

Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (April 11, 1968 - March 29, 1969)

Aztec Amphitheater

[April 11, 1968 to April 14, 1968]

This trip was planned to settle once and for all whether one can go up the Redwall from the river one half mile south of the mouth of Fossil Creek. A secondary objective was to use rope to get off the terrace east of Elves. Jorgen Visbak and Chuck Johnson had been planning to go with me for weeks, and then in the last ten days beforehand Clarence (Doc) Ellis was invited and accepted the plan. He is a 29 year old gun smith from Sierra Madre near Pasadena and he is experienced in search and rescue operations.

Chuck and I reached the airport shortly before Doc got there in his Jeep. We went to the Visitors Center for a few minutes and then returned to the airport where we found Doc. Jorgen's plane was a bit late and then we went to the cafeteria before starting out the Topocoba Hilltop road. It took about 90 minutes to drive in my 55 ford to the park boundary sign about six miles beyond the crossroad where one turns north to the Bass Trail. When Jorgen had changed to his hiking clothes and had organized his pack, we were leaving the car about 3:50 p.m.

We could see where the sun should be although it was behind a cloud most of the time and Chuck had a compass. We hit the rim about where we had figured and then went back to higher ground for better walking. With our heavy packs containing supplies for six days, we thought that 95 minutes to the trailhead was not too bad. We passed the pit where I had spent a cold night in comfort by a fire and could still see my pile of unused firewood. Some of the trail along the west side of Apache Point seemed harder to follow this time, but the switchbacks through the Coconino on the east side seemed no worse. We noted the shovel along the trail near the bottom of the Coconino.

It had been four years since I had been along here and this time I had not paused to study the lay of the land from the rim above. I had been so complaisant about my memory that I had neither reread my logs nor transcribed my route discoveries to the piece of map I was carrying. Along the Esplanade I immediately began to realize that this had been a mistake. I was unsure about which promontory was the short and best route to the Redwall rim. I had been thinking that we would get down to the Redwall rim by daylight and then use moonlight if necessary to go to the head of the Redwall gorge in Royal Arch Creek and then camp by a rainpool in the creekbed. It was a good thing that Doc was along. He saw a pothole of rainwater about 100 yards below the trail before we had come to the promontory I had descended before. It was 6:50 p.m. so we were all ready to camp. The water was in quite a hole on the top of a fallen rock with only a few square yards of runoff area. One usually looks for water in the bedrock in the center of a wash, but this was up to the south of the bed. I would have missed this completely. I don't know whether there was water here the other four times I walked this route. The water was several inches deep.

In the morning, after I had been a poor guide by leading the group down from the trail and then admitting that I couldn't remember the better route, we went back up to the trail and proceeded south. Now I felt

unsure about how I had done this in 1960, but we saw the water holes and could start down here. I wouldn't swear that we followed the same route I had used, but the general outline was the same, down until a cliff barred the way and then to the south around various points. Doc came to our aid and found a crack behind a big rock where we could chimney down the hardest cliff. We had to remove the packs for this, but there was no trouble in handing them down. I should have remembered this difficulty if I had gone down here solo. A little lower we rounded the last point and could see our way clear to the bottom although I didn't like the narrow ledge we were on to get below a fall over to the other side where burro trails continued to the bottom. I had the unpleasant feeling through most of this rough going that I have lost self confidence badly during the last few years. The three younger men were taking to it better than I.

We had seen occasional tracks of hikers and I was glad I knew who they were, Hildreth and Fulton. In the bed of Royal Arch Creek we found the tracks most of the time. The hard places seemed a little harder than they had four years ago. The bed was drier than I had ever seen it and I am sure I had seen rain pools higher on the other occasions. I missed the angle where we should have left our packs since we just wanted to go down and see the bridge before going out on the terrace east of Elves. When we came to the spring, we dropped our packs and proceeded with just our cameras. I took off my shoes and socks and waded through the first pool while Chuck got around with the help of a stepping stone. I believe Doc climbed around everything. A little farther we could see where Hildreth and Fulton had waded with their shoes on since the tracks were still clear in the mud covering the rock bottom. I still had my shoes off so I waded while Doc got around the corner holding to slight projections. Chuck was able to do this too, but I knew I would take a fall if I tried this. When we returned from seeing the bridge, Jorgen followed my example and climbed on a rock from which we could jump about six feet over and down three and a half feet to a rock ledge. I should have been warned by the impact not to do this again. Jorgen was fascinated by the bridge and the flowery pools along the little creek. This time I looked up from just south of Royal Arch and saw my suspected keyhole bridge up near the rim of the Redwall to the east. I had been right. I could see sky through it.

When we climbed out of the bed to follow the bench to the east terrace, I went a little farther south than we needed to and led the group up to the base of the cliff. Walking was fair along here, but it got worse and we found a better trail lower on the return. I know that I had used the lower route before. Jorgen found a way down to the streambed that avoided the exposed clay area near the south end of the lower route that had bothered me before.

We went by the benchmark on the terrace and took some pictures. Not far east of this cairn, Doc called our attention to two or three Indian ruins. One still showed its rectangular shape and the walls are still two or more rocks high. We wondered whether the occupation was made easy by springs along this terrace. In quite a few places travertine is visible, making us wonder whether they were wet at the time of occupation. We soon reached the place for the logical descent. In my previous notes, I had blithely said that two 15 foot ropes would make it possible, but now it looked entirely different. I must have been abnormally chicken since at first I was afraid to go down to the ledge just above the straight drop. The way down here is really safe, and we found the rope and note left by Hildreth and Fulton. One interesting feature of this place is that on the platform about two thirds of the way to the safe landing below, there are three driftwood poles and a small pile of rocks. We wondered whether the Indians could have constructed

some sort of ladder here. Someone had at least come up from below that far for the poles would not have occurred there naturally.

The unsettling part of this rope descent is the need to tie the rope around a rock resting on the ledge just at the right place. However, it is about 2 by 2 by 3 feet in volume. Chuck and Doc couldn't budge it, but they couldn't help thinking of consequences if the rope with a man below should loosen it. I would now say that the drop from here to the platform is 25 to 30 feet and the drop below is about 15 feet (after making the descent, I figure it is a little less than 20 feet). We could have used Doc's 100 foot nylon for the top and the hemp rope left by Hildreth and Fulton for the lower place (no rope needed). I made a fuss about the danger so we turned back. At Jorgen's suggestion, we went downstream again and camped right under the bridge. High water had deposited a great deal of driftwood on the ledges where we camped. Our bags were just right for the temperature of the night, and if it had rained we could have all slept under the bridge. The moon first cast an eerie glow on the cliff to the west of Elves, but then the sky became dark from the total eclipse which was invisible from our position. We slept late in the morning. I could think of some secondary projects if we would go back to the car, but Jorgen particularly enjoyed being down in this locality. Since my guiding and nerve had already been so poor, I was ready to turn over the planning to anyone else. After ten o'clock, Chuck and Doc talked us into going back to the descent site on the terrace and get down by making a rope ladder. Doc had done this before by tying knots in the doubled rope with slack in one of the strands to preserve a loop that doesn't grip the foot and hold it. We had made up our minds to trust the size and weight of the rock anchor.

However, just a few minutes walk from the bridge when we came to the pool that is hard to pass unless one wades, I jumped for the second and last time. My heels hit the uneven rock first and I rolled over in pain realizing that I had hurt myself fairly badly. Still Jorgen jumped the same place and did all right. Doc and Jorgen helped me back to camp by letting me swing my worst right foot free and just touch the not so bad left foot to the ground. At the rougher places I got down and crawled although my left knee had been skinned in a careless fall the previous day. I lay on my air mattress the rest of the time I was there. After a little discussion about procedures, Chuck ate a quick lunch and started to bring me a helicopter. We figured that he would be able to get to the water we had seen where we first left the Esplanade trail, go on the next day and possibly bring the chopper by four on Easter Sunday.

After Jorgen and Doc had given me a chance for some lunch, which I declined since I felt so lousy, they took quite a trip out on the terrace west of Elves. I believe they said they got up the second side canyon south of the bridge. When they had been gone quite a while, they shouted to me from the edge of the cliff south of the bridge. They reported that there is no way off that terrace to the river unless the shelf continues around into the next notch canyon to the west. If it does, they would have reached a talus. Here is an objective for my flying friend, Bill Martin.

On Sunday we took our time getting up. Finally, Doc and Jorgen went up and knocked down a bush that might bother the chopper in landing at the platform just east of the top of the bridge. If the pilot had decided that there was too much risk in landing there, a crew would have had to lash me in a basket litter and take me up the creek, along the bighorn trail, and out on the terrace east of Elves.

While Doc was killing time near the bridge, he found an imposing set of ram's horns still fastened to the skull. It was quite old, but we could tell from numerous fresh tracks that they are still around. There were a few burros left up on the Esplanade and on the terraces down to the Redwall rim, but we saw no burro tracks down in the creekbed below the bad spots nor out on the terraces near the river.

Just as we were thinking about our lunch we heard a noise and soon the chopper was coming in our narrow gorge between the spire and the wall to land at the chosen spot east of the top of the bridge. The pilot stayed in the machine with the blade going. If he had felt a gust of wind, perhaps he could have given it full power in time to avert a fatal accident, but there was no wind at all. Jorgen helped me get my belongings into my pack and soon Doc and Ranger Malcom Nicholson were helping me up the rough climb to the chopper. On the steepest and loosest part, I crawled on hands and sore knees, but Nicholson piggy backed me up some very tiring parts. His help must have saved a good many dollars in chopper time. Chuck got his pack off the chopper and got mine on below the bubble and very soon we were off. Chuck had surprised us all by continuing Saturday afternoon past both water supplies and camping up on the rim at Apache Point. This accounted for the unexpectedly early arrival of the chopper.

My feet were not giving me much pain and I thoroughly enjoyed the trip back. Browning, the young pilot, would fly quite near the cliffs where he could get a lift from the warm air rising. He turned in Garnet Canyon although he was far from high enough to cross the Esplanade. By the time we came to the high place, he had enough altitude. I imagine that a helicopter pilot can turn fast enough not to crash a cliff even if he has estimated his rise incorrectly. I took the rest of the pix on my roll as we went along Serpentine Canyon. I began to wish I had memorized the map better after that. I believe I saw another place to descend from the Tonto to the river. It wouldn't hurt to study the stretch from Boucher to Bass and learn all the ways down.

Ranger Harold Timmons was waiting for us with an official ambulance and I was taken to the hospital for a check. The doctor made me promise to get X rays and see McDonald when I reached Flagstaff. Betty and Roger Field drove Roma to the canyon to get me. After I had bathed and shaved, Roma took me to the Flagstaff hospital. The X ray pix showed that I had quite a wide split in my right heel bone. As I write this, I still can't put much weight on my better ankle so I have to crawl (wheel chair for two weeks, crutches for two weeks, then a cane).

Havasupai, Manakacha, and Enfilade Points
[June 18, 1968 to June 19, 1968]

The party from National Geographic, Joe Judge, Topy and Mary Edwards, planned a photographic trip to the western part of the park and when Joe was here in Flagstaff on Monday he invited me to go along. Jim Baily was the driver and we learned that he really knows the area.

We traveled in a Dodge three seater like a travel all put out by International. However, this vehicle had only rear wheel drive but four speeds forward. Jim got us over the bad places very carefully. It would give him fits to see how much faster Jay Hunt would have driven that road. Even I take it faster in my passenger car, but Jim gave us a fine smooth ride and we felt that he knew how to keep from spiking the

gas tank or the oil pan on a rock. We went out along the Telephone Line road to Pasture Wash Ranger Station and then to Signal Hill Fire Tower.

Several hundred yards past Signal Hill, where a plastic ribbon is tied around a tree limb, Jim stopped and showed us a rather well preserved ruin very close to the road, just a few yards to the west. Then he led us to the rim just east of the road. Under an overhang just south and below where we stood was a small ruin which probably served as a storage bin. We also had a fine view of the river from here and could look down Ruby. I am rather sure that Ruby offers access from the Tonto to the river. Havasupai Point gave us a rather precariously tilted approach road and a fine view at the end. However, Topy said later that it is not as good for the photographer as Enfilade.

On the way to Manakacha Point we stopped above Forester. Jim combed the area below with his glasses and showed us where on a previous occasion he had picked out six bighorns. After the fork, when we were headed west to Manakacha, Jim pointed out an old air strip that is now overgrown with young sage brush. It must have been used at the time the mining company was thinking about installing a cable tramway from Manakacha down to Supai. We also stopped along the rim about a half mile east of the end of the road. Jim showed us an old rotted wood ladder lying on a narrow bench below the top cliff. We couldn't explain this at all. I wonder whether someone hoped to drag it down to where we had found the route down through the Coconino with the ten foot break in it. However, this ladder would have been longer than necessary. I didn't see where along the rim near here one could get down through the upper cliffs without a rope, but I knew that this is possible because Doug Shough and others have done it since the day that I went ahead and found the ramp through the Coconino. The rest of our party allowed me a little time here and I went along the rim to the west and found the right place about 150 yards west of the broken ladder. From Manakacha we could see the fields of Supai, but the main part of the settlement is out of sight under the east cliff. I pointed out the Wescogame Point descent route to Jim.

We returned to the fork and drove about a half mile north to where Jim had tied a plastic ribbon on a tree limb to camp. From here a 15 minute walk due east gets one to the Enfilade ruin. Topy and I went over to it while the rest were preparing dinner and we made several trips on Wednesday morning. Jim showed me a fine storage cist under the main rim opposite the north end of the citadel. It held a note signed (1966) by R. C. Euler, Larry Powers, and the chopper pilot Wayne Learner, and perhaps one more. Jim had found this in 1961. There were also some signs of construction at the top of the talus below the citadel itself.

I found that I could still climb down and up the chimney facing the mainland towards the north end of the citadel. Jim and I were the only members of the party to get on top, but Joe scrambled all over the area between the citadel and the main rim.

Jim gave me a lot of other information of interest, such as the fact that they killed burros from the air, but only by rifle, and that the juniper clearance has been stopped as not accomplishing the purpose. It seems that sage brush comes in faster than grass, and the junipers come back thicker than before. He also told us about a drowning or two at Havasu Creek, and he gave us a lot of details concerning the Sierra Club trip down the river which included him as far as Phantom Ranch. Although they had rained more than half the time and were miserably cold and wet, they wouldn't build a fire to dry out because their leader had said

that the driftwood supply was now cut off and that future river parties should save all wood for cooking. He said that morale was so low that by the time the party was down to Diamond Creek, they were all divided into small cliques. Jim has been around the canyon nine years now and he really knows a lot. He knows the names of the Supai Indians that have lived in certain shacks not far from the Topocoba Road and he knew details of goings on at Supai among the Indians.

Jim also straightened me out on a suit against Melvin McCormick concerning a road across the Grand Canyon National Monument that McCormick had built without a permit to some sort of mine. I thought it had been settled against McCormick, but it hasn't been decided whether he went beyond his rights.

I have come to the conclusion that when I want to know something, I should get in touch with Jim Baily.

North Rim

[July 1, 1968 to July 2, 1968]

I had thought that my feet should be able to take at least as good a workout as I had given them on June 21 so I planned two interesting one day trips, down through the Coconino and possibly the Supai also to the Freya Vishnu Saddle and the next day a trip to the cliff dwellings below about a third of the Supai off Bright Angel Point. As it turned out I didn't do either of these things. I ran into a hard and fast rule laid down by the new Chief Ranger that no one should be allowed to go off the rim without a companion. The administrative head at the north rim tried to get special permission for me but the Chief Ranger on the south rim couldn't be reached by phone in time to do me any good.

As an interesting substitute, about 9:30 a.m., I decided to try going out on Saddle Mountain and look for ruins that Judd had reported. This would be out of the park so no permit would be needed. (Note that I am not campaigning for Marble and the lower canyon to be given to the park service.) I drove out the well graded logging road and then hit the narrow but easily passable road that goes out on the park boundary to the Saddle Mountain burn, which I reached twice before by walking from Point Imperial. This time I noted a small cairn marking the trailhead and the trail was rather open for about 50 yards. Just when I was getting up my hopes of making good time through here, the trail gave out and I was in a jungle of locust and small aspens. The locust brush had always been shaded by pines, but these had been killed in the fire. Many were now on the ground further adding to the snarl. I wasn't carrying a map, and in my dismay at fighting uphill through the locust thorn patches, I decided to try the bottom of the draw. This would improve the walking temporarily and then I would have to get out of the bottom because of downed timber. There were also some blockages caused by the great flood. The brush was so bad immediately above the bed that I didn't try to fight back to the higher level. Today when I consulted the Nankoweap Quad map I found that I was not even heading down Saddle Canyon. Instead I was at the head of Buck Farm Canyon. One point of interest in this canyon is a nice little spring that flows above ground through most of the Coconino and Supai.

The water had disappeared before I decided that I should turn back about 2:00 p.m. I was down where I had good views of the Cocks Comb and here both sides of the canyon were less brushy. I climbed up to the right and got above the Coconino. This put me on a broad bench that I recognized as the route to Saddle Mountain. It is still quite free of brush except at the west where it starts upgrade to a ridge that

forms the park boundary. There is only a bit of manzanita and walking is easy. The route to the top of the ridge was better than where I had been on the way out, and I saw signs of the trail along the ridge. The walking in the dips near the car were of course just as bad as they had seemed in the morning, but if I were to try this route again, I would go out the way I returned. I came to the conclusion that if I ever want to go down the Nankoweap Trail again, I will start from the deer camp at the south end of Houserock Valley. Of course if one were staying at the north rim and had to drive for more than two hours to reach the deer camp, it would be easier to follow the boundary of the park. Certainly one should not go down Buck Farm Canyon.

At the end of the Monday hike I had reactivated a blister and had also gotten some very sore heels so I didn't try for a permit to do anything ambitious. I drove out on Fire Road E4 and tried to locate a cave that Jim Baily had told me about. On consulting the map where he had told me to plot it, I was very close to it, but I couldn't find it. I walked fairly close to the rim from the eastern most reach of Manzanita Canyon to Komo Point and then returned to the car. After lunch I drove to the end of this west branch of E4 and walked out to Obi Point. Both rim walks gave me fine views of the old buttes from a new angle. I think I found where one can climb out of Manzanita on the southeast side. There were numerous places where one could get through the other cliffs. I found a piece of pottery at the end of E4.

Attempted descent off the east side of Papago Canyon
[August 21, 1968]

My investigation of this area last fall ended in my belief that I could surely complete a new route from the rim to the river since I had shown that the Kaibab, Coconino, and Supai will go without a rope. From the rim across Papago Canyon, I was almost sure that the Redwall would be almost as easy as the Supai.

This was my first Grand Canyon hike since my accident and the first one this year in really hot weather. I still had to be very careful not to turn my weak right ankle and the caution in placing my feet slowed me down. I got an early start, getting my permit shortly after seven and finding the right place to start down from the rim by eight. I soon realized that I don't have the route memorized and I wasted a little time route finding. This time I went rather low over to the right and then turned left to the head of the ravine through the Coconino. Here too there were many details that I didn't recall clearly. The best way seems to stay left as much as possible after one has gone down the slabs near the right at the head. I had to swing to the right in a few places, and when I came up at the end of my trip, I stayed more to the right so as to take advantage of some shade. There were some hard places where I had to pull my weight with my arms. Below two thirds of the Coconino there is a huge chockstone. On the climb back in the evening, I went up the bedrock on the right side, but on the other passages, I went over the boulders on the left.

On the descent it is clear that one has to go left along a ledge over to a parallel ravine to continue downwards. This is only a few yards, about 20, away from the first one. Here, there are a couple of places where there are options. On the descent I kept to the crack over to the left where water would flow and came to a place that seemed difficult while facing in and I took to a ramp that led me north and was able to double back. On the return, I was somewhat confused in deciding when I should cross over to the main ravine. Perhaps the choice of the switch should be determined by the fact that further climbing would be

much more difficult or impossible, but a few cairns would help. I took 65 minutes to get down through the Coconino and still longer on the return.

It likewise took me over an hour to follow the Hermit over to the big slide and only 53 minutes to get back here. I seemed to find more trail on the return. Something that impressed me this time is how thin the Hermit Shale is along here, probably not more than 40 feet deep. The best route down the yellow slide is along the crest rather than in the ravine. I came back up better than I went down. The Redwall had appeared very possible from the rim of the canyon to the west. When I started down the big notch, I could proceed without difficulty through about a fourth of the depth. Then there was a 40 foot drop that wasn't quite perpendicular, but it had weathered smooth. I didn't care to try this although I could see that once through here the rest would be easy talus. I next tried another ravine to the south. After a still deeper easy descent, it led to an impossibly sheer wall. I even looked at one more place still farther north than the main ravine, but it was hopeless right at the rim. I'll have to cross this off as a possible route unless one wanted to use a rope. Signs of deer were very rare or missing.

The rough going and the heat really got to me on the return. I should have worn gloves because the rocks burnt my hands when I was climbing. Perhaps I would have felt better if I had taken extra salt sooner instead of waiting until I was feeling rather weak and sick. Big bluebottle flies were a pest too and even when I finally reached the rim about 6:10 p.m., I was limping because of sore feet and a big blister. I have lost some enthusiasm for hot weather hiking.

Salt Water Wash to Tanner Wash
[August 17, 1968]

Ever since 1964 when I followed Reilly's lead and got to the river down Salt Water Wash and then had studied the upper part of Tanner, I had had the ambition to go down one and up the other. I wasn't sure how my heels would hold up to a full scale hike, but I figured that if they felt too weak when we reached the river I could take it easy and return without trying the big loop. Bob Packard, a new mathematician on our staff, and Doug Shough, were my companions. They both showed more speed and stamina than I did.

I carried Reilly's log with me and it was of real assistance in finding the best place to leave the highway, a little to the south of Mile 529. We also had the Tanner Wash Quad map along and we could see from it that the gully next to the highway northeast from Mile 529 does not lead into Salt Water Wash. We thought of driving along the dirt road we had used before in getting started down into Salt Water Wash from the east, but since we were intending to hike up to the car from Bitter Springs at the end of the full day, we parked where we first left the highway. We followed the dirt road along the east side of the east arm of Salt Water Wash until we were even with Red Point and then went down along the bed. I didn't note the time of passing the junction with the main west arm nor of other landmarks, but we noticed that it took from 10 until 11:45 a.m. to go from the car to the river. I was gratified to see that I could remember the location of the shallow cave with three sticks placed crosswise between two shelves. It is on the west side near the Toroweap Coconino contact. It is difficult to know when you are passing down through the Coconino here since the formation is generally buried under talus material. At about this place occurs the highest abrupt drop in the canyon, and around to the left (west) I could see definite signs of trail construction. Dirk Springoram and I had seen cairns on the talus slope above the bed to the west, lower

down. There seemed to be more small gullies, only a few yards deep but still a bother to cross, so we kept to the bed fairly consistently. My impression is that at one time the Indians could have brought stock to the river. Men on foot wouldn't have needed as much trail construction as is still indicated in places.

I had reviewed what Dock had told me by letter concerning the Brown inscription and I had brought Pat's log along. The river seemed a little higher than when Dirk and I had eaten our lunch down by the water in a little shade. We had come down the boulder and pebble outwash and I told the other men about my desire to see the inscription. I remembered that the picture Dock had reproduced on his letter showed his head just below the writing. As I was explaining that the words were not far from the top of the vertical face, according to Dock, Doug went a few yards ahead on a little shelf and announced that he had found some words cut in the patina. There they were just as described. We looked out at the seemingly harmless currents and wondered why a man would have drowned here rather than at hundreds of other more likely places. Even at the present stage, toward the other side, the current formed eddies that resulted in temporary whirls a few inches deep. The riffle below this pool was quite lively and showed a rock through the water towards the right. The water here looked rather shallow. A rapid just before Mile 13 showed an abrupt drop of a couple of feet with two or three sizable rocks cutting the water. I believe the best channel was right below the cliff we were on, next to the left wall. Sheerwall Rapid was not seen to good advantage since we were rather high and lower ledges obscured the view when we were near it.

After eating we all had a good look at the map and started along the talus covering the great thickness of Hermit Shale. The Supai is just showing at Salt Water Wash and soon it gets higher and cliffy. I had thought that the river could be reached from the left bank only a half mile above Sheerwall Rapid, but our walk along here convinced me that I had been mistaken. Bob and Doug had been going quite far ahead of me down the wash and then waiting while I caught up. Here on the river talus the same thing happened. I didn't say anything as we all went our separate ways because I don't like to be regimented myself. Still there was a good deal more chance of becoming out of touch for long periods along the river than there had been in the wash. I was soon far in the rear and I thought the lower levels looked easier. After 20 minutes or so Doug was down ahead of me on a clear ledge below the cliffs. I thought he had a good idea so I went lower still to follow him. I thought I had seen him rounding a corner 150 yards ahead, but before I reached the place, I came to a 15 foot drop off at the end of my ledge. I wondered whether he had climbed down somehow, but I retraced my route wasting 15 or 20 minutes until I could climb above all the Supai outcrops. When I had about reached Mile 13, I heard someone shouting and shouted back. Bob had become worried about our location and was waiting. Doug managed to climb up from below, perhaps at the last place where he could have, and I finally came along. By this time we were all feeling the heat. I had brought only a two quart canteen thinking that I could refill it from the river when we were nearing the side canyon, but my canteen was empty well before we reached Tanner and there was no way down to the river. The detour wouldn't have been pleasant even if possible since we were about 300 feet above the water. My digestion wasn't all it should have been after too much tuna for lunch and we were all in the mood to rest at least every half hour. We averaged a mile an hour along this side hill boulder strewn stretch which I should have remembered is par for the course. We reached the turn into Tanner at 3:00 p.m. to find that the talus here is steeper if anything than it is along the river. I hadn't realized that we would have to stay on the steep talus so long before we could get down to the bed, and it was four by the time we were able to reach the seep springs that are rather numerous in the canyon as it cuts through the Supai.

The water was a life saver although the others complained that it had a salty taste. Strangely, I didn't notice this and even when I swallowed some salt I was carrying, it didn't taste as salty as usual. There was a brisk breeze blowing all day, and we were getting dehydrated just as fast as one does when he feels much hotter. Dry salt stood out in white marks on Doug's forehead. After a soak in a deep pool, we started on.

Now I realize that seeing a way where a talus reached to the bench above the Toroweap from the opposite rim was quite different from knowing where we should turn up out of the bed to reach it. The walking along the bed was so much easier than making one's way along the steep talus above that it seemed a pity to start up sooner than necessary. Bob and Doug were only half convinced that there would be any impasse in the bed. After going by several vertical exposures of deep red shale 200 feet high, we came to a dry fall that was a real problem to pass. We could have done it by a long detour, I felt, but I was also rather sure by now that we were about to pass the only way leading to the bench above the Toroweap. I rather insisted that we backtrack and try to get up on the talus. From about 150 yards below the big red dry fall, we could go up the first part of a great slide formed of fractured blocks cemented in clay. About 150 feet up, Bob was stopped by an irregular vertical wall. I went to the left and didn't like what I saw. While Doug was thinking about the angle between the wall and a big block of rock, I started down to try another place. Before I got there Bob shouted that Doug was up the hard place. Next Bob got up with considerable guidance from Doug about where the holds were. Doug took my mostly empty Kelty while I went up the eight foot bad spot. I had been bothered by leg cramps off and on for over an hour and I was afraid that one would hit me while I was in the worst place, but this didn't happen. Bob led us up a routine climb to the base of the Kaibab cliff before we could get past a bare ravine to go south along the bench. One thing of interest is that the talus where it reaches the easily climbed part of the bench is only a foot or two wide. Future weathering may reduce it to the status of a similar talus on the east side which falls short of reaching the climbable part of the upper ledges by at least 15 feet. After more great floods, our route may be no longer passable. After more careful slow wading, we rounded a corner and were where I had been four years ago. However, it was 6:15 p.m. by the time we got down into the bed of Tanner and didn't have to be so wary of a slip. The bright stars were coming out when we reached the tributary that goes toward Bitter Springs and it was 8:35 p.m. when we reached the highway.

There was one last bit of excitement when we were within a quarter mile of the highway. Bob and Doug had a small rattlesnake buzz at their feet. We did a short detour and came out on the blacktop about four and a half miles south of the car.

Crazy Jug Canyon

[August 25, 1968 to August 28, 1968]

I entered the canyon via the trail to Big Saddle Spring where there is a concrete trough containing only a little rain water. The trail, which starts at a low place in the rim just east of an old corral, continues on east beyond the dry spring and goes down a break in the Coconino. This time I missed the pictographs that I saw when Doug Shough and I came up this way at Thanksgiving. I should have reread the log of that trip. This time I followed the rather good trail clear down to the Esplanade. It angles to the east, and Doug and I had missed the fork. I probably should have followed it until it joined the lower trail, but I cut through the brush to the west.

After a little rough going I came on the lower trail that goes west along the Esplanade. Where I came on it, one has to go up over a promontory. Here I had to decide whether to go to the south over some rough scrambling where Doug and I had come up or follow the trail northwest and down to the base of the breccia pinnacle. I wanted to learn more about the trail, so I did the latter. It is a good horse trail all the way although there are brushy places. Just after it passes to the south of the pinnacle it turns steeply down a ravine to the base of the fall. There was no surface water above where the trail crossed, but below the fall, for several hundred yards, there was a stream. I could have camped here, but this walk had taken less than an hour and I wanted to camp at the lower spring where Doug and I had stayed on our former trip. When the trail went up on the Esplanade to the west, I kept on walking down the dry wash. Progress was steady but I might have gone south faster along the trail up on the Esplanade (no, this is slower 5/21/74).

In due time I came to the tributary from the east where I was almost sure that Doug and I had camped. I was rather sure I remembered the red cliff where the little stream had come splashing down, but now not a drop of water was apparent. It was now late enough to camp, but I decided to go on down to the Redwall in hopes of finding rain pools where Doug and I had seen them at Thanksgiving. It was only two weeks after a very rainy four weeks. I had started from the car at 3:50 p.m. with a full gallon of water, but I liked the idea of being able to fill my canteen in the morning before leaving a camp site. It was about six when I reached the place where Doug and I had climbed up and down a fault crack to bypass a narrow slit where the streambed had stayed in the harder rock and the Redwall on the east side which had been thrust upward over a hundred feet past the Supai on the west. The hard limestone must have been pushed up so gradually that the stream could cut a very narrow channel through it rather than be deflected a few yards and carve along the joint between the two kinds of rock as it has done for the past quarter mile. In my search for water, I followed the dry bed into the limestone. In the first hundred yards there were two big overhangs. Before the canyon became really narrow, I came to a few gallons of water in a pocket with a sprinkling of dead moths on the surface, but what was more discouraging, numerous yellow jackets hovering around. I had been stung when I first reached the bed and didn't care for a repeat. Since I was carrying enough water to take me through the night, I retired to the dusty floor of the big overhang on the west. Here I was surprised to find plenty of cow chips. As I shoved them aside to make room for my bed, I wondered how many years ago this had been familiar range land to some cowhand. If I had a slight tendency toward lonesomeness, these cow chips were reassuring. I could also count on staying dry even though the sky had let down a few drops already and might rain more. I decided that this was a cozy and friendly place. There were also no ants nor mosquitoes. I was rather warm at first and lay on top of my bag but for the second half of the night I was glad to have my light weight down bag. There were several rockfalls while I was drifting off to sleep and one as noisy as a cannon that woke me out of a deep sleep. I was also aware of a gently shower, but in the morning there was no water to share with the wasps.

Since I felt rather sure of finding more rainpools or of getting down to water below the Redwall in a couple of hours, I went on with only a quart left. Going back a short way, I climbed over the Supai promontory where Doug and I had come down. Then I made the mistake of trying to stay at the higher level. I soon found that I should have gone back to the bed along the same fault. If I had read the log from two years ago, I would have proceeded down the bed, but instead I climbed up and went along some very slow going across ravines and through manzanita. Thinking about the water situation and also noting that the bed was now quite a bit lower, I took the next chance I saw to go down. I did reach a generous amount

of dirty rainwater with only a few wasps around it and got a refill in one two quart canteen. At the bottom of this ravine, I had to go up and over into the next one south to reach the bottom. Here I saw an empty can with the label still intact showing that someone had proceeded me on this part of the route. As I now reread my log, I realize that Doug and I came off the Esplanade and reached the bed by this identical approach. Only a few minutes walk below here I came to the same chockstone which we had walked beneath and then the sudden narrow drop into the slot. This time I backed up just a few yards and climbed the lower brushy slope to the west. I could go along it until I was even with the end of the narrows. The drop in front of me is not perfectly smooth and in the aerial views it looks tempting. I was not in the mood to go down finger and toe holds with my pack on my back, so I retreated. The slope I was on seemed to rise rather high and nearly reach the Redwall rim with the possibility of doing so just around a corner. Rather than try any more experiments, I retreated to the sure route up the break. On my way back along the creekbed, I could see that I had guessed right. The ledges did not go up to the top.

By going on up a quite a little higher than the actual Redwall rim, I found easy walking on a terrace of lower Supai. This time I took no chances of starting down too soon again. I walked out on the point and looked down the main canyon of Tapeats Creek, perfectly dry at this time of year. I could see a steady stream of water coming out of the nameless canyon between Timp and Stina. I wondered whether Matthes and Evans had seen this water flowing all the way down Tapeats in their day since they had put a solid blue line in the bed. Walking back along the east rim of the promontory, I came to the upper break.

Once down the first few yards, after a bit of bird dogging, I decided to go along the wall to the south. There was a definite easy slope here, but there was an intense concentration of yellowjackets around the catclaw brush. I seriously considered giving up the trip rather than face a host of these. By now my left hand had puffed up 50% fatter than normal from the sting on the back the previous afternoon. If a third of the wasps I faced would go to work on me at once, I was fairly sure they could finish me. Finally, I decided to move ahead slowly and got through without a sting. It was now easy to walk down along the wall to the south. There was another chute, but I couldn't see any future at the bottom. Instead I found that I could go quite a bit lower directly east away from the wall. The rest of the route was forward and then to the left staying high enough to get past some steep slides until I reached a talus that took me almost into the bed. Even at the very bottom, I had to look for a crack to get down the last few yards. All this blundering had used up five hours so I had lunch here beside the running water. There were more birds than I would have expected, and a hummingbird watched me eat from 18 inches away.

There was no more need to get out of the bed to bypass obstructions or falls until I was well down into the Tapeats Formation, and here it was only a matter of crawling over a pile of big broken rocks. I had thought of going up canyon at the junction with Crazy Jug and seeing the Redwall impasses of Stina and Saddle, but I felt that by the time I reached the trail at Thunder River, I would have done enough. I did see a place just west of the mouth of saddle where I think there is a possibility of climbing the Redwall (go into Saddle canyon). However, I believe I saw a 20 foot ledge that one could not surmount.

Ever since 1951 I had been trying to get up my nerve to wade Tapeats Creek. From reading Lauritzen in Arizona Highways, I was braced for neck deep pools of the cold water. Before venturing into the stream, I waterproofed my gear as well as I do for floating on the Colorado River. I found, however, that one never has to get wet higher than just above the knee. At least 95% of the walking is on land, and enough people

do it now to establish a faint trail. I put my trousers in the pack and found that my shoes were not harmed by the wetting. I have felt just as insecure on my feet in fording Bright Angel Creek when it is high. One can select the fords where the water is not foaming and is usually no more than a foot deep. In the two or three places where there is no bank except a vertical wall, one can walk in water only a few inches deep. During this late August season, the water was not depressingly cold either. I was under no compulsion to cross fast and get out. It was a fine experience to see this very impressive canyon through the Tapeats Formation, but I am not convinced that the route from the trail to Tapeats Cave is faster by water than by land. I noted that it took me two hours and ten minutes to get from where I ate a short way into Crazy Jug Canyon to the main stream, and then it required an hour and 45 minutes to go from there to the junction with Thunder River. I would estimate that it would take an hour to go up the side canyon to Tapeats Cave.

When I arrived at the trail I spent a little time looking for the people who had left the footprints going up Tapeats Creek and back, but they had already pulled out. The gnats were bad at the regular campground, so I walked a short way up the trail before I ate my usual dinner. I had thought of sleeping just below Thunder Spring at the last place to pick up water before leaving in the morning, but when I felt the cooling breeze from the cascade where the trail cuts in right by the creek, I decided to use this sort of air conditioning, especially since my bivouac down bag was going to be too warm anywhere else. This air current from the stream worked perfectly and I had one of the best nights ever. I wonder whether it would be ten degrees warmer than elsewhere in the winter.

One final project that I carried through on the way out was to see the route off the rim right at the end of Monument Point. When one goes up the long talus that goes through the Toroweap about ten minutes walk northwest of the end of Monument Point, he finds that there is a trail along this bench to the point. This continues in both directions but it seems more like an improved deer trail, marked as it is with cairns, around to just below Monument Point. Here I believe I started up too soon since I had rough going over loose material and up some ledges. When I was about halfway out, I came on a well defined trail. There was even a cowchip along here, although a cow would have to be as agile as a wild burro to negotiate a couple of ledges that were a scramble for me near the top. There were a couple of cairns at these questionable places, but none that I saw right on top. I put up one myself and noted that the takeoff point for this old cowpath is only a few yards south of where I told the scouts to turn away from the east rim of Monument Point and follow the draw to the north most point to use the deer trail down to the same break in the Toroweap and Coconino. I noted that it took me two hours from the National Forest Service horse trail along the Esplanade to the rim of Monument Point, and I needed an hour and 40 minutes to walk from there to the car.

As I see it now, the best route to the upper end of Tapeats is to follow the trail as I did to the bed of Crazy Jug Canyon below the pinnacle. Then one should follow the bed for the climb over the Supai spur before reaching my campsite in Cowpod Cave. Go down the fault line into the bed again and follow this bed to where Doug and I entered the canyon in 1966. Then climb up to the Supai terrace and proceed to the break in the Redwall. (Or cross Crazy Jug and go out on the Esplanade. Come off it near the end this is slower 5/21/74.)

Grand Canyon flight
[September 14, 1968]

Bill Martin took Lucinda Crimen, Chuck Johnson, and me for a flight of over two hours for me to check Brahma, Shiva, Osiris, Grama Point, and particularly the questionable route down the Redwall to the river a half mile south of the mouth of Fossil Creek.

When we came over the canyon we flew about even with the top of Brahma and passed to the west of Zoroaster. I wasn't close enough to the summit block to make out the cairn, but Bill will swear that it is there since he saw it clearly on another occasion. Chuck and I noted that the west side of Brahma looks quite good for a climber. I didn't see the place where Ellis and Davis needed to traverse on friction grips alone but of course our view was very fleeting. Perhaps the picture will bring out the spot when I study it. My impression that the best route up the Supai is above Hattan Butte was reinforced (Doty and Ohlman used this). Here the walking should be easy and the ledges are not high, but one can never be sure without doing it. On the other hand the actual route used by the previous climbers appeared hopeless. This was over northwest of Zoroaster. We circled Brahma and looked at the Coconino on the east side. Chuck thought that it looked quite good but I think that it may not be as easy as the Davis Ellis route on the west. Furthermore it would be slower to get around there.

From the south side of Brahma we flew to the south of Buddha and I saw it and Manu better than previously. The ascent in the region of Widforss Point didn't appear to be very easy. I took a picture of the upper Haunted Canyon, but we were too far away to get any impression of the feasibility of climbing the Redwall at its end.

From there we went to the north of Shiva and I snapped a picture of the ramp up the Coconino that has been used on all successful climbs. As we circled around Shiva to give me a look at the eastern side of Osiris, I noted that one can get up through the Kaibab near the southwest corner of the summit plateau of Shiva. I was too nearly on top of the supposed route through the Coconino at the southwest outlier of Shiva to be real sure that there is a good route here, but most of the Coconino is easy.

Our previous idea that the easiest way through the higher parts of the Supai on Osiris is on the north side of the eastern most projection was reinforced by this flight. We were too directly above the Stanton H K route to learn anything new about it. We went from there to the north of Confucius and I got a rather poor chance to study the Redwall descent south of Grama Point. From the air the route I worked out down the Redwall into the west arm of Tuna Creek looks sure and easy compared to anything near Grama Point. It would be interesting to get down there and try to go up the Redwall from below. (I missed seeing the MacKae Lawes ravine on the west side.) We flew over Muav Saddle and dropped down through Saddle Canyon and Tapeats. I got a fairly good look at the Redwall descent in Crazy Jug Canyon and I think I could have shortened the route by going south instead of north when I was down among the shale cliffs below the Redwall. Chuck and Lucinda were treated to a view of Thunder Spring and the Tapeats Source Canyon. Then we went upriver and passed Specter Chasm without trying for a better look at the dubious route at its head. I was impressed by the roughness of the walking along the shale benches if I were to try to go from Deubendorf Rapid towards Fossil Bay on foot after crossing from the right bank.

We got the best views yet of the supposed route down the Redwall a half a mile south of the mouth of Fossil. The most likely route is near a straight slot that angles through most of the Redwall, and then a parallel slot goes through the shale. It appears possible to go along ledges from one slot to the other (yes).

Mohawk Canyon

[September 28, 1968 to September 29, 1968]

I knew from the former trip with Jorgen that I should get an earlier start if I were to reach the river in one day. I had thought from map study that I could go on to the river in two hours from the farthest north of the former trip, over a half hour's walk from where Jorgen and I camped. Thus, I drove from Flagstaff on Friday evening and slept beside the car about nine miles from the road end in Mohawk. Cows came by in the night and I might have had more sleep by staying at home with the alarm set for 3:00 a.m. I drove away in the dawn and warmed the car before eating breakfast.

One of the major thrills of the trip was to see a big bull elk from the car while I was in the steep ravine of upper Mohawk. Its rack seemed to be four feet across and still it went up the side of the ravine as gracefully as a mule deer. I hadn't realized that there were any elk in this part of the state.

Shortly after seven I passed the shelter caves and noted water in the Coconino potholes as before although it hadn't rained hard for weeks. Apparently the summer rains had been severe and there were signs of flood damage to the road. This had made it necessary to use a grader and thus the road was in better shape than Jorgen and I had found it. They had bulldozed a part following the meander thus eliminating the steep grade that had worried me last March. The fence and the converted wing tank at the road end had been torn up. the trail was as good as ever, but I didn't go up to see whether the seep spring where the cattle and horses drink was still running.

There are several signs of development of the lower valley in the Hermit Shale and Supai Formations. I came on a cache of cooking utensils and horseshoes in a box set up on a rock and I saw a roll of fence wire as well as another wing tank which was somewhat smashed instead of serving as a water trough. There seemed to be more cattle and horses than we had seen before. A group of 11 cows including a calf seemed to think I was trying to catch them and they went on down the valley in front of me for an hour and a half without showing enough intelligence to get out of the main trail where I wanted to walk. Sometimes I would stay in the wash thinking that they might let me pass so that they could go back to grazing, but they would hurry on when I was nearly abreast. Finally they got off to the side when they reached the side canyon from the west where Jorgen and I found a seep. The horses would show more alarm and really get clear away even if they had to break into a run along the rock strewn hillside. It amazed me to see one practically gallop over ground where I would have been pressing to make a mile an hour. The valley seemed to be overgrazed in comparison to National Canyon. The stock must know more waterholes than we were able to see. Although acres of the best bottom land seemed to support little besides stunted Russian thistle, some of the horses were big and fine looking.

I was carrying two gallons of water so that I could camp at a dry spot if necessary and still get out the next day . With my right foot not completely over the accident and my shoulder straps slowly causing aches, I had to rest a little more than on previous trips. It was just before noon when I came to where

Jorgen and I had camped. By 12:30 p.m. I was on my way again and soon entered the Redwall. After 105 minutes in the limestone, I came to an absolute barrier where chockstones had lodged and made a 25 foot drop complete with overhang. About 25 minutes upstream from this was another sharp drop that I was able to bypass to the east. There were signs of horses above this upper barrier but none below. Some minutes walk above this upper barrier, there is a wet place in the gravel. Horses have pawed out holes that had about an inch of water in the bottom. I saw that I could get a little water here if I cleared out the hole and dipped with a cup. There was one more slight drop between this place and the complete barrier, where I had a little trouble on the return. However, instead of putting my pack up ahead of me and climbing between rather smooth rocks, I could have fought the brush and gone up among some broken rocks over to one side.

As I was deciding how to bypass the upper barrier a slight noise called my attention to two bighorn ewes standing on the bench to the west. They paused just long enough for me to think of getting the camera out and then nimbly took off to the north along the bench. They were the first I had seen since 1961 and my eight and ninth in the Grand Canyon. A few minutes later when I was starting the detour to the east, a rattlesnake buzzed but far enough away not to bother me.

Just above the absolute barrier I came to a deep water pocket holding many gallons and only a few bugs. Furthermore there was a steady trickle down below the ledge in the bed which was still accessible. Another advantage of this flat ledge for a campsite was a good overhang with just enough room for one to sit up in bed. I put the pack down with a sigh of relief and decided what to do with the rest of the day, from three o'clock on. There seemed to be a slight sheep trail north along the bench at my level, but around an angle it pinched out. Then I went down and up the other side of the bed to the same level to the east. After going along there for ten minutes, I found that it too ended in a vertical wall. However, from there I could see that the bench several yards higher on the west side continued indefinitely. I was quite tired, but I decided to give it a half hearted try. I could tell that it would take well over an hour to advance along this bench before I would get a glimpse of the river. It wasn't too hard to get to the higher level but there were many places which required care. At one place I had to crouch to get past an overhang on a narrow ledge and it was slow to pass a jumble of great blocks in a ravine. After about 25 minutes I came to a projecting angle from which I could get a good look to the north. The bed below was much farther down, and I assumed that this meant that the 30 foot drop that had stopped me was succeeded by one or more others. Wherever I could see the bed it appeared to be quite level which means that the drops were vertical steps. I returned to the pack when I was about a mile from the river, or so I figured. If I had been there another day, I could have started along this bench while fresh. (If I had gone five minutes longer, I would have gone down the ravine and found the log ladder.)

I put my bed under the overhang to make sure that the light weight down bag would be warm enough. As it turned out, I need not have worried. I spent the night with nothing but my shirt to keep me warm from the waist up. In the night I was annoyed by the sound of a mouse gnawing in my pack so I moved it far enough away to stop the sound. After about four hours of sleep I awoke to the sounds of a brewing storm. Finally the thunder and lightning became acute and a short rain with some hail fell. By the time I was ready to walk up canyon, about 6:15 a.m., the sky was completely clear.

On the way out, about three fourths of the way to the top of the Redwall, I climbed to what might have been an interesting cave. However, I found it only about eight feet deep, just enough to appear dark from below.

Another observation that was more satisfying was to note several small areas supporting growths of crucifixion thorn. It is thick in Diamond Creek and fairly common in Peach Springs Wash and along the Tonto to the west, but I had not observed it in Havasu nor in National. It occurs in north facing exposures at three places about halfway through the Redwall.

There seemed to be more birds in this canyon than most and one type of butterfly was common this late in the year. The datura was blooming sparsely and many yellow flowers were to be seen. I walked out with somewhat more than my usual number of rest periods and reached the car at 3:30 p.m. An Indian was repairing the fence. In answer to my question he assured me that one cannot walk down to the river via Mohawk. I would now believe him in preference to Bob Euler's informant. (George Billingsley found the route along the bench on the west side and climbed down a log.) In fact I would say that the impossible dropoff occurs higher in Mohawk than in National, and walking along the bench to get a look at the river seems more difficult than the corresponding route in National.

Sewrey Route down from the Dripping Springs Trail
[October 5, 1968]

Several years ago Bill Sewrey told me in Phoenix that he had hopes of getting down through the Supai from the Dripping Springs Trail. Later I heard that he and Dewey Wildoner had succeeded in doing this. About a year ago, Weaver in his Summit article told of their success in following this route up to the trail with rope used only in pulling packs up ledges after they had climbed without aid. I had wanted to check this route myself.

Bob Packard, Derek and Connie Bloomfield, and Allyn Cureton came with me, or rather Derek took us to Hermit Rest in his van. I regarded this as a short trip, especially if we returned up the Supai to the trail and back to the rim, so we didn't hurry. It was close to 11:00 a.m. by the time we got organized to leave the trail at the last notch in the Supai before you come to the drop off of the valley with Dripping Springs at its head. I had noticed this place for many years and I even climbed down the crack system over to the west side and reached the talus below. I realized that this would go easily for quite a way, but from the Redwall rim below there seemed to be little chance of getting through the lowest cliff of Supai.

After descending through almost half the Supai on the boulder slope, we came to a continuous ledge. It was only a few feet down and Bob jumped down a couple of feet after getting as low as possible. I made sure that we could get up again by going to the east and finding a small tree that could be climbed within easy reach of the ledge. There were no further barriers until we came to the impressive lower cliff. Over to the west a ridge of soil rose high against the cliff and there were some broken ledges in that direction. Allyn followed a ledge in that direction, but it was not too easy to get over there. He got down at a place that needed skill to the next ledge and after going farther to the west, he returned with the cheering word that we had it made. I went over there next and did a good deal of stooping and some crawling to get under overhangs. I followed the ledge farther than Allyn and found an easier and safer descent. I

proceeded according to Allyn's suggestion a bit farther west along this second ledge and found some fairly safe breaks and cracks that let us down to the soil slope. At one place Allyn caught up and stood below to see whether I would need any assistance, but I made it without anything more than the usual care in finding holds. Connie came last and she needed just a bit of guidance for her feet. It is a most interesting route and ranks with the rope route to Supai, but that would be much harder if the ropes were gone. The distant view makes this route seem very nearly impossible.

After we had eaten our lunch, we all seemed to agree that it would be more interesting to go along the rim of the Redwall over to the north to intercept the Hermit Trail. I should have known that this would take a lot longer than to go back the way we had come, but we proceeded anyway. Allyn and I had both been along here, but it seemed hard and slow to Connie. She had to call for a lot of rests when her heart pounded. Bob and I went ahead and brought more water back to the others, but this was nearly unnecessary. We mostly wanted to see how much reserve we had left. Finally I decided that I had better hit my best pace and get to the rim to telephone Roma that I would not be in time for the bridge party. After I had had a good head start, Bob decided to catch up with me, something that he succeeded in doing while I was in the Toroweap. I caught a ride with some tourists and phoned from the village. By the time I had eaten at the cafeteria and had then walked to the district ranger's office, the others had already been there looking for me. After they checked the cafeteria and the Bright Angel Lodge, they came back and we got on the road.

It was a fine fall day and the canyon air was clear after the recent rain.

Walter Powell Route up from the mouth of the Little Colorado
[October 20, 1968]

Last year in December Doug Shough and I had found the old Indian route down from the north rim of the Little Colorado which may be how Walter Powell went up near the mouth of the Little Colorado. J. W. Powell gives no details but says that a comparison of barometers showed that his brother had been 3000 feet above the camp. One of the diaries mentioned that Walter Powell was out trying to reach the rim, but it didn't say he had been successful. If 3000 feet was the full height attained, the modern maps would imply that Walter had not been on the actual rim by about 300 feet. If he went up the route that Shough and I reviewed, he would have reached the most difficult part of the climb, at the base of the Kaibab.

A week ago six college boys, led by George Billingsley, after getting my information about the upper two thirds of the route, went down Salt Trail Canyon, along the river, and up the Walter Powell Route. They agreed that the hardest climbing was at the top. I wanted to see the rest of the route through the Redwall and below. I tried to get Shough and Cureton to go along, but both were tied up.

On Saturday afternoon I turned off Highway 89 about a mile north of the Gap at the first side road with a stop sign. Vern Taylor had indicated that this side road offered a saving of several miles to one who wanted to reach the head of the Salt Trail. I wanted to check this and I also figured that it would be about as close to go to the head of the W. Powell Trail in comparison with the route leaving the highway at Cedar Ridge. I found this route a little slower to drive than the road in from Cedar Ridge, but I finally came to the north south road west of the buttes and I recognized where I would have turned to reach the

Salt Trail. It would have saved several miles. However, when I turned west where I thought I could go over to the route to the junction of the rivers I made quite a mistake. The road led down among various rocky washes. Study of the Shinumo Altar Quad map only got me more confused. Near dark after three descents and climbs in the car, I finally decided that I wouldn't connect with the right route. In getting out of the last draw, after dark, my back wheels were throwing rocks around and I almost got stuck in a sharp turn where I might have had trouble backing down the hill. Soon after reaching the flats above, I found I had a flat tire. When I had returned to the bed of another deep valley, I decided to wait until day to tackle the hill. The spare tire I had in use was not very strong. While getting to sleep, I had to decide whether to persist with the project of the W. Powell Trail or whether to get back to the highway as quickly as possible. I decided to take a chance and go ahead.

In the morning I found that the grade out was much less steep and rocky than the one that had wrecked the other tire. When I came to the third valley on the way out, instead of going down, I backed away to a fork I had seen and went northwest. This stayed on high ground and soon I was on the way to the desired trailhead. I found that I had gone 43 miles from the highway whereas it was only 24 miles on the way out to Cedar Ridge.

On leaving the car, I headed for the ravine Doug and I had used, but for some reason it didn't look quite right. Someone had used spray paint here to mark strategic places for the descent. At one of the marked places, I was sure that I had not used the difficult chimney under a chockstone which was indicated by the blue paint. I did know, however, that Billingsley and his companions had been up here, since they had reported the painted letters and numbers. After I had gone down the chimney without my light pack and canteen, I came up another way and recognized it as the one I had used last year. Below this place there were no more painted symbols although there were about three places as hard as any above. This may mean that the route markers had given up the rest of the way. A little lower I came to a place that had caused me shivers last year, where I had to grip and swing out to get around a projection to a place to descend three feet safely. At the bottom of this step was the rock pile we had noted before, and here I was absolutely sure I was in the same ravine. The last drop before I reached the Coconino was about the hardest. Here one has to let his body drop down several feet holding with his hands alone. Then one avoids the big drop at the top of the Coconino by going to the east along a ledge. This route through the Kaibab is through an impressively narrow slot in the 300 foot wall and it consists of a series of seven or eight surprises that one can advance at all. I can imagine the relief that the Billingsley Party must have felt when they first saw the painted letters and numbers and were sure that the rest of the route was possible. They could be fairly sure that they had the right ravine from what I had said, but if progress had been impossible, they might have been in real trouble since they were on short rations for water and food. Below this there is no trouble through the Hermit and Supai. One keeps over to the west and passes a series of ridges of talus material. Walking the rim of the Redwall to the west around to the ravine that cuts through the Redwall is likewise straightforward, merely a matter of watching for loose rocks and heading several ravines. It took less than two hours to come from the rim to the beginning of the Redwall descent. The boys had built a couple of cairns in this ravine and the lower one was supposed to show where one should leave it to go out on a ledge to the right. George had said that I should go along above two flat topped projections along a narrow ledge until I could go down a talus to the river, or so I understood him. I crossed a recent rockslide area, just as he had said and soon found the two projections. Not seeing any way to get off the ledge, I followed it on with increasingly difficulty until I was facing the river. Still there

seemed to be no way off the ledge. When I came to a consolidated rockslide that offered no footing, I decided that I had had enough. It was demoralizing to turn back where I thought the boys had been, but the strain was telling. I felt slightly sick.

By the time I was back in the break in the Redwall, I was ready for lunch. I had thought that I would then return to the car, but I could see that it would be easy to go on down the break through the entire Redwall and add one more Redwall traverse to my list. I started to do this at 12:30 p.m. and told myself that I might as well continue along the base of the shale cliff to the right until 1:00 p.m. Before that limit arrived, I found that I was on a relatively good route down to the river. Instead of having to conserve water I had left in a two quart canteen, I had the chance for a refill at the river, which I reached at 1:10. The five hours and ten minutes since I had left the rim could have been shortened by 75 minutes if I had not made the false detour along the high ledge and had waited until I reached the river to eat. I needed three hours and 50 minutes to reach the rim from the river.

The boys had wasted some time by going up the bed of the inner canyon through the shale only to find it blocked by falls, although Chuck Johnson said that they hadn't tried very hard to pass the barriers. I found their footprints coming up from the river along the rim of the shale gorge. This makes me wonder why they were ever on the narrow ledge along the lower part of the Redwall, and where they were able to climb up to the ledge (I misunderstood, they weren't on the ledge at all). It was far simpler to stay below the shale cliff which is a lower extension of the Redwall until one is in the ravine that goes up to the south, the break where the entire Redwall and much of the shale below can be climbed on stabilized slide material. I'll have to ask Chuck or George about this.

The only deer hoofprints and droppings that I found were along the lower Redwall ledge and also along the shale route at the base of the top shale cliff. Along here for a few yards I recognized a meager deer trail. If deer can get out through the Kaibab above they would have to leap vertically farther than I think possible, but they would have no trouble with the route up from the river to this place. (George found a potsherd on this route.)

It was well after six and dark when I reached the highway at Cedar Ridge. Here, within a block of a public phone, I discovered that the spare I had put on the previous night had gone flat. After a distress call, Larry Casto drove Roma up in our car to rescue me. He loaned me the spare from his Ford and we all got home before 11:00 p.m.

Mohawk Canyon

[November 22, 1968 to November 24, 1968]

A picture taken at the end of my advance along a precarious bench on the west side of Mohawk Canyon low in the Redwall seemed to show some chance that the east side might be broken and permit a descent if one could go that far along a similar bench to the one I was on. In order to have time for such a check on an ordinary weekend, I left home Friday afternoon and was ready to leave the car at the end of the road in Mohawk by 7:30 p.m. The night was clear but with no moon. The upper part of the trail and most of the bed below called for the use of my flashlight but I made about as good time as I could have during the day. I was concentrating on getting as far as I could in three hours of walking. Just before 10:30. I noticed

a good overhang in the Supai with a smooth rock for my bed and no chance of dew. It was on the right a quarter mile below the left tributary where Jorgen and I had found a seep in the spring of the year. I had come with one full gallon of water and I figured on getting down canyon to water before I would start out.

Something kept me from going to sleep promptly and it was nearly 1:00 a.m. when I dropped off. I got cold on the underside and woke up permanently by 4:30. Perhaps I should try ensolite instead of an air mattress in winter.

In about three hours more of walking I got down into the lower Redwall and came to the first big barrier, which can be passed on the east. About five minutes walk below this I saw the first water, a rain pocket right in the bed. There was no water in the gravel higher up where I had seen it in September. I left my pack by the water where I had decided to camp.

First I went on down canyon, about 20 minutes and came to where I had camped before. There was still a lot of water in the deep pocket (O.K. 6/9/71) in the level rock. It had rained a measurable amount about one week before. There was less water at the base of the minor drop than there had been before, so I checked closer. The gravel was absorbing a good little flow from a spring, enough to make quite a gurgle as it crossed a sloping rock. I would trust this at all times (no, 6/9/71). I studied again the drop in the bed. It would certainly require a rope. It is a fall of about 30 or 35 feet.

My plan had been to go along the bench at the level of the first barrier, where I had seen two bighorn sheep. I thought they might have established a trail that would help speed up the walking. There was a slope that allowed access to the bench just south of where I had left the pack and as I left the bed I found the bones and some of the skin of a bighorn lamb about as large as a half grown jackrabbit. Since the Museum of Northern Arizona keeps bones for identification purposes, I brought the skeleton back with me.

The bench seemed to be about as slow and bad walking as anything I have ever undertaken. The footing was poor and there was no trail. Furthermore the way was cluttered with catclaw and cactus. After a half an hour of this I was still only about halfway as far north as the spring and my campsite. My knees were shaky and I sadly concluded that I would never reach the interesting part of the canyon this way. It took me longer to get back to my pack. Irritated with the frustration, I decided to carry a gallon of water up canyon and possibly sleep where I had the first night.

About ten minutes walk into the Redwall, there is a place on the east where the walls are completely broken. Furthermore there is a faulting that has broken a route through the Supai of the Esplanade a few degrees east of north from here. This is just north of the WC marked R7W and R6W on the National Canyon Quad. I decided to detour up to the surface of the Esplanade and have a look around. Right away I found I was on a trail that had been worked on by Indians. Now it is used by the horses. After it crossed one small streambed, it passed over a mescal pit, the first indication I had seen that Mohawk had been used by aborigines. The trail didn't show all the way up through the broken blocks of Supai, but there were plenty of horse signs on the Esplanade. The walking was level and easy up here, unlike the Esplanade east of Supai. There were bare rock exposures with lots of rain pools, the deepest about three inches. I had intended returning to my pack as soon as I had reached the top, but then the view to the

north was cut off by a higher part of the plateau. When I reached the highest knoll, I saw that the view would be far superior if I walked north to the edge of the point between two canyons. When I got there it was later than I liked, but the reward was great. I could see the rim of the Redwall hiding lower Mohawk. There was a bit of the brown Colorado in sight, but the finest scenery was Stairway Canyon north of the river. I could also see a way down through the Supai across the side canyon south of the knoll marked 4317. One could easily walk the smooth surface of the Redwall rim and get a fine view of lower Mohawk from the point north of 4317. This detour went too far to compensate for my feeling that I had gone on a wild goose chase. In weather a little warmer and wetter than late fall, this part of the Esplanade would be fine territory for an inspiring expedition. Within a week after a rain, there would be plenty of water on the flat rocks. I had pushed my luck rather far and I just had daylight to get back to my pack. I had a fairly comfortable night right there.

I ate breakfast in the bag before it was light enough to walk. Before leaving the Redwall, I checked another shallow cave on the west side. It was only a few yards to it. It sloped up about 15 or 20 feet, not deep enough to require a light but deep enough to feel many degrees warmer than the outside morning air.

The entire night had been clear, but the forenoon looked threatening from time to time. The wind and sun were changeable. I had slept far better than I had the first night, but I didn't feel quite up to par, which forced me to rest more than I used to. I got to the car by 2:30 p.m. Mohawk is a fine, scenic canyon and it is providential that the permanent spring is just accessible above the absolute barrier. The Esplanade to the east seems particularly fine for fast walking. (Remember the route using the log ladder on the west side below the bench.)

From Apache Point to Colorado River and Forester Canyon
[November 28, 1968 to December 1, 1968]

Jorgen Visbak, Bill Mooz, and Doc Ellis came by air to Phoenix and then by car to Flagstaff Wednesday evening. Our original idea was to sleep out on the Topocoba Road to get an early start on Thursday. However, a gale from the north persuaded us to have us all sleep in our house and set the alarm for an early start. We got to the District Ranger's Office by 7:00 a.m. where Art Foran met us. He and I both drove our cars out to the park boundary sign south of Apache Point and we started our walk at 8:30.

We first saw the rim south of Quetzal Point and then followed the telephone line until it turned west. Our time to the point wasn't bad, 90 minutes. In the break through the Coconino we noted a pick on the way down and a shovel on the return. When we were just below the Coconino, I heard a noise and looked in time to see a bighorn ram nimbly loping away over this slope of very poor footing. In a short time Doc pointed to it again silhouetted against the distant background. We were not too sure that we recognized the exact place where we had spent the first night last April, but we saw that we had taken very nearly the same time to get there, three hours.

This time I was sure I could get the party down the correct promontory, the long one that extends toward the angle above the terrace east of Elves. We found convenient breaks near the end of each terrace, but we finally had to cut back to the northwest to find the crucial crack behind a big rock that took us down the most persistent cliff. I am sure this is what I had located before, but I hadn't realized that it was quite this

near the end of the terrace. On the return I found a cairn I had built to mark the place. The way along the Redwall rim is very winding but it is fast since there is a good burro trail almost all the way south to the ravine that cuts through the upper Redwall down to the bed of the creek. This time there were plenty of burro signs along the bed of the creek but none down as far as the waterholes below the first big drop.

Just as we arrived at the barrier in the lower Redwall where a brushy bench extends to the right, one of the men saw a bighorn. They noticed two or three and finally six were in sight at once. The animals got away so fast, my only picture might barely show a white rump, but Bill Mooz has higher hopes for one he took through a telephoto lens. I led the group around the drop by following the bighorns and getting down to the bed 100 yards farther on, but on the return the three who came up last stayed in the bed. I must have done this myself on former trips. Doc noted some good rain pools below this barrier which we counted on during the trip out. A few minutes farther down canyon, we arrived at the tributary from the east where one should climb up on the east bench if he wants to reach the terrace with the benchmark. We went up immediately and had to go high to get past a slide where the steep clay walls are impossible. On the return we went down a ravine to the bed north of here by perhaps 100 yards. When one stays low along the bench he can walk right along at a normal pace. There is a recognizable trail almost all the way which makes travel seem luxurious compared to similar places I have been attempting in Mohawk and National Canyons. Up to our arrival near the bench mark I had been predicting our time requirements very successfully. We came from the car and reached the terrace before four.

By now, however, Bill was feeling his knee and needed a rest. While the others were stopped with him, I went ahead to relocate the rappel site. I went down along the north edge of the terrace and came around a knoll right to the place again. Putting my pack down right on the shelf where we would need the rope, I went up to signal to the others. It was a good thing because they were all high on the slope overshooting the right place.

Doc and I tugged at the anchor stone without being able to budge it. It is bigger and more irregular than I had remembered it from last spring. It even seems to be cemented by travertine to the floor. I suppose it broke from natural causes, but if so this circumstance is just as peculiar as the bedrock weathered rope anchor at the site of the Hopi Salt Source. If it were more than a yard in either direction along the shelf, it would be in the wrong place. As Doc fastened his rope around the rock and got out his diaper sling and brake bar, we had time to note the two poles leaning against the wall from the platform 20 feet down. Their lower ends were braced in a man made pile of rocks. They lean like a ladder without rungs against the wall to the east of the best rappel site, and the top of the poles is supposed to get one to a place where the wall can be climbed. Perhaps Allyn or Doc could go up here, but I would no more want to try this than I would the similar place at the top of the driftwood ladder near the Hopi Salt Source. There have never been any nails driven into the poles near Elves and we reasoned that these poles may be as old as the ruins on the terrace. A C 14 date would be interesting. (Gary Stiles climbed this from below without a rope up west of the rappel and then across and up.)

I led off for the rappel and Doc even sat behind the anchor rock and gave me a belay with the rope Art Foran had carried. Everything went easily although I felt a few butterflies in the solar plexus before starting down. there are even some small toeholds below the rim for the first few yards. The bottom eight feet has a slight overhang but it is not large enough to cause any twisting and swinging. After I had

unhooked myself, I found that from the shelf I was on it is simple to climb down a crack to the talus below and reach the place where I had come up from the river in 1961. I wish my former log had been explicit about whether I had then climbed on this shelf and had seen the poles. My present recollection is that I hadn't but that I had seen the shelf from which we could rappel. I have checked and in the log of last April I mentioned three poles. This would include the two leaning against the wall and one that is lying down.

By the time all were down and Art had tried his Jumar ascenders to get back on the shelf to look for a hip pad missing from Doc's waist band, it was dark. We were glad we all had flashlights and that I remembered the easy way down to the river. There was a moon and we had no trouble getting enough mesquite for a fine cooking and campfire. The sand was good for our beds but I was a little chilly before morning.

We had a leisurely start about 8:30 on Friday morning and took surprisingly long to reach Elves. After climbing up to the upper fall and pool, we started on. The big driftwood log is still perched across the top of a split rock just as I remembered it from 1961. I was not clear about where the going was to become most time consuming except that it was along Stephen Aisle. We got by some of the cliffy promontories by staying low although we were above a Tapeats bluff above the water. This kind of walking reminded Bill Mooz of the Beamer Trail south of the mouth of the Little Colorado. I had already thought of the similarity of our rappel to that going down to the Hopi Salt Source. Perhaps it isn't too remarkable that the region above the beginning of the Grand Gorge should resemble that where the granite is about to go under.

Jorgen was so eager to get on and see the place that I had picked for a try at climbing the Redwall between Forster and Fossil that we had to gang up to make him stop at a rainpool at 12:15 p.m. for lunch. He would hardly believe me when I told him that it would take us two hours of walking to get down to the river from there. Actually it was 3:30 p.m. before we came to a place where there was easy access to the Colorado with sand for sleeping and enough wood. Jorgen had gotten quite far ahead and when we came along he was about through with a chilly bath in the river. Bill was already having trouble with a knee, so he and Art stayed around camp to collect wood while Jorgen, Doc, and I went west to see the climbing area. This took less than an hour and we were well beyond the delta of Forster when we stopped. It was clearly too late to do any more than look at the place. Doc had said that my serials made the climb seem 75% possible, but now we all thought that the probability was far less. I still want to try it someday, but when I was on the spot, I was about ready to write it off as a bad guess (it goes by Enfilade Point Route).

We saw one burro on the north side of the river west of the mouth of Black Tail Canyon. We saw our eighth bighorn on the south side also.

I had thought that we would eat lunch at Elves Chasm and then get up the rope to camp at the Royal Arch. Bill was having a lot of trouble with his knee, however, and we stopped for lunch at a beach west of Elves. The early morning had been overcast but now the sun came out in fine style and Jorgen and Bill had another dip while I was keeping warm in my jacket. Here I decided to go out on time and let Jorgen

and Doc stay behind with Bill. The others wouldn't be as embarrassed as I would by not appearing for work on Monday. Art decided to come with me.

Jorgen had his chance and climbed quite high at Elves Chasm. He reported many little cairns to mark the route, but still he didn't get high enough to see the fall directly below Royal Arch and the tower. Art and I got on a bighorn trail that led east and followed it rather high before we lost it. Our route up to the rappel was much more direct than if we had gone east to the former camp before climbing. Art went up the rope using the Jumars first and hauled our packs up before I started up. the Jumars are much easier than Prusik knots. At the top I found natural handholds. I left my extra food for the later party where the rope was tied and of course we lowered the Jumars to the shelf below. The other three saw us as we were finishing our job on the shelf above the rope and were able to make themselves heard. Before we left, Art found Doc's missing pad and we left it with the food. We then concentrated on getting across the slump and travertine terrace and by the steep bench to the bed of Royal Arch Creek. Daylight was about gone when we were going up the bed looking for a rainpool. We were beginning to worry about having gone upstream instead of down to the spring when we came to plenty. When we spread out our beds we were careful to put them where it would be possible to climb high on the bank if there should be a rain and a flood. The night was mostly overcast and then just before dawn a slow rain started. We ate in the dark and started on by 7:10. With the polished bedrock wet, we had to climb around the barriers in the brush along the slopes. I easily recognized the burro trail by which we had come through the top part of the Redwall and we were able to follow a good burro trail along the rim of the Redwall. There are still a number of burros left in this amphitheater and we saw three as we went north. I don't understand why this part of the canyon should be such a favorable habitat for both burros and sheep when neither are common in most of the park. I hadn't remembered how many headlands we needed to pass before we came to the right place to go up, but I recalled that it was opposite the little bridge that we call Keyhole Begay. I walked most of the Redwall rim with my plastic sheet over my head and the pack to shed the rain and snow, but as we arrived at the climb, the weather began to clear. The cloud effects around Wheeler Point, Mount Huethawali, and other prominences were out of this world. We were able to follow a burro trail most of the way up through the Supai and I went right to the crucial crack behind the big rock that was the key to the route.

The trail around below the pinnacle required care with the snow over the rocks and grass. On the rim we stayed within sight of the east rim until we came to the telephone line and then followed it for about eight minutes or to the north side of Point Quetzal. Here Art spread out the map on the ground and we oriented it with Fossil Mountain that I recognized. The sun was showing most of the time so we didn't need a compass. When we hit the road we knew which way to turn and within a minute we could see the parked cars. It took less time to get back from the point than we had taken on the way out.

The other three traveled about seven hours on Sunday to come from the river up through Royal Arch creek and camped just below the crucial crack in the Supai cliff. It snowed much of the night, but they were comfortable under a couple of overhangs. They walked on out to the road on Monday in several inches of snow to find Art's Travel all waiting where he had taken it back to pick them up on Monday. Bill's knee had felt worse on Monday than on Sunday, but they had made fair enough time. Jorgen found a piece of pottery along our route above the river near the upper end of Conquistador Aisle.

Diamond Creek

[December 30, 1968 to January 2, 1969]

Doug Shough came from Cottonwood Sunday evening as planned, but I had a number of chores and wasn't ready to go until after noon on Monday. They are still improving the road down Peach Springs Wash until now the upper part is as fast as the road to Supai. It would be a much harder assignment to keep the lower end of the road out of reach of floods, much like building the breakwater for a harbor. We met a Mr. Dunnigan fishing at the river when we were leaving the area. He said that they can keep the road in shape throughout the year except for July and August. In my new Ford pickup truck, I had no worries about injury to the car or getting stuck in sand.

We shouldered our packs where we met Diamond Creek and started walking at 4:00 p.m. We were intrigued by a road that they have bulldozed across the flat starting up Diamond Creek. It has been cut by a flood but there are still rubber tire tracks showing in the sand in a part beyond the cut. One branch goes up a steep slope and makes one switchback. Mr. Dunnigan accounted for this as going to an exploratory mine. Doug and I conjectured that the Indian Service had some money at the end of the fiscal year that would revert to the U. S. Treasury if it weren't spent. Anyway, this 500 yards of road is easier on the hiker's feet than the boulder field it goes through.

During the 90 minutes we allowed ourselves before stopping for the night, we passed the tandem falls that are a prelude to the black rock narrows and reached the more open area where some cottonwood trees grow. It was a little hard for me to climb up the rock to get past the falls with my pack on my back. The night was chilly but the frost line was a little farther up canyon. My new ensolite pad did seem warmer under me than an air mattress, but I missed the comfort of the mattress. I'll use the ensolite only for cold weather.

On Tuesday we got away about 8:00 a.m. We noted the slight amount of water coming out of Robber's Roost Canyon. There was lots of jumping across the little creek and much watching one's footing across fields of boulders. It seemed to me that away from the streambed were mostly sand and boulders. We saw three or four horses going up a steep trail near the side canyon on the north side above the Tapeats. It seemed that one might have a chance of climbing out through the Redwall in that direction.

We came to the broad canyon down from the pass separating Robber's Roost Canyon from Diamond Creek about 10:15 a.m. and started up to inspect it for a horse trail. We left the packs at the bottom and Doug gave me a candy bar for a possibly necessary snack before we got back to the real lunch. When the going got a bit rough in the bed of the wash, Doug suggested going up on the west to try to locate some sort of wild horse trail. Before long we came to a man made trail that went high above the bed by switchbacks. Then it contoured back into the bed and went up the slope to the east. Just when we had concluded that it was going to continue to a break in the upper cliffs in that direction, it angled to the west and went up a valley there. The part through the blackbrush on top was obscure. I continued on through some snow until I was sure I had connected with the area that Allyn and I had covered three years ago. The candy bar was most welcome because it took us an hour and a half to reach the top and an hour to get down.

I wasn't in good hiking shape and we took a long lunch break. I wanted to show Doug the fine bank of ferns at the upper spring, but I became confused by a little flow we saw near the horse trail and thought that the next water coming into the main bed should be the last. This time, contrary to my recollection from three years ago, the bed was dry for about a half a mile above the Tapeats and it was also dry above the junction with the lower spring. We went into the lower spring canyon and soon I knew that it was a first time for me. I could see what Donald Davis meant when he said that this spring is harder to reach than the upper one. It is rougher over the rocks of the bed and the thickets have more low branches. We continued past the junction with the dry arm and eventually passed the fern covered bank of travertine below the spring. We had decided to camp where the lower spring water comes into the main bed of Diamond and we had allowed an hour for the ascent. When we had been going up for 55 minutes we were at a place where we could see that there was a most impressive boxing ahead, sheer walls where a great fall would form in a storm. On the right side of this spring canyon, a little upstream from the spring, there may be a place that one could climb out. If I ever want to catalog all descents, I should check this place. We got back 20 minutes faster than we had gone up because we took to the open slope on the south side where horses have made trails. I believe Davis had noted that this is faster.

We had a premonition that we would have a colder night than the previous one and I kept a fire going all night. There was no wind but the logs popped small coals out and made a few small holes in my plastic sheet. Fortunately none landed on the bag. There was a little ice in the canteen by morning. On New Years Day we got away about 8:00 a.m. We walked up the dry bed and found a little water coming into the main bed from the next side canyon. This was the upper spring canyon. The amount of water was soon perceptibly greater. I recognized the pleasant walking under the trees and the pretty little fall over the rock ledge. Doug was really impressed by the falls through the maidenhair ferns. From my previous inspection, I thought that there might be a way out through the upper end of this canyon, but rather than take time to see, we returned to the main project, to check the arm of the canyon that goes on over toward Prospect Valley. I thought that because of the great fault, this would be a logical place for a walk out to the plateau.

Opposite the mouth of the upper spring canyon, we saw a shallow cave high up in the base of the Redwall. Both Doug and I thought that there might be a wall of adobe in it forming an Indian ruin. We postponed inspecting it closer until the return. When we had gone less than halfway up to it, we both agreed that the wall was merely a natural rockfall.

Walking the main bed is relatively easy and fast above here for some distance. The next side canyon from the east looked long and interesting. From what we could see in passing, there should be a good chance of walking out to the plateau here too. We kept to the main canyon, to the north. Just as we came to the precipitous side canyon from the west, we noted vertical veins of calcite that go across the side canyon from wall to wall. I had never seen them a foot or more thick and so continuous. The texture was most interesting in the bed where the calcite was worn smooth.

The next tributary from the east was visibly impossible, but a little farther north on the east side, a snow covered slope seems to offer a good chance for getting out. We wanted to see the farthest north arm, so we passed by this too. Very soon we saw a rockslide seemingly at the main fault that looked promising. It was directly ahead while the canyon makes a sharp meander to the west. We were both fairly sure that

there should be an impassible fall in the bed here although we didn't actually go far enough to see it. At the top of this slide we were on a narrow wall that leads to a pinnacle surrounded by the meander. We could follow a bench ahead on the east and then climb a similar slide to another saddle. From this we might have been able to get down into the bed of the wash and proceed north with no further problems, but we elected to continue along a bench. After we had gone along here for perhaps 200 yards, we saw that we had a good chance of being able to double back and climb to the top of the Redwall and get a fine view of the whole area. We succeeded in doing this with some use of the hands. The Redwall rim on the east is fully 350 feet higher than it is on the west side of this canyon.

We had succeeded in the main objective but we had also noted four other places where it would be interesting to try a climb. On the last day we checked the Lost Man Tributary of Peach Springs Wash and found that it is impossible.

Through the Redwall across from Diamond Peak
[February 8, 1969]

Bob Packard and I left Flagstaff in my truck about 7:00 p.m. with the highway somewhat icy until we reached the Ashfork hill. There was also some snow on the road into the wash beyond the Peach Springs airstrip. Below that the surface was slightly muddy for a mile or two, and the last mile of the road to the river was bad in a spot or two from a recent flood. We were glad we had a truck instead of a car. The night was clear and breezy, but we slept warm enough.

The river had been several feet higher, but as it was the level was up from what I had seen in November and at the first of the year. The current may have been stronger, but I was able to row Bob over in the kayak without drifting downstream very far. Along both banks there were back eddies. I had decided not to go to the ravine below Diamond Rapid where I had seen a sure way through the Tapeats, but rather to go upstream to the side canyon there. We landed at a beach and put the kayak behind some willows. As we walked east to the canyon mouth, we came on a cache of about 40 quarts of outboard motor oil and a barrel of gas. It did seem like a fine spot for a camp.

The floor of the side canyon was rather level for about 200 yards and then as it turned to the left, we found the bed to be gray granite. After some of this routine upgrade, we came to an impassible fall. I led Bob up a scree slope to the right which turned again. With some hand and toe climbing, we got up to a notch from which we could look down into the gradually rising bed beyond. With a short detour down and up to a similar notch next to the Tapeats cliff, we got to a narrow and precarious bench that led north to a ravine going up through the Tapeats. This ended inside a little tower of Tapeats capped with a loose block that can serve as a natural cairn for this route. We still had to walk up 80 or 100 feet to get to the broad Tonto level. Here there was a well established burro trail that provided fine walking around into the next canyon east. The canyon where we had left the river is a big one and is well shown on the Williams 1/250,000 Quad map, but where we wanted to go up the Redwall is hardly shown at all. The 15 minute Quad would be a big help when it is finished.

One branch of the burro trail went up towards the ravine which I had identified as a possible break in the Redwall. Above some abrupt places in the shale this trail entered the bed. After two or three small barriers

which were easily bypassed, we approached a place where the canyon forks. Both forks seem to have high impassible falls, but we saw where some animals had been going out of the bed to the south. The highest burro droppings were in the bed at the base of this steep scramble, but we saw none higher. There were bighorn droppings at intervals all the way to the plateau above, and in the soft soil on top, there were some very clear bighorn tracks as well as other animal tracks. When we had gone up around 150 feet on this bypass, we got back into the bed and proceeded to a narrow slot that looked a bit difficult from a distance. However, it was fairly easy to find a couple of ways by the chockstone. We used the bed and then the slope to the north for the rest of the way to the top of the Redwall. The Redwall shows quite a displacement where we came out on top, that to the northwest being about 100 feet higher.

Just before the last scramble to the top, we saw a good window to the north of our route. To the west of the window, accessible along a ledge, was a shallow cave. Our inspection turned up no pottery but we did find bits of charcoal as well as sticks that had been brought in but not used for a fire. There was no way of knowing whether we had been preceded along here by ancient Indians, recent Indians, or white prospectors, unless someone would pay for a carbon 14 dating of the firewood.

On top of the Redwall it was easy to walk uphill to the northwest. We kept to the divide between the big drainage at whose mouth we had left the boat and the canyon that goes into the river about Mile 219. The final point from which we turned back about 12:45 p.m. was at the top of the Supai where the Williams Quad shows a contour around a small butte. If I had wanted to go on around the base of the top cliffs of Hermit, Coconino, and Kaibab I should have stayed lower and gone to the north of this knoll. We ate lunch near the top where we found some water standing in depressions. From the top there was a lot of scenery. We could see a bit of the Uinkarets across the Colorado twice. The Redwall on the east side of the river is far higher than it is on the west side below where we were. It is also broken and scree covered in many places. We could see that Diamond Peak, consisting of Redwall largely, is far below the corresponding strata immediately to the east. We could see up the lower part of Diamond Creek, but there was no hint of the canyon bed turning to the north and lying between us and the high rim to the east.

Something that impressed both of us was that the top cliff to the north, the Hermit, Coconino, and Kaibab, was nearly impregnable. However, I did find one place where I believe one could go up a scree slope, then west along a ledge, and finally up through the Kaibab in a broad ravine. This is facing the bay formed by the canyon upriver from Separation. It is not to be confused with the place one should be able to break through the upper cliff at the head of Separation.

On our way up, Bob was impressed by quite a collection of odd concretions in the Supai. He also picked up a strange looking little rock. It is black and seems to have a fused surface like slag. It is as heavy as if it were a meteorite. I brought it home and will show it to the geologists (manganese ore).

When we got back to the place to start down the Redwall, it was still only 2:00 p.m. We elected to go out along the rim of the Redwall toward the river. This was on a promontory with a narrow neck and a blunt head. This gave us what Bob thought were the finest views of the day, down on the river both upstream and down.

The trip back down to the boat was only about 15 minutes faster than it had been uphill. We decided that our most precarious climbing of the day was not in the Redwall at all but from the rim of the Tapeats down to the bed of the creek. I had no trouble recognizing the route but the way along the top of the granite over to the head of the trough seemed harder at the end of the day. We went down to the level creekbed in the trough east of the one where we had come up. It is almost straight in line with the part of the creek that points directly toward the river.

The only excitement of our second crossing was when Bob was pushing the boat off into the river. His foot began to stick in the mud and he almost fell in the water and mud. We were packed and leaving by five and got home in good time at 8:30 p.m.

I figured that it was quite a day. We had found a route through to the Tonto which I hadn't scouted at all. The route through the Redwall not only proved possible but it was easier than expected. We found a window through the rim of the Redwall and also a cave with signs of human use. We also found that one can make respectable progress over the terrain to the head of Separation. One would have to be prepared for freezing temperatures at night above the Redwall, but it would be a good two day winter hike to come up here and go down to the mouth of Separation.

Middle Echo Peak
[February 15, 1969]

Bob Packard went with me up to Lee's Ferry which we reached about 9:30 a.m. It was interesting to see the motel units and the store and restaurant. The Sparks, who now hold the concession, are ready for lots of business. They offer Jeep trips up the Paria Canyon, boating up to the dam at \$15.00 per person, and they are going to start a new package in river trips. It will be a three day trip down to the mouth of the Little Colorado River with helicopter service to bring the passengers and equipment back up to the plateau. They think that there are enough people ready to pay \$295.00 to make it worthwhile. The drawing point will be that the patron won't have to endure a mule ride up the Kaibab Trail at the end of the trip.

Bob and I crossed the river about ten and put the kayak up high in the brush where a rise in the river would not affect it. There were numerous fresh beaver cuttings in this riverside thicket and there were many holes in the soil just about big enough for a beaver.

We went past the rock cabin on the far side of the flat but didn't inspect it. After some scrambling over the broken hills we came to the barely recognizable road. In a short time I lost it and we went rather high above where the road used to go. This was a mistake because in the increasing drizzle, we had trouble on the clay slope. After getting by this difficulty, I followed the flat below while Bob unwilling to lose his altitude, kept up on the rough slope above. We met at the base of the great sandslide on the west side and ate lunch before starting up.

About 12:15 p.m. we started up the sand and we needed about 30 minutes to get to the top. We clocked ourselves down the same way later in the day at five minutes for this slope. In another 15 minutes we had reached the saddle between the south peak and the middle peak. I noted that we had gone up toward the

middle peak when I had Reider Peterson and Norvel Johnson with me, but we had given up trying to reach the north peak by this route without attempting the middle peak. Although it is lower than the other two, my impression was that it is the hardest climb of the three.

After a short scramble along the ridge, we had to choose the east side or the west. I couldn't see very far ahead on either, but the west seemed to lead upwards more consistently. I tried a direct route but gave it up. I feel sure that Allyn or Donald could get up there, but I came down and followed Bob around farther along the west side. We soon came to the end of that ledge, but just before the end, there was a chance to try to go up at a crack. I couldn't seem to pull up well enough to reach a place for my knee, so Bob leaned against the wall and made a cup with his hands at wrist level. With this step, I got up. I intended to come down and do the same for him, but while I was checking out the top rocks, he had made it by himself. I built a cairn of crumbling rock at a place that may be two inches lower than another block, but I was able to get on top of this slightly higher one also.

There was a way down on the northeast side that seemed to go all right for the 30 yards that I could see. There was plenty of exposure, but I took it very slowly. I had no real trouble in getting back to the ridge south of the summit by a route that is easier than the one we had used for the ascent. On our return we went lower and caught the old trace of a road, but we left it to go out on a point or two on the light colored terrace above the junction of the Paria and the Colorado. It was interesting to see the thick muddy water mix with the clear. They stayed apart until caught by the Paria Riffle.

Before we got off the slope, Bob called my attention to four domestic sheep. Since there were no others around, we guessed that they had strayed from some Navaho flock and might well pass all their days in freedom.

The light rain had stopped before time for lunch, and we felt that the day was well spent.

Towards Lonetree Canyon

[March 8, 1969]

Allyn Cureton had visited a ruin that Euler had discovered from the air, and Allyn told me where to find it, below the Tapeats on the west side of Lonetree Canyon. Unfortunately, I thought I could find Lonetree without taking the map along.

I left the Kaibab Trail at 8:00 a.m. and found the trail not too bad. The snow was deep near the top, but the wind had piled it deeper at the outside edge of the trail in a sort of cornice. Hikers and mules had formed a rough path in the deep snow. A little lower the clay was frozen in a rough surface. In fact the day was so cold that in the shade there was no melting as low as the rim of the Redwall. Below the three and a half mile post, a little below the last switchback of the Redwall descent, I left the trail and went southeast into Cremation Canyon. For a time I was uncertain whether to try to go down the Tapeats narrows in the west arm or go to the south. I ended by going south of the major cliffs but I found a way down into the east branch without going too far out of the way. About here I encountered a group of eight fine mule deer. Although they weren't very close, all seemed to be bucks with fine racks. They watched me for a time and then went bounding uphill and out of sight over a ridge.

Soon after I crossed the bed of the east arm of Cremation, I came on a good burro trail. This may be along the original Tonto Trail. As I now read the map, I was too far south and too high to be on the Tonto Trail until I got across to the east of the bed of Cremation. On the return I found that there is a way to get down into the bed after all three arms have come together. One can get up on the west side rather directly, and I found an interesting trail that goes east from the bed and stays below the Tapeats, at least to the next cut through the formation. On the return, I detoured along this lower route for ten minutes. It became indistinct but I had already assured myself that one can get through the Tapeats farther east.

When I was below the ridge of Redwall that projects farthest northeast from below Pattie Butte, I chanced to look up at the right time and saw a fine window near the top of a fin of limestone. It is broader and larger than the similar one to the west of the Kaibab Trail. I got a better look and a photo on my way back.

Shortly after passing beneath this ridge, I had good views across the river. I could see that one should have no difficulty in coming off the plateau and getting down Zoroaster Canyon. The surest way would be to follow the ridge separating Zoroaster from Clear Creek and then come down to the bed from the east, but there may be a way to leave the plateau a little farther west. Here there is quite a bit of bare granite that may be a little too steep.

A little farther east I could look down and get my clearest view over of the mouth of Clear Creek with its fin of schist projecting into the current and making a landing at the mouth about impossible. I could see every bit of the way that Finicum and I had come down in a minor canyon just east of Clear Creek and I had a fine look at the beach where the Cal Tech Party camped. I saw that it is quite easy to get around the corner into the Clear Creek slope and reach the bed a bit upstream from the mouth, but one has to get through the Tapeats in the same place Don and I came down. I think this is the valley where George Billingsley found an Indian ruin, but it may be the larger heading beneath the saddle of the Howland's Butte. About here I became confused and thought I could remember that Lonetree Canyon came down to the river west of the mouth of Clear Creek, and I returned to look for the ruin west of where I was. After studying the map again, I saw my mistake after I had reached the ranger station. I had been rewarded by seeing the high window, the old trail below the Tapeats, and some fine views of the river, but I'll have to go again to see the ruin. I didn't take time to check the seep spring in the high shale near the end of the point above Cremation. It shows better in the summer when the leaves are on the trees.

Lonetree Canyon
[March 29, 1969]

Joe Hall and his family were at Grand Canyon visiting the Larry Hendersons Friday evening. We were Joe's guests at Bright Angel Lodge for dinner and then we had a good visit at Hendersons. About the middle of the evening along came two cavers, Dave Nelson and Bill Peachey. They were going on a non caving trip down the Tanner Trail and out the Grandview Trail. We found a lot to talk about. After a night at the recently opened campground, I had breakfast at the Hendersons with the Halls. The Halls were going to take their time starting a week long backpack over to Clear Creek, but Larry Henderson and Bob Packard came with me. We started down the Kaibab Trail about eight and reached the place below the

white switchbacks in just over an hour. The head of the trail was still frozen, but it was in fine shape all the way. On the return, we had to dodge just a few muddy spots.

We crossed Cremation Canyon above the main Tapeats outcrops. It worked out rather well, much better than when we were returning. On the return, I tried to follow the map version of the Tonto Trail. I believe we were correct, but we had about three deep ravines to cross. Rather than cross all three one after the other, if one wishes to come to the Kaibab Trail where the Tonto crosses it, there is only one ravine to cross, and it is no deeper than two of the arms higher to the south. I was doing it the best way without realizing it on my trip several weeks ago.

When we came to the place where I had looked up at the window through the Redwall, the others would have missed seeing it if I hadn't called their attention to it. It doesn't show up at all well from the trail. Something that Larry saw much better than I did were the numerous sets of deer antlers. Perhaps they had been shed just since I had been down there a few weeks ago.

The day was warm but not too bad for good walking and we found ourselves approaching Lonetree almost an hour ahead of the time I had been close on the previous trip. We kept to the best trail instead of going out on the points for good views of the river and for photos as I had done before. We entered Lonetree near where the Tonto Trail crosses it and then walked down the bed. Bob stayed up near the top of the talus at the immediate base of the Tapeats while Larry and I went down the middle and checked for water. We had decided to see what the ravine would be like where it met the inner gorge. As we neared this transition, I left the bed and went over one spur to the east and then went up and out to the west. I was able to walk down farther here than the other two could go down the bed. I could see a short distance upstream and then by going over a spur to the west, I had a good view of the mouth of Clear Creek.

If one were to try reaching the river at the mouth of Lonetree Canyon, he should go to the east of the drop off. I am rather sure that one could go down a route that slopes into the lower part of the wash not far from the river. It might make an interesting one day return to go down here and then return to the rim via the river on an air mattress and go up the Kaibab Trail.

In going down the bed, Larry and I came to a big old cottonwood tree and lower we found water running along over the bedrock. When we were through with our inspection of the drop off area, we went up to the base of the Tapeats on the west side of the canyon. Even before we reached the base of the cliff, I happened to be ahead for the moment, and I saw the ruins. There were about four rooms side by side against the cliff base and just to the north a row of neat storage bins. As usual these were better preserved than the rooms. We could get up the Tapeats immediately to the south. Larry called our attention to the many Mariposa lilies that would bloom soon.