it may also be possible to come up the break from Bedrock Canyon where we had come through the Supai. If I understood something that Jim Sears told me, this is indeed possible and this would be the most direct route of all. As it was, we came from our camp to the top of the Redwall in South Canyon to the rim in two hours and 45 minutes. This means that one could come up from the beach at Stanton's Cave to the car in about three and a half hours.

There is now a car track right down on the slump block to the rim where our cairn was built. They could also drive over to the point where the larger cairn was already in place. I suppose there is little use for the

route we found about ten years ago off the slump block to the east above the Colorado. This would still be good if one wanted to go down to the river at Mile 30.4, and the old can and the Indian potsherd that Allyn Cureton found along here may indicate that this was an objective.

While we were eating lunch at the Mile 30.4 beach on Saturday, we all noticed a fine spring coming into the Colorado on the other side. It is distinct from the one I saw when I came down the trail on the left bank because one would have a hard time reaching the spring we now saw if we were without a boat. In getting back to the truck, we used the road most of the way. At the top of the rise near the slump block, we cut across a curve, but after that we found the road going in our direction. I think we missed a fork that goes to the Buffalo Tank and we were on the road leading to North Canyon Point. The walking was easy and the day was cool. It was hard to judge our progress on the almost featureless plain but we finally came to the fence where we had gone out to the rim on Thursday. Here we tried a short cut using a road that seemed to go in our direction, but after we had been on it for 20 minutes, we decided to cut across to the road paralleling this one where we had parked the truck. It took longer to reach the truck than I had guessed as it was two miles northeast of a fork or two and a half miles from the gate through the fence. We had come from the rim above Bedrock to the truck in just under three hours.

East from Lee's Ferry [December 16, 1972]

Lee Dexter and Steve Studebaker asked me whether I was going to the canyon on this Saturday. I had thought something of taking a ski hike, but I readily changed my mind. Going down the South Bass Trail to Mystic Spring to see the Seal Head Rock appealed to me, but when the time came to leave this morning, I was uneasy about the driving west to the head of the trail. Instead of this project, I got the others interested in going to Lee's Ferry where we would try to find the way up to the east rim somewhere north of the Spencer Trail. The Escalante party must have found some way up here for their horses, and the second Powell party got a pack train down from east of Paria.

Before we left for the hike, we looked at the sunken boiler of the Charles H. Spencer and I also talked with Dave Kepper who works for the Fort Lee Company at the store. He assured me that we could follow the pole line that goes to the north and then turns east up the broken slope. We could follow a washed out road over the Chinle hills until it ended where the line turned a right angle and went steeply up. It was a steep scramble over mostly loose rocks to the top with a little use of the hands. At the top we went up to the summit of a knoll which is just south of the power line and then headed west.

The views from the top of this rim are hard to beat. You can see a little of Lake Powell and all the fine buttes in front of Navaho Mountain. The Echo Peaks were snow covered and looked great, and of course the Colorado River and the Vermilion Cliffs to the west rounded out the striking scene.

There were thin pockets of snow behind the bushes but walking was easy. We were far enough north to miss the ravine that cuts down to the south. We had started about 10:30 a.m. and by noon we had come to the long slickrock exposure where we could sit down in the sun but were protected from the wind. The day was cool and we enjoyed the jackets while eating lunch.

We followed the top of the escarpment on the east and then headed for what looked to me like the top of the right bank where Packard and I came up from the river on the float trip from the dam to Lee's Ferry. In getting off the highest level, we passed some pools formed in the white sandstone that were six or eight inches deep. They had about three inches of ice covering the water, so they would last for quite a while at this time of year. On the return, we broke the ice and got more water. We reached the rim at Mile 10.2 and I was sure that this was the descent route.

About a mile farther to the northeast we came out on the rim of Ferry Swale. Its depth impressed me more than I had expected. We agreed that it would be interesting to get down along its level bottom, but since it was about 2:00 p.m., I thought we should be getting back. At the base of the south facing escarpment, we detoured north to quite a deep shelter cave. On the approach Steve picked up several flint chips that showed hand work. In the cave we found bits of charcoal and bone fragments. We also noticed that someone had been digging the site, pot hunting, and had left an empty bottle and a Sprite can. There were wheel tracks around the area and we conjectured that someone had flown over the region and had noted possible cave sites and then had come pot hunting by four wheel drive.

We wanted to return via the Spencer Trail so we headed along a track south of where we had been in the forenoon. Along here Steve noted volcanic rocks and he and Lee located a dike about three inches thick. We got to the rim above the Paria Valley north of the trailhead, but still we had to cross various ravines that cut down our time. We perhaps could have done better along the same track we had used in the morning with a turn to the south at the rim. We recognized the trailhead by four cairns. Two had names in a can dating from 1967. The trail is somewhat farther south than I had remembered. It was as rough as I had thought, but still we reached the car in 50 minutes of downhill walking.

Tanner Wash to Hot Na Na [February 3, 1973]

George Billingsley and Jan Jensen were interested in seeing the river at the mouth of Tanner Wash and I was eager to finish the project of going down Tanner and up Hot Na Na. On 9/20/69 we had gone down Hot Na Na to the edge of the Supai above the river. The group had contained a very slow hiker so that there wasn't time to go along the river and come out Tanner as planned.

George and Jan were ten minutes ahead of schedule in getting off and we got up to Bitter Springs to start walking at 8:00 a.m. We parked at an old car graveyard at the head of the side wash west of where the first Standard gas station was located. I had used this draw as an access to the bed of Tanner in years past, but the place where it enters the bed of Tanner seemed entirely different now. My picture of 9/19/64 shows the trail getting to the main bed of Tanner through a narrow slot behind a big rock. Now there is nothing but open sand and gravel there. A fault goes through here and this accounts for the access from both east and west. There isn't any other way to get to the bed of Tanner farther north. We were surprised by the amount of snow we had to walk through. The temperature was 25? when we started and down near the river the maximum for the day was 40?. Although we were in the bed consistently, George spotted the places where the old sheep trail had been built around obstacles and taken up on the west side. Ice covered the pools but we weren't sure that it would hold us. There were places where the ice had broken under its own weight when the water leaked out from beneath.

George kept us informed about the transitions from one formation to the next. The color of the rock doesn't help one tell where the contact occurs of the Kaibab with the Toroweap. The upper half of the Toroweap is more laminated. The lower or beta member of the Toroweap is massive and smooth cliff. George remembered that there was no way up to the bench on the west once one starts down the beta member and I recalled that the bypass to the west is along the bench well above the Coconino. Thus we knew that we were at the place to go up on the bench. George built a small cairn. There is no sign of a deer or sheep trail along here as one would expect in the western Grand Canyon.

As you reach the place where the lower formations are covered by slide material, for safety you should go high. Jan crossed a very exposed place with steep and crumbling rock and clay, but George and I went high and came down. The bank that reaches up to the top ledge at the lower part of the bench is now only a yard wide. One wonders how soon erosion will remove all possibility of getting down here.

There are numerous seep springs in the Hermit Shale and the ice effects in the bed were the bonus for coming at this time of year. George got so excited about this ice over the falls that he shot off 20 pictures of color slides.

When we reached the Supai in lower Tanner, we had too decide whether to stay up on the rim or to go down the bed as far as it seemed feasible. George and Jan wanted to try to get to the river just east of the mouth of Tanner while I was more interested in going over and out via Hot Na Na. We settled for going down the bed for a short way. I was leading and stopped when I came to a place that probably is possible. One bypasses a drop by walking down a rather steep slope in the sandstone. I wasn't sure that my shoes would grip it safely. The other two weren't up with me and didn't get to use their judgment. If we had gone down here, we might have gone upriver on some ledge to where George thought he had seen a trail up from the river. As it was he and Jan went back and followed the Supai rim out upriver from the mouth and then couldn't get down. They went back up Tanner.

We spent three and a half hours getting from the car down to the narrows in the Supai where we ate lunch. Then it took me a half an hour to back up, follow the Supai rim and reach the angle above the river. Even with a couple of detours to get around two notches, I reached Hot Na Na from Tanner in 80 minutes. The walking seemed easier than it had from Salt Water Wash to Tanner. However, I had only a few views of the river itself, but I did get a couple of pictures of Sheerwall Rapid. I also got a good view of a sharp rock sticking up from the bottom of the river about a quarter mile downstream from the rapid. The flat rock where I landed while on my air mattress trip through Marble Canyon was covered by a foot of water. This is at the upper end on the right.

When we came down from the bench at the middle of the Toroweap to the bed of Tanner Wash, George and Jan were in front, and they followed the route that Shough, Packard, and I had used in 1968, slightly to the south near the bottom of the slide. There is a hard place here, about one third of the way up from the bottom. I tried going north and down. About 200 yards to the north I could walk down. I was behind at the start but I was ahead when we reached the bed. I would always do it this way in the future. I left a one rock cairn on a high boulder in the bed for a marker.

There were few birds in evidence in spite of the winter day, Juncos, ravens, and I saw one owl.

One can go up Hot Na Na without any major bypasses, but there are numerous places in the bed where one has to bypass big rocks. At times it seems an advantage to stay up on the talus material to the side. When Norvel Johnson and I came down through the Coconino, I had thought that a bypass to the east was necessary around a small fall. I recall now that in 1969 we went right up the bed here, and I did this in the bed again.

This time I left the bed of Hot Na Na when I first saw a sheep trail going out to the east. On top I headed for where the Page Highway would come down to the plain. I crossed numerous Navaho truck roads and more valleys than I had thought possible. The bare hillsides were good walking, but on the level the snow was better than the mud where the snow had melted. I went southeast and reached the rim above Tanner before I got to the fault where the sheep can cross Tanner, where the truck was parked. Arriving at 5:40 p.m., I was only about ten minutes behind George and Jan.

Lower Tanner, in the Hermit, can be counted on for water at any time of the year. At this time Hot Na Na had a little running as well as quite a bit of ice, but I don't think one can count on finding it there. When I passed the southern one of the two caves on the east wall of Hot Na Na, I could see the pile of owl guano from clear down in the bed of the wash.

It had been a good hike of nine hours of actual walking plus about 40 minutes for resting while eating. I was gratified to see that I can still take that much exertion.

Skeleton site revisited [February 10, 1973]

I had been down to the river at Mile 91.2 twice before, on 12/19/66 and 1/16/71. Six years ago I just wanted to see what was left of an old trail, and two years ago I wanted to see the Tapeats break that Jorgen had found and also I felt that this was the right place to find where the Kolbs had taken the picture of the skeleton in clothes. Jorgen had seen the picture I had taken purporting to show where the body had lain, but he thought that the place was wrong because the rock in the river didn't seem to stand out far enough from the shore. Since I could do my driving on the paving, I chose to go back there with the superior reproduction from the Kolb's book instead of the print from the National Geographic.

My start from the top of the Bright Angel Trail was at the same time as before, 8:45 a.m., but I was able to make better time down through the snow. Perhaps it was because I had cleated Vibram soles this time, and I reached Indian Gardens by 10:05. The top mile and a half had deeper snow than I have ever seen on this trail. The maintenance crew had shoveled a path through snowbanks three feet deep for long stretches. More rocks had fallen and been left on the trail also. When I was coming up the trail in the dusk, a big rock fell in the ravine about 20 yards ahead.

It takes something like an hour and 45 minutes to walk from Indian Gardens around the head of Horn to the Visbak Break, beyond a shallow bay west of Horn. There was some water trickling in both arms of

Horn, in spite of the sign at the fork of the Tonto Trail away from the Plateau Point Trail that says there is no water available for the 12.3 miles to the Hermit Trail.

When I was approaching the place to get down through the Tapeats, I came on four burros. They seemed to be coming back.

My recollection of the break was rather hazy. I saw the place that I knew was harder than Visbak's. I couldn't recall how close to the break that faces south the easier one is supposed to be. As I looked for Visbak's along the edge of the cliff overlooking the Colorado, I found three large cairns at the very top of a little knoll. One of them would have been enough to mark the route down. I thought that I had gone down the hard way two years ago and had come up the easier way, Visbak's. When I couldn't find Jorgen's route, I started down the one I had found. I got by some hard and exposed places and then came to two drops quite near the bottom. I hesitated and then gave up the route. On rereading my log, I find that I came up that way. I suppose it looks better from below. Anyway, I looked harder and found Jorgen's way only about 40 yards farther north, but definitely within the horseshoe of the shallow bay. It is marked by a low tower with the walkway between it and the mainland.

When I got to where I could see the sharp rock island near the north bank and upriver from the mouth of 91 Mile Creek, I kept my eye on the tower on the north rim of the inner gorge and descended until it was in the right position for the perspective in the Kolb picture. I haven't located the picture I took two years ago, but I am sure I came back to the same place I thought was right then. There was still the difficulty of the island seeming closer to the north shore than it does in the picture, but I believe this is because the river was at a higher stage when the Kolbs were there. I also took a picture near a similar platform 20 yards lower and farther east, but I am sure that the background here is less true to the 1908 picture. I am sure that the first place is right.

It was 2:45 when I got back to the Tonto and 4:05 when I reached Indian Gardens. Here I finished the rest of my food and walked steadily to the rim through the snow from 4:20 to 7:00. I got home by 9:00 after being held up for a wrecker to pull a car out of a drift at the north edge of Kendrick Park. The road had been clear in the morning but the wind had drifted a lot of snow over the pavement since then.

Howlands' Butte and source of Clear Creek [February 17, 1973 to February 19, 1973]

Ever since Doc Ellis and his friend had climbed Howland's I had wanted to do it too. I might have tried it alone, but I was glad to have some expert climbers with me. Eric Karlstrom came in Friday afternoon to ask a question about climbing Zoroaster, but I talked him out of the idea, at least at this time of the year when there is snow on the Hermit slope with more higher. He consulted Ben Foster and their girl friends and they all decided to go with me.

At my suggestion, Eric got a separate permit for the four young people so that I would not feel responsible for them. We got started down the Kaibab Trail at 9:10 a.m. and reached the bridge to the campground at the bottom in two and a half hours. My shoes without log soles, gave me real problems in footing on the steep snow at the top switchbacks. There was quite a bit of mud lower, but the day was fine

and the rest of the trail was in good shape. The girls, Poly Pederson and Margaret Lechner, were fine hikers, but I can still keep ahead of them. I made the Clear Creek Trail in about four hours and they came along 15 minutes later, still good time.

The five of us wanted to go on north to the Indian ruins at the junction of the Cheyava Falls and wet arms of Clear Creek to camp, but before we went up there, two couples returned to their packs where the trail first reaches the creek. They were Al and Karen Hahn and Mike and Nina Morgan. The men are Ph.D.'s in psychology and work at the VA hospital in Phoenix. When I asked them if they had some ideas of what to look for around Clear Creek, they said that they had Butchart's Grand Canyon Treks. Al, or Doc Hahn, was quite excited about meeting the author.

I slept under the overhang at the ruin while the young people made their camp east across the creek. I had my dinner near my bed at the old fireplace and then joined the others for talk around a campfire until 8:30. As usual I was up and could have started on the day's activities considerably before the rest, but we figured that it would not be too long a day. I went down and visited with the Hanhs and Morgans until the others came along. Poly decided not to try the climb in favor of going to see Cheyava Falls.

We went up to the Tonto via the break near the lower end of the tributary that comes down from the pass east of the Howlands. I noticed two presumably prehistoric rock piles that could serve as steps. Instead of using the top one, which would have meant a pull up, I used an easier route to the west, and Margaret followed suit. Ben and Karl found harder ways, but Ben was up first. We went along the west side of Howlands and proceeded up to the high shale slope. The walking wasn't easy here with numerous ravines. We returned lower and liked it better. If one wants to go on east to Vishnu Creek, the route through the pass would be much faster. (To Vishnu over the Wotan Angels Gate pass is the fastest.)

From Ellis I knew the route up Howlands, around the southwest promontory and up the slide that takes you past the lowest cliff of Redwall. Then you go west to the ridge and follow it up. There are a couple of places where one can go along a ledge to the right to find the easiest route, and at several places there are minor variations, but the route stays quite close to the crest where the blocks are shattered. There are a few loose rocks where one is looking for a grip, but mostly the climbing is steep but quite good. The exposure is a real factor and I think that this route is a bit harder than the way to the top of Cheops Plateau up a similar ridge. My way up Johnson Point was just as severe in a place or two, but I may have missed the easiest route on Johnson.

At the top of the Redwall, you see that the promontory is quite narrow. The rest of the way to the top of the Supai knoll was easier than it looked. We went up on the side nearest us and found convenient breaks where the small cliffs occur. We took an even hour to go from the talus below the Redwall to the top of Howlands. The Ellis cairn at the summit is a super big one. Ben had carried lunch for the others to the top in a day pack and they ate on the summit. I had snacked below and had then left my Kelty down there, so I went down alone to eat. I had to be careful, but I was glad to see that I could do it alone. When the others came down, Margaret had to accept a belay at one place. However, she is a good climber and took a course in climbing from Paul Petzold last summer. That Redwall ridge is just at the limit of what I would undertake alone. In fact, if I had been alone on the ascent I might have backed out. Eric and Ben

are in the expert class. Eric had climbed the Grand Teton without a guide and Ben had been an instructor in an Outward Bound Program.

When we were down to the Creek, Ben and Margaret took it easy. Eric wanted to go up to see Cheyava Falls even though I told him that it was too far for daylight walking. He hurried on ahead while I proceeded at my rate back to our camp at the Cheyava arm junction. As it turned out, Eric met Poly coming back from having seen the falls and turned around far short of that part of the valley. I got to my camp a little after four and decided to see the arm of the creek where most of the water starts. Ted Rado had told me that there is a superior overhang campsite up there, and I figured that I could get a look at it before it would be time to return.

I was impressed by the changes in the bed caused by floods since I had first seen Clear Creek about 1948. It may have been the time of year but I suspect that the changes are more serious. Boyd Moore and I and later Allyn and I used to make our way through thickets of cottonwoods and junipers where now it is a desolation of boulders. I saw one pretty fall over a ledge of bedrock, but I didn't see many pools that would be green with maidenhair ferns in season. I saw some dead mimulas, so there are still chances of spring and summer flowers.

On the way upstream I missed a fine terrace on the east side of the creek only about 15 or 20 minutes walk up from my camp. It is well above flood level sand and a fire pit and a pot or two show that it has been used as a campsite. Around the corner into the source canyon, there is a similar overhang that is not much above creek level. The smooth sand seems to have been left by a flood. I wonder whether Rado really used this one or the other which shows signs of being an established camp.

At the junction of these upper arms of Clear Creek, I could look ahead to the left and see the 30 foot fall in the shale which Allyn and I used as a sign that we should climb out to the west to reach the figurine cave. There was still time after I had gone into the arm with the water, so I conceived the obvious idea of getting far enough up the bed to find the source of the water. Travel was easier than in Wall Creek. When the bed was thick with cottonwood shoots, I could usually find a deer trail along a terrace. I noted that tamarisk has already infiltrated the native flora even this high. The canyon in the Bright Angel Shale is even prettier than down below the Tapeats. The Redwall and higher formations show well and the towers and cliffs made a fine show in the late afternoon. I got beyond the highest water in the bed and saw that the springs occur on the east side. There is nothing spectacular at the springs, just water coming out from among the rocks in a dense grove. I believe cavers have tried without success to find caves higher up the slope.

I turned back at 5:15 and reached the campsite at 6:15 having spent 30 minutes coming down the wet arm before its junction with the other shorter arm. As I was reaching the area of the ruins, I met Bill Rietveld who had decided suddenly to visit Clear Creek. He was trying to find my campsite at the ruins, but he was walking past. We had a good visit and enjoyed the campfire until nearly 9:00. On Monday we walked out together. Eric and Ben left the trail at the head of Zoroaster Canyon and climbed the little butte at the end of the ridge between Clear Creek and Zoroaster Canyon. It was done very quickly but it entailed a pull up over an overhang. Still they didn't get to use their rope. Unfortunately it already had a cairn on it. They reported that following the ridge out to the butte was more exciting than the climb.

The girls took the long walk from Clear Creek to the south rim in one day without complaint and were too proud at the end to let me carry their packs up the last grade.