Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (October 7, 1976 - February 26, 1978)

Comanche Creek [October 7, 1976 to October 8, 1976]

Ken Walters and I had seen that bighorns and deer can come down the ravine northeast of Comanche Point through the Redwall. I wanted to complete this route from the rim to the river, which would make the 95th for me between Lee's Ferry and Pearce Ferry. Al Schauffler came to the campground rather late on Wednesday and we were at the permit desk early Thursday morning. He left his car at Moran Point since he wanted to fill in his gap along the river from Tanner to the Hance Trail and come out a day after me. The weather was ideal and the trail is in fine shape. Al carries a monstrous pack but he never asked for a rest. With my 21 pounds or so, I had no trouble walking right down to the river in less than three and a half hours. The present sign calling the distance 14 miles is surely an exaggeration. Al had read Grand Canyon Treks rather carefully and he was interested in having me point out where one leaves the trail to take the Cardenas Unkar Route, where the old Tanner Trail comes in from Cedar Mountain, where the priest was killed, and where you can see the Cardenas Natural Bridge. I also pointed out where Treiber and Grubb climbed the tower below Comanche Point. There is a lot to see from the Tanner Trail including the towers to the north across the river.

We ate an early lunch at the overhang near the cliff at the bend in the river. It seems to be a popular campsite big enough to shelter a couple of beds. Al had used it quite recently on a trek when he encountered a bighorn sheep on the Tanner Trail. He also knew all about pack rats at this site. We started on for the main project by 12:15 following a dim trail that hikers have made along a route about halfway to the top of the cliff upriver from the camp. When we were past the cliff section, we followed the other hikers and walked near the upper part of the vegetation. We started up the bed of Comanche Creek for a short way before I remembered to go back and fill my canteen in the river. This wasted perhaps 10 minutes, but I was glad to have a full canteen since the afternoon was quite warm.

At the place where the creekbed swings to the south, we left it and went up a minor bed that goes straight toward the narrows in the lava. This was a mistake. We could have gone down into the main bed again, but the temptation was to conserve our altitude and try to get along a bench below the top of the lava and come out at the top of the narrows. We not only passed by a place where we could have gone down into the main bed but we also passed a break where we could have gone to the top of the lava. Al was able to come down the basalt into the main bed right at the narrows but I had to back up and go through the break above. While I was doing this, he was walking up the bed. Here he got a fine view of a bighorn ram and an ewe leaping from stance to stance across the face of the cliff above him. They went out to a platform at the end of the promontory and then returned the same way, proving that bighorns don't have all their routes memorized. We saw fresh droppings all the way up the canyon.

We noted the landslide and mud slide areas that Phil Schafer had used for his talk at the symposium. They didn't impress me as being so unusual as he regarded them. I recalled where we should leave the main bed of Comanche Creek and follow the arm to the southwest. There were great drops in the shale and a couple

of bypasses weren't easy, steep shale slopes with rocks showing in the mud. For a long way near the end, we were on a simple consolidated landslide to the west of the bed. We had to go clear to the base of the Redwall and descend there, but we made it.

Evans Butte [October 11, 1976]

I already knew how to go from the Point Sublime Road to the Tuna Flint Saddle, so I figured that it wouldn't be too hard to reach the top of Evans Butte, rather a recent name for the highest end of the Sagittarius Ridge. I drove to the North Rim by myself Sunday afternoon while Roma was going back to Sun City.

After an early dinner at Jacob's Lake, I drove south into the park and found the Point Sublime Road open. Until then I hadn't decided whether to do the hike to Manu Temple or the one to Evans Butte first. The Point Sublime Road had a few puddles of standing water, but there was never any danger of getting stuck in the mud. All places are surfaced with broken rock, but there are some terrific bumps. When I stopped at the sign for Kanabownits Spring, I couldn't start the Jimmy. I raised the hood and put the battery back where it should be. It had been thrown off its stand and had been leaking acid. The motor started immediately and I tried to tie the battery in place since there was no clamp to hold it. I went on out to the old campsite near the end of the road and spent the night. In the morning I had no difficulty in starting, and I parked at the first space off the road where you enter the valley.

It took about 45 minutes for me to up down up and south to the place to leave the rim. There was a cairn of three large rocks at the head of a deer trail. When I came down to the Toroweap, I figured I should go still farther south to get through it. When I returned, I found a better break with a deer trail right above the simple way through the Coconino, but you do have to go quite a bit south of here to get through the Kaibab. The trail was clear to the top of the Supai and the bypasses of falls in the latter were simple, with alternatives. I reached the saddle in about two hours from the car.

The old cairn indicating a route towards Flint is still there. I proceeded along the ledges at this level without dropping down to the Redwall. There were some short stretches of easy progress, but mostly one walks around and between rocks and past brush. I was surprised to find two more cairns in the next half mile. When I finally reached the base of Evans Butte, I could see that there would be a slight problem in route finding. After taking a drink, I put down my lunch and canteen and went on with only the camera. There were no tough pitches. At the top I doubled back and went up the final pitch at the east end of the mesa. It is not a climber's challenge, but the views were exceptional. I took pictures in all directions, toward Arthur, the Holy Grail, Wheeler Point, and the South Rim. The sight of the river itself to the southwest was great.

I had no problems with my feet or physical condition, but on the way back I began to think that I should try harder to get a companion or two. The story of Pederson's sudden death of a heart attack was on my mind. A companion can't do you any good, but getting the body out is far simpler if there is a witness. Anyway, I seem to be getting less independent.

I had about decided to go home after this success in climbing my 76th Grand Canyon summit, and then the car decided the issue. The battery was shot. A friendly tourist got me started with jumper cables, and I drove straight to Jacob's Lake where I had to buy a new battery for such a price that I figured I had better come home before I went broke.

North Rim trip and Bundy tales [November 10, 1976 to November 14, 1976]

I got away from Sun City so early that I didn't eat breakfast at home. It seemed just as easy to drive to Saint George, Utah, around the west of Lake Mead as through Page, so I went to the west on the way north and came back by the other route to see friends. The whole drive is most interesting. I was surprised when I first realized that Joshua Trees grow so close to Wickenberg. The new bridge across Burro Creek is a high one, but one is likely to cross it so fast that he doesn't see much of the canyon. The old winding road down and up was more scenic. The ranger at the Lake Mead Visitors Center advised going along the lake through Overton rather than through Las Vegas, and I was glad to see the lake and the rough country again. I stopped briefly at the picnic area called the Bowl of Fire, an outlier of Valley of Fire State Park. Another experience was the freeway through the Virgin River Canyon. The old highway went north around the range, but the freeway manages to follow the river right through the 1000 foot canyon.

It had taken eight hours to get from Sun City to Saint George. After a late lunch at a restaurant, I headed south. The road out of the Virgin Valley up the grade in Quail Canyon was a bit rocky and slow, and the entire route in Arizona was very dusty this time. About 48 miles south of Saint George, I took the road southwest at the fork to get to Mount Dellenbaugh. After opening and closing the two gates, about 35 miles past the fork, I was stopped by a padlocked gate and a No Trespassing sign. I drove back to a fork and started down a secondary road to the southwest with the idea that perhaps I could get to Mount Dellenbaugh and down on the Shivwits Plateau by a roundabout way. If I had the right maps, I would have continued, but after three miles of driving in this direction, I gave up for fear it was a wild goose chase and I would run out of gas without getting to do anything significant. I went back to the fork in the main road and continued the 12 miles to the Mount Trumbull schoolhouse, where I parked and got supper to stay all night.

Ed Bundy and another man came over from their ranch to investigate, and during our conversation, I learned that Pat Bundy was living about a mile to the east.

In the morning I drove over to Pat's place and had a two hour visit with him. I heard again the story of his trip with Chet Bundy and Floyd Iverson down the river to bury the body of Floyd's nephew who had drowned. A point that I had not remembered clearly from Chet's letter to Marston was that their boat hadn't got clear away from them at Separation Rapid, but it had been badly damaged when they had tried to float it through the rapid empty. They were also quite short of food. They stashed the boat and came out finally finding the arm of Separation Canyon that would go. They found Kelly Seep and Pat said that it was back in a tunnel. He indicated that it shouldn't be hidden by the present Castle Tank. He talked as if they were not as hard up for water as for food. After getting the word about a cabin with some jerky in it from two mounted ranchers, they missed the shack, but later they came to a ranch with no one around although there was a freshly baked pan of biscuits. They helped themselves and left a note and walked

home on the plateau. This was in 1929 and in 1931 they went back to repair the boat and take it downriver and out. A rock had rolled down and punched a big hole in the metal boat, so they went home on foot. This time they walked down to 209 Mile Canyon along the river and came back the same way with minor variations.

Pat passed along someone's suspicion that the bride and groom had walked out Peach Springs Wash so that the groom's farther could collect a lot of insurance money.

A real goody from Pat was the information that one can climb the canyon wall almost directly opposite the Whitmore Trail and get out on the Esplanade to the Ridenour Mine. He and two other men got high up there and returned after shooting a bighorn sheep. The most exciting thing that happened to that party was that the boat sank just before it got to the north bank, a wetting for all. Pat also told me about getting a flock of sheep along the river from Parashant Canyon to the Whitmore Trail. In answer to my question, he expressed the belief that the trail from the river a mile below the Whitmore Trail up to Cane Spring was built by men working for old Nutter, who wanted to bring cattle across the river from the south. He figured that cattle could get down to the river from the south, perhaps through Mile 192 Canyon.

Pat also told me about driving a Jeep from the Whitmore Road over to Vulcan's Throne. The roads indicated on the new map don't join, but Pat got through. When another man tried to repeat the project, he tore up the transmission in his Jeep and John Riffy had to pull him out behind a bulldozer. Pat also told about getting down to the river upstream from the Lava Trail via the old mine west of Cove Canyon. He reported a pit or cave at the mine that seemed to have a lot of good ore showing. John Riffy didn't back up this report. Pat and a friend had gone downriver and out the Lava Trail. One of Pat's most interesting stories was about a gang who cut a lot of cordwood in the mountains north of the Cove. They packed the wood down and dropped it off the rim of the Esplanade. They wanted it to float down to Needles where they would bring it to shore and sell it. There was no indication how far this plan went, but Riffy confirmed that you can still find cordwood part way down the mountain.

After this I drove to the head of the Whitmore Trail, only 900 feet above the river. Pat had told me that there are some Indian ruins to the west of the base of the trail, and I wanted to find them. They tie in with what Powell said about his trip to the river with the human pickle as his guide. As I reread Powell, I figured that they took the horses from where the present road ends around to the west past the cirque. They couldn't get the horses past the narrow ledge above the cirque. Then they got down into the cirque by the light of their torches. In the morning they found the ruins over near the present trail and went up there. Pat said that before he and his friends had made it into a horse trail, this route had been an Indian path with rock piles for steps. I hiked down to the river all right and studied the wall across the way. I figured that I can repeat Pat's climb up to the Esplanade some day. I also found what is left of the ruins, very little, but I saw bits of potsherds and charcoal. I was going on downriver and out via the scramble on the south side of the cirque but some chest pain around my heart made me wonder. I went directly back to the car taking about 40 minutes to go up the trail. I quit worrying about a heart attack when I recalled a lurch I had taken while camping at the school house. I had banged my chest against the edge of the back seat and had bruised my chest.

On Friday I drove back up the road, in four wheel drive part of the way. I parked due east of the cinder cone and went up the lava flow to the Esplanade. Some of the walking was slow over rough lava blocks, but most of it was a lot easier then walking the usual Supai surface with so many little canyons to cross. I hadn't studied the map well enough to know where the road is, but I got well past the fence marking the park boundary. About the time I figured I should turn back, I went out on a point about the time I figured I should turn back, I went out on a point about the time I figured I should turn back, I went out on a point about the time I figured a route from Tuweap Valley to Whitmore Canyon. When I was getting back near Whitmore on the return on Friday, I saw that I had a lot of extra time and I went out to the south on the long promontory overlooking the river just east of Whitmore. On the way I passed a shelter cave with bits of charcoal. On this hike I saw numerous bighorn tracks and droppings, but the only actual animals were cottontail rabbits, one jackrabbit, and one coyote. I noted the trail, not shown on the map, that connects a road high up in the Cove with the road going across the lava from the Whitmore Road.

I had a hard time deciding what I would do on Saturday. There were indications that the weather might be changing and I considered getting out of the area before the road got bad. But I decided to take a chance and try the thing I had most wanted to do, get down Billingsley's dike southeast of Lone Mountain. I had talked to Orville Bundy on the road south from Saint George and he had said that the road west from the cinder cone was now in worse shape than it was last March. Hence I parked just a bit beyond the line shack and began walking the road about 7:35 a.m. In an hour and seven minutes I had reached the improved water holes that have some plastic tubing nearby. This time I noticed that there are two of these with cement dams only about 100 yards apart. They both were holding water, the only supply that I saw all day. I had the relevant maps along and had no trouble finding the trail down the fault cliff, about a two and a quarter hour walk from the line shack. It took about two hours to go from there to the edge of the Esplanade at the volcanic dike. There are so many little canyons cutting down through the Supai that it pays to keep fairly well north and then cut south to the rim. I came to the rim a bit too far east but I soon found the impossible dike ravine and then the break in the Supai where I had gone down last March.

I had brought my overnight pack with the expectation of spending the night at the river, but it was only 1:00 p.m. when I finished eating at the rim, so I just went down with my canteen and camera. As Billingsley had told me, I turned east this time at the foot of the Supai break and got into the broader ravine there. There were about three places where chockstones or small drops in the bedrock of the bed forced me to look for a bypass. At a couple of these places I had to face in and look for toeholds, but they weren't too bad. Down where the east ravine I was in joined the one I tried last March, I would have had trouble getting down to the bed, but it was easy to go around a point to the east and walk down in a short ravine over there. I had overrun what I had figured would be my time allowance by 15 minutes when I reached the place I had been coming up from the river last March. I came back to the rim in slightly less time than it had taken me to get down. By this time I knew that I couldn't count on getting to the road much before dark, and my canteen was so nearly empty that I would have a bad night if I didn't reach the water holes. At one point along the way back, it started to rain when I was near an overhang. I spread out my plastic sheet to catch water and began smoothing a place to sleep under the shelter. It didn't rain enough to mean anything and I went on. I was walking in the dark from the rim to the road. I used my flashlight sparingly for fear that it might give out, but I got to the water just 12 hours after I had left the car.

I had a good dinner and slept an hour or so. Then I woke up because of the bumps under my ensolite pad. Furthermore, a mouse and a mosquito combined to keep me awake. About 12:30 a.m., I got up and walked to the car where I got some good sleep in the Jimmy on my air mattress.

On Sunday I stopped the car and shaved at a metal cattle tank fed by clean water from a pipe and then drove on out of Paw's Pocket to have another short visit with Pat Bundy. I was pleased by the interesting drive up past the Hurricane Fault and through the forest south of Mount Trumbull and down into Toroweap Valley. After lunch at the last fork in the road out to the Toroweap Overlook, I took a hike to where I had slept along the road to Cove Canyon and a loop hike when I couldn't make up my mind about the weather. When it seemed to be getting settled for a fairly dry afternoon, I hiked to the top of Vulcan's Throne to reach my 77th Grand Canyon named Summit and then set out to go west to where I had been two days before. I turned back about 20 minutes short of this goal. It was a good thing too, because for the last 15 minutes before reaching the car, I was feeling sickish from having eaten too much tuna for lunch. A couple of Tums fixed me up, and I was soon able to eat a modest dinner. After dark I went to the Riffys. They invited me in and we enjoyed a visit of two and a half hours. John and Mary Beth are nice people. About 9:00 p.m. I left and in less than five minutes I was driving through a pelting rain and snowstorm. Before long there were puddles but no deep mud. By 10:30 I was ten miles south of the paved highway and the sky was clear. The night was cold and I was glad to get into both sleeping bags.

On Monday morning I turned off the Kanab Page road at Glen Canyon City and drove the 13 miles to the Warm Creek arm. The last four miles of road go down the bed of a canyon and the route is very scenic. I took a bath in the lake with no one around. Then I went to Page and found where the Dotys live. Alan and Jane were in Flagstaff for the day to check on Alan's eye which was infected. After dinner at the Empire House Restaurant, I looked up the Finicums and had a fine evening visiting with them. In the morning I heard from Al Doty about his first ascent of Hancock Butte after giving up the ascent of Sullivan Peak. I visited some more friends in Flagstaff on the way home, especially George Billingsley who showed me color slides he had taken from a helicopter in the western Grand Canyon.

I left out all mention of a minor loop hike that I took Thursday afternoon. It was from the parking at the head of the Whitmore Trail west to the canyon coming down from the cinder cone. I saw the cowpath across this gulch and then went up the canyon and climbed up the Redwall at its contact with the lava on the east side. The return from the highest point of the Redwall here was mostly on the road.

During my four days of walking I had done two more Redwall routes, another way from the rim to the river, and one more Grand Canyon named summit.

Western Grand Canyon [January 24, 1977 to January 29, 1977]

Steve Fulmer went with me leaving about 7:30 a.m. We had some worry about the Jimmy 25 miles from Kingman. The motor bucked and surged and then would stop even while idling. We finally got to town and saw a Toyota GMC garage from the off ramp. The foreman knew at once what was wrong, a clogged filter in the fuel pump. He had it done by the time we were eating at the nearby Denny's.

As soon as we approached the lake, I could see that the level is up at least 10 feet since last year. The lake showed a slow current in the canyon, but the water was clear as far up as we got, to Jackson Canyon at Mile 257. One could plane along without thinking about the mud bars we ran into last year. I decided to moor the boat at the mouth of Pearce Canyon so that I would have the experience of walking up the bed all the way from the lake. We reached the place to tie up early enough to take nearly an hour for an inspection of the old Pearce Ferry Road. Snap Canyon Wash is only a little farther west, and the road follows the high ground between the two washes. We saw wheel tracks showing that it still gets some use. Another old road that is used more now than some years ago is the one coming to the lake from the west just south of Iceberg Canyon. When we came back down the lake on Friday, there were a number of recreational vehicles parked at its end.

On Tuesday Steve and I got out and started up the wash by 7:40 a.m. In 15 minutes I realized that the day might turn wet, and I had left my poncho in the boat. I went back for it while Steve walked on slowly. I left the boat the second time a little after 8:00 and caught up with Steve before we were even with the impressive butte of red sandstone on the south side above the bed. Jorgen and Ed had thought that it is just as easy to walk from the lake up the bed as it is to come from the cove over the hills down into the bed, but from our timing, it seemed longer the way Steve and I were doing it. However, this may have been because I was slowing down for Steve. I thought we might be at the place in the bed where we had reached it two years ago before we came to the actual place, but when we did come to the right place, I recognized it for sure.

There was water as before in the holes on the bare rocks about 10 minutes of walking time east of the mouth of the big tributary from the south, the one that drains the mysterious bowl. There were also lots of burro droppings in the bed this time, and we saw six or more but were not close enough to make a good picture. We ate our lunch a bit early when we came to the fork in the main canyon where there is a shelter cave. The weather had not become worse and we even had some sunshine on us as we ate.

After lunch, Steve excused himself from going further while I started up the north fork. Two years ago, Visbak, Herrman, and Belknap had gone up here and had come down into the main canyon by going south over a saddle. I immediately had to do a bit of climbing to get past a smooth fall. Very soon I saw the waterholes that the others had reported. They are deep enough to hold water for the entire cool season. To pass one of these, I arched my back with my feet on one wall and my hands on the other. There was a chockstone where I might have crawled up somehow after putting my pack and canteen up ahead, but I preferred using a bypass to the north where the Redwall was broken and rough.

I didn't feel sure about where I should leave the bed to go up and down into the main south fork. Passing by one ravine up to the south, I started up when I had been away from the lunch site nearly an hour. For a time I wondered whether it would be easy to get up the last cliff to the top of the Supai, but I found two good ways. I got out on top to the north of the saddle. It would be easy to walk from here to the road going to Fort Garrett, but I preferred to climb to the top of the mesa south of the saddle. There was also no problem at all in going down the open slope from the saddle to the bed of the main fork of Pearce Canyon via the open tributary south of the bed which is in line with the route I was using. I regretted not having time to get out on top of the Sanup Plateau to the east of the great sinkhole bowl. Grist for another trip.

Going up the main bed and then going north or south using these fault valleys is the most efficient way to climb out of Pearce. I found bighorn droppings to the north of the saddle. Perhaps they go down to water in the north fork because this seems to be the best supply in all of Pearce.

I needed just under three hours to go from the lunch site up the north fork, over into the main fork, and then back to the lunch site. It took me about three hours to walk from there to the boat, arriving just after 6:00 p.m.

In getting away Wednesday morning, I started the motor too soon and hit a rock ledge with the prop. Fortunately, it wasn't bad and there was no new vibration. We followed the landmarks fairly well as we cruised up the canyon. I showed Steve Rampart Cave, Columbine Falls, and Muav Cave. He was able to keep us straight on the mileages with the Belknap Guide. I looked into Tincanebitts and then turned back to tie up at the mouth of Dry Canyon. I didn't have any strong hopes of getting up through the Redwall in it, but I thought that a canyon that big should be checked.

Steve and I left the boat about 8:45 a.m. We had a terrible time getting past the tamarisk jungle growing on the silted delta. The slope on the east of the mud flat is steep and hard to walk on. We tried the edge of the jungle for short stretches and then went up on the slope again. It took us 45 minutes to reach the open wash above the jungle, but I did this in 35 minutes when I returned by myself. We ate lunch where the main canyon goes to the east and then north. Again Steve had walked as far as he wanted to while I went on up the canyon about the same distance that we had been together. I saw no animal footprints. The absence of deer and bighorn gave me the idea that there is no way out, so I wasn't surprised when I was stopped by a big chockstone at the top of a dry fall. It was a little surprising that I had been able to get this high, into the upper fourth of the Redwall.

I got back quite early. At the upper end of the mud flat, I walked up on the terrace to the east and found the only evidence of Indian occupation I had seen all day, a large and well built mescal pit. After two good days of walking, I figured I would take it easy on Thursday and stay with Steve. I thought he would like to see the evidence of gardening at Quartermaster Spring. I should have tied the boat west of the mouth where one can walk up the slope and get into the bed above the big fall, but I saw a clean place to moor on the east side of the delta. Getting south there was rough and when we went higher, it was still rougher. Steve was afraid that the knee which has had surgery might give out, and we returned to the boat without reaching my destination.

After lunch we cruised past Burnt Canyon. We were intrigued by the picture taken from Triumphal Arch that appears in the Belknap Guide. I thought it might be visible if we went into Jackson Canyon. When we moored at the west edge of the tamarisk jungle delta, we soon saw that we should have to do some cliff scaling. We moved downriver to a minor ravine where we could land and easily pass the jungle and walk up to where we could look into Jackson Canyon. We spent about two hours going up here and back but we didn't see the hundred foot high arch. Perhaps it is on the other side of the river. We moved the boat to Burnt Canyon and had time to kill.

Thursday was special in that a boat came buzzing along up the canyon. The four sightseers didn't camp because we saw them returning in the afternoon.

Friday was supposed to be my biggest day. Last year Bruce Braly and I had proved that we could go up the west arm of Burnt Canyon and get out above the Redwall. I got the impression from something that George Beck had said that there would be a still better chance of getting up on the plateau through the east fork. Steve agreed that he wouldn't try to keep up, and I would start early. Steve was intrigued with the stone shack, or the two room apartment as he called it, counting the ramada as the second room. We had a peculiar accident about 11:00 p.m. Thursday night while we were tied to shore with two ropes and had our anchor out on the other side as well. Both of us were awakened out of a deep sleep by a big thump that shook the whole boat. The next day we tried to explain it as caused by a convulsive kick that one of us had done in his sleep, but when I got the boat out of the water, I found a new dent in the hull. Perhaps the boat had been resting on some mud that was covering a rock ledge. The mud may have slipped away letting the hull down hard on the rock.

I got started before it was fully light, about 6:50 a.m., and found that the walking past the tamarisk jungle is very easy in Burnt Canyon. In fact there is a vague trail along the not so steep slope above the jungle all the way back to the open wash. It took me 130 minutes to reach the fork in the canyon. I stopped long enough to inspect the seep spring and I saw that someone had built a clay dam to catch the water. There was only a small rim of clay left, and the water wasn't flowing well enough to fill such a pool anyway. There was a small pool back in a little cave where the seep comes out. I checked the terrace with a lot of charcoal mixed with the soil and the mescal pit on a higher terrace just north of here.

The map I carried in my hand kept me fairly well oriented as I walked up the east fork. Tributaries were interesting, but they offered no egress. This east arm forks again as one reaches the Redwall. These branches are actually impressive with very narrow spooky channels. I followed the north branch first and succeeded in getting past a couple of head high chockstones before coming to a big fall that was impossible for me. It was the same story in the other branch except that there was a little water running out of the sand into a small pool. South of this junction, on the east side was a small seep with some fern. I also went up to inspect a vertical, overhanging slot on the left a few hundred yards south of this junction. I was back so soon, in three hours, that we moved the boat to Sandy Point for camping. On the road up from the launching ramp, Steve called my attention to two bighorn ewes. They were the first I have seen from a car in the US.

Western Grand Canyon [March 12, 1977 to March 19, 1977]

Jorgen Visbak met me a little after noon at the turnoff to Dolan Springs and we proceeded to Meadview. He left his car near the ranger's home. We talked to Mrs. Heddin since her husband was away. She told us that the lake had fallen a couple of feet to 1191 and that they would stabilize it at about 1189. I also learned from a man near the ranger office that the level fluctuates a lot at the mouth of Separation according to the volume coming down the river. The motor worked fine and we got from South Cove to Separation in less than two hours. We had time enough to do some scouting for a route up on the Tonto to the east of Separation. Jorgen showed more nerve than I in climbing the cliff right near the river, but he didn't make the top, and he agreed that he wouldn't want to carry his pack up the way he had climbed. I gave up this effort and went farther upstream along the bed of Separation. About a third of a mile from the river, I noted a talus and a broken area above. There was a notch in the Tapeats at the top and I thought from what I could see that the route was about 99% sure.

The water rose a lot Saturday night. On Sunday morning, I fastened the boat by three ropes, one at the bow and two attached to the stern to hold it a right angles to the shore. I thought that at least a considerable portion of the hull would remain in the water.

We found my route to the Tonto quite feasible even with packs although we did have to do some switching back and forth. Immediately we needed to go over a ridge and across quite a deep draw. It was not much of a detour, but going down and up again was tiring. Not long afterwards we came to something very much like a cairn and a faint trail. Jorgen soon spotted the site of Bridge Canyon City and we noted several places where one could descend to the river on the south side. There also seemed to be more water in the ravines over there.

We had the seven and a half minute quad maps and kept our bearings very well. When we were on the rim of the tributary opposite 237 Mile Canyon we found about a hundred feet of half inch steel cable. There were also some boards and wire that had formed survey markers. Jorgen spotted an old trail switching down to the river in the west arm of the canyon at Mile 237, on our side of the river. The trail starts down midway between the two arms and the first few yards are hard to recognize. The faint trail continued along the edge of the Tonto only a little farther. We soon came to another split canyon where the western arm seemed to offer a good way to the river, but we didn't want to stop and investigate it at this time. We hoped to camp at the river considerably past Gneiss so that it would be possible to reach Mile 225 the following evening.

We at a late lunch on the rim above the big north side canyon opposite Gneiss. Jorgen pointed to where their boat had lodged near the south shore just above the rapid. The river level seemed to be fairly high Sunday forenoon. Mile 237 Rapid didn't seem like much and the rock near the middle of the river in the next rapid upstream was covered. Gneiss Rapid still seemed impressive. From where we ate, we observed a route down to the lower part of Gneiss Canyon North that would probably bypass any fall in the bed. We couldn't see the lowest part of this route. We went back about a half mile from the river to get to the bed of Gneiss Canyon North and then we could get up the other side quite handily although with a lot of effort. Our packs contained food for six days and the descent must have been around 500 feet. When we reached the canyon opposite Bridge, our side of the river was cut up and rougher than it had ever been, and the walking that we could see ahead would be slow and precarious along a steep slope. We had a feeling that there would be few ways to the river for hours. We both felt it smart to retreat and get to the south of Gneiss Canyon North for the night. The way down was harder to find when we were looking straight down on it and near the bottom it was quite a puzzle. However, we were able to get to the bed, and we were lucky that it got us down right below the foot of a fall in the bed that had no obvious bypass. Before we went on to the river, I noted a chute that seemed to go up to the west rim of Gneiss Canyon North, if only we could get up the first 80 feet where there were some falls. I used some hand and toe climbing and checked this place before we went on to the river.

I recall that in June, 1966, I tried to land and walk past Gneiss Rapid but I couldn't get to the north shore in time. The curving rapid still looked impressive and I was not surprised that in 1966 I lost my zeal to float on down the river indefinitely. I didn't relish another rapid in that cold water and I got out on the left at the first beach below Gneiss.

When we were walking the Tonto on Sunday, Jorgen not only pointed to Bridge Canyon City, but he showed me the bridge in Bridge Canyon. It looked better from a distance than it did close up. I showed him the place I had waited for 24 hours on the south bank and we noted the trail system there and the terrace for a tent.

Jorgen and I had fine campfires every night except for the rainy Wednesday evening that we spent in the boat. The beach at Gneiss Rapid was especially fine for that and we thought that the Granite Gorge along here is second to none for scenery. Our morning starts ranged from 7:35 to 8:00 a.m. We were starting away from camp on Monday about 7:45. The chute up to the west rim of Gneiss Canyon North was a simple scramble after the hand and toe hold bypass near the bottom. We left our gear except for canteens and lunch on the Tonto at the head of the chute and proceeded to explore upper Gneiss North. Separation Canyon really doesn't fit Powell's description of the place where the Howlands and Dunn left the party, and we wondered whether it would be possible to walk out of Gneiss North. We got into the bed at the first deep draw going in from the west. For a long way the grade was minor and walking was easy. At the contact of the shale and the Muav, we found a spring which had several drips and one steady stream about as big as a drinking straw.

At what may have been the lowest of the Devonian Limestone, we were stopped by a narrow slot with a deep waterhole. One could swim this and crawl out at the other end, but we didn't care for the cold water. We tried crawling along a narrow ledge on the east wall. We spent a long time here trying to decide what to do. Jorgen went farther along the ledge, but I climbed up using some poor holds and looked around the next corner. There was positively no future in this because of another fall crowned by a chockstone. Then when I tried to come back the way I had gone up, I found it hard and dangerous. Even after Jorgen took my pack, I didn't care to come down the way I had gone up. Finally, I disrobed and prepared to swim while I was handing my shoes to Jorgen, we got the idea that he could pull me up one place and I would be able to do the rest, and this is how I got back without wetting. Then we found a fairly good and simple hand and toe climb on the east to bypass this narrow gorge. Bighorn sheep droppings along here encouraged us to think that the canyon might allow us up through the Redwall. After another one and a half hours of steeper scrambling over large rocks in the bed, we came to a fork and chose the west side which seemed to offer the best chance of further progress. Here we were finally stopped dead by a high sheer fall near the base of the Redwall. Then we checked the other arm and it stopped us even sooner. We concluded that Gneiss North is not a canyon where anyone has gone out to the North Rim. On the return, we filled our containers at the swimming hole in the narrows and slept on the Tonto where we had first come up. That night I was glad to have my down bag supplemented by quilted Dacron underwear. On Tuesday we felt that we could set a leisurely pace and do a couple of side trips on our way back to the mouth of Separation Canyon. The chute we figured we could descend comes to the river at Mile 236.8. We had had some difficulty in getting past a steep rubble ridge in the west fork of this canyon, and now that we wanted to go down it to the river, we carried our packs down below the hard place. Bedrock showed in a few places in this canyon, but the bypasses were easy and obvious. The river was low by

Tuesday afternoon and the rock that had been covered when we passed on Sunday was now three feet out of the water. Rocks were visible on the south side of the river fairly near the surface, so the best channel is north of the central rock. This nameless rapid was much more impressive than Mile 237 Rapid farther downstream.

Shortly after we got back on the Tonto we found the trace of a trail. We soon recognized the trail below the Tapeats that goes down to Mile 237 Rapid, but we had a bit of doubt as to where to leave the rim. There must have been a trail here good enough for pack burros, but now you just scramble down among the cracks in the rim until you find the real trail at the bottom of the Tapeats. By careful attention we could follow the trail to where the wash leveled out near the river, and then the trail seemed to stay to the west of the bed. When we started back we missed the part of the trail where it leaves the bed to ascend the west facing slope, but we caught it higher up and no time was lost.

We had no trouble identifying the break in the Tapeats rim above Separation Canyon but I suppose we should have built a cairn to mark it. I became confused about the best way down after turning to the north as we both remembered it. Jorgen got ahead here by keeping to our original route.

When we came in sight of the boat, we saw that the river had fallen so far that the boat was perched at a 35 degree angle high and dry except that about two feet of the stern was still in the water. A ski rope that I had used to tie the bow to a stout tamarisk had broken and the boat had slide a foot or two until the skeg had jabbed into the mud and sand where the bottom leveled out somewhat. We assumed that the water would rise in the morning and that the boat would float properly. Fortunately, the river did not rise in the night, and I had plenty of time to consider what would happen when the water rose again. There were three orifices below the deck line near the stern and I began to worry that the water would fill the lower part of the hull through these holes before it would float the boat. I stopped up the gas tank overflow, the bilge pump hole, and the large vent for the bilge blower exhaust with adhesive tape. then when the river began to show signs of rising about 4:00 p.m., I dug sand and mud from beneath the forward part of the keel. Between us, Jorgen and I slid and pushed the boat down into the water. I have the feeling if we had stayed away for the full six days, that we would have returned to find the boat more than half under water.

We were glad to get away from the small sandy beach at Separation. The day had become windy and we had sand in everything. We dropped down to the mouth of Spencer Canyon and found a good place to tie up. We could see by the waterlines on the sand that the fluctuation here is only about 18 inches. We could walk the wet sand over to a trail up into the tamarisk jungle and the trail took us over to the open streambed. We gathered wood for a campfire, but we didn't use it when the evening became rainy. Both of us slept on board.

When we were getting breakfast Thursday morning, a couple of small oar powered inflatables came by. We hadn't seen the others, but there were six of these boats in the party that was led by Kenton Grua. It took us just less than two hours to carry our packs up past the flowing water in the bed of Spencer. Jorgen saw an overhang that would be some help in case of rain. When we walked up to it on the east side behind a thicket of mesquite, we saw smoke stains on the ceiling and an old tobacco can.

We left our gear except for food and water here and proceeded up the dry bed. Both of us had forgotten how much farther it is to the travertine promontory with the springs above on the west side. It took us about 15 minutes to reach this landmark. There was some water beneath the travertine cliff in two places. In the square numbered 2 in the Spencer Canyon Quad, a canyon comes in from the west. This looks from a distance as it if might be a route to the plateau above.

Billingsley had told me that they had come down to the bed of Spencer by a route between Hindu and Milkweed Canyons. This cliff looked so bad to Jorgen and me that we didn't think we could be at the junction yet and we didn't recognize Milkweed Canyon. The map indicates that Spencer continues upstream to the southeast and we proceeded in that direction.

We were coming close to our time to turn back but we could see the canyon changing character ahead. There was a big deposit of travertine on the south wall and soon we encountered fine vegetation and springs with the best pools we had seen in all of Spencer. When we came to the next fork we could see two impossible falls where Hindu comes over the Devonian Limestone. The other fork, probably called Spencer still, goes up more steeply in a narrow canyon. We would guess that this arm is blocked too. We got back to our packs and slept in the open after enjoying a fine fire.

On Friday we walked to the boat and then proceeded to the mooring at Mile 257.1 where Steve Fulmer and I had stopped and climbed to the Tonto. While we were going up the ravine, I came to a handkerchief that had caught on a catclaw and had been jerked out of my pocket on the previous occasion. Quite soon after we started west along the Tonto, we came to a faint trail. Burro signs were quite rare in this area. We wondered whether this was a man made trail. In the Triumphal Arch Canyon, the trail turned toward the arch, but we lost it before we got close to the actual climb.

From across the valley, I couldn't feel sure that we could get up all the lower cliffs below the arch, so I led Jorgen up the main stream bed and we climbed past the lower three cliffs before following the bench to the north. Well past the arch, there is a ravine that allows access to the upper bench. Then we had to jog south of the arch and do some climbing that seemed harder to me than to Jorgen. In fact, I might have balked if Jorgen hadn't been with me. The arch is quite high in the Devonian and you get a wonderful view over the whole area.

On the way down we saw several cairns besides the one at the back of the arch. They guided us to the short cuts in the lower cliff. We got to the boat and camped at Sandy Point.

Ninety four Mile Canyon and Redwall near Set [April 25, 1977 to April 27, 1977]

Ever since I had seen a window in the Redwall rim southeast of the Tower of Set and had heard from Mike and Barbara Martin that the Redwall could be climbed from the south just east of Set, I had been eager to try reaching this area. It had been a long drag to get across the river to Bright Angel Creek and then walk to Trinity and beyond, so I was pleased to learn that one could get down from the Tonto Trail to the Colorado opposite 94 Mile Canyon. then I could cross the river on my small inflatable and proceed up through the Tapeats where I had spotted the break just east of the mouth of 94 Mile Canyon.

When I called Chuck Wider about this latest trip with Shafer in the Superstitions, I mentioned my ambitions in this region. He realized that I hadn't invited him, but he talked me into taking him. The idea was that he would come down to the campsite by the river at Mile 94 and then he should spend the day as he saw fit while I crossed the river to do my thing.

We left at 6:30 a.m. on Monday and stopped briefly in Flagstaff. I missed seeing Jim Ohlman and Bob Packard, but I visited with George Billingsley who told me of a recent helicopter trip with Jan Jensen to Separation Canyon. They found an Indian ruin, a mescal pit, and a reliable water hole in the tributary of the east arm above the Redwall.

After lunch at the Red Feather Lodge, we had to stall a bit waiting for the permit window to open at 1:00 p.m. Then Tim Manns got me interested in an amazing bit of Grand Canyon lore, the proposal to connect the two rims of the Grand Canyon by a series of aerial tramways. They would have stations on Hopi Point, Dana Butte, Tower of Set, Hours, and Osiris. According to a long account from Ed. K. Thodon who worked for the survey team in 1919, they had a camp on the top of the Redwall near the point to the southeast of the Tower of Set and quite a lot of their working time was spent in getting supplies to that isolated place. This was accomplished by mules to the south rim of the Inner gorge, and then they used a temporary tram system down to the river and up to the camp.

Chuck and I got started down the trail by 2:15 p.m. and made such slow time to the junction with the Waldron Trail that I got excited. I gave the map to Chuck suggesting that he camp at Hermit Campground or at Santa Maria Spring that night. Then he could go down and see Hermit Rapid the next day and get to the car on the third day. I doubled my pace as soon as I was alone. Before I came to the Cathedral Stairs, I overtook a group of young people who had volunteered to work on the trail from Hermit Camp to the river for two weeks. Their leader seemed to be a member of their organization, Bill Valentine, and a seasonal ranger, Bryan Culhane. They were all familiar with Grand Canyon Treks and seemed pleased to meet the author.

At the difficult place at the base of the Tapeats in the ravine to Mile 94, I stayed in the middle of the bed and had a bit of trouble finding safe hand and toe holds. I went down with my pack off, but on the return I came up with it on. I spent four hours on the descent from the head of the Hermit Trail. There were a few drops of rain, but not enough to get anything wet.

The fire under my soup was Sterno and I put the fireplace close to a large rock to cut the wind. There was some very short, sparse grass nearby, but I had no idea that the fire might spread. When I was going down to the river to wash up, I glanced back and saw that the fire had ignited the grass and had gone like a streak up into quite a thicket of mesquite including some large trees. There were so many dead limbs on the ground that the whole thing went up like a blast furnace. All I could think about doing was to pull my own gear out of danger from sparks and go around the area to see that the fire didn't follow the grass away from the area and up the canyon side. It took some lively work on my part to bat the flames out to keep

them from crossing a natural fire break in the sand. I was quite sweaty when I saw that there was no danger of further spreading, so I enjoyed my dunking in the river. However, I was in a state of depression until I finally got to sleep at quite a late hour because of my carelessness in causing the needless destruction.

I woke up early, at 5:00 a.m., and by 5:45 I was off for the day. Everyone had said that the river was exceptionally low and I could see that they were right. I could paddle my little inflatable right across without having it drift downstream at all. Going up the first rocks above the river was about the hardest climb for the day, and it wasn't really hard either. I got about 100 feet above the river and then went slightly down until I was in the ravine with the Tapeats break at the top. There is no virtue in staying near the rim of the Tonto along here nor around into 94 Mile Canyon either since there is one ridge after another. I left my pack with the lunch on a saddle north of a rocky outcrop and went up the Redwall break with my canteen and camera. From a distance the way up looked sure fire until near the top of the Redwall. Then there seemed to be a sheer face with only a narrow vertical crack near the middle. I knew that the Martins are very good climbers, so I was prepared to be turned back at this place. However, when I saw a lot of bighorn sheep tracks and droppings, I was reassured. When I found a very rusty five gallon square oil can I was very sure that I would succeed. The crack in the cliff turned out to be a yard wide at the bottom and sloped back at an easy grade. There was even some trail construction near the top.

To look for the natural bridge, I knew that I didn't need to go out on the promontory next to the Redwall break. I climbed over a low saddle and hit the rim going east to the point above Trinity. It was disturbing that I couldn't find my bridge in going all the way to the point. Then I cut back staying farther from the edge where the walking was smooth. Very soon I came to an old camp marked by a rectangular row of rocks, an old rusty shovel, and a metal funnel for collecting smoke above a fire. There were also a couple of smooth boards that I took to be some sort of surveyor's equipment. When I got back to where I first encountered the rim, I went close again and was rewarded with finding the bridge, about 25 by 25 feet with a rather shallow and narrow rim of rocks over the top. I got pictures of all these points of interest including a close up of Set itself. I had been informed over the phone that recently someone climbed the Tower of Set, and I assume that they approached using the Redwall break I had. As I was getting back to my pack, I came on four hoofs and a few bones, all that was left of a small deer. I couldn't tell whether the predator was a cougar. Bighorn and deer droppings indicated plenty of use in this corridor and there was a good game trail along the Tonto around to the head of 94 Mile Canyon. I ate an early lunch where I had left my pack.

One needs to stay high, following the trail, to get to the head of the Tapeats gorge. As I went along, however, I did check the possibility of getting down to the bottom of 94 Mile Canyon through a couple of east side tributaries. They were impossible, but when I was going along the bed later, I saw a couple of places where the walls were broken and one could descend. I also noted, while going north to the head, that there were three places where broken slopes occur on the west side.

Not far above the bed of the minor, eastern fork near the head of the gorge, I noticed a small but deep mescal pit. When I went close for a better look, I saw a rock shelter beneath a thin projecting slab. I went along the west rim until I was reasonably sure that there would be no drops in the bed of the Tapeats section. Walking was obvious and easy until I got into the igneous rock. Springs occur when the bed is

mostly black and weathers with a rounded appearance. Soon thereafter I came to deep dry falls. The bypasses required some care and use of the hands, and I felt lucky that I didn't have to go back over my route up from the boat. I spent one and a half hours in the bed of 94 Mile Canyon by the time I reached the river. It was no trick to go east to where I had cached the boat and I got across to my duffel well before 4:00 p.m. with plenty of time to rest and read.

There were a few more raindrops a few times, but by bedtime the sky was clear and I slept well. It took me about 50 minutes to get up to the Tonto Trail and about five and a half hours to get to the car. This included a detour to look for inscribed names near the spring north of the trail at the base of the Coconino. I had thought that Roy Carpenter had said that there were two very old names, possibly about 1890, but the only one I saw was the name Al Rohrer and it had no date but looked rather fresh. I hailed Chuck Wider when I was five minutes walking time behind him. He had spent the night above the junction of the Hermit Trail with the Tonto Trail. Strangely he didn't wait for me and walk out together. I was closing up and then I missed him. He said that he had gotten off the trail, but he joined me at the car while I was finishing my lunch.

The nine hours of walking on Tuesday seemed most rewarding since I connected two more places at the river with a route to the rim and had gone through the Redwall at my 151st break. I had reached another natural bridge and had found the evidence that they were really surveying for the cross canyon tram. Furthermore, I had seen another ruin and mescal pit and had found water and a route down through 94 Mile Canyon.

Ninety four Mile Creek to Crystal Creek [May 19, 1977 to May 21, 1977]

On my way to the South Rim, I checked and found that Bob Packard was not at home but I had a short visit with George Billingsley at the museum. He surprised me by not seeming a bit sure that there was a route through the Redwall to the south side of the Ra Osiris Saddle. I had planned the trip on the basis that he had told me on April 25 that it would go.

I gave two hitch hiking couples a ride to the canyon from Flagstaff. They were surprised, and so was I, to learn that all four were from France. Two could talk passable English, but I didn't understand much of the lively conversation.

After lunch at the Red Feather and some conversation with the permit rangers, I took the shuttle bus to Hermit Rest. It was 3:00 p.m. when I started down the trail. I noticed that I walked the first 1.3 miles in 35 minutes instead of the 55 with Chuck Wider. I met several geology students from Western Washington S.C. coming out while I was going down. I felt like hurrying again and I missed seeing the old Four Mile Spring that has been dry ever since I have been along the Hermit Trail. Tom Davison confessed that he has never been able to find any trace of it. I usually see it plainly when I am coming out. The way to watch for it is to go around the shallow bay immediately north of Lookout Point. It is just around the corner beyond this bay and is marked by a bucket rammed down over the metal post that used to hold the sign for this spring. Since it has been dry for at least 30 years, they should have taken it off the map. On

the return I noticed something along the Cathedral Stairs that I had never seen before, an old rusty strip of iron fastened to the rock that borders the trail. I couldn't guess the purpose.

In the Bright Angel Shale I was tempted to cut across to the pass where the Tonto Trail gives a view to the river, but I decided that the rough little ravines made it better to use the trail. In the ravine to mile 94 at the river, I changed my mind again about the difficulty at the bottom of the Tapeats. This time I went out of the bed to the west and followed the narrow ledge. I believe I'll do this consistently in the future. On the return I tried something new, going up beside the cliff to the west but closer to the bed than the regular way. After pushing my pack ahead in a bushy place, I gave up and used the regular way. This has the support of deer according to the droppings.

The girl at the permit window had warned me that the river might be a lot higher than I had seen it in April, and when I arrived a little before 7:00 p.m., I was impressed. It was up four or five inches from what it had been in April and if I wanted to cross I would have to go quite far upstream to avoid being swept into the rapid. However, in the morning it was down again to almost no current and I crossed as easily as on April 26th. I was expecting it to be high again by evening, but it didn't rise again. There had been a little rain recently and I found a few places with water even before I came to the narrows where one needs to climb around the barrier falls. I also came to a place where I could climb out to the west just before this narrow place in the Archean rock. The bed turns east into the narrow place and a spur of schist juts out from the west wall here. A place or two near the top of the Tapeats were hard enough to make me build a couple of cairns so that I wouldn't miss them on the return.

At the top of the Tapeats I took a good look at the south side of the Ra Osiris Saddle and decided that I couldn't go up at either fault. I don't have a similar mental picture of the possible break southeast of Osiris, but I assume that it wouldn't go either. As an alternate hike, I decided to go along the Tonto and see whether I could reach the place I had been in 1966 along the rim of Crystal Creek. In doing this I found two mescal pits, one being very nearly obliterated. I didn't notice them on the return and I am not perfectly sure that they were near the crossing of the first side canyon west of 94 Mile Creek, but I think they were there rather than at the crossing of the one nearer Crystal. It took me four and a half hour to reach the rim of Crystal Creek from where I had cached the boat at 94 Mile Creek, and I had time to go out and look down at Hermit and Boucher Rapids. I duplicated Stanton's picture taken from right at the angle above the mouth of Crystal Creek, but I needed two 35 mm slides to cover his field. I had my lunch just before noon at the rim above Crystal and I was glad I had carried a gallon of water before I got back to the mouth of 94 Mile Creek.

There had been no breath of wind in the morning, but towards 2:00 p.m. the wind began to blow in real gusts so hard that I had to brace against it. I had not deflated the boat but had weighted it down with a couple of rocks. I worried some that the wind might be able to tip the boat over and then blow it away. When I got to where I had left it, it was safe, and there was also a surprise. Some boatman from O.A.R.S. Inc. had left a business card and a couple cans of beer. It was unfortunate that I don't drink beer or anything alcoholic. However, I wrote them a note when I got home thanking them for the sediment and the good wishes.

There was nothing exceptional about my walk out on Saturday. The day was not too hot, but I took six and a half hours to get to Hermit's Rest. This included time to visit with some of the hikers and eat for 25 minutes at Santa Maria Spring. I had come away from the river with only one quart of water and was glad to get a refill. When I was starting up the switchbacks west of Cope Butte, I saw a young couple closing the gap between us below me. I was thinking how I would excuse myself from keeping their pace on account of my age, but before long I saw that they were resting enough so that I was pulling away from them. I saw them about twice later, but after that they were so far behind that I never saw them again.

Lower Hance Canyon and Sockdolager Rapids [May 22, 1977 to May 23, 1977]

I wanted to go out to Fossil Bay and see whether I could get down through the Supai in Specter and at the head of Fossil Creek, but the rangers told me that the Indians don't allow walking out on Great Thumb Mesa and I didn't feel like walking the Esplanade from Apache Point. I'll wait until they soften this rule. As an alternate, I decided to go down to the foot of Sockdolager Rapid and try to make my way along the wall to the mouth of Hance Canyon as Jon Thomas had done. I got my permit on Saturday and started early on Sunday.

Something that occurred to me was that the new part of the Grandview Trail is a little scary. I feel sure that a loaded pack horse couldn't get by a couple of narrow places. The rangers who get nervous about letting hikers go to remote areas should remember that they let anyone go down this rather risky trail. I met several backpackers coming up the trail. They had spent the night on Horseshoe Mesa and had carried water up from the spring. They were from Tuba City and knew Doug Shough.

I got down to Horseshoe Mesa in about the usual time, but when I started up a slight grade north of the rock shack, I felt so tired that I thought it inadvisable to continue. I actually started back for 100 yards and then reconsidered this decision. With my determination restored, I proceeded north to the west prong of the horseshoe and went down the old trail to the Tonto. It seems to be fairly well used now and had quite a few Vibram footprints. It had been an even 20 years since I was down here to get below the Tapeats, but I recalled that there was some constructed trail off the Tonto. Over near the rim of Hance Canyon there is a depression in the rim and a couple of large cairns locate the beginning of the trail. It isn't very clear in the gentle slope, but where the Tapeats breaks off one can easily find it and follow it east at the base of the cliff. It is not so well defined as it goes down to a saddle just west of a knoll in the schist. Here I should have gone down to the river to the foot of Sockdolager, but an arrow made of pieces of white quartz directed me toward Hance Canyon. Cairns almost all the way down guide one to one of the two ways to the bed of Hance. There was water making a few fairly good pools in this stretch of the bed. I would swear that in 1957 we were not blocked by any barrier below here and could walk right down to the river, but now, perhaps only 150 yards back from the river, there is a chockstone and a 15 foot drop. Al Doty later told me that he had bypassed this place by climbing up along the wall to the west, but I lacked ambition. I shouldn't have felt this way since my main purpose had been to go along the wall above Sockdolager. Now I just walked up the bed again to the familiar barrier fall there and didn't even use my time to see how the bypass looked for this barrier. This bypass is now marked by a cairn and a trail is defined across a sandy slope. After eating my lunch, I climbed back up the way I had come down and then didn't consider seriously going down the slope t the foot of Sockdolager.

Up on the Tonto again, I followed the very well defined trail around to the spring on the east side of the neck to Horseshoe Mesa. This time I came up the bed of the wash to the spring and only climbed out to the south at the very end. This works quite well. I met a couple resting at the spring with not too much on. Without asking them whether they had just had a bath in the basin, I dipped my canteen in because I was a little pressed for water. I went on and camped in front of the mine. When it looked as if it might rain, I spread my bed in the shaft and then moved out again in the night when I was bothered by mice. The varmints ate a small fistful of my bread, but they didn't gnaw through the pack to get to it fortunately. I won't sleep there again.

The couple I met at the spring came by while I was loafing on my air mattress from 4:00 p.m. on. They had gone down the Hance Trail to Hance Rapid the previous day and were going out on the Grandview Trail their second day. I could have carried my pack out with them showing that the trek to the river and back is still a possibility for me in one day, but I wanted to reach the campground in the forenoon to be sure to have a place.

After cleaning up, I had a good visit with Tom Davison. He offered to help me get up Vishnu Temple next October. Then I had quite a visit with Bob Euler. He has looked over the Esplanade both east and west of Supai that the present Indians call their traditional use areas. He found plenty of signs that Indians different from the Supais used those areas too. The most interesting thing that he told me about Vishnu Canyon was that there is a ruin of a white prospector's cabin in a sort of bowl to the east of the streambed.

Tim Manns had signed out Shankland's Life of Stephen Mather for me and I read it clear through on Monday and Tuesday. After returning it, I drove to Lee's Ferry to connect with Bob Dye. He thought he would be along about Wednesday or Thursday.

On Tuesday evening the Patrick Conleys had me to their trailer house at Vermilion cliffs for dinner. I met three river boatmen: Clair Quist, Roger Murphy, and another man. We had a delicious meal and a good evening of river talk.

On Wednesday I hiked up Paria Canyon for four and a half hours. This got me 15 minutes past the first west side canyon that comes in at river level. I was able to find stepping stones almost everywhere that I needed to cross the stream. Some backpackers that I met about ready to break camp said that they had wet feet all the time that they were coming through the canyon. I found that it was even easier to keep my feet dry northwest of where I met them than it had been below that place. In fact for a long way a trail goes high above the stream to the west. At some places this trail has to penetrate huge rockslides where a few cairns are the only sign that you are on the approved route. The streambed below is also cluttered with rocks so that this trail is a help. Pat Conley told me that the canyon upstream from where I got stopped is still more exciting, but the walk I took was through inspiring scenery. Years ago I was on the verge of walking through the Paria Gorge, and maybe I'll carry it out yet.

On Thursday I gave Bob Dye up and decided that I had done enough hiking for one time. I went to Page early enough to catch Al and Jane Doty before they went to their jobs. They gave me the run of their house and on Friday morning Al took me for the long promised flight over Lake Powell. I understood

what I was looking down on much better this time than I had before. We flew over the Dry Rock Creek arm and then over the Kaiparowits Plateau. We saw a little of the Escalante and the mouth of the San Juan. I recognized the Emerton Arch Cove and the airport and the area where I had found the way from Dougi Cove over into Oak Canyon. I looked for a way from the region of the airport down into Anasazi canyon, but from our altitude I couldn't tell what would go. The white rock ridges on the northwest side of Navaho Mountain showed up in a spectacular manner.

On Thursday evening Al and I took his 150 foot rope over to Jim David's route down to the river near where the tunnel road reaches the rim. There is a good place to tie behind a big rock right on the brink of the hard part. I got down a little way holding on the rope and then lost my nerve. Al went on down to where Packard and I had come up from the river. He said that the narrow crack was so narrow that there is very little room to move. He didn't see any Moki steps that made it easy to ascend as David had said. He used the rope constantly in getting back up. I believe that the next time I get here I would keep up my nerve and be able to do this climb. It would be preferable to use two ropes, one for the top 15 feet and the other to hang straight down the crack over at the west side.

On the way home I had another bout of chess with Dick Hart, until 2:00 a.m. and then until 1:00 p.m. on Saturday. He won the last four games so he finally agreed that I could go.

Paria Canyon [June 27, 1977 to June 29, 1977]

I visited with the men at the Alpiner Store and with the math department on my way north. At the Lee's Ferry Store I asked whether it would be safe to walk through the canyon at this time of year. Clouds were beginning to build up for the summer rainy season and they had had one good rain in Flagstaff. I could see that the Paria was about nine inches deeper than it had been at the end of May. Then you could see the Paria water as nearly clear, but now it looked like dark gray paint. The girl clerk assured me that plenty of people were still walking through.

When I left the Jimmy it was 3:30 p.m. The gate was locked but it was easy to walk around the east end of the fence by the irrigation ditch. I was carrying quite a bit more food than was necessary, but I suppose I would have appreciated it if I had been ledged up somewhere by a flood. I took an empty plastic gallon milk container so that I could carry extra water if at any time I saw the need. I had played with the idea of pouring water on my shirt from time to time to beat the heat. The temperature was about the hottest of the year, 114 ?F in Phoenix on Wednesday. I passed by two seeps just west of the trail that are not much more than four miles from the start. I figured I would at least walk until 6:00 p.m. and take my chances on finding more water for camping.

Pat Reilly had briefed me on the location of several rocks decorated with petroglyphs. His log, which I read very hastily the night before I left home, mentions the mushroom rock marker 50 feet to the east. I had noticed this rock when I was here on May 25, but at that time I had overlooked the petroglyphs. This time I realized that I might be getting close to Mile 6.2, Reilly's estimated position and I looked a bit and saw the pictures. I didn't notice another picture rock until I was returning on Wednesday. This is about 100 feet farther north, but still just south of a low, stubby mushroom rock. One might guess that the

Indian artists were influenced by these two landmarks in picking the site for their pictures. They don't seem to be close to any trail end or water source. I had already noticed, at about Mile 3.0, the sandslide or Domínguez Trail. This must be the way used by the supplier for the second Powell river expedition when he tried to reach Lee's Ferry by going to the north of the Paria Plateau. Neither going north or coming south could I see the supports for the power line that used to come down to Lee's Ferry from the east. Perhaps they have removed it and use power coming from downriver. I meant to ask about this change, but I got to the car too late Wednesday evening and I left too early Thursday morning. A good loop hike would be up the sandslide trail and down the Spencer Trail.

About a quarter of a mile south of where the trail leaves the flat as it ends near the shale wash out, I camped for the night. I figure I had come about seven miles from the car in two and a half hours. There were lots of cow chips around but I saw only one cow on my way in and none on the return. I had seen a couple of calves and about three cows in May. Perhaps someone has moved them to higher and greener pastures for the summer. There were fresh deer tracks everywhere along the creek and also plenty of fresh cow tracks. I noted one big mule deer out in the open at perhaps Mile 5.0 on the way out. In spite of the heat, it left in great bounds. The two quarts of water I had carried from the car didn't suffice for my soup or my breakfast. I doped the creek diluted mud with iodine and drank it as sparingly as possible as well as using it for my Lipton's soup. When I ate the latter it looked like mud pie, but it tasted like soup. I didn't seem to feel the worse for the mud in my diet, but it had a definite effect on my excrement.

When I had gone a short way on Tuesday morning I discovered that in May I had missed the best trail through the rock slides and above the steep clay cliff. I had been on the trail part of the way, but I went too high before coming down on the flat near the F. T. Johnson inscription. When I got it right, I saw the Johnson inscription of May 30, 1912. I wonder how soon someone is going to get an attack of conscience and remove this the way G. M. Wright was treated. In May again I failed to find his name where it used to be near the sunken steamboat. I looked across the creek but I couldn't decide which big rock had petroglyphs on it. It would have involved two creek crossings, and I didn't consider this effort worth while. On Wednesday I saw a rock that may have been decorated, but I couldn't prove this without binoculars or going across to it. Within two hours after Al had started on about 5:00 a.m. on Tuesday, I found a seep spring just downriver from the mouth of the side canyon at Mile 10.5. I was glad to empty the dark gray emulsion out of my canteen. In May I had walked 15 minutes beyond here. It would be interesting to see how far one could go up this side canyon. If you were willing to climb in sand, it might be quite high. The entire Paria Canyon looks very difficult to escape from, but Reilly has marked on his map a way called the Adams Trail at Mile 13.25 and the Old Stock Trail at Mile 19.8.

By a strange coincidence, when I met some people near Mile 12, I was addressed by name. Two young men I had known in Flagstaff were conducting a group of colored boys, ages about 12 through 15, through the Paria Canyon. Lee Haines had been through before. Bill Williams I knew from the Sierra club committee meeting in Flagstaff. They were worried because one of the boys had gotten away from the rest when the others went up to see Wrather Arch. He must have come out safely at the lower end before I started in at 3:30 on Monday. There was no search going on late on Tuesday or on Wednesday, so I am sure he was all right. Close to Mile 13 I met a couple with two girls. Their names were Bruce and Mary Perkin. They were from California and had met my old friend Jerry Foote who had gotten them interested in the Paria. They were on their second trip through. They told me about the Shower Bath Spring at Mile

14.5 and that there is a good campsite, high above flood danger, inside the mouth of Buckskin Gulch. I passed another young man and woman hiking downriver, but they were across the creek and I only exchanged a greeting. They hadn't noticed the special nature of the Shower Bath Spring. When I asked about it, they didn't seem to have noticed it but they had found plenty of seeps on both sides of the creek. I was afraid that I might have passed the Show Bath without noticing it either, but when I came to the end of a short stretch of the river running due west, I saw the water falling several feet in much greater volume than anywhere else.

As Reilly points out, the bed is different as the river is going through the Kayenta bedrock about Mile 12. I also noticed the high sand dune far up on the south side of the stream.

I had been told that there is now no BLM sign announcing Wrather Canyon, but that I could recognize it from the cottonwoods and extensive flat terrace on the north side of the river. I had been keeping my position quite well by following the bends shown on the topo map, and I walked right into the entrance. The beaten down tracks in the sand made me sure. I was quite impressed with the beauty of the vegetation and ruggedness of the side canyon as I was by the arch itself. Haines and Williams had assured me that I would need only 15 minutes to get in to see the arch but I suspect that they didn't time themselves. It took me a little over a half hour to get up to the high position needed for the best picture. I was on the detour for more than an hour. No water was flowing out of the side canyon, as I have heard sometimes is true, but there was a good gurgling sound of a running steam directly below the arch. One could go on up the bed for some distance past the arch.

I wondered what would merit the name, The Hole, but I wasn't surprised to find that it is a deep alcove something like the old Cathedral of the Desert in the Escalante up Clear Creek. Lots of maidenhair ferns festoon the walls and seeping water keeps a shallow pool well supplied. It is surely worth crossing the creek to walk into.

I was identifying the bends in the canyon and I figured that I could identify Judd Hollow, but still I didn't notice the pump and pipe that I knew about. I was looking for them on the east side of a big promontory that splits the bottom of Judd Hollow. When I didn't see the machinery I thought I might have mistaken the identify of Judd Hollow and I walked on. The short stretches and the abrupt turns in the canyon made me think of the map beyond Judd Hollow. About 4:00 p.m. I stopped to study the map and assess the condition of my feet and ankles. I was dismayed to find that I had left the small amount of adhesive tape back at a rest stop two or three miles downriver. When I saw the well developed mat burns I decided that the smart things to do would be to retreat. This was at about Mile 19 and I turned back around 4:15.

I soon got back to what I had thought to be Judd Hollow, and this time the pump and pipe were in plain sight, just upriver from where I had been looking. I also noticed a wooden ladder leaning against the wall. I wonder whether the men putting in the pump could climb out using that ladder.

I continued my retreat until I came to some seep springs and I camped on the north side of the river at about Mile 17. On the right side of the bed there is a spring that would be flooded with every rise of the river. Still there is a good enough pool of clear cool water to be home to hundreds of tiny fish. At a couple of places the tiny pool springs keep the sand churning in the bottom.

On Wednesday morning I got started about 5:20 a.m. and reached the good seep at about Mile 10.4 in five hours. I made myself comfortable in the shade of a cottonwood on the cool moist clay near the river and read Time and had a very leisurely lunch. When I finished all the reading, I began to get bored and I decided to go on out starting on at 1:00 p.m. It was plenty hot, the hottest June 29th on record in Phoenix, and I carried about three quarts of water for what had taken me four and a half hours to walk on the way in. I got to my first campsite in only one and three quarters hours which I had remembered as having taken two hours on the way in. I needed an hour longer for the next and last leg to the car than I had used coming in. I had a cloud cover for most of the afternoon, but still I was in poor shape from dehydration towards the end. I finished with water in the canteen, but I seemed not to want to drink enough. I did take some salt and also snacked on salted peanuts about an hour before getting to the car. There were some disagreeable features, like raw spots on feet and ankles, bites from flies, and the heat, but still I am enthusiastic about going back to do the rest of the Paria and study the possible trails down from the rims. The next time I think I'll wear bread wrappers over my feet inside the socks to try to prevent chafing.

Little Dragon and Lawes MacRae Route [October 8, 1977 to October 12, 1977]

I had formed quite a program for four days of actual hiking at the North Rim. Three of the days would involve going off Grama Point down the Lawes MacRae Route to the Tonto in Tuna, then off the Tonto west of the Tuna inner gorge and then via the Royce Fletcher Route down the river cliff to the mouth of Tuna. Then we would go along the river to Crystal and come up to the Tonto just west of the mouth of Tuna by the route on the west side of the Crystal Creek Gorge. We would return via the Grama Point Route. Then on the fourth day we would go off the rim toward the Colonnade and get down the Redwall into Haunted Canyon.

Jim Ohlman met me in Flagstaff and encouraged me at various times, but our accomplishments were far less than my plans, something that is quite common.

Alan and Jane Doty pulled into the Jacob Lake gas station right beside us and we had quite a visit. Just the week before he had climbed Little Dragon and he was headed for Monument Point and Bridgers Knoll this time. Jim and I got our permit at the North Rim Lodge and met Ira Estin, a caver friend of Ken Walters, and a companion. They were going into Dragon Creek via the Shiva Saddle and they asked a few questions about that route. They intended to follow us out the fire road, but they missed us somehow. I wasn't an expert in finding the road W1 any more because I started up right on a road that goes to the exit highway and has to back up some yards to get on the road that goes near the dump. Jim and I had the map along and tried to work out the right position for the car for the most direct route to the Little Dragon. We may have gone a little farther west than necessary, but we got out and back in good shape. We found that Al had not built any cairn on the lower north summit of the Little Dragon but he had built a good one over a foot high very near the summit of the real high point. When we had walked away from the car we had gone past a couple of sinkholes quite near the road. As we came back through the woods, we had to keep our course by guess, and we tried staying on the high ground until that seemed to be going too far east. When we went down and up on the high ground to the west, we may have come quite close to the right.

sinkhole again. On reaching the road, we turned west, but in just a few minutes both of us agreed that this was wrong. The car was only a few minutes east of where we had reached the road.

On Sunday morning we drove to a place that seemed closest to Grama Point. In the walk through the woods we had a tendency to go too far to the east, but finally we reached the rim of Crystal Creek Bay rather close to the rise toward Grama and then we went southwest to the rim above the east arm of Tuna. We were looking down into the fork that is just east of the high point 6273. Ginger Harmon had said that the Redwall break was a little north of this point on the west side of the canyon, and we could see that the wall there was impossible.

Jim and I went down to the Toroweap at the head of this canyon through some really bad brush and worked our way towards the end of Grama at this level. The going got easier than it had been at the head of the draw, but the slight deer trail wasn't easy to follow. I got discouraged and we headed back for the rim. When we were half way to the road, both of us got the idea that it would be good to go to the end of Grama and look down. We did this and decided that with the rise toward the end of Grama, it might be counted as a Grand Canyon summit a bit like Comanche and Fossil Mountain. The view down gave me the conviction that Ginger was wrong in putting the Redwall break over near the 6273 location. The way through the Hermit and Coconino would be no real problem. There would be some difficulty in the Kaibab between the main end of Gram and the next headland to the west, but we could play that safe by going down where we had before, through the brush and then along the deer trail. The Supai was more of a problem, but the best place seemed to be right at the bed of the wash going down to the head of the minor canyon right next to the wall toward Confucius and Mencius. We could see the place along the wall beneath the saddle to Confucius that was proposed by the airmen to Lawes and MacRae because a talus covers more than half the Redwall, but I still wonder why they would have preferred this to the route down from the Tuna Flint Saddle. On the west rim of the Redwall gorge, slightly to the north of a spire in the Supai on that side, I could see a depression that might be the head of a ravine going down obliquely into the canyon. It reminded me of the head of the cut through the Redwall on the Enfilade Point Route and it would have been my choice for the first try.

By now Jim and I thought it was too late to start down. We were not sure that we would find water in the Tapeats in Tuna Creek since this had been a dry year. I thought it would be better to wait until the next day and use the known route via the Tuna Flint Saddle and get down soon enough to reach the river if necessary for camping.

We next parked at a place which would be a logical departure point for the Tuna Flint Saddle and then noticed that there were many plastic colored ribbons tied to tree limbs here. A Jeep track led up the hill to the east and more ribbons indicated something of interest. I concluded that they have marked the route to the Indian ruins below the Kaibab. We were going to spend some time just wandering in the woods to the west, but we decided to see these ruins the second time for me and a new experience for Jim. The Jeep track was faint and the ribbons were rather far apart but there was a good cairn built at the head of the Scramblers Trail off the rim. We went down below the bare Kaibab cliff and then followed the trail to the west, getting lower than I had remembered. Then we went up into a small bay and saw the familiar ruins, a row of eight granaries on one level and a small dwelling on the level just below. To the west on a ledge beneath an overhang and up about 15 feet from where you stand, there is a crude wall that might serve as

a defense rampart in case of attack. Jim tried climbing a juniper tree and getting up the wall, but this was out without a good ladder. Someone had carried a heavy six foot plank down here, but we didn't see how that would help. A 16 foot two by four with cleats would be the thing. Before we started toward Grama Point the first time, we had driven to Point Sublime for the view. Here we met Jeff Ingram, the former Southwest Secretary of the Sierra Club. He recognized me and we had a short visit. Now we decided to go back to Point Sublime to spend tonight before starting down the Tuna Flint Route. During wakeful spells in the night I decided that it would be better to go down the Lawes MacRae Route and come up Crystal Creek with a half day spent in going along the river from the mouth of Crystal to the mouth of Tuna to investigate the way to get from the mouth of Tuna to the top of the Tonto west of Tuna.

We started away from the car just before 7:00 a.m. and needed more than 30 minutes, with some fumbling to find the place, to reach the rim at the west base of Grama Point. Our way through the brush to the Toroweap was just as bad as it had been when we went down the previous day and worse than the way we had come up. Right after we passed the farthest place reached on Sunday, the deer trail cleared up a lot and we needed about 35 minutes to go from the woods on top to the place where we headed down through the Coconino and Hermit. There must have been a lot of ways to get down this broad slope of slide material overgrown by junipers, but we did have to zigzag a bit to avoid minor drop offs. Jim scouted ahead to look the Supai over and he came to the conclusion that we had better try it right at the center of the wash. The hardest place was a 15 foot wall where we had to go to the west and look for the best place. There was a steep crack wide enough for one's shoe. I used a light rope looped around a bush for a hand line, but Jim came down with no help except that we lowered both packs with a rope. There was another barrier where we might have gone far to the east across the draw but Jim got a more direct way where he pulled out some loose rock and made new steps for me. The rest of the Supai merely required routine care not to stumble on loose rocks or slide on shale exposures.

Jim spotted the sole of the rubber shoe near the top of the Redwall ravine before I told him that it had been seen by Olin and Harmon. Then I alerted him to watch for the two ropes down in the break. He saw both before I did. In fact I think my bifocals limit me a lot in spotting things. The way down the Redwall in this ravine is beautiful. It must really have amazed Lawes and MacRae to find so fine a way down. It could be seen from the top of Confucius, but it doesn't seem logical to be where it is. It would rank very high among my 151 routes through the Redwall. There was one place near the bottom of the route where we got out of the bed to the right, but Jim thought that he could have climbed down here directly. He waited for me in the main canyon bed and pointed to a rain pocket that is over a foot deep. There had been some recent rain on the rim that had put muddy pools across the point Sublime Road, but this rain pool was six inches down from its overflow but it was still about eight inches deep. I was glad to get a refill for my two quart canteen. The afternoon got quite hot and we didn't get to Crystal Creek until 4:15 p.m.

Walking the bed was routine with a few big boulders to get around. We left the rain pool after our early lunch about 11:30 and were leaving the bed above the junction with the west arm in less than two hours. The way along the Tonto on the east side of the lower Tuna gorge is time consuming with hills and long detours into side ravines. I went over to the Tapeats rim and checked that the spring is still flowing down into the granite from the lower Tapeats. We finally got over the saddle just south of the elongated shale butte I call Scylla Major and went southeast to find the break in the Tapeats near the mouth of Crystal.

We located it with help from a cairn that must have been two feet in diameter and several feet high before it fell in a heap. There were a couple of small cairns 40 or so yards below the rim, but beyond that we were on our own. We made hard going of this descent by getting off the right ridge to the south. The footing on the chips of shiny schist was precarious and the steep but jagged ridge to the north of the draw would have been far better.

We had a pleasant rest beside Crystal Creek from 4:15 on, camping about five minutes walk from the river. On Tuesday morning we carried just our canteens and a snack along the river toward Tuna. I had the erroneous idea that this would be simple walking over blocks beside the river all the way. When we had to climb along cracks in the polished rock and step along ledges around corners in a cliff, I got discouraged. Where I decided to turn back we would have had to follow some cairns and go 200 feet above the river. I decided that it would take too long to really see the Fletcher Route up to the Tonto and still move our packs up Crystal to the highest water. We got back to our packs and started up Crystal about 8:30 a.m. It seemed longer than I had remembered to the junction of Crystal and Dragon, about two hours and ten minutes. As before, a lot more water was coming from Dragon than from Crystal. There was one place in Crystal below the junction where big chockstones made a bypass necessary. There may have been lodged here by the great flood in December, 1966. I don't recall the obstruction from my trip up the creek in late May, 1966, but I recorded the fact that I took two hours and ten minutes to go to the junction of Crystal and Dragon at that time without a pack on my back, and Jim and I carried out backpacks over the same distance in only five more minutes. I showed Jim the prospect hole near the junction and we noted that the flood devastation over the terrace south of the junction is not nearly so noticeable as it was in 1967.

The Tapeats narrows in Crystal is farther north than I had remembered, I warned Jim that it was a deadend for me even though the fall at the upper end is not very high. I took the deer bypass to the east. Jim wanted to see what I had seen on my first trip, and he also wanted to try the climb out at the upper end. The bypass is also longer than I remembered. Jim did succeed in climbing the wall to the east of the water and then he pulled his pack up after him. It swung into the fall but it didn't get soaked. Our progress to the head of the water was hindered by the amount of growth in the bed. Finally, we came to the place where the water was above ground, but I recalled that there was some on the surface higher. We found this to be true and camped beside a seep pool. The springs I had seen at the feet of the cottonwoods on the west side of the channel were not flowing. We had come here from near the mouth of Crystal between 8:30 a.m. and 1:45 p.m. I didn't feel much ambition and I spent the afternoon reading the Readers Digest. There were lots of flies here but they didn't bite.

On Wednesday morning we got going a few minutes before seven and took about two hours to reach the foot of the Redwall break. The brush in the Redwall route was worse than I had remembered and it took us 35 minutes to reach the top. Getting through the manzanita to the fine walking up the wash in the Supai was also rather slow and we reached the good walking in just about one hour from the bottom of the Redwall. There were a few pools of clay red water through this stretch. Many of the maples were past their prime but some had scarlet leaves and this was about the nicest walking we had on the entire trip.

Where the going got steep near the top of the Supai we saw muddy paw prints on some rocks that looked very much like a cat. They weren't big enough to be made by a full grown lion.

The worst brush of the entire trip made getting through the Hermit and Coconino a real fight. We could find some thin places where progress was relatively good, and then we would come to a wall of interlacing brush much of which had thorns. About 1:40 p.m. we came out on top with a good deer trail for the last quarter mile.

We walked about 35 minutes through the woods to reach the road and then a like time to reach the Point Sublime Road. It took 50 minutes of walking on the road to reach the car. The car odometer told us that this was just under four miles to pick up our packs where we had came out of the woods.

We used W1 to reach park headquarters where we met a young climber, Earl Cram, who has designs on Mount Hayden. I dropped Jim at the NAU campus about 9:30 and got to Sun City about 12:30.

Boucher Creek and Hermit Camp [December 9, 1977 to December 10, 1977]

My original plans for a nine day hiking period were thrown away when I got a light case of the flu. Finally, on Thursday I drove north and visited at the Alpineer store and the math department where I picked up my trail logs that Jim Ohlman had had. I got to the permit counter at the South Rim in time to get a plan signed for five days of good hiking. I was going to go to Clear Creek in one day, then see Bob Dye's route through the Supai and Coconino, then walk back and up into Haunted Canyon in one day, walk the loop up Sturdevant Canyon and come down Haunted using a rope at the top of the Redwall, and then walk out from there the fifth day. Mary Langdon was loath to permit me sleeping privileges in Haunted Canyon since she had been making others agree to camp up on the top of the Redwall in the Phantom Canyon area.

While I was at the permit window I ran into Brian Culhane. We had met on the Hermit Trail last year. Now he invited me to have dinner with Trinkle Jines and him at the girls dorm, a former caretaker's house in the southwest part of the village. We had a pleasant evening of talk and then I was invited to sleep on the davenport at the men's dorm. I spent an uncomfortable night of little sleep because the room couldn't be cooled off. I realize that with the bad night and my cold still a bother, I would rather take on a less ambitious project than to start down the trail with food for five days. I went back to the permit window and got a two day permit to go down the Boucher Trail expecting to see the Supai and Redwall routes in the upper Boucher Canyon.

As I was hiking along the Boucher Trail before it reaches upper Travertine Canyon, I began to wonder how difficult the Supai in Boucher might be. I realize that Packard, Walters, and Ohlman can do climbs that I wouldn't undertake alone. In order not to get in a jam, I decided to go down the trail to the Redwall rim and then follow it around to the head of the Boucher Gorge. I could then use whatever time I had left for seeing the Supai route and have plenty of daylight for going down the Redwall to water in Boucher Canyon.

This was a good idea except that it was getting along in the day when I left the trail to follow the Redwall rim. When I had been breaking this new ground for about 30 minutes, much slower going after the rim

changes from a platform to a steep slope, I got discouraged and turned back to the trail. I had spent almost an hour on this deadend and in just one more hour I got down to Boucher Camp about 4:15. I was feeling low because I had had to give up the purpose of the trip, and besides my feet hurt and one knee was feeling bad from breaking the shock of coming downhill. I had fallen in the trail when a rock rolled underfoot and I had put my hand on a cactus. I lay around on my mattress reading Time until supper and thought that I would let the younger men have the big time exploring to themselves. It was an unpleasant decision.

One mistake in packing my groceries was that I left behind the meat I had planned on eating for the two days. Another poor decision was to sleep in the mine shaft for warmth. I was wakeful again by being too warm, but I got a much better night of sleep then I had in the living room of the ranger dorm. Twice that night I was startled when rocks fell from the roof of the shaft to the floor about five feet from where I was lying. While I was eating in bed before daylight, I heard an awesome rumble of a lot of rocks falling and sliding somewhere.

I went back on Saturday along the Tonto to Hermit Creek in three hours and it took five and three quarter hours to reach the car from Hermit.

Pearce, Spencer, and Milkweed Canyons [January 22, 1978 to January 28, 1978]

Bob Marley, an electrical engineer with a lot of hiking experience, went with me. We pulled my boat from Sun City to South Cove with lunch in Kingman. We got there shortly after two, but we found that I had left a switch turned on and the boat battery was down. After some inquiries, we took it to Frenchy's where we could get a quick charge in an hour. At Bob's suggestion, we disconnected the battery at each long stop and had no trouble starting it.

Since it was late when we finally got away from South Cove, we merely went to the north side of the promontory of Sandy Point for the night. We were glad we were in the cabin that night because it rained hard with some hail. It was blowing from the northwest in the morning when we wanted to start and we had a hard time getting going since the motor refused to run in reverse gear.

From here to Pearce Ferry we had to watch for driftwood but we managed to dodge it and we tied up at the north end of the cove where burro trails lead over the hill and down into Pearce Canyon Wash. By 9:30, we were ready to put on our packs and start up the 1000 foot climb over the ridge into Pearce Canyon. This time there were quite a few pools of water in the bed left from the recent rain. They subside into the gravel quite fast, but the water in the grooves in the bedrock on the north side seems to last well into the winter. This is about ten minutes walk upstream from the first major side canyon coming into Pearce from the south.

Three years ago Jorgen, Bill Belknap, and Ed Herrman had gone up this side canyon and had been stopped by a very high fall. We now had the time since we only wanted to get to the cave near the junction of the main arm and the north arm. It is an impressive bay with very high walls going to the top of the Redwall. There is a split in the rock where the fall has carved its notch, but it is still around 100 feet

up to the lip. We went up a talus to inspect a slight shelf at the foot of the cliff on the west side of the fall, but we could see no signs of use by Indians. Bob noted that one could climb rather high on the east wall about a quarter mile north of the fall and an expert might have the nerve to go on up using the roughness of the wall for holds. We spent something more than an hour on this detour. At the shelter cave north of the mouth of the north arm of Pearce, we were able to follow burro trails up to the cave. It seemed that someone has been digging into the bed for artifacts because there were two or three shallow pits in the floor. We noted a crude metate and mano, but the blackened roof was the only other sign of former occupation. We were able to scrape level places for our beds and we had a good night here. There had been a threat of showers but it cleared up and got quite cool before morning. In the morning we got away about 8:00 and went through the Redwall narrow of the main arm where we found quite a bit of water but no running stream. My project was to go out on top using the third side canyon from the south. It lines up with one from the north that I used last year to get from the north arm to the main arm. Visbak, Belknap, and Herrman had done this three years ago, but no one that I knew had been up the continuation on the south. Bob agreed from the start that we could get out on the Sanup Plateau from here, and we were not disappointed. In fact it would be grist for another hiker to check all the ways.

Just as we were passing an arm of this tributary that comes from the east, Bob pointed to six splendid bighorn rams that were about 50 yards away on a ledge leading into the east arm. All six watched us for a couple of minutes and then left in a leisurely, orderly manner around the corner into the side canyon. We had time for several pictures, but there was little contrast with their background.

Near the top we veered to the west where the way to the rim seemed the surest. We had come from the cave up here in about two and a quarter hours. Bob ate a snack and took some pictures and then we headed southwest to see the broad valley that forms a sort of bowl in the surface of the plateau and that drains down into the canyon we had entered before reaching our campsite at the cave. Billingsley had gotten me interested in this area by suggesting that it might be some type of sinkhole, but from our position on the slope east of the valley, it didn't seem so different from quite a few desert type drainages such as go into the Little Colorado. We got back to our packs at the junction of the main and north arms of Pearce in time for a late lunch. We walked down to the boat in less than three hours. The day was still warm enough for us to shave and take sponge baths. We enjoyed our reading by gasoline lantern light before retiring.

On Wednesday we boated up to Spencer with no trouble from mudbanks. The lake was high enough so that one could get a boat to the foot of Columbine Falls and there was enough water in the river above the lake level. The lake level was 1184 feet and the river survey puts the height of the bed at Separation Rapids as 1175 feet, but the daily fluctuations of the flow are up to three feet at Spencer and from the swift current and dirty water, we figured that there was also a flood coming out of the Little Colorado River. We moored the boat at the extreme north end of the silt bank but we should have tied it still farther upriver at the last flooded tamarisk.

When we left the boat we soon found that the trail over to the running stream was flooded by the high water from the river and we had a little difficulty in getting up on the highest silt terrace to go west and get down to the clear streambed. We needed about two hours to reach the mouth of Meriwitica Canyon which is recognizable by the detached tower of brown granite standing away from the wall. The flow in

the creek varied considerably along here. Once the bed was dry for a short distance. Finally the bed did go dry just before we reached the wooded terrace on the left bank where Jorgen and I camped last year. Floods had buried the water holes where Jorgen and I dipped our canteens. The first surface water is now at least 100 yards farther downstream. It was still early and I was sure that we should find more water at the big travertine terrace about a mile upstream from where the map places Spencer Springs. When we approached this travertine cliff on the west side of the bed, I entered the mesquite thicket looking for water and Bob went up the open bed. He soon reached the place where water can be heard falling down the face of the cliff with just a little dropping over the edge of the bank into the gravel of the wash. We put our beds on some level ground across on the east side of the wash from here. The secondary stream channel just a couple of feet below my bed was still muddy from the last flood.

We had taken about three hours to get here from the boat so there was time to see the interesting features on top of the travertine terrace. We followed a burro trail up on the south end and then went along the rim to the north. The marshy tangle of greenery was hard to cross without getting wet feet. We soon came to the rock wall and concluded that its main purpose was to get rocks out of the way of a garden bed. Something that I hadn't noticed when I was here with Homer Morgan was that there is a petrified irrigation ditch here, much like those at Quartermaster Canyon. All the former soil near them has been washed away and now the former ditch is a ridge of travertine with a groove along the top. Farther to the north and back from the rim of the terrace where there is still quite a bit of soil and there are evenly spaced rock piles where someone has tried to clear the ground.

We went up on the highest part of the travertine deposit near the springs and then came down to the south and doubled back to find the rock cabin. It is just below this higher slope and a few yards south of the greenery formed by the spring water. Since there are no timbers around to support a roof or form the door, we wondered whether the building was ever finished. I have noted that the Boucher cabin had a small fireplace but there is no hint of one at this rock house. The walls are well done, everywhere at least two stones thick and fairly impervious to the wind even without mud for mortar. About 20 yards away there is a little shelter cave in the travertine, and the ground appears to have been smoothed for good sleeping. A frying pan and another pan are still there. We even found a shoe which may have shrunk some. It didn't seem big enough for an adult. Parts of two more rotten shoes were in the mud. We thought that the man who cleared the field and built the rock cabin must have lived here for some time. About the first thing that we saw when we walked north along the rim of the terrace were two rusty tin cans which seemed too large for consumption of the contents by one man. The shelter under the travertine projection was only big enough to sleep two comfortably.

We broke camp on Thursday morning about eight as usual and needed about two hours to get to the junction of Milkweed and Spencer. On the way we looked rather carefully at two places where one might have a good chance of climbing up on the plateau west of Spencer but we had other things to keep us busy. We walked about 50 minutes up Spencer before we came to a good flow of water and we camped on the south side of the creek. We would have enjoyed more sunlight if we had been on the other side. There was ice on most of the pools and the ground thawed into mud near our campfire that evening.

After an early lunch we headed up canyon to find what we could about upper Spencer and the possibility of climbing to the top of the plateau. First I wanted to see what was up Spencer beyond where Jorgen and

I had been last year. The burros have a bypass of a fall quite close to the junction of Spencer and Hindu Canyon. Then the walls close in above the rough bed until, less than a mile above the junction, there is a big pool that would have to be waded and only yards beyond there is a spectacular fall. So we went back to the vicinity of the mouth of Hindu where a lot of travertine on the left side of Spencer can be climbed.

Bob preceded me here and checked around a corner of the next cliff above and soon I heard the encouraging call, "it goes." There is just one angle where the rock is broken into stepsand one can go up even with a pack on his back. Bob built a cairn to mark this place from above and then we walked up a short valley with a bit more hand and foot work at the top. From there is was just a walk to the east of a Redwall promontory and up to the west to a saddle and so to the top. We were higher than most of the plateau in any direction. On the return to camp, Bob tried going down off the travertine into Spencer west of the junction with Hindu and he was in camp for some time before I got there. I went down near where we had gone up, but I found an old horseshoe. We theorized that some Indian packhorse had gone wild and had come in here without his master.

On Friday we walked down to the junction of Spencer and Milkweed. Bob had something wrong with his digestion so he stayed by our packs while I went up Milkweed to see what I could before 11:45. There is the way to get to the top where Billingsley and his companions came down, but from a distant view, we thought that his way is not unique. The way that looked the easiest to me leaves the bed in the upper right corner of block 26 of the Milkweed Canyon NW Quad and goes southeast past the C of the word Canyon.

The first water appears near the bottom third of the same block 26 and there is a running stream above ground most of the time from here on up as far as I went, to the upper corner of block three where you come out of a fine narrows through the granite. The geology of Milkweed is most interesting. All the way up Spencer, the Tapeats seems to be tilted up to the south until it is higher above the bed near the junction with Milkweed than it is down by the travertine terrace. Then a little way up Milkweed, on the west side, you can see a break where the granite comes up suddenly about 600 feet higher than on the other side of the break. Where I turned around at the end of the granite narrows, it was still 300 or 400 feet above the bed. The promontory to the south at 4600 feet elevation may not have been Redwall at all. There is clear cut Redwall above the junction of Spencer and Milkweed, but farther south where the slope forms the access route, something else like red sandstone is just north of the broken area. It weathers into smooth bulbous knobs. A geologist would have problems cataloging all these irregularities. A fine landmark was a travertine fall on the west side in a tributary. I believe it is in the branch from the west about two fifths of the way from the bottom of Block 34. Another landmark is the tower on the east side of the bed near the top of block 35.

Even at the end of January these canyons have birds, junkos, canyon wrens, and others. I saw an ouzel and a slate gray bird that had the shape of a cardinal including the crest. There were herons and ducks on the river.

In spite of Bob's indisposition, we made better time down to our former campsite across from the travertine terrace than we had on the upgrade on Thursday. There was a big ring around the sun and the sky became overcast to the extent that we moved our beds under the nearby overhang. This was the reason I saw the Indian pictographs painted on the wall and ceiling in red clay. There were a couple of

human figures and some geometric doodles and some mere smudges. There was no rain and the morning dawned clear.

We continued to make fast time down to the boat in the morning. The river had dropped about three feet and the bow was on the rocks. Bob didn't have to strain after he untied and pushed it into the water. We made good time downstream. I recognized Surprise Canyon, Triumphal Arch, Burnt Canyon, Quartermaster, Tincanebitts, Dry Canyon, Bat Cave, Muav Cave, and Columbine Falls. We put the boat in close to Columbine Falls for Bob to get a picture.

I had no trouble getting the boat on the trailer since there was no wind. For the return to Kingman, I tried the gravel road that goes through the foothills and reaches the highway a block east of Terrible Herbst. We reached home about 6:30 p.m.

Phantom and Sturdevant Canyons [February 24, 1978 to February 26, 1978]

I had talked to Jim Ohlman about climbing Manu Temple and coming down at the head of Haunted Canyon with the aid of a rope. When he discovered that they have named a minor butte on the promontory between Sturdevant and Haunted for Louis Schellback, Jim had another reason for wanting to go up here. He called me and we agreed to meet at the permit desk at 3:00 p.m. on Friday. I left home early on Friday and played chess with Dick Hart in Sedona for a couple of hours on my way to the canyon. I got there a couple of minutes after three and I was visiting with Tom Davision when I got a phone call from Flagstaff from Jim Kirschvink saying that they were delayed but that they would meet me down at the Bright Angel Campground some time in the evening.

The Kaibab Trail was snowy and slick at the top and muddy in places down to the upper Supai and I carried a heavier than usual pack since I had my climbing rope. I got down to the campground in two and a half hours. I happened to fall in with a seasonal ranger, Brad Jones, and I ate my dinner in his cabin near the bridge across Bright Angel Creek. We had quite a visit mostly talking about climbing Zoro and Brahma. The ranger party packed a lot of water up to the saddle between Zoro and Brahma and the party of three or four spent two nights there. Brad was able to climb Brahma in one and a half hours from this saddle. Don Suthers climbed Zoro solo and Tom Davison got almost to the top before time ran out. At the ranger dorm on Sunday evening, Tom showed us the slides he took of the trip. A major part of the route is up a vertical crack where one can get only a foot into the space. It is aid climbing.

In talking about the Brahma climb, Brad didn't remember any part where one had to walk across a steep smooth exposure of Coconino with shoe friction only. When I told him about how Donald Davis and Doc Ellis had done it, he figured that he had taken someone's suggestion and gone up directly at this place instead of walking across the friction pitch. He said that a woman who worked at Phantom Ranch, Terri Meche, had also climbed Brahma. This was the trip using three days instead of going up and back in one long day from Bright Angel Creek as Davis, Ellis, and Doty had.

Ohlman and Kirschvink came along about 9:00 p.m. and we got off on our hike up from the north end of the campground about 7:00 a.m. on Saturday. The trail up to the Tonto is very well defined. The trouble is

that the clear track leads to a 12 foot pitch that is rather difficult with a full pack. I had done this before, but we were delayed in getting a detour to avoid this little cliff. The best way seems to be south of here close to the base of the main cliff. The track through the Tapeats break is also well used now, but it goes where the scramble over rough blocks is harder than the walk up a talus south of the center of the ravine.

Ohlman was enough of a geologist to clear me up on why the Tapeats looks so different on the Tonto here. He explained that it was formed in a quiet bay between Shinumo Quartzite islands and had a lot more organic material in it than the Tapeats which was formed in the open sea.

I led the way up to the saddle just east of Cheops and we found the Indian ruin on the high ledge as we got down toward the creek. I came to what is left of the trail just a little below the ruin, but on the way out on Sunday I found that the trail continues farther east below the ruin to a rocky ridge where it seems to end. Someone has built a cairn here but it is not noticeable from a distance. I had probably remembered it wrong when I thought that I had followed this trail clear up to the pass east of Cheops. I must have passed beneath the Indian ruin numerous times before I noticed it. Ohlman and Kirschvink probably would have missed seeing it if I hadn't pointed it out. I had remembered the lower end of the trail not exactly as it is either. I thought I had walked up a not very steep grassy slope from the bed of the creek just above the Tapeats fall, but I found that this is much steeper, practically a small cliff. Rather than go down here and lose altitude unnecessarily, we went west and got down through a narrow break in the little cliff. Ohlman had come up the bed of Phantom Creek just the week before and he and Kirschvink had gone back through Trinity and down from the Tonto to the Bright Angel Campground. Ohlman prefers the route up the creek to the way over the Tonto. I haven't done the creek for about 25 years, but the overland route along the Tonto appeals to me. It took me just under three hours to go back this way from the overhang campsite to Bright Angel Creek and I think it would take me at least that long to go down the creek and use the Kaibab Trail.

After a rest and a snack near the overhang about 10 minutes walk from the Tapeats fall, we scrambled up the steep and skiddy route to the shale slope toward Sturdevant Canyon. I made the mistake of going down to the bed of Sturdevant instead of keeping most of my altitude at the pass. The walking in the bed isn't that much better. Ohlman and Kirschvink started later, but they got ahead of me and had to wait. At the place where they reached the bed, we had a discussion and agreed to split up. I left Phantom Creek with only two quarts of water while they each carried one and a half gallons. They were prepared to spend the night on the Redwall. I had figured on sleeping up there too, but I had thought that I would find rain pools. The boys would leave their big packs at the top of the Redwall and go up and climb the newly named Schellback Butte. I would come to the top of the Redwall and pick up a 50 foot rope that Ohlman would put out for me and head around on the Redwall rim to reach the head of Haunted where I would get down to water for camping.

I got close enough to talk to the boys when they came to the barrier near the bottom of the Redwall. I had followed the example of the deer and had bypassed this to the east, but the two Jims climbed up right in the bed. I had forgotten how rough the going is in Sturdevant. It is a mess of broken, angular blocks, and I needed 45 minutes to go up through the Redwall. When I got up, I couldn't find the packs and the 50 foot rope that I was to use to get down at the head of Haunted. Walking the Redwall rim back south and then north to the head of Haunted looked rough and long and I lost heart and started down Sturdevant. When I

had used another 45 minutes to get to the bottom of the Redwall, the two Jims shouted for me to wait down there. Both of them came down in surprisingly quick time and Ohlman tried to persuade me to go back up with them and go through with our projects. I insisted on going on down where I could sleep warm with plenty of water. I agreed to go up Haunted in the morning and meet them coming down after they had had a crack at Manu.

After a very warm and comfortable night under the overhang, I started up Phantom toward Haunted Canyon, but the sky was completely overcast. It seemed to be getting more threatening all the time, so I changed my mind again and started to go out. After a three hour trip to Bright Angel, I ate an early lunch and reported to Andy Banta that he could tell Ohlman and Kirschvink what I was doing, going home starting up just before noon. I needed five and a half hours to go from the river to the rim, and I ended feeling pretty discouraged. I will have to plan less ambitious trips with people that are my speed. I spotted one bit of cow or calf droppings more than halfway from the creek to the saddle.