Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (March 17, 1973 - March 2, 1974)

Trinity and west on the Tonto and Shiva Redwall [March 17, 1973]

My main purpose in starting on this trek was to climb Claude Birdseye Point with the additional project of scouting along the ridge north of Ra for Stanton's camera position for his highest picture. Neither of these was accomplished but some substitutions made the trip quite rewarding.

Gerrit DeGelecke came to my office to get some information about the Little Colorado shortly before I was to leave and he accepted my invitation to go on this one. He was a good hiking companion and in coming up the South Kaibab Trail at the end of the trip, he reached the top an hour sooner than I. In spite of his superiority he let me choose the route at all times for the rest of the trip.

Dock Marston had once furnished me an old map that showed the trail going up from Bright Angel Creek and over into Phantom. It also showed a fork from this trail going around the south sides of Cheops and Isis above the Shinumo Quartzite. I thought that it might be the best way to get into the upper part of Trinity even if the trail should now be obliterated. After going up out of the inner gorge at the north end of the campground through the Tapeats west of the first granite ridge, we followed the cactus studded hills toward Phantom and then stayed above the Shinumo around the south side of Cheops. It is sure that there has never been a trail along here and the footing is very bad with lots of rocks and cactus. By the time we got to the west side of Cheops we were very sick of the route, especially since we had to cross a steep slope of debris and would have to go quite close under the Isis Cheops Saddle before even starting around Isis. When we found a break through the Shinumo west of the south end of Cheops, we were happy to be able to get back into the shaley bed of 91 Mile Canyon. When we got to the top of the Tapeats well below the upper end of the valley, we should have done what I had done on 8/19/59, crossed the arm of Trinity starting below the middle of Isis at the fault but instead we chose to get past the Tapeats cliff to the right at its head.

By using this route, we ran into the hiker whose footprints we had seen off and on. It was Anthony Williams and he told us that there was no water where I had found it twice, at the highest showing of Tapeats in the bed of the arm below the Isis Shiva Saddle. He said that there were some rainpools higher, however. I led Gerrit down to the place where I had camped with rain pools twice (8/19/59 and 4/18/65). There was no water, so we had to decide whether to go up or downstream. I decided on going down, because I was sure that there would be a seep at least. A little north of the canyon through the Tapeats that heads between Horus and Set, I noticed a seep that fills several pools for 50 feet of exposed schist. Allyn and I hadn't seen this when we walked up in 1965 so it may get covered by gravel occasionally. This water had a slightly salty taste and had a laxative effect on me, but we camped here. We were able to camp under a fine overhang at the base of the Tapeats to the southeast. This gave us complete protection from some rain that fell on Sunday morning. I noticed a crude rock shelter under a neighboring overhang to the north of ours. I couldn't say whether this was done by a prospector or by an Indian. Our route to this point had been poor and it took us five and a half hours to reach the place from Bright Angel Creek.

Early Sunday morning we waked down Trinity. It took about 15 minutes to reach the confluence with the east arm and about 30 minutes more to reach the place where progress is impossible and the creek goes over falls in a very narrow slot. Water was running in the bed off and on most of the way below the confluence and it seemed a bit less brackish than our spring near camp. We got back to our overhang in time to keep dry during some showers and we read Time to pass the time. The weather brightened as we were finishing an early lunch, so we took a half day walk along the Tonto west of Trinity.

I took quite a few pictures of the river with an emphasis on the mouths of Trinity, Epsom, Salt, and Monument Creeks. I could see where I had stopped walking along the base of the Tapeats on the east side in 1959. There seemed to be a possible climb down from the end of my line at that time. Gerrit called my attention to a very old rusty five gallon kerosene can lying beside out route near the rim not far west of Trinity. (The can was left in 1919 by the Davol Party surveying for a cross canyon tram. See Life of Stephen Mather.) We missed it on the return. We kept quite close to the rim as to see the river. Epsom, Salt, and Monument stirred old memories. At Monument we saw numerous hikers camped mostly at the east end of the beach. At a point on the east side of a small ravine east of 94 Mile Canyon, we considered the possibility of climbing down through the Tapeats. It looked hard, and then we found an easy way to get down through the ravine itself. One could certainly walk the slope down to the river here. We were at the end of our time allowance, so we didn't do more than take pictures of this route. On the way back, I happened to look up to the rim of the Redwall when we were in the bay just west of Trinity and I saw a neat natural bridge in the rim of the Redwall. This bridge could probably be reached since the break in the Redwall facing the river southeast of the Tower of Set can probably be climbed. The span is perhaps 40 feet and the opening is broad in comparison to the height.

On the return I saw a violet in bloom, the only one I have seen in the Grand Canyon. Quite a few flowers were already out, but the real show will be later. This has been a wet winter, and all desert flowers will be fine.

On Monday Gerrit and I got off about 7:10 a.m. and reached my former campsite at 7:40. We were carrying our full packs and I can't explain how we were able to get to the top of the Shiva Isis Saddle in an hour and 25 minutes compared to my time in August of two hours. Perhaps the cold weather helped that much. Just below the rim about 100 yards west of the low point of the saddle, I spotted a cave and I checked to see whether it would be a warm place to sleep. Instead I found it to be dripping and forming small stalactites. We set Gerrit's plastic sheet and sauce pan under the drips to get a water supply for camping Monday night.

We proceeded with nearly empty packs and watched for rain pools. In spite of the showers the preceding day, there were almost none of any account. The going was rougher than I had remembered and I was discouraged by the thought that we were much slower than I had been with Cureton in 1965. I hadn't reread my log, or I would have seen that we were not so much behind schedule. It took us two and a half hours to walk a bit beyond the gully that drains the southwest half of Shiva. Here at 1:00 p.m., I took stock and decided that if we persisted in climbing Birdseye Point, we would never get back to our bedrolls before dark. Just after we turned back, I checked the big ravine to see whether there might be water at the base of the 60 foot fall. There was no good sized pool, but a fair stream of water was coming

down and a person could get all he wanted. It would seem that this is melted snow water from the top of Shiva, so it would be the place to come for camping in February or March. If Gerrit and I had brought our packs here, we could have climbed Birdseye the next day. We had eaten an early lunch where some water was trickling through the shale about one hour's walk from our bedrolls. Two of the three little basins we built when we stopped at 11:00 a.m. were dry by afternoon.

When we checked the water system in the little cave just below the rim of the Redwall, we found that Gerrit's pan and plastic sheet had collected about a quart and with what we had brought back in our canteens, we had a good dinner. There was only about a cupful more on the plastic sheet by morning, so either Gerrit hadn't set it right, or the drips were giving out. We got down to rainpools in the arm of Trinity before we got dry.

I regret not having inspected the ruin that Davis had found just east of the first promontory from Shiva. We didn't walk high as he did. Once I experimented with this and was soon way behind Gerrit who remained low. Most of the deer tracks were low. The deer are numerous along here and also down on the Tonto west of Trinity. We found quite a few discarded antlers. Gerrit found a set of antlers fastened to the skull along with the backbone. It would also have been interesting to walk around the base of Isis and perhaps look at the route to the top, but by this time my feet were hurting in spite of tape around most of the toes.

When we had gone out along the Tonto west of Trinity, I had looked down on the bed of Trinity and had wondered whether we had gotten low enough to be in an open part that can be reached, I feel sure, by an easy walk over the intervening ridge from Mile 91 Canyon. When we left our camp near the Shiva Isis Saddle, I wanted to check this idea before we headed back to civilization. Near the top of the Trinity Creek arm from the Shiva Isis Saddle, there is a steep place where formerly I had gone to the west out of the main bed. Both going up and returning this time, we climbed past a chockstone in the main bed. I prefer it to the other. It was an easy walk down through familiar surroundings to the junction of the Isis arm with the main arm. Here we left our packs and went on down, in about 30 minutes, to the jumping off place in the spooky narrows. We were not far enough toward the river to be able to walk over the ridge into Mile 91 Canyon, but just upstream from the dropoff there is a debris filled ravine going up to the base of the Tapeats. We decided to see whether it is feasible to climb to where I had been along the base of the Tapeats in 1959. It was sticky in two or three places, and I would want to let down my pack with a rope, but we could do it. Gerrit was waiting below to help me if necessary at the hardest place, so I didn't take a long walk south at the base of the Tapeats, but I am sure that I was where I stopped in 1959. It is doubtful whether the use of this route would save time in comparison to going up 91 Mile Canyon and over to Trinity higher up, but it is an interesting climb.

In leaving our lunch site we went up the arm from Isis and turned into the access route to the right to get up through the Tapeats. Then I made the mistake of heading for the top of 91 Mile Canyon instead of going to the break in the Tapeats directly. We could have turned and gone into the very head of 91 Mile Canyon, but we preferred going to our right and getting into it farther south. Instead of contouring as Allyn and I had done in 1965, we stayed in the bed and then turned up the arm that leads to the shale saddle to the east. I believe the bed is faster even though you lose altitude. East of the saddle we dropped

down the bed until we came to the ledges and then we contoured into the arm of the drainage that comes from the east side of Cheops.

Allyn and I had seen deer head uphill to a break in the Shinumo cliff in the direction of the descent through the Tapeats to Bright Angel Creek. We wanted to camp at water pockets we had seen in the soft red rock beds, so we tried this access to the top. It worked fine with a detour out of the main ravine to the south near the top and then a cross over to the north at the very top. It took us 35 minutes to go from the bed to the top and then about ten minutes to get to where we wanted to camp. I had predicted a trek of four hours from Trinity over here, but it was really only three hours and 25 minutes.

The weather had alternated between fine and threatening all day, so we found a nice looking overhang and spread out our beds. We got fires going and I cooked soup in a shower. After looking up, the weather really got wet and we put the plastic sheets over as well as under the bags. When it was completely dark, the rain suddenly came down hard. Before long, water was sluicing down the rocks and running down under our roof. It soaked my trousers that I had jammed back against the wall. Soon the bags were thoroughly wet underneath and we were cold. About 9:00 p.m. the rain stopped but the storm born stream in the little valley continued to roar for two more hours. Fortunately I had a can of Sterno so the wet wood dried and started to burn. About 2:00 a.m. I went back to bed with newly dried trousers and parka and slept a couple of hours before my wet knees woke me again. Before five I revived the fire and Gerrit and I spent the last part of the night around the fire again.

The trail down to Bright Angel Campground seemed quite familiar and easy and we were there in 45 minutes. The trip up the South Kaibab Trail was unusual for me because I saw four bighorn sheep at close range, about 30 yards off the trail west of the sign for Bass Limestone. They were two ewes and their fairly large lambs. I went up the trail and came out to the edge of the cliff only 30 feet away from them. When they took off, one lamb didn't want to jump down five or six feet to a lower ledge and went a little farther then the others looking for a better way. I spent over five minutes observing them before they were too far away. The top half of the trail was mud and snow, but I was able to get up in four and a half hours with no worse feeling than weariness.

Seal Head Rock near Mystic Spring [April 21, 1973]

I told Betty and Roger Field where Mystic Spring is located and confessed that I couldn't locate Seal Head Rock, shown on Page 153 of In and Around the Grand Canyon by James. On their one and only visit to Mystic Spring and the Bass Camp just around the point to the north, they came back with the location of Seal Head Rock. They told me that it isn't a landmark standing above the prevailing level of the Esplanade as I had thought. It is inconspicuous since it is in line with the rest of the Supai rim rocks and is about 75 yards south of the spring, right where the trail south from the spring turns left to go up on the open area that forms the surface of the Esplanade.

With this sort of information, it was no trick at all to find the site. It was the first time this season when I thought that the road west from the village might be safe, especially since I now have the assurance of being able to shift into four wheel drive in the Jimmy. The road was quite rough and it was still a bit

muddy in a few places, but when I reached Bass Camp, I found that various two wheelers had made it. There were about five vehicles parked there.

Although showers and wind had been forecast, the day was fine. I got from the Visitor's Center to the trailhead in about an hour and 20 minutes and started down by 9:30 a.m. There was very little snow on the trail, and when there was some, other hikers had trampled a track that had melted to the bare ground. I had intended to bring my black and white picture of what I had thought was a bit of a dam built by W. W. Bass to catch water in the bed of the first draw. I had taken this on 7/6/58 but I have never been able to spot any remains of a dam since then. I want to go down this trail at least once more, so I hope I'll remember to carry the picture the next time.

The trail is well marked by cairns now and it gets enough use to make it clear. At the narrowest part of the ridge separating Bass Canyon from Garnet Canyon, I met two hikers, Jo Anne Varnum and Eric Oleson. We had quite a little visit and they were glad to meet the author of the guide Grand Canyon Treks and I was gratified to meet some more people who liked it. They asked about Indian ruins and were chargrinned to realize that they had walked past the ones up in the Toroweap without noticing them. I also told them where to look for mescal pits. One is just to the west of the trail and south of the east arm of Garnet. I noticed it as I passed when I was going down, but I walked right past without seeing it on the return. There are two big ones below the Supai rim on the west side of the north arm of Garnet.

I followed the trail as it skirts to the west of the head of Bass Canyon but branched off toward the right slope of Huethawali. This is south of the juniper and pinyon trees in a clearing covered by blackbrush. Naturally I followed a bit of a trail and paused just before the route was leaving the flat and starting up the broken ledges. I may have been right by here before, but this time I noticed two clear outlines of rooms. Part of the walls are still two feet high and show a right angle. They are about 50 yards north of where a shallow ravine comes down to this flat. Something I didn't notice until I was coming back from Mystic Spring and was trying to locate the two rooms again was another mescal pit. It is about 100 yards north of the rooms.

When I was near Mystic Spring, I found the hole in the rocks that has the tunnel going out on the level of the camp. I climbed down getting some assistance from the redbud tree in the bottom. The spring was flowing about as it was last spring at this time, but there is no basin. One should chisel a basin in the sandstone or build a dam. I found Seal Head Rock and took care to line up everything as in the picture of James. A few yards southeast of the rock is a neat little natural bridge, about seven feet in span by four feet high with a couple of yards of space behind.

Since we were having a couple of friends for dinner at 6:30, I had to start back. I found that I still can cover the ground about as well as ever, and I reached the car by 3:00. I got home a bit after six.

Port Hole and Grand Scenic Divide [May 5, 1973]

Years ago I had noticed a spot of light showing through about 80 feet below the skyline north of the end of the Grand Scenic Divide and south of Dick Pillar. I wanted to see it close up and discover whether the

fin of rock was really thin or whether the hole might be all that showed of some winding tunnel. I got started a bit later than I had two weeks before. For one thing, I had an interesting conversation with a man who was getting a permit for a month long backpack to the Hindu Amphitheater, Steve Coney. He and two friends are going to carry huge packs to Crystal Dragon and really explore the place. I told him some things about the area, but I regret that I didn't urge him to check the S H K route up by the Tower of Ra. They were taking a rope and had had some experience rock climbing. Coney lives in a cabin south of the Elk Mountains in Colorado that is snowbound six months of the year. He uses skis to get supplies. The road to Bass Camp was in fair shape and although rain was predicted, I didn't think enough would fall to make it bad. I got started down at 9:45 a.m. and was at the large cairn on the Esplanade 35 minutes later. I noted the position of the mescal pit nearby, about 50 yards to the northwest of the cairn. I took the shortcut off the Esplanade through the notch where the rim is low between Bass Canyon and the Garnet Canyon drainage. Just below the rim you have to go east for 10 yards or so to the crevice where three logs help you down. The one with the nail in it is still there but it has fallen down. I went to the trail and used it to get to the rim of the Redwall. It looked slow to try to keep up at the right level in the Supai, just below the top massive cliff. As I headed the gorge I checked a cave opening about 50 feet down in the Redwall. It would have made a dry shelter, but it was only 10 feet deep.

The walking along the Redwall rim is relatively easy here for some distance, but I figured that I should be getting up to the right bench of the Supai at the second draw north along the east side of Bass Canyon. Here the rocks are tumbled together making a corridor clear to the top of the Esplanade. I found myself needing to backtrack once to get up to the base of the top cliff.

When I was still on the Redwall rim I had a shouting conversation with a lone hiker down on the trail below. I learned that he wanted to get to Elves Chasm and I contributed some advice. He finally asked whether I could be Harvey Butchart, and he said he was going by my book. His first name was Del and his last name sounded like Harmony. He was from California and I had met his mother driving a Blazer back from the trailhead.

The rain with some snow pellets started about 11:00 and I was wearing my poncho for more than an hour. It got in my way when I had to climb up the ledges and progress north was as slow as I had expected it to be. After 12:30 p.m. I was getting near Dick Pillar and finally glimpsed the small angular hole 30 feet up beyond a higher ledge. I might have been able to climb to it just south of the hole, but it seemed a bit dangerous so I put down my pack and went north about 75 yards to an easier place. The ledge back to the hole wasn't bad and the view through the hole was striking. The hole is almost rectangular, about four feet by five feet high and only about six feet through. My pictures from here will be dull because it was raining and snowing off in the distance.

I returned beneath the top cliff of Supai and then climbed to the Esplanade at the first chance, back where I had left the rim of the Redwall. There was a bit of hand and toe work near the very top. I could follow a fairly good deer or faint burro trail most of the way back to the Bass Trail. When I was near the streambed draining the west side of Fossil Mountain, I came to a mescal pit and found another on the south side of the biggest wash from the same bay. Just to the southwest of this latter mescal pit was a crudely constructed storage bin. If there had been any adobe mortar, none was left.

I got to the trailhead at 3:45 and visited with a group who had taken a five day hike with two children, the younger only seven.

Vesta Temple [May 18, 1973, cf. 5/14/72 and 6/11/72]

As we noted last year, we should have slept at the car on the Park Boundary Road 1.3 miles west of the drift fence and started at dawn. We, Lee Dexter and I, got our permit after 8:00 a.m. and left the Jimmy on the Boundary Road about 1.3 miles west of the gate through the fence and started at right angles to the road a couple of minutes before 9:00. We looked at the compass to get the direction at right angles from the road and then steered by looking at the sun. This time we reached the rim about 100 yards west of the two cairns that now mark the Bortle descent. We used my 120 foot rope as described in last year's log and followed the same route below. This time, at the base of the break where you get off the ledge at the lowest hard place in the Kaibab I noticed several pieces of dead wood which had been placed there a long time ago to assist in the climb. These might be used to date the construction of the mescal pits. It is interesting that these obscure routes have been found and then lost, perhaps many times.

Our route finding last year paid off and we kept well ahead of the schedule then. I had brought a second rope that was at least 60 feet long and at the Packard break through the bottom of the Coconino we tied it better than I had tied the 50 foot rope last year with Donald Davis. I have changed my mind. Although I think Doty could do this free, Lee and I were glad to pull on the rope in getting down and up here. Of course there is the Davis route about 50 yards to the northeast which is definitely a ropeless route. We went down the talus 50 yards to the west of the base of the Packard break and used the way off the talus ridge that Packard had found last year. It is slow and risky to get across some of the steep and bare shale and the whole way along the Hermit around to the farthest south bay of Topaz is slow going. We found one place where a sheep or deer had pawed into the mud for water, and at the branch of Topaz farthest to the east but not the one down from the Vesta Saddle, there were some trickles of water that dried on the bare Supai rock.

It took us about an hour to go from the car to the base of the Kaibab and another hour from there to the Hermit below the Coconino descent. In another hour and a half we were to the seeps. I built little dams for the water and used it to supplement our respective gallons we had carried from the car. I had started to feel the heat by 11:00 a.m. and my appetite was shot, but we had some lunch by the water. We got on our way well after 1:00 and could see by then that the trip to Vesta would require a return to the car after dark. I suggested to Lee that he leave me and make sure that at least he should succeed, but he turned down this offer and stayed with me, resting when I had to.

Travel along the Hermit gets easier after this and it takes a little over a half hour to get from our seep to the saddle south of Vesta. Walking along the east base of Vesta is also relatively fast. We noted another mescal pit over here and Lee was amazed that the Indians got around to so many remote areas.

The climb up the talus at the northeast end of Vesta and the route up through the Coconino along the ridge to the south isn't particularly hard. Packard had done this only weeks before when he came in on a two day hike from Drippings Springs, and he had told me that it is unnecessary to do any pull ups like Doty

described. There were places where we had to look for a route, and I am sure I identified the place where Bob went along a little ledge on the west side of the spine. Climbing up at the south end of this small and exposed ledge needed the hands. Very soon after this difficulty we had to go around on the east side where we found a vertical chimney. Fortunately there are good footholds on the walls and I had no trouble in getting up behind a slab that has fallen across this chimney. This Coconino route doesn't seem as hard as the Shoshone Point Route, and the way through the Coconino north of Jicarilla Point calls for more nerve. There were no difficulties in getting to the top of Vesta after this, but the route is interesting with exposures of gypsum clay and some ledges through the Toroweap that need bypassing.

We reached the rim by 9:30 p.m. in the dark and finally found the car after 11:00. (We found a broken down cairn at the Vesta Saddle. Dexter found a fern fossil in the Hermit past the south end of Topaz and brought it out. He also showed me a near fossil footprint on a piece of Coconino too big for easy carrying.)

Nankoweap area [May 29, 1973 to June 1, 1973]

I had four days to do something, so I got Bob Packard interested in going to Nankoweap with me. He wanted to climb Nankoweap Mesa and bring back samples of the Toroweap. My special ambitions were to climb Duppa and Cochise, the Redwall in Malgosa, and the canyon at Mile 49.9, right bank, and do the Redwall climb northwest of Seiber Point. As usual my score was far from 100%.

We got a fairly early start and found the Houserock Road in good shape. Someone had plowed through leaving ruts eight inches deep at one time, but now the road was dry. However, this was the first time that I had seen two of the dips running with snow melt water.

We left the Jimmy at 9:45 a.m. and went down the usual trail, the Saddle Mountain Trail, to the bed of Saddle Canyon. Here I noticed for the first time that the good trail continues across the wash and up. I thought that it might go along above the bed, which was running, and lead over to the saddle, a route that would be much better than our old way of going along the bed. However, instead of heading for the saddle, it went up and to the east. Instead of returning to the bed and continuing the old way, we left the trail and climbed through the rocks and brush up along the rim of the Coconino cliff. We found ourselves committed to getting quite high on Saddle Mountain before we could come down the way I had climbed the mountain before. When we finally came to a break in the Coconino cliff, we followed a deer trail down. We must have crossed my former route without knowing it since we descended to the saddle from the east. This near climb of Saddle Mountain and descent to the saddle took two and a quarter hours, so we ate lunch at the saddle.

The Nankoweap Trail along the Supai ledges was not as easy to walk as it had been in December, 1969, and I lost it a few times. The big snows have made it about as hard to follow as when I first went along it. There were a couple of seeps that would have made camping possible along this stretch. We got from the saddle to Tilted Mesa in two and a half hours in spite of the trail finding goofs. We went down the old trail through the Redwall which is now marked by quite a few cairns instead of using the deer trail that I used to consider better. Cairns now mark the precarious part of the trail where you go east along the shale

below the Redwall. After the first 50 yards, the trail is better and one has no trouble continuing around to the east to the descent through the Tapeats and down to the bed near the Butte Fault. Here we slept for two nights with only ants and little flies to bite us. No mice or other rodents bothered our food.

On Wednesday, Bob climbed Nankoweap Mesa between 5:20 and 8:00 a.m., and then he went and climbed Nankoweap Butte before returning to our camp by 4:30 p.m.

I wanted to investigate Billingsley's opinion that the Redwall can be climbed in the canyon on the right side of Marble Canyon, Mile 49.9. Bob had gone to the river and back to our camp in two and a half hours on Tuesday evening. I found that the walking had deteriorated after the great flood and also because there was three times as much water in Nankoweap Creek as I had ever seen. It took me two hours one way to cover the route from our camp to the river. I was prepared for slower travel along the river bank. I was surprised to find a deer trail along here most of the way. It avoided the worst of the mesquite by going up on the slope, but it was often overgrown with wild oats and bigger things. It amazed me to find three surveyor's stakes along here. About a half mile upriver from Little Nankoweap when I was high on the slope, my eye was caught by what I took to be a colossal fish sluggishly swimming toward shore. Then I realized that it was a beaver.

The first thing I noticed when I reached the vicinity of the reported Redwall ascent to the west was that the fault passing behind Sase Nasket hasn't produced a route up to the east. The Redwall is sheer and smooth. The next thing I noticed was two cairns at the mouth of Mile 49.9 Canyon, one quite large. A deer trail also encouraged me to think that I could get up this route. I had seen hikers footprints going up the riverbank trail, and there were some footprints going up the side canyon too. There were two short detours necessary to get past small drops in the lower shale. When a great fall stopped travel up the canyon, one could turn up a talus to the south. A short jog to the right got one into a similar ravine that led to a narrow slot in the upper half of the Redwall. It ended in an impossible overhang, but one could go along the base of the cliff to the right. Here I decided not to try going up a vertical crack with an awkward move to pass a chockstone at the top. I suppose a stronger climber would have done this handily, but I could see a way to proceed at a lower level around a corner. This involved moving carefully along a narrow and very exposed ledge. I soon came to a place where if I could climb down about 25 feet and up a still worse place beyond, I would have the climb made. Broken rocks were wedged together forming a vertical wall (I did this later, 11/11/74). I didn't like the looks of the place, so I gave it up. I would like to hear the report of the other hikers who left tracks along the bed below. I hadn't seen their tracks this high up, but I wonder who would build a cairn at the lower end of the canyon if the climb had proved impossible.

While I was eating lunch in the shade after descending, I watched a couple of boat parties go by. One was a flotilla of eight six man oar powered boats run by Wilderness World. I considered asking for a lift down to Nankoweap, but landing those craft would have taken some effort and time. The oars don't give as much control as even a small motor. If I had thought in time, I would have taken my air mattress along and floated down to Nankoweap. As it was, it took only one hour and 40 minutes to walk the distance. Even after a soaking in the pleasantly cool water of Nankoweap Creek near the river, I was back at camp just after Bob returned.

On Wednesday Bob and I started together to try to climb Duppa leaving camp again at 5:20 a.m. He and I both like to enjoy the cool of the morning for hiking. We put down the gear we didn't need to take for the day at the junction of the main arm and the one coming from Mystic Falls. Our estimate of the time required to go from there to the branch coming in from between Duppa and Swilling Buttes was exceeded before we saw the tributary. Climbing the slope to the south, we saw that we had just passed the place. Instead of showing as a dry wash, it ends in a flat, covered with canes and vines. We walked through the blackbrush upward and then into the streambed. There were numerous large rocks in the bed and a dry fall, so we walked up along the slope to the east much of the way.

Above this falls, the Tapeats looked more and more impressive. The valley we were in had a lot of charm with trees, flowers, and spring birds singing. As we approached the Tapeats narrows, it became a glen. There was an active seep with pools of water about one quarter mile above the fall, but it would be dry during most years. I had thought that there would be a way through the Tapeats near the bed and there was a deer trail around the final obstruction. From here on the walking was quite open although rather steep, on partially consolidated scree. Hutton Butte lived up to expectations, quite smooth and precipitous, a challenge like Buddha, Zoroaster, or Hayden, except that all of those go up past the Coconino. This would be a job for the experts with hardware.

I had hoped that Duppa would be our kind of climb, and I was right. For a few yards at the south end, one had to use the hands and move with care. At the end we went along the west side and then to the highest point, using a total of about three and a half hours for the trek from the creek level to the summit. We got down in about two hours. What a view we had from the top! Duppa is placed so that one sees a ring of buttes. Bob picked out a place where we might have had a chance to climb Swilling, near the southwest angle of the latter (we climbed here 10/14/73). One would have to go up either of two rather steep chutes at the end. I was afraid that there would be no good handholds and that we would be turned back in frustration, so we didn't attempt it. On second thought, I believe that this would offer a better chance than a ravine I had noticed on the north side last year.

We were back to our packs by 1:40 p.m. and after a chance to cool off in the stream, we carried them up the arm from Mystic Falls. It began to look more and more like rain, so we considered ourselves very lucky when we found a big projecting rock with space for two beds already smoothed out beneath it. It seemed to have been used quite recently. It is about 30 yards from the arroyo that goes up northwest of Seiber Point and about the same distance from the creek from Mystic Falls. West across the arroyo about 100 yards is a house sized block that rolled down the slope and came to rest on one edge. There is a broken bottle a few yards east of the big rock and about head high on the east side is an interesting inscription. Last year I was looking for it after Donald Davis told me about it, but I couldn't seem to see it. Now someone has scratched the lines so that it now looks fresh, and I couldn't miss it. The reading is No. 5, 1882. J.H.A. Beneath this reading is a fairly well done picture of a nude man in profile urinating. Perhaps J. H. A. was one of Walcott's assistants. He would have been an advance scout, since the Nankoweap Trail was finished on November 24, 1882.

This neat and almost rain proof campsite wasn't the only unexpected find. On the way back from Duppa, while Bob was making fast time down the bed of the wash, I went back down the terrace that we had used on the approach. Before Bob got back into the wash, we came to a ruin that showed several room outlines.

The two highest walls stand up well above the blackbrush. I believe that George Beck has charted this one. Then when Bob was in the wash, I found another site with walls almost completely tumbled down. The terrace west of the junction of the wash and the creek is on two levels. This second ruin that I spotted is on the higher one and is right on the rim of the terrace overlooking the creek.

While I was resting my sore feet at the protected campsite, Bob hurried upstream to see Mystic Falls and the intact ruins across from the falls. Before he got there, we had a shower of short duration. I did a little cooking during the rain. We had more rain before and after dark, but by putting my plastic sheet over my bed, there was no real trouble. The day was clear when we started out at 5:30 a.m.

I guessed that we would be at the place in the bed of the canyon where we would start up the south slope after an hour of walking. It was about one and a half hours and we had to do a bit of real climbing to pass one cliff in the Muav. Bob felt better when he removed his pack and pushed it up ahead. We had studied the area when we came down the Nankoweap Trail on Tuesday. I had Billingsley's and Davis' word that it would go. In fact, this route had come to be called the Huntoon route. I wasn't sure whether the way was up a straight crack or by a zig zag route farther to the east. From the trail across the canyon, we had agreed that the way would be to go up a rock slide, then east along the base of the cliff to a ravine. We figured that we could go up the talus in this ravine until we could move west along the base of the top cliff to a ragged area where we could climb the rest of the way to the top of the Redwall. When Bob and I reached the top of the rockslide, on an impulse we elected to go west to a crack. We had to descend a bit but at the lower end of the fissure were two fine cairns, so we knew we had someone's right place. There were no complications until we were nearing the top. There was a place where we handed our packs to each other so as to pull up more freely. I had resolved to stay on the rim of the Redwall and get around beneath the regular trail before going up through the Supai, but the way the immediate route looked, we angled up and went through more and more of the Supai before settling down to contour around to the trail. There was plenty of brush, but the going didn't average as bad as many places along the Hermit. We needed one and a half hours from the bed of the canyon, less than one hour to get to the top of the Redwall, and one and a half hours to go from there to the trail and up to the top of the saddle.

After a snack at the saddle, we went right down the valley into and out of the bed of the wash whenever it seemed advisable. There was rain and sleet shortly after we started on, and we tried to walk with our plastic sheets over our heads and packs. When we had gone about three fourths of the way, we picked up the old trail on the ridge between the two arms of the creek and followed it successfully. Again we saw tracks of other hikers, both going and coming. We took one wrong turn when a spur trail branched off to the left. It quit at a clearing and we turned back down to the bed and came to where the Saddle Mountain Trail crosses it. Even after the delays of handling our plastic sheets and then stowing them away and going off to the cow pasture, we needed only 95 minutes from the saddle to the car.

Cochise Butte and Point Chiavria [June 6, 1973 to June 9, 1973]

Bob Packard couldn't go and I didn't try to find another companion. I drove to the north rim on Wednesday morning and got my permit from Sophia Hall. I explained that I had checked Donald Davis' route last year down into the north arm of Lava just south of Hartman Bridge.

At one of the viewpoints I got acquainted with a tourist from Virginia, Bob Harry. He was about to take off for an 18 day traverse of the Grand Canyon in a dory with Martin Litton. The cafeteria wasn't open yet, so I had lunch on the rim at the Painted Desert Viewpoint. I left the car, as I did last year, at the paved pullout about eight tenths of a mile south of the saddle southwest of Point Atoko, and when I walked to the rim in over 30 minutes, I found myself to the north of the place to start down. Also as before, I thought I should start down before I came to the right place. When I got down through the scrub oak and locust thorns to the barrier ledge, I went through at the right break and noticed that someone has placed a small cairn on a nearby rock to aid the identification from below. It seems to be the only break for some distance and it is near the cliffs that protrude to the south of the access ravine. The break is choked with brush and seems not to be used by many deer. From above the marker is a bare platform rock just to the north of the crack.

You get into the ravine from the north where the slope is rather clear of brush. Last year I had hiked this route with only a pack for my lunch. This time with gear for four days, I carried a rope and lowered my pack past the tree trunks at the chockstone. With the rope for handholds, I could let myself down using only toeholds in the crack under the chock. On the return I kept my pack on and used the rope for a grip for my right hand while I used my left on the rock. I also used the stubs where branches had been on the bare tree trunks for steps. There are two or three other places in the Coconino that seemed somewhat difficult for me now, especially during the return.

It was interesting to see good sized snowbanks at the base of the Coconino. White violets were blooming in the ravine and higher and flowers were attractive through the entire trip with cacti in great shape down below.

I stayed in the woods to the south of the ravine most of the way through the Supai. At one place I followed a clear deer trail for about 200 yards. I was sorry to miss it on the return. Struggling uphill through brush is always a lot harder than breaking through it downhill. Before you are at the very bottom of the Supai, the ledges on the south become impassible and it behooves you to go along the contour to the north and get down there. I believe that I went higher before contouring on the return than where I crossed the ravine on the descent. It is a rough walk over to where you start down the Redwall any way you do it.

I recognized the pinnacle that I had used as a landmark last year and started down the ravine to the north. A steep descent dissuaded me from going lower and when I crept around a corner to the south, I found that I was still much too high. From here on I saw my way, up a ravine to the south and around the base of the pinnacle. Details of the route seemed vague after only one year and it was almost as hard to find the route as it had been before.

It took about five hours to get from the car to the Juno Ruin where I made camp. There was water in the lower Supai and a fine flow halfway from the bed near Hartman Bridge to the ruin. There was water coming off the wall through the moss at the Shower Bath Spring on the left below the arm from Hubbell Butte. These sources would not be reliable during a hot dry season, but one should trust the bigger springs several hundred yards below Juno Ruin.

There was no threat of rain so I slept on a little sand in the open bed south of the ruin. It was the only night of my trip that the air mattress held air. I started on down the creek to the junction with Chuar Creek by 5:00 a.m. Getting out of the bed to the north I found a bit of pottery. The rangers in 1928 noted a pottery site about a mile east of Juno Ruin, which they called the Fort. Springorum and later Davis and Ellis had seen this pottery too. The next day when I was also coming down the valley I got out on the terrace to the south, farther upstream opposite the landslide on the north. For perhaps a quarter of a mile there was a well defined deer trail and then a well modeled metate of Tapeats Sandstone showed me that it had been an Indian trail 800 years ago.

At the mouth of Chuar Creek, I left my sleeping gear and extra food. There had been tracks of hikers coming down the main creek, but I saw no more footprints going up the bed in the direction of Gunther and points north. The lower part of this bed is exceptionally easy walking on shale gravel and clay. Galeros Butte looms above the bed like a pinnacle from Glacier National Park. After you pass the fork that leads up to Gunther, the bed becomes steep and rocky and then cluttered with fallen trees and brush. Sometimes I thought it was less brushy away from the creek. I roughly followed the main draw that leads to the notch west of Cochise. There was an impressive cliff forming the north side of this notch. On the way to the top of Cochise, there was another notch but also no way down to the north. Cochise from a distance had made me wonder why it had rated a name at all, but when I was on it I was more appreciative. I was lower than the top of the Redwall to the east and west, but not much. The geologic map doesn't show it, but there may be a graben through here. The north face of Cochise shows about all the height of the Redwall. After eating, I went down to the east and looked at the much lower notch there. Some deer tracks started down the woody slope making me think that this would be a real break, but they soon stopped. About 50 yards down the slope I had to do a chimney descent for a few feet and then 50 feet farther there was a 40 foot rappel. Below that the descent is clear, but there is no rappel less descent here. (A correspondent came up here from Kwagunt.)

I was interested in the easy walk up through the entire Redwall to the west of Cochise. It is clear that one can come off the Lava Kwagunt Saddle and follow the Redwall rim east and get into Churar Valley this way. There is also an intriguing way down through the Redwall on the northwest side of Gunther. The day was getting hot, though, and I had no ambition beyond getting back to the creek and sitting in the water. I put my bed where there seemed to be the most shade and the fewest ants near the junction of Chuar and Lava Creeks, but there were flies that bit.

On Friday I was away from this campsite by 5:10 a.m. By six I was leaving my entire pack by a big rock on the north side terrace and heading toward a break in the Tapeats south of Point Chiavria. I had in mind the project of completing my coverage of the suggested McDonald burro route from the plateau down to his mines at the mouth of Lava. I considered going up the streambed in the valley east of Point Chiavria because if there were a break in the Tapeats here, it would be more direct. I had to use my hands a bit in the lower Tapeats, and McDonald would have had to build a trail for loaded burros. Since the only sign that anyone had ever been this way is an old cairn at the insignificant top of Poston Butte, I am retracting my former support for this as the real McDonald Trail. If it were, there should be some sign of trail construction in the Coconino, some trees cut along the Hermit north of Point Atoko and elsewhere, and

some trail construction through the Tapeats. I think McDonald must have used the regular Nankoweap Trail.

I went around to the east under Point Chiavria and then looked at the possibility of a Tapeats break at the foot of the valley north of Chiavria. There is a good break across on the northeast side of the big valley east of Siegfried but I don't think it is where the geologic map shows either of two faults. The fault came through where I was standing at the brink of the Tapeats cliff, but there was absolutely no chance to get down here. The junipers and brush go right up the slope to the top of the notch that separates Chiavria from the rest of the ridge leading to Poston and Hubbell. Correction! I believe there is a fault cutting through the Tapeats where I stood with the north side higher, but this is different from the place where the Maxon map shows the big fault cutting through the Tapeats quite a bit farther north.

Walking below the top of the Redwall along the north side of the ridge leading to Chiavria required care but there was no real difficulty in getting to the far end where I built the first cairn. The climb through the brush and loose scree to the ridge had been the hard part. I came down the Redwall on the south side where the big fault cuts the ridge. It had been so many years since I did this just once with Dirk Springorum that I had some of the thrills of finding the route all over. You go down the ravine until you come to an obviously impossible drop below the Redwall and then you go to the east until it is no big deal to scramble down. I should have stayed on the ridge of slide material below right down through the Tapeats, but I began by angling toward my Tapeats break of the morning. Down at the brink of the Tapeats, I changed my mind and came back west to the place where the Tapeats is broken to the west of Juno ruin. I reached the creek by about 11:00 a.m. after leaving the tip of Point Chiavria at 9:00. I approached my pack from a different angle from where I had left it, and my landmarks weren't very sure. In fact I was wondering whether I would have to go beyond and come back before I would find it, but all at once I saw the pack less than 100 yards ahead, right where I was headed. I soon cooled off in the stream and ate lunch in the shade.

The idea of going out that afternoon occurred to me, but I felt run down after so much walking in the heat. It seems that I don't drink enough even with plenty of water in the canteen. I take extra salt, but I still come out dehydrated. My appetite also falls off and after several days of this hot weather hiking, I am definitely below par. What with my flat air mattress and a rustling in the night which I attributed to a big black centipede like creature, I didn't sleep too well. I should have been out where I had slept the first night, but the overhang at Juno ruin had given me fine shade all afternoon, and I was too lazy to move.

As I lolled around in the afternoon rereading the Reader's Digest that I had finished the previous day, I also noted the pictographs on the ceiling. The best is a white rectangle with curving handles at opposite ends, but there are also some rather vague smears of red clay several yards to the southeast of this prominent mark.

I got the earliest start of all Saturday morning, 4:45 a.m. The walking didn't seem too hot most of the way, but I was slowed by dehydration, malnutrition, and a shortage of sleep. The struggle upward through the brush and trees and across bare shale slopes made me think that trail hiking in the mountains might be a pleasant interlude to this sort of rough canyon pioneering. I got to the rim at 10:50, not much behind my prediction, but then I cut too far to the south to strike the road. It took me 40 minutes to reach the highway

and then 30 more to walk north to the car. I should have gone much farther north than I did where the valley paralleling the rim isn't so deep. It would have been better if I had reached the road near the dip and then walked south, since this distance is only 0.8 miles. This route doesn't appeal to me as much as it did last year. Anyone who goes down this way should brace for some very bad going, especially on the return.

The conglomerate just above the Redwall that I first noticed in Red Canyon and later north of the Tanner Trail, in Granite Park Canyon, and Matkatamiba, also appears in Lava Canyon above Hartman Bridge. It has the same brown matrix but the included pebbles seem to be somewhat larger than elsewhere.

Just west of Juno ruin there are some precariously poised blocks of sandstone seemingly ready to fall. There are striking towers in the Redwall on the east side of the upper end of the north arm of Lava Canyon. I also noticed some caves near the bottom of the top member of the Redwall in Chuar Creek on the west side of Gunther. With the flowers and the birds and rich vegetation, including some firs beneath the Redwall, this part of the canyon can compete with the very best.

Little Dana Butte [June 20, 1973]

Al Doty tried to climb Dana and gave it up, just about the only summit that ever turned him back when he really gave it a hard try. He had also given up Newton but when he came back with Jim Sears, they succeeded in getting up, only to find that it had already been climbed.

However, Ben Foster and 'Eric Karlstrom succeeded in climbing Little Dana last spring and they also found a cairn on top. Perhaps this previous ascent dates back to the twenties when Fred Harvey was taking tourists on the pack trip down to Hermit Camp and then to Indian Gardens and up (1919 Davol Survey Party).

I had looked at Dana from Mohave Point and thought that the west side of the notch might be easier than the east where Al had tried to climb (from above) and where the Foster Karlstrom team had succeeded. The latter had called part of their climb 5.8, obviously too hard for me alone. When Lee Dexter asked me to take him to the south rim for a one day hike, I was eager to have him help me on Dana. We took his friend, John Victors, with us even though John had broken his wrist and it was still in a cast. John and Lee had climbed Diana Temple with the cast on the arm, and I knew what sort of difficulties they had faced on the Diana climb. I didn't want to take on anything more ambitious than the route down the Kaibab from the rim to Diana.

There was some delay in getting John and we didn't get to the permit counter before 8:20 a.m., so we were starting down the Bright Angel Trail after the mule parties. The mule drivers seem to have been given some instructions about letting fast hikers pass, and it was a new experience for me to have them tell me we could walk behind the mules while the string was resting. Another sight was to see one string of mules pass at a certain place and have a string of pack mules go off the trail above a few yards and pass the saddle string. Lee, John, and I jogged most of the way to Indian Gardens and did this leg in 70

minutes. The day was cool and we felt fine. We were back on my proposed schedule when we started away from there by 10:00 a.m.

The walk around the head of Horn Creek was without incident. We noted that there is still a bit of running water above ground below the trail in the east arm of Horn. It was still showing in the heat of the afternoon, but I don't think it can be permanent for the entire summer.

We could see how to walk up a talus and get above the shale cliffs and the Muav to the base of the Redwall, and the Redwall below the notch south of Dana looked rather broken. I had convinced Lee that the west side should be investigated, and he wanted to do that even though I was in the mood for switching and trying the route used by Foster and Karlstrom. For one thing, he confessed that he didn't feel in the mood for any very strenuous and risky climbing this day. I could see that our timing wouldn't allow a real effort on both sides, especially since I had agreed to get John home before 9:00 p.m. We walked on around to where we could see the west side and immediately saw that it is much more difficult than the east side. We came back to a shady place just below the edge of the inner gorge and ate lunch.

It was 1:00 p.m. when we were back at the foot of the talus leading up to the base of the Redwall on the east side of Dana. Although Lee and John didn't share my ambition, I still wanted to see the difficulties close up. I agreed to reach Indian Gardens before 4:00 p.m., our original schedule, and see what I could do towards the climb besides. The others decided to play around below and experiment with photography. My shoes didn't grip very well on the talus, but in nearly 30 minutes I was on the bench at the base of the Redwall. It took me about ten more minutes to go along toward the notch. I was able to see if a place where the ledge has broken off was passable, and the real problems would be to get up to the notch from the ledge. I had to turn around to stay with the timing.

When I was down near the Tonto Trail, I saw a very old and rusty tobacco tin. The young men walked up from Indian Gardens in excellent time, Lee in 100 minutes. I took my present par of two and a half hours, still faster than the throngs of hikers.

Little Dana Butte [August 3, 1973]

After the slightly encouraging inspection I had made of the Dana Butte climb on June 20, I wanted to try again. Scott Thybony dropped in at my office and passed the time of day on Tuesday after we had come home from our 25 day tour. He had found a Pima point near the head of the Hance Trail. He had a week off from his work on the river and I invited him to go with me to try Dana again. With my agreement, he invited two other men, his brother, John, and Dick Parks who has a new job of teaching at the Verde Valley School. John met us at the Visitor's Center and Dick and Scott were waiting for me at the courthouse. We got to the permit desk and to the Bright Angel Trail in time to get started ahead of the mules.

Walking down was pleasant and fast and I still didn't feel the heat much on the Tonto. It took us only 80 minutes to get around to the place to climb the talus to the bench that leads over below the notch south of Little Dana. Water is still flowing in the east arm of Horn near the top of the Tapeats. There were two

small pools and the lower contained tadpoles. We ate a meager first installment of lunch in a bit of shade on the Tonto Trail. One of the men noticed a mysterious sort of frame of iron a few yards below the trail. We couldn't decide what it had been good for.

The heat really began to be felt as I climbed the talus. A few yards north of the place where the bench has a sort of barrier break, we were at a place where we could climb up through steep and rough limestone. Hands were needed and the exposure was impressive, but there was a fairly good way to get to the top of the saddle at the north end. There were three options at one place. Scott went up past some chockstones to the top while John and I made our way north at lower levels. Our two ways converged to a place where I found an old rope in place partially covered with gravel (from the 1919 Davol Party). Just below here we had found some shade and it was a good thing for me that we had. I got to feeling almost sick with the heat and a bit dizzy. I reclined as best I could and suggested that the others should go on without me. In about 10 minutes we were ready to move because I had recovered nearly to normal. The breeze felt good on top of the saddle. Scott went along the rugged profile to the north where the lowest point of the notch occurs. He reported that we would need to make a short descent by rope, and he even found another piece of old rotten rope at this place. We had my goldline climbing rope with us, but the more we looked at the way ahead up the ridge to the top of Dana, the less sure we were that we wanted to try it. I also didn't know about getting up the 10 or 15 feet of rope, but later Scott said that the wall wasn't perpendicular and that we shouldn't have been worried about that. There was a good place to tie the rope, and we could have used knots for gripping the rope. I wish now that we had gone on until we actually found a place too hard for me to climb. I have a feeling that we could have made the summit.

If we had taken an hour or more and finished the climb, it would have been a very long hard day. I really felt the heat as we walked the Tonto. I killed some time at the Horn Creek Spring getting some extra drinks. I had started away from Indian Gardens with two quarts of water, but I used more than that much in the next four and a half hours. We got to Indian Gardens at 3:30 p.m. and went on at four. At 6:30 three of us were at the car, but John had broken ranks. He had told us to go on ahead and we didn't realize that he had become ill. Scott went back to see whether he could help and to tell him that we were waiting. Perhaps it was something he had eaten, but he was 45 minutes behind the rest of us. We had a break with the weather finally. As we were reaching the Gardens a little rain fell. The clouds were heavy for the rest of the day and it was cool as we walked out. Otherwise, I am sure that I would have needed more than two and a half hours for the climb out.

Shivwits Plateau [August 13, 1973 to August 15, 1973]

Henry Hall came from Phoenix to go with me and we left home about 10:30 Sunday morning. After a lunch at Cliff Dwellers we had time to go to Saint George and then south toward Mount Dellenbaugh before camping beside the road. The weather was fine and I had a good night on the ground.

Near Mount Dellenbaugh we kept to the east at the fork and soon had the rough lava showing in the road. It was about the same as it had been in November of 1971. The low flat areas were all dry and not bad for driving. We switched back and forth from four wheel driving. There are quite a few gates to open and close and Henry was a real help, especially where a wooden gate was heavy. I remembered the turns

fairly well except when we opened a gate and kept right. Very soon we found we were in a clearing with old lumber stacked around. A good guess is that this is the site of the Parashant Lumber Mill shown on the 250,000 map.

Even in four wheel low I killed the motor once at the bottom of the ravine that discouraged Roma and me on 11/13/71. It was easy to back away from the large rock and go on, however. You feel a lot better with the rugged tires and the much lower speed. There were plenty of other rough places where we were very glad to be in four wheel drive. When we came to Shanley Tanks we recognized the place by our distance traveled and by the cabin that is shown on the 7.5 minute quad map, the Price Point Quad. A huge pine had broken and fallen across the road in such a way that it couldn't be bypassed. The ranchers will have to use horses from here on south until they can get a large chain saw or a powerful bulldozer.

On this Monday morning we put our lunches in the packs and started off to look for Price Pocket and Price Canyon. There was quite a bit of water in the two bigger tanks. We stayed on the road too long and completely passed by Price Pocket. Then we got to the bed of the canyon by a steep little scramble and continued down it. When we had been away from the Jimmy for an hour of slow walking, we came to a good waterhole. The deepest part was still two feet deep, but it could collect water three feet deeper before it would overflow. Quite a bit farther, just before the canyon takes a plunge over the Toroweap, there is another pool that was quite shallow but that could hold a lot of water.

While Henry waited I made sure that one could get down to this water. There is a deer trail on the west side. He also agreed to wait for me to check the possibility of getting down Price Canyon at this drop. It was brushy but quite safe over on the left side and I could see that there were no other difficulties down to where Price joins 209 Mile Canyon. If I ever want to go down 209 before they clear the tree from the road, I could start down Price. Then I could come back from the river via the Price Point Trail and arrive at the car very conveniently.

Henry and I backtracked up Price Canyon until we could walk up the east side. We waited until the brush seemed thinner but the loose scree was a drag. I knew that Henry had had trouble keeping my normal pace ten or fifteen years ago, but I thought that he must have improved while I am slowing down. It still seemed that he needs a lot more rest than I. On the plateau we headed for Price Point. It steepens toward the end but Henry wasn't prepared for the fine panorama as we topped the last rise. He said he had the same feeling that he experienced the first time he looked at the Grand Canyon.

I was prepared for this view, but it was all most interesting. I could see where Jorgen and I had been when we came up the Redwall on the Price Point Trail and had reached the top of the Supai. There was Spring Canyon and Indian Canyon with their drainages already cutting a big notch in the Supai. I could see where Jorgen and I had stopped above the Redwall on the right rim of Indian Canyon. Mile 209 Canyon was the dominant feature. Granite Park Creek and the many faultings east of the river only gave hints at the best way to come down to the east side of the Colorado. I moved to the highest point of the rim where the survey marker has fallen down in spite of the wires. I also looked for the way that Mr. Esplin had said one could start down the Price Point Trail. I rather thought he meant the break in the rim where layer after layer of lava is exposed and there are many hundreds of feet of slide material in the trough between the

cliffs. Still I thought a more comfortable and sure way might be via the ridge off to the south beyond this break.

When Henry and I walked back to the Jimmy, the sun was completely hidden by clouds. I recalled Dock's warning about the difficulty of keeping the course. The one thing I had intended bringing and had forgotten was a compass. Henry had brought his on the trip but hadn't thought to take it on our short hike. We occasionally could see Mount Dellenbaugh and also we could get a peek at Price Point now and then. Henry had stronger convictions about the direction than I had. My intuition concerning direction seems to be weakening with my age. Near the end, Henry thought that we were too far north and I wasn't sure of anything. We came out quite well, north of Shanley Tanks, but within sight of the car and cabin. It took us one and a quarter hours to go from the top of Price Road to the car.

There was a rain in the early morning and we were glad to seek shelter in the cabin and built a fire in the range for cooking. The rain gave me misgivings about going for an all day hike instead of getting out of the country, but the moon shone in the night and in spite of the heavy overcast in the morning, I got away by about 6:30 a.m. on Tuesday. Henry knew that he would make my quest of the Price Point Trail an impossibility if he tried to go with me, so he stayed at the cabin and read my magazine.

This time I carried Henry's compass for the return through the junipers. I left the road just south of the lowest tank and headed toward Price Point. In one hour I was at the break in the rim above the rock slide. Instead of going right out on the south tending promontory, I studied the rockslide. When I saw that there was no uncovered cliff, I started down. I sought out the places where there was loose but small material and slid freely. I got down to a juniper at the bottom of the fresh slide area in an hour from the rim. After this I kept rather low as I headed Indian Canyon, near the top of the Supai. A broad flat grassy area was a help in the right direction, northeast.

Where Indian Canyon sent short branches into the Supai, I retreated uphill and headed them. When I came east again, I was looking down into Spring Canyon. Along the Supai rim above the south arm of Spring, I came to my second mescal pit of the day. Under an overhang back of the pit was the remains of a crude rock shelter. The first mescal pit was in the Supai west of the grassy flat but I might have difficulty finding it again. Not far south of the rock shelter, right above the pass between Spring Canyon and Indian Canyon, a deer trail went down to the dividing ridge and up to the top of the Supai where Jorgen and I had stopped on 1/25/71. When I was nearing the top of the Supai east of the pass, I found trail construction and several cairns. On the descent I also found a broken horseshoe. From Shanley Tanks to this point took me less than five hours and I feel sure that I could get to the river in less than four more.

The day had been relatively cool with a cloudy sky, but I finished two quarts of water with my early lunch. I had two more quarts that just lasted until I reached the car by 6:15 p.m., but on a clear day I would have been in trouble.

There were surprisingly many small birds along the Esplanade and I was also startled to find a number of Ocotillo growing near the top of the Supai in Indian Canyon. When I was starting up the long drag at the break in the rim, I was warned by the buzz of a small rattlesnake.

In returning I used a more direct route from the ridge between Spring and Indian Canyons but then I made the mistake of going much higher than the meadow I had crossed on the approach. There were lots of minor ravines to cross and then I finally had to descend almost to the lowest level of the morning just to reach the rockslide. Going up I kept to the biggest blocks I could find to avoid loose material, but still the climb was slow. On top I checked the direction to the sun against the compass and came west to the road south of the tanks.

I was quite weary and sore footed after my 12 hour hike and was quite willing to take it easy the next day. Henry and I got a slow start and then walked to Dinner Pocket. The road junction is quite obscure. There is nothing but a few larger chunks of lava pushed out of the way to indicate a road at all. Over the crest of the rise it is more like a road. Dinner Pocket is first recognized by some corrals and a very old log cabin. The water was quite shallow with most of the hollow below the drop in the bed taken by silt. A trail leads down the small cliff on the north side to aid the cattle. We then walked south along the road until we thought that we could get a good view out to the west. A short walk to the rim gave us a very rewarding vista.

When we got back to Shanley Tanks, Henry decided to loaf while I looked for the real Price Pocket. From map reading it seemed to be farther north than where we had gotten into Price Canyon. I went down the bed of the valley south of the tanks. Almost immediately, where the bed dropped abruptly, I came to two connecting potholes drilled into the hard basalt. They both had water that looked rather repulsive and had numerous wasps flying around. The mappers might do well to show the other two lower waterholes as well as this one.

I was planning to wait until later in the day and then move down to Kelly Tanks to sleep with the object of getting to Snyder Mine and back early on Thursday. About noon we could see that quite a storm was dropping rain to the north and I decided that it might be well to get out of the area before the road became still worse. We found that the rain had been spotty, but there were long bad places in the muddy road. We used the four wheel drive for 17 miles until we were north of Mount Dellenbaugh and also at one more mudhole on the relatively good road quite a bit farther north. The Jimmy took a lot of cleaning before all of the Shivwits mud came off.

Big Canyon [September 29, 1973]

Roma and I wanted an outing starting after my duties of greeting people for Homecoming registration, so we elected to go out on the reservation and look at the access roads to Big Canyon. George Billingsley had told me what a fine hike they had taken down there in cold weather last winter. Most dirt roads were snowy and muddy at that time, but they could get near the head of Big Canyon, the tributary of the Little Colorado River from the right just above Salt Trail Canyon.

It had been over eight years since I had been off US 89 toward the Little Colorado and I was quite confused by the many roads that aren't shown on the map. I played my hunches, but for a time I didn't know whether I had already overshot the approach to Big canyon. George had told me of a Navaho Trail into Big Canyon where it is already quite deep, and my main purpose was to locate it. We ate lunch in the

Jimmy toward the western edge of a big flat. There were some low buttes of red shale to the southwest and I couldn't tell at the time, but we were east of where the south arm of Big Canyon starts being deeply incised. When we drove on we soon came to where the road doubles back in a wash to get up a minor escarpment where the Blue Springs Quad shows the figure 5000 at a contour line. The road goes northwest between an isolated hump and VABM 5467. Before it comes to the end of the ridge with the figure 5431, there is a chance to drive south. This road goes farther toward the rim of the canyon then the map shows, and you can park within yards of where Billingsley saw the trail that crosses the canyon. It comes down from the north midway between and north of the letters A and N of the name INDIAN on the Blue Springs Quad.

While Roma sat in the car and read a book, I went down the trail with a time limit of one hour for the investigation. The trail is badly eroded, but the slope is such that there is no difficulty in following it to the bed. The Coconino shows 60 feet or so by the time one is down to the sandy wash. Walking is rather slow because of the loose sand in the wash and the Russian thistle grows thickly everywhere else. I had time to start up the trail leading out to the south for a short way before I figured that half of my time allowance had gone. The day was warm, but I got back a little before I had said I would. I agree with Billingsley that the area is most interesting.

I really intended going to near the north arm and seeing where the college hikers had come out, but I took a turn to the west too soon. We drove past two super Hogans and headed on west toward the junction of the south and north arms of Big Canyon. When we came to the end of the track, Roma stayed in the parked car while I took a 40 minute walk down and up to the top of the knoll 5235 above the confluence. The canyon was several hundred feet deeper than where I had been before and I could look ahead and see it cutting into the Supai before the bends concealed the bed.

When we drove away from this place, I still wanted to go up near the north end of the north arm, but we got tangled up near a cattle tank. By the time we had backtracked and come out on the main road again, we could see that it would be quite late before we got home, so we came out to the highway. Acting on impulse, I took a different way out from how we had come in. At first it seemed that we were on a more direct route, but then the road turned north. We finally turned east on a minor branch and reached the good road that must have been built by the firm who installed the transmission towers. We reached the highway about nine miles north of Cameron. By either route, it is about 15 miles of slow, bumpy driving to reach the vicinity of the trail down into Big Canyon. Using the trail into the canyon, it should be possible to get from the car to the bed of the Little Colorado in one day. The students have shown that there is no possibility of going down the Redwall in the bed of Big Canyon, but one should be able to follow the rim of the Redwall around into Salt Trail Canyon and get down.

Third try for Dana Butte [September 30, 1973]

When I thought about the climb of Dana that had eluded me twice, I forgot how difficult it had seemed on the spot, and I figured that with a good climber to go ahead and hang a rope down, I would be able to make it. I was sitting at home, brave enough to go back and tackle it alone. However, Bob Packard, Christine Turner, and finally, Gerrit Degeleke decided to do it with me. Gerrit had climbed Confucius

Temple and had taken the course in rock climbing, so I figured he would be the one to go ahead and hang a rope down to me. Bob took his wife and Christine to Indian Gardens on Saturday afternoon and Gerrit and I were to meet him over near Dana on Sunday morning.

Gerrit came over to our house and we started for the canyon at 6:00 a.m. Bob had been given a hard time when he requested a permit to climb a butte, but he had the paper so Gerrit and I started down the Bright Angel Trail at 7:30. We trotted a good bit of the distance to the Gardens and got there in just over one hour. Perhaps this accounts for the bit of trouble I had with one knee later in the day. There was a bit of pain when I was walking the Tonto Trail back but after the rest at the Gardens it felt all right on the way to the rim.

Bob and the two women were waiting for us in the arm of Horn and he wondered how I expected him to climb the Redwall directly to the west. I told him that we weren't even in sight of Dana yet, but the more I studied his map, the more I realized that I have picked the wrong butte to call Dana. I have been thinking that the prominent pinnacle farthest to the northwest was Dana, but the old Matthes Evans map agrees with the new one in placing Dana as the large triangle of Redwall to the southeast of the saddle I had been on. I am sure that Eric Karlstrom and Ben Foster have climbed the one that I had called Dana. Al Doty was trying for the right one when he came along the Redwall all the way from the Bright Angel Trail and couldn't get down to the ridge over to the real Dana. It seems very logical to give the one I had picked a name like Dana since it matches Tyndall, Marsh, and Cope and it is more noticeable from any angle than the real Dana Butte. We might call the one I had picked Dana Junior until they have decided on a name.

We all reached the talus going up to the base of the Redwall about 10:00 a.m. and spent some time resting and eating so that we wouldn't need to carry any food high on the climb. I led the way along the high bench and then to the crest of the saddle south of Dana Junior. We all went closer to the lowest place on the saddle than I had been before, but I let Gerrit and Bob go to the far side of the last block alone. They reported that it would be no big deal to use one of our ropes to get down to the lowest place in the notch, but they seemed to feel the same way I did about the climbing up from the notch to the top of Dana, Jr. There seemed to be a series of hard places.

Perhaps in my younger days, when my shoulders and arms felt fine, I would have wanted to go on and struggle past the hard places pulling up past the bulges, but this time I suggested that Gerrit and Bob might like to go on without us while Christine and I made our way down. They spent some time thinking about the project and then returned too (Bob climbed this later).

The weather was still quite hot between one and two while we were walking back to Indian Gardens. I had plenty of water but still felt the heat, and Robbie Packard was feeling almost sick. She took almost a half hour longer to get from the base of our butte to Indian Gardens than Chris and I did. There was absolutely no water in the east arm of Horn as there had been on 8/3/73.

I showed Christine the Indian ruin just below the trail as you approach the Gardens and she pointed out an old spring wagon that is almost submerged in the weeds and grapevines north of the open part of the Gardens. I had never seen this before, but it must have been here for years.

We all came out in good time since it was shady and fairly cool on the steep part of the trail.

Route into Kwagunt and Swilling Butte [October 13, 1973 to October 14, 1973]

Lee Dexter and Scott Baxter missed the first ascent of Confucius and Mencius and they were quite interested in trying to do the first ascent of Hutton. I wanted to try Swilling where Packard and I had thought there might be a class three route. I offered to guide Dexter and Baxter down into Kwagunt via the Point Atoko Route that I had discovered 16 years ago through the Coconino and fourteen years ago through the Redwall to the bed of Kwagunt.

Tom Wahlquist and Gerrit Degeleke, who had climbed Confucius and Mencius this past Labor Day accepted my invitation to go and so did Bob Packard. I thought that the young climbers might be a real help to me if it seemed too hard.

We left our names and license with the ranger, Jack Fields, and then slept at what used to be called Two Rivers Overlook, the scenic viewpoint south of Vista Encantadora. In the morning we parked at the turnout to the fire road, E6, and were soon leaving the rim down the right bay to get through the rim cliffs. It was only two years since I had used this route to go to Siegfried Pyre and I didn't miss the way. The little spring at the base of the Coconino was running as well as ever, just a seep forming a small pool. More than two would have a hard time getting water for camping.

We kept as near the base of the Coconino as possible on the way northeast to the base of Point Atoko and saw a good pool of water after about 20 minutes of walking on the way out. For some reason I missed passing this pool on the return, a repetition of what happened on our Siegfried Pyre trip. There are occasional dense patches of brush that deflect one away from the base of the cliff. There were two or three bare ravines that had steep clay slopes. We were able to pass them rather high on precarious and narrow shelves at the base of the Coconino. Progress while we felt fresh was good and we got from the base of the access ravine to the base of Point Atoko in one and a quarter hours. On the return this lap took somewhat longer, about one hour and 35 minutes. Beyond Point Atoko I knew that we should go a lot lower, and we were able to follow a deer trail much of the way. We didn't seem to have to buck as much brush on the first day as we did on the second while returning. There was quite a bit of water in the upper part of the second ravine northeast of the Lava Kwagunt Saddle. We had left the car at 6:30 a.m. and had needed 35 minutes to get to the bottom of the Coconino and about two and a half hours to reach the saddle.

There were some barrier falls in the ravine down from the saddle through the Supai, but they were not difficult to bypass. Still we were wishing that we could find a deer trail. When we came to the Redwall rim, I told the group that I had gone right down the bed 14 years ago but that I was soon forced to do a hairy traverse along a ledge to the east. Dexter and Baxter, carrying their long ropes, ignored this warning, but the others, who had come in my car, followed me into the woods to the east of the Redwall gorge. It was slow and rugged and we tried getting down into the main bed. I had not remembered where I had gone back into the main bed in 1959, but I knew I hadn't used a rope and that the first climb out of the bed was the only place that I had felt nervous. After some bird dogging with Packard getting too low and

having to return to our level, we came on a deer trail that led us down and north. About where the Bright Angel Shale first appears, we scrambled down a break to the bed. This was right since there was no further obstruction in the bed nor was there another way off the bench farther north. We came down where the water seeps from the west slope in the shale and forms a running stream almost all the way to the Tapeats. We ate an early lunch here while we waited for Dexter and Baxter. After 20 minutes or more, they came along with the report that they had needed five rappels to get down the bed and that one of them had been down 75 feet. They had pulled the doubled rope down after them trusting that they wouldn't find a rappel too long for their rope below.

When we came to the Tapeats, I left the bed to go to the east a bit before I reached the lip of the highest fall and I had a rough time on the steep slope until we came to a deer trail. On the return we found that the trail comes down into the bed right at the lip of the fall. Things didn't look the way I had expected them to and for a little I was afraid that I had forgotten how to get down the Tapeats. In due time we found my former passage, a rather narrow ravine that gets into the bed off the side canyon just before it joins the main bed of Kwagunt. This access canyon is just west of Banta Point. I noted that there is a definite notch of perhaps 80 feet depth separating Banta from the main Redwall. It would be an interesting climb and might be quite difficult (Ohlman says it isn't bad).

We continued on down the main canyon until we came to the wash that descends from the saddle between Hutton and Swilling and put down our camp gear. The trek here from the car had taken seven hours. It was only 1:50 p.m. when we were ready to begin the scramble to the base of Swilling. Packard started up but decided he was too tired. Degeleke had a pulled muscle or something that was hurting, so he didn't start. Although we had a slight head start, Baxter and Wahlquist were waiting for us at the base of the steep route Bob and I had picked from our Duppa viewpoint. Bob had had trouble with leg cramps near the end of this climb and I was well ahead of him, something that has never happened before. This 1600 foot climb from the south at the warmest time of the day was when we might have felt the heat, but it didn't seem bad. I still had water in the two quart canteen when we returned to the bottom.

The route goes along a high bench with half the Redwall already below. Then behind the southeast promontory of Swilling, there is a double ravine up the rest of the Redwall. Fortunately it is broken by plenty of small hand and toe holds. It is steep and requires care, but I can do such places alone. It was a simple walk to the top of the butte above about 80 feet of Supai. We were higher than Duppa and Hutton but quite a lot lower than the top of Colter. We built the first cairn near the highest point, but the location was suggested by the presence of loose rock for our pile. We didn't walk to the north edge of the butte, quite a little distance, but when we looked over the western rim, we saw a route that might lead to the top of Colter. There may be real difficulties in getting up the Supai cap, however.

After taking all the pictures we wanted, we started down. I got down without any more fuss than being careful to look for the holds and steps, but Bob and Tom Wahlquist wanted Scott to belay them. Bob preferred holding on the rope for a grip. All this rope work took time and I was waiting where we had put down our packs for 25 minutes before Scott and Tom came along.

When we reached the bottom of Kwagunt, we learned that Lee had found a good little flow of water up a branch to the east from the streambed Bob and I had used for the ascent to the saddle. Gerrit took us back

there to fill our canteens and it was really dark by the time we were ready to go down, about a ten minute walk along the bed. We were all thankful that it was unnecessary to walk about two miles more with our packs to the bigger spring in the bed of Kwagunt where I had camped in 1959. The moon was bright but we were all ready to retire early.

We had all eaten and were ready to start in the morning by 6:30 again. Since we all followed the deer trail up through the Redwall it took only 35 minutes to get through the Muav and Redwall. We had a worse time through the Supai since we had begun to follow the deer trail to the east and up and then tried to switch over to the ravine used in the descent. By 10:30 we were at the running stream and here we ate an early lunch. In only one hour more than we had needed for the descent we were out to the cars. There was time to take Tom and Gerrit to see Cape Royal and we were home a bit after 9:00 p.m.

Esplanade between Fishtail and Deer Creek Canyons [November 10, 1973 to November 12, 1973]

George Billingsley had told me of some unique pictographs on the esplanades west of the Thunder River Trail and also of a pair of springs low in the Supai in the east arm of Fishtail Canyon. David Mortenson had also said that the route off the Redwall rim going down to the high talus between Deer Creek and Fishtail, a little east of the nameless canyon which is in line with the Sinyala Fault, goes without a rope. I have long wanted to see these things myself, so I figured the three day weekend would be a good time to do the trip. Tom Wahlquist and Steve Studebaker, two students, and Visbak, Mooz, and Herman accepted my invitation to come along. Jorgen drove Bill Mooz from Los Angeles to Las Vegas where they picked up Ed Herman and came on to meet us at the end of the Indian Hollow Road by noon on Saturday while I drove the college students up from Flagstaff that morning.

The weather for the entire three days was perfect, clear almost all the time but quite pleasantly cool. On the way down, we kept to the Thunder River Trail until we came to the sign Trail 23 with an arrow pointing to the east. This was below the knolls to the west and we proceeded along the level somewhat lower than our route for the return. Our return on Monday was more efficient but the ground and footing were rougher. We felt that we were more sure to run into our first objective if we were low, the larger than life pictographs. Bob Dye had been with Billingsley when they discovered these figures and had looked at Bob's location of the pictograph site on the map, but I hadn't made a notation on mine. We looked from the head of the trail and even used Steve's binox but we didn't identify the right cliff face.

When we came to the first place that might be right, about one third of an inch from the east edge of the Kanab Point Quad and near the 4800 foot contour, we found it lacking in pictographs but it was an interesting campsite with some protection from the weather. There was 20th century camp trash but there were also signs of a mescal pit and many worked pieces of chert. Steve found some pieces of arrowheads and a very beautiful small bird's foot arrowhead. He also found a couple of potsherds nearby. There was a modern stone fire ring and a rectangular stone lined pit of undetermined purpose.

When we went around the corner of the promontory we could see another larger cliff exposure about a quarter of a mile away. As we followed the base of the cliff, curving to the north and then southwest, we passed a fine low cavity that would give perfect protection during the hardest rain. When we came this

way the next day we looked in and saw a Chlorox bottle still full of water with a tuna fish can nearby. The cliff we were approaching was stained with black water marks on its northern half but the south end was a uniform light brick red. From some distance we could make out the two larger than life figures that George had named the Ghosts. They are done in white clay and have rounded shoulders with hands straight down. The oddest feature on both figures are the three straight lines going straight up out of the heads.

This Ghost Rock is on the east end of a promontory that can be passed either to the north or south. Ed went to the south and stayed at a lower level while the rest followed me to the north. Eventually we came down from the terrace a few yards and met Ed who had been going up a ramp, probably a better way. We followed fresh horse hoofprints for a time which went our way, to the west and to the rim of the east arm of Fishtail Canyon. When Ed noted a cairn or two, we figured that it was the place to start down. Bob Dye's notes on a map showed us later that if we had gone just a little farther west we would have come to Walapai Johnny's Bean Cave, but we didn't get that far west. We found more cairns and constructed trail where we were supposed to descend from one level to a lower one. About halfway down through the Supai, there is a well constructed descent that is the key to the successful search for the spring. It is on the east side of the canyon and not far south of the barrier fall.

We missed seeing a cairn that would have directed us back toward the fall and then on the same level around into the main east fork canyon. We learned latter that a burro could get down to the next level in this arm and follow the bed to the lip of a high fall with a cottonwood tree growing in the grotto below. To get to the spring which is only 50 yards past the cottonwood, the burro could follow a constructed trail on the contour back around the corner into the smaller trail arm to the east of the main arm. The cliff and fall in this arm can be bypassed by following more trail on the contour to the southeast until the slope is easy to descend back to the spring. There are really two springs, one in each branch of the east fork of Fishtail. They are below the lowest massive Supai cliff and possibly 150 vertical feet above the highest showing of the Redwall. They are only about 30 yards apart, one in the main east fork of Fishtail Canyon and the other in the branch where most of the trail descends. When we checked the constructed trail into the main branch we all saw several tools discarded beside the trail: a couple of shovels, a pickax, and the head of a sledge hammer. We figured that there must have been some prospecting as well as trail construction to make the spring more accessible. When I was going out on Monday, I found a roll of cardboard containing a compact mass of sawdust or something like it. I broke it easily and cast it aside. One of the men called it an old weather beaten stick of dynamite. As stated above, when we came down on Saturday, we missed the cairn that would have directed us to the north and into the main branch. We contoured to the south looking for a way down the lowest massive cliff. Nothing looked easy, and Ed, who was ahead, walked right by the place where Steve found us a way down a minor ravine. Here loose rocks were more of a hazard than steep pitches and exposure. We came down to the bed of the east arm a good quarter mile below the spring. We had taken from 1:00 to 4:20 p.m. to get here from the cars. There was plenty of firewood and smooth places for all of us to sleep. Firewood was no problem and we had campfires both nights.

On Saturday evening we had explored the possibility of climbing the cliff between the two arms or rather branches of the east arm of Fishtail. The climbing wasn't severe but there was one place where I needed to remove my pack and lay it on the block above. I had to hug the wall and advance beneath a slight

overhang. Some of the party did this with their packs on but we all agreed that this was the hardest place. By this climb on Sunday morning, we dodged the elaborate contouring of the Burro Route and reached the level of the crucial constructed trail up the otherwise unbroken face.

My objective for Sunday was to check the Mortenson Route through the Redwall about one half mile east of the fault canyon. We left the accepted trail and went south above the cliff with the constructed trail and found a way through an intricate set of minor cuts in the terrace. Then we angled northwest with the objective of getting down the wall into the west arm of Deer Creek Canyon. We needed to reach a terrace on approximately the level of the saddle going from the Deer Creek drainage over to the fault canyon. Unwisely, I led the group past the Ghost Rock and over near the first campsite we had encountered. This not only showed fairly modern camp trash but, carved on the wall, the inscription Dec. 16, 1905.

Not far from this we found a well hidden crack behind a large block that was the easy way to get down to the next level. Two or the group followed me down here while Ed and Tom found their own more difficult and interesting routes through the top cliff. We caught up with them on the broader terrace below. Walking was easy and quick along here and soon we rounded the corner into the draw that enters Deer Creek from just below the Ghost Rock. We crossed this at a lower level and then went up to the former height on the other side. It was an easy walk from here to get over the saddle into the fault canyon.

Getting down through the rest of the Supai in this canyon was simple with only a couple of short detours around drops in the bed. When we were about 100 yards beyond the junction with the west fork of this draw, Jorgen noticed a meager seep in some clay and remarked that there might be more water below. Within 20 more yards we found two nice pools. There was very little flow, but they were deep enough to fill a canteen by immersion and they didn't look stagnant and scummy. Before we reached these pools, I found a rather rusty and very dirty Bowie knife in the dry bed. Along the terrace at the top of the Redwall we all saw a gallon canteen hung across the top of a large rock by its strap. It was empty with the cap hanging loose.

All in the party were struck by the view from the angle above the mouth of this fault canyon. We could see the river almost continuously from above Tapeats Rapid down to Fishtail Canyon. The Redwall cliffs along here, especially on the south side of the river, are overpowering. I looked for any way for a sheep trail to go up on the south side of the river, saw none. One could follow the river along the edge of the Tapeats very easily where we were looking at the south bank, and there were some breaks where one could descend to the river for water. This encouraging situation may not continue clear to Matkatamiba, however. The short canyon in line with the fault just upriver from 140 Mile Canyon was interesting for having a talus filled bed that would let one walk up within about 200 feet of the top of the Redwall. Then, as far as I could see, further climbing would be impossible.

Going east along the top of the Redwall was still easy until we approached the indentation where we hoped to find the break in the Redwall. Here were steep shale slopes and some loose rocks that had to be watched. The rest of the party made better time than I across this bad slope and Steve was investigating the possible descent routes when I came up. We didn't give much thought to a break leading down to a notch behind a blunt pinnacle which was west of the ravine. There were three chutes and Steve found a cairn between the second and third, so we knew that one of these should be the way. Steve, Jorgen, and

Ed went down the farthest east chute to a huge Supai boulder as big as a living room. The way past this seemed very difficult or impossible, so they came back and tried the middle chute. Steve announced that it was only class four climbing, but very soon he was trying to string out my rope as a handline. There didn't seem to be any safe anchorage for it, so he tried the descent free. Quite close to the top there is a small chockstone at the top of a two foot wide crack. The safest way is straight down with slight steps for the toes so that it isn't a true chimney process. One should have a short rope to lower a pack here. The rest of the way to the talus is either over talus material in the bed or down a bare slope of bedrock with small humps and breaks for meager holds. Steve followed the bed nearly to the bottom of the Redwall, but he couldn't tell whether this easy travel continues. It is likely that there is a nearly vertical rubble wall in the bed. Most of the party went far enough down to assure success, but next to Steve, I went farthest. I departed from Steve's example in that I moved out of the bed onto the grassy slope to the west of the draw. I could see that this route was sure to lead clear to the river.

We saw that there wouldn't be time to continue to the river and still get back to our campsite at the spring before dark, so we reluctantly started back at 1:25 p.m. Three of us returned up the east arm of the fault canyon through the Supai while the other three went up the west arm. We were all glad to get a refill of water at the pools before we separated. Ed, Jorgen, and I, who went over the saddle into the Deer Creek Valley, departed from our morning route in that we went up the draw that goes right by Ghost Rock. It is more direct and at least as easy as what we had done in the forenoon. The others came to a place where they had to help each other up a ledge, but they were back at camp a half hour sooner than we were. Our route from the Redwall break to the spring took only two hours and 40 minutes.

On Monday we went from the spring to the register at the trailhead in less than three hours, and Tom and Steve had taken time out to climb an impressive little tower in the Toroweap beside the trail just above the top of the Coconino.

The whole Esplanade region around the head of Fishtail Canyon is cut up in a fantastic manner. It is a wonderland of red rock with mushroom rocks and towers that might be called triple decker ice cream cones. We were amazed by what we saw everywhere. It seems that it should be an utterly forsaken wilderness, but we had seen plenty of old tin cans at the overhanging ledges and plenty of signs of Indian use. Jorgen as well as Steve had found a couple of broken arrowheads. There were also signs of horses or burros on the Esplanade and even down near the spring. We all felt that we would like to know it better. Actually, before the others were ready to start out on Monday, Steve and I went down the valley from the spring and looked into the Redwall gorge. We came to one drop in the bed that could have been bypassed farther along the rim. We decided that in our half hour there wouldn't be time to go down to the junction with the west fork of Fishtail. There might be water at this level in that fork as well as the east fork. We all hoped that some day we would finish the trip to the river at Mile 137.6.

Big Canyon [December 1, 1973 to December 2, 1973]

The weather wasn't to be perfect, but I figured this would be as good a weekend for an overnight trip into Big Canyon as any. Billingsley had told me about its attractions and I thought I shouldn't remain ignorant of them. Steve Studebaker accepted my invitation to come along. He was glad to be included since he had

been told by Ken Stevens what an interesting place Big Canyon is. We got away a little after 7:00 a.m. and dropped Mike Hastings off at the turn off from US 89 to Tuba City. He was hitchhiking to be with his folks at Navaho National Monument.

I tried to follow the way I had gotten to the head of the sheep trail into Big Canyon from the north, but I did everything wrong. We saw the end of the good road at the gravel pit, the road that leaves US 89 just north of the bridges across Moenkopi Wash. Then we went too far to the south and wound up, after 23 miles of driving, at a Navaho frame house on the south side of Big Canyon. We talked to a young Navaho man who owned a Honda motorcycle, but he didn't seem to know about the sheep trail into Big Canyon from the south. We turned around and headed Big Canyon to the west of some buttes and finally got on the road that Roma and I were on in September. We still made one more false move when we drove down to a hogan that is shown on the USGS map, but from there it was easy to go west and south and reach the head of the sheep trail that I had descended in September. It was nearly 11:30 by the time we were walking.

The bed of the canyon dropped very slowly most of the time and the soft sand made the walking rather tiring. There were signs that cows come down here and at times we were on a cow path. Steve found several bits of petrified wood in the bed where it had been washed down from the Chinle Formation. I found small chunks of conglomerate, bright colored pebbles smaller than marbles cemented in a gray matrix. I forgot whether they appeared after we had passed the junction with the north arm, but I remember that there were many pieces of the stuff in the north arm where we went out on Sunday. There was only one real barrier in the east arm, a jumble of huge chunks of Kaibab Limestone that had fallen in from the rim. We saw several fresh looking scars in the Coconino that marked recent falls. We both wanted to go out the north arm on Sunday, so we put our packs down at the first water we saw below the junction. Nearby was a fine flat chunk of Kaibab Limestone that was supported so as to form a roof in case of rain. We didn't notice it at the time, but there were mosquito wrigglers in the water. It was 3:00 p.m. when we started on to get a glimpse of the river. The gray of the Redwall began to show in the bed long before the bed got steep. We could tell that we were soon going to get stopped in the bed at the last chance we had to climb out to the north. The top of the Redwall, about 150 feet above the bed here, made an easy terrace for fast walking. It was getting past 4:15, my tentative time for turning back so as not to get caught by darkness, but we were still not where we could see the river. By 5:10 we were there and we were glad to struggle somewhat in the darkness to find our packs in order to get this view. I could see a rift across the Little Colorado, perhaps a half mile upstream from the mouth of Big Canyon, where there is likely a route all the way down from the rim to the bed. I also spotted a cut in the Redwall a few hundred yards south of the mouth of Big Canyon on the east side of the Little Colorado that appears to offer a feasible route down to the river. This might need a rope for 25 or 30 feet only. Back up Big Canyon, west of where we left our packs, we spotted a ravine that seems to give access to Big Canyon from the south. I would like to try connecting this break with the Redwall break south of Big Canyon to try to establish another route to the bottom.

Steve had slipped into a pool in the upper Redwall and had gotten his feet wet. He had brought his flashlight along so he didn't worry about walking in the dark. While he was trying to change his socks and make other adjustments to make his feet comfortable, I hurried on to use as much daylight as possible. I got back to the packs in one hour and 25 minutes.

It was as clear as a bell when we went to bed, but about 2:30 a.m. there began a fine drizzle with only one small cloud in the sky. Soon, however, the sky was covered and a sharp rain was falling. We had room for both of us under the slab. The rain lasted less than an hour and we both got some more sleep. We breakfasted early and were on the way out by 7:30 a.m.

The north arm is firmer under foot than the east and it rises faster with firmer gravel. It also has steeper, closer walls and is more scenic. In both arms I carried my map in my hand much of the time and I knew where we were at all times. A complete horseshoe bend around a pinnacle makes a fine landmark in this north arm. It snowed on us along here so heavily that Steve wore his poncho for a half an hour, but then it cleared up.

When we came to the wide constructed trail that George had mentioned, we saw an intriguing narrow gorge going to the west. It didn't take long to explore it, because it ended in a dry fall. The plunge pool beneath the fall is about the deepest of these I have seen. The overflow is about 30 feet above the level of the green slimy water that must have been four or five feet deep when we were there. I would say that this water is permanent and it is used by Navaho sheep. When we were going up the trail, we noticed another large pool in the north fork of this same arm.

The amazing thing about the trail is how wide it is, wide enough for a Jeep, but the surface is too rough for even that vehicle. This trail down to the water may also have some connection to a deposit of yellow soft rock at the rim. This material, only a bit harder than clay, also has some green and blue parts. Perhaps someone thought he had found a uranium mine. We got to the top shortly after 11:00 a.m. and walked east and south as soon as we could head the north branch. We passed fairly close to a hogan but we gave it some room since neither of us wanted to cope with a dog.

The wind across these flats kept changing. It was mostly strong and cold, but when the sun shone for a while near noon, we had lunch. We should have stayed over near the escarpment that bounded the plain on the east and walked the road until we came near a peculiar sandstone slab that is dome shaped above and has quite a bit of space beneath. We call it the umbrella rock. Instead, we cut off to the south too soon and had to cross one or more developing side canyons. When we finally hit the road we had traveled in the Jimmy, I thought we should still go farther east. This we did, but then we came to a really deep canyon that would take quite a bit of backtracking to head. Fortunately we could look far to the north and see a big metal tank that we had noticed when we were coming in on Saturday. We were near the rim of big Canyon and we soon recognized the rift ravine where the sheep trail goes out to the south rim of Big Canyon. Also we soon saw the Jimmy waiting.

On the way out we missed the hogan that is nearby and came to the road next to the hills near the umbrella rock. On the way out we passed by the first chance to turn left but we took the second. It went about as straight as a string to the place on US 89 just south of a bridge and about a mile or less north of the turnoff to Tuba City. It was only 16 miles from the head of the sheep trail to the highway using this route. I think this would also be a good way to the head of the Salt Trail.

Two other matters of interest that we noticed were the cairns along the terrace that leads from Big Canyon along the top of the Redwall into Salt Trail Canyon, and the other was a peculiar trail worn in the bench across the north arm from the constructed trail. This may have been where sheep go to graze. There seemed no other reason for its existence.

Big Canyon [January 19, 1974]

Before Christmas I proposed going down Big Canyon to Doug Shough on January 19 and he accepted. When George Billingsley came in with his maps of finds in western Grand Canyon, I invited him, and Bob Packard also decided to go with me. I also happened to meet Sally Lockwood and she decided to go too. George decided to take his own truck since there would be congestion for so many, including his wife, Sue, in the Jimmy. We left here just before 7:00 a.m. and met Doug at the turnoff to Tuba City at 8:30. George led us to the right place over dirt roads that are a bit better than the average for that part of the reservation, and he really knows the area. We left US 89 a couple of miles north of the turnoff and then angled southwest keeping well to the east of the buttes that mark the beginning of Big Canyon. George knew where to make a right turn and get on the road that goes out near the confluence of Big Canyon and the Little Colorado. His guidance was particularly valuable since low clouds hid all distant landmarks such as Cedar Mountain. We enjoyed the view down into the Little Colorado upriver from Big Canyon and then drove back and took a dim spur track leading to a high point about two thirds of a mile west of the ravine I had selected as the possible descent (one and a half miles east of Little Colorado River rim).

There was snow several inches deep on the shady slopes and it took us about 15 minutes to walk over to the head of the ravine. I had decided from the view of this ravine from the bed of Big Canyon on December 1 that the highest part would be the most doubtful. There were problems in route finding from ledge to ledge, but Doug solved them quickly enough. We did see a fairly large cairn about 50 feet below the rim, so we figured that the Indians have used this access. At one place we crawled down a short ramp under a parallel rock roof. On the return I missed this feature. I came up a more exposed crack, but the handholds were good. When we got below the rim ledges to the broken scree slope, it was rather snowy. This required care but we were soon down to the start of the Coconino. Farther north, in Marble Canyon, this formation is relatively thin, but here it seems to be as deep as it is elsewhere in the Grand Canyon.

George and I were fifth and sixth in the procession as we strung out in the descent. Doug went ahead down into the main gorge into the Coconino, but he found the way blocked by impossible falls. George turned out of the bed to a point to the west and decided that the way was better there. I should have remembered this from seven weeks ago. I followed George out of the bed. While he went just a bit farther west and then got down by the most difficult move of the entire climb, I traversed farther west to a simple talus that covers the rest of the Coconino and continues on down to the bed of Big Canyon. Packard followed me and we were soon far ahead of the others who used George's route.

When we were below all the difficulties, George decided to go back up since he had seen the rest of Big Canyon on his first trip into the area, and Sue and Sally went back with him. Doug and Bob and I were down in the bed of Big Canyon below this descent by 11:10, about 75 minutes from when we left the car.

We left some of our climbing gear and my outer jacket here and continued down the bed. The New Year's storm had left fresh clean water in many depressions where the bed was bare rock.

I repeated my mistake from the first trip and led the others up from the bed too soon. Within 50 yards we were back on the proper route up from the bed to the top of the Redwall north of the bed. We noted the cairns Steve and I had seen. About here, Doug decided that he would be slowing Bob and me down and he volunteered that we should go on without him. I thought he would continue at his own rate and get the fine view from above the confluence while Bob and I would go there to eat lunch and then proceed toward Salt Trail Canyon along the rim of the Redwall. Bob and I reached the viewpoint down on the river in 75 minutes from where I had left my jacket and ate lunch from 12:30 to 1:00. Doug turned back before this. Bob and I got to the trail in Salt Trail Canyon where it crosses to the west rim of the Redwall in another 60 minutes. We turned back a bit after 2:00 and I reached the car at 6:10, just as it was getting dark. George guided me to the highway.

Hance Trail and Papago Canyon [February 23, 1974]

Six or so years ago some students had come down into Papago Canyon from the rim, and on 5/9/71, Jim Sears had led Ellen Tibbets and Jan Jensen up from the river into Papago and out by a route he marked on a map and gave me. I wanted to check this route. It would be faster to reach the break he had marked in the Tapeats from the rim in the east arm of Papago, the route I had discovered, but I didn't want to chance this rather difficult climb through the Coconino in the snow. I thought that I might be able to reach the place from the Hance Trail and get back to the rim in one long day. Although I formed the plan only a couple days ahead, I was able to get Lee Dexter and Ben Foster to go with me.

After getting our permit we were parked near the head of the Hance Trail shortly before 8:45 a.m. The ground was snow covered with places a foot deep. The walking was mostly easy with a good crust, but our tracks showed. We hit the head of the trial with no delay. I was wearing rubber soled shoes without lugs and had quite a bit more trouble keeping from slipping in the snow than the other two, but both of them took a fall. I made one bad choice of trail for 20 yards, but mostly we were able to recognize the right route. There were bare patches but the snow mostly covered the trail to near the bottom of the Supai. Ben had led a group of college students down this trail only two weeks ago, but at one place near the bottom third of the Supai he led Lee to the east side of the gulch before he should have. Both going down and coming back we held to the trail much better than I used to in spite of the snow cover.

At one promontory on the rim of the Redwall, I made the mistake of going around on the level when the trail actually went up over the ridge and then down across the shale in a ravine. Lee was leading on the return and he corrected this mistake. We had no further trouble following the trail. Below the Redwall it seems clearer than it used to. We followed it more or less along the level to the north above the first big tributary on the right. Across from us was the big fan shaped talus that covers the Quartzite cliff. When we came to a mine with some green and blue copper ore, we headed down the shale slope. In the bedrock of the stream, there were a couple of water pockets holding about three gallons of good water between them.

A deer trail came across the Hakatai Shale from the southwest and we found traces of trail going up the talus. We lost it in a big rockslide above and headed up and across a small ridge. On the other side we were able to pick up a distinct trail most of the way to Papago Canyon. We ate lunch about 12:15 where we had a view of the lower end of Hance Rapids. We noticed Vibram footprints of a solo hiker coming along this trail headed toward the Hance Trail. Ben found a piece of shale with clear tracks of a trilobite.

The narrowness and rugged towers of the west arm of Papago were most impressive. We crossed this arm and headed for the place in the Tapeats rim that Sears had marked. It took a bit of looking to find a couple of ways that I could get off the rim down to the talus only 15 feet below in one place. While Ben was getting down a difficult place, Lee found me two routes. He went back to the Tapeats rim while I followed Ben down to the south and to the bed where Sears had shown the way they went. When Ben and I reached a 300 foot drop in the bed, through the entire Shinumo, it was 1:30 p.m. and we had agreed to start back by 2:00. According to the map that Jim had marked, we were supposed to go along the Shinumo rim to the east around a point and find the way down (no right in the steep bed). We reluctantly turned back. We knew that we would be caught by darkness as it was.

There was more water in the bedrock where we got down into the east arm of Papago then there had been in the other place. I had brought two quarts along and was very glad to find refills at these two places. I drank almost a gallon in all even though the day was cool to cold. I wanted my two jackets whenever we sat down. It got dark about 6:40 when we were in the Supai. I had a hard time getting back uphill in the snow and I held up the others. I was losing my sense of balance from weariness and had to take some breaks in the Coconino and higher. Ben stayed with me and we reached the car about 6:45 p.m.

Long Canyon and Maroon Mountain [March 2, 1974]

I had been thinking about trying to climb Maroon Mountain for years but something over a year ago I took Lee Dexter there on a reconnaissance. I had told Bob Packard about it and he wanted to try it too. In fact, this time he selected the date and invited me to ride with him. He also took Ken Walters, a geology student, along. Ken is a strong hiker and climber.

We parked at the usual place in the clearing where there is some old machinery. I had forgotten about the road that goes in farther on the south side of the wash. Still, Bob might have had trouble driving to its end because of the width and height of his camper. We had left Flagstaff about 7:15 a.m. so we must have left the truck about 8:30. We followed an old track and then cut down toward the wash where a flood had eroded the trail. We had to pass through a fence without a gate and soon we saw a car and a motorcycle on the other side of the wash. Not much farther we went across and used the trail.

I pointed out the site of the Indian ruin behind the triple towers, and I told the other two about the bootlegger's cave which I had been to only once. We were on the trail for quite a long way, but at one place the others were down in the wash while I was south of it on the trail. I took a wrong turn and came to the end of the good walking where the track stopped quite far from the wash through bunches of brush. I was well behind the others when I finally reached the wash again.

At one place Ken noticed a streambed leaving the main arm to go up to the north. I had been confusing the real Maroon Mountain with the nameless pinnacle south of it and only about 150 feet lower than Maroon. On the basis of what I had done with Lee Dexter, I elected to pass by this wash. We were able to use the new 7.5 minute quad map that Bob had brought to identify this wash and see that we should go on farther. When we finally reached the branch that I had thought the best with Lee, we turned up it for perhaps 30 minutes and reached another tributary coming down from the real Maroon Mountain. Ken thought that it would be a good way to start up, but it seemed to me to be leading to some impossible falls. I overruled him and we went on up about ten more minutes to another branch. This one looked a lot better. For one thing the slope was north facing, and there is usually more vegetation and less bare rock in that direction. Our guess was a good one and there were no really bad places all the way to the top of the mountain. A deer could do this easily, and we were actually on a recognizable deer trail part of the way.

Ken elected to try his own route and he got way behind Bob and me. At one place I took a ravine west of the one that Bob was in and although it was a bit easier and led to a cross over to his, he got quite far ahead. He had found an intriguing place in a very narrow fissure, a tunnel beneath a big rock. There may be only this one way to the top of Maroon, but this route isn't hard at all. We got to the top about 11:00 and immediately had to fight our way through several yards of dense manzanita before we reached a grove of ponderosas. We could tell from the map that the highest point was to the southeast.

Near a saddle as we proceeded in that direction, I recognized a mescal pit with charcoal showing. We also saw a place where the woods had caught fire. There was a lot of brush on top as well as a few ponderosas. We had been bothered by thorny New Mexico locusts on the way up, and there were some on top as well as much oak and manzanita. When we came to the highest part of the flat top, we were surprised to find a square clearing with a chunk of salt in the middle. An axe had cut down the two larger trees and to one side there was a full gallon can of paint and a screwdriver. A piece of paper showed the date 5/4/72. I believe I was told that the Forest Service had fought a fire on top at that time, using a helicopter. The views from the top were great and after lunch, we descended without incident.