Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (August 1954 - December 1957)

Floating on the Colorado River [August 27 and 28, 1954 and September 18, 1954]

During this last weekend of August, Ellery Gibson and I took our packs down the Hermit Trail to sleep out a couple nights. I had been down here several times before, so we kept going at a steady pace and aimed for the bottom of Monument Creek. We knew that Purtymun's gear was cached there, and we wanted to see about the trip to the river here. As usual, there was a little water running in Monument Creek, and we saw the bed springs under the overhang which had been used in the old days when the loop from the Hermit Trail over to the Bright Angel Trail was an accepted and popular outing. Walking to the river down Monument Creek is a pretty simple task, which didn't surprise me since I knew that horses could make it. We timed ourselves back up from the river to the Tonto Trail at about 45 minutes. I don't think the Inner Gorge is as deep here as it is at the South Kaibab Trail.

The river seemed very low and the rapids known as Granite Falls were concentrated over toward the right bank. The water was pretty wild, and I was not surprised that the Purtymun Party had given up here. What surprised me more was that they had come through Horn Creek Rapids with portaging. We found the pile of duffel. A life jacket was near the top and we tried it on for size. Georgie White had already pushed the rubber boats out in the current but they had soon been caught by eddies. The story is that they showed up at Lake Mead about four months later. Elmer finally brought some pack horses down Monument Creek and took the rest of the stuff away overland. The only approach by horse now is along the Tonto Trail from Indian Gardens, because the shorter route down the Hermit Trail is blocked by rock slides.

I forgot where Ellery and I left our packs, but I know I brought my air mattress down to the river here. Somehow I had gotten the idea that it would be fun to paddle around on it in the river. I believe I had done this on a picnic in Oak Creek, and I wanted to see whether it might be possible to use a mattress as a means of going down river. It worked fine for me in the quiet pool. I could paddle upstream with the backwater along the edge and then cross over and return without getting too close to the rapids. Ellery tried it too, and right away he had the curiosity to see how hard it would be to get back up on the mattress if you had slipped off or been turned over for some reason. That maneuver is awkward at first, but with a bit of thought and patience, you can get the hang of it. The technique is to lie crosswise across the middle of the mattress and then to pivot your body until you're lying lengthwise. We didn't know this then, and it was comical how the mattress would pop up the wrong way.

Ellery and I still had time to leave Granite Falls and go back over near Hermit Creek before it was time to make camp for the night. I had never been to Boucher Creek nor Boucher Camp, so I resolved to test out my theory that the mattress would furnish good transportation downstream and see that region too. Ellery went with me to see Hermit rapids and then while I was blowing up the mattress, he waited around to see me off. I hadn't at that time worked out a system to keep the contents of a knapsack dry as I floated along so all I took with me was shoes and socks. I figured I would get back to Hermit Camp where I had left the pack in time to eat lunch. Later I wished that I had brought my watch, because I would have liked

knowing how long it took to float the 1.6 miles downstream from Hermit to Boucher Rapids. Ellery figured that it might take him a bit longer to go up the trail to Hermit Rest than it would take me, so we agreed that he should go on ahead at a leisurely pace while I was returning from Boucher Creek by the Tonto Trail. It seemed to me that I floated the 1.6 miles in less than 45 minutes. There were no rapids or riffles of any kind along this section of the river. I inspected the left bank to see whether I could walk upstream near the water without going up onto the Tonto Plateau, and I came to the conclusion that this would not be advisable. There would be too much rock climbing. However, my impression wasn't too firm because when I heard later from Dock that Russell and Monnette had done this going from Hermit to Boucher, I supposed that it would be feasible. Finally, in April, 1958, we tried doing just this. Don, Ivan, and Marshall Maynes gave up the long one-day loop hike. When I went on, I had to go up to the base of the Tapeats, but this trip is covered in another place in these logs. Going downriver was so simple along this stretch that I became enthusiastic about the method.

At this time, I believe there was a little water in lower Boucher but none up by the camp. From my later trips, I learned to expect water during all seasons somewhat higher than the camp. I must have been in a hurry, because I went right past the rock cabin without seeing either it or the small structure I later called the rock chicken coop. It was easy to see the old trail leaving the bottom of the wash going up to the Tonto level. I also noted the branch which goes on up the Redwall to form the Boucher Trail. On the way back to Hermit Creek, I experimented with going higher and straighter than the regular trail. The experiment was not a success as the route was rougher and I probably lost time. When I crossed Hermit Creek, I noticed the old corral they used for the mules. One item of interest before you get to the creek is a high and well built fence from the base of the Redwall down to the edge of the Inner Gorge. I thought it probably had something to do with the limit of some mining property, but I learned later that it was put up by the Park Service to keep the wild burros out. They reasoned that the bighorn sheep would come back if there was no competition with burros, and that the sheep could climb around the fence while the burros could not. Actually, the burros could go up the Boucher Trail and come down the Hermit to restock this basin. We found burro bones along the trail down into this area where rangers had shot them. There were also some live burros somewhere around to judge by the manure.

Hermit Camp used to be quite an elaborate affair with tents mounted above wood floors. There were even concrete bases for some sort of structures in regular rows. They had piping to bring water to the grounds from higher up the creek and with this irrigation, there were cottonwoods growing. There was a cable car to bring down supplies from Pima Point above and wagon roads for moving food and supplies around. The one thing that is most nearly in its original state is an underground storage cellar.

After a late lunch on the path approaching Hermit Camp where we had spent the night, I left for the rim and got out in good time, a half hour after Ellery.

I'm not sure whether the move away from Hermit Camp over to Phantom Ranch was a good one. You get a better view of the surrounding cliffs from Hermit. The walk down to the river at Hermit Rapids is interesting, and the rapid itself is much more spectacular than anything along the River Trail to Phantom Ranch. It must be that Phantom Ranch is more strategically located on the way to the North Rim. Also there are so many interesting places to go to from Phantom Ranch like Clear Creek, Ribbon Falls, and Phantom Creek. I believe you get a broader impression of the whole Grand Canyon from the South

Kaibab Trail than you do from the Hermit Trail. In making this comparison, it is interesting to read James chapter on the Hermit Trail which was only in the planning stage when he wrote about it. He called it a trail to the scenic heart of the canyon.

From Hance Rapids to the Kaibab Suspension Bridge [September 4, 1954]

The mattress worked so well going from Hermit to Boucher that I was excited about using it for more ambitious projects. I knew that the part of the river from Sockdolager Rapids to Bright Angel Creek was noteworthy for the steepness of the banks and the impossibility of walking around the rapids, or at least two: Sockdolager and Grapevine. I figured that if I could do that part, I could do it all. I don't remember how I got Ben Surwill interested in going with me. We didn't know each other very well and he had never hiked with me. He was young and had been in the Army, so I thought he would be in good condition for the trip. I didn't even find out how good a swimmer he was. I suppose I chatted with him in front of the training school and mentioned my ambition. He was enthusiastic.

It took us a little longer to get to the bottom of the Red Canyon Trail than I had figured it would. On the way through the Supai, we had an experience that I have never duplicated. We were following the bottom of the wash instead of keeping to the slight remains of the old trail. When we came around a big rock about the size of a room, there was a bighorn ram only about 15 feet away from us. It got to its feet rather deliberately and walked away in front of us without showing much alarm. Possibly it was not in good health because it lay down again not very far away. It let us catch up and then moved on several times so that we must have had three or four close encounters over a period of about 20 minutes. Most unfortunately, I was not sure I could keep a camera dry on the river, so I was not armed at the time.

It was quite warm near the bottom of the wash, and I think we ate our lunch under the shade of a big rock about a half hour before we reached the river. At this time I was not aware that the trail strays away from the bottom of the wash most of the way down. I know now that when you are below the Redwall, you should go nearly to the bottom of the wash and then turn north at about the same level until you come to the tributary from below Zuni. The trail goes down into the shale here toward the east and then stays rather high above the bottom of the wash as it turns the point back into the main arm of Red Canyon. There are a couple of places where you have to scramble down past big rocks if you stay in the bed of the wash.

It must have been after 1:00 p.m. when Ben and I were finally ready to shove off below the bottom of Hance Rapids. I was not familiar with the Inner Gorge along here when we did this, and the only times that I had my bearings for sure were when we were negotiating Sockdolager and Grapevine Rapids and when we were passing the mouth of Clear Creek. I had looked at the river from the mouth of Cottonwood Canyon, about 60 feet above the level of the water. However, I have to confess that I didn't recognize Cottonwood as we were passing it. We were wearing sneakers so that we could get out and walk without hurting our feet, but we found that the wet rubber soles on the polished schist and granite were exceedingly slippery. Once when we were just standing and thinking things over, I lost my footing and fell in such a way that my hip hurt for a number of days. When we were going along a narrow ledge 30 feet above the water to bypass one rapid, Ben and I agreed that we were probably taking the hard way out.

We would have been safer down in the water. At both Sockdolager and Grapevine Rapids, we climbed along the right bank for about a third of the way through the rapid and then pushed off where the waves were not quite so high. We must have walked clear past some rapid or riffle about 12 different times.

Once I saw that there was a rapid ahead which I thought we ought to scout from the bank and gave Ben the sign to land to the left. As I was getting out of the water, I heard him say, Here I go, I can't make it to the bank. It was a short but sharp drop. It seemed about the steepest place in the river that I have ever seen. The river narrowed and then spilled over a huge rock in about the middle with the water apparently only a foot or two deep over the top of the rounded rock. It seemed too me that Ben went over the south end of this smooth spillway and dropped five or six feet at about a 45 degree angle. He did it in fine style without seeming a bit unnerved and waited for me in an eddy at the end of the millrace several hundred yards downstream. I suppose I should have pushed off and done likewise, but I climbed down the rocks on the left and had to paddle to get into the current below.

We were in the water when we passed Clear Creek, but we walked past Zoroaster Rapid. On the whole we stayed quite close together while we were in the water. Ben could paddle a mattress about as fast as I could. Sometimes we would be abreast and talk things over, but most of the time I was slightly ahead and made the decisions about landing and inspecting rapids ahead. We had a bit of trouble keeping out of eddies, but on the whole we were able to do it. One thing that made the trip a bit unpleasant was a cold drizzling rain that came down on our bare backs from time to time. When the wind blew, we were a bit too cold. Another thing that worried us was the lateness of the day. We were a half hour behind my schedule when we pushed off from Hance Rapids, and I had told Ellery that we would get down to the bridge by 6:00 p.m.

When we did get to the bridge, it was nearer 7:00 p.m. The engineer was just finishing taking his water sample and readings, so we stopped above the bridge and talked to him briefly. We noted a very small rubber boat about half full of water moored near the path leading to the cable car. We later learned that someone had come down from Lee's Ferry in it but had decided to abandon ship here. Ellery had been waiting for us on the bridge until 6:30 p.m., and then had hiked up and told Roma and the others that we must have stopped our trip along the river somewhere and that we would probably not be coming along that evening. Getting out of the river up by the cable was a mistake as it was a climb through brush and rocks up to the path. We ate our supper near the bridge and then started up the South Kaibab Trail as it was getting near dark. Now I began to wish I had checked Ben for hiking speed before bringing him. He had no wind at all and needed six and a half hours to go from the river to the rim. When he saw how long it was going to take him, he asked me to go ahead and tell the others he was all right and telephone his wife in Flagstaff that he was OK. I tried to get to the top by 10:00 p.m., the time I had predicted, but I didn't make it until 10:15 p.m. The car had waited until 10:00 p.m., and then they had gone to Bright Angel Lodge. If I had phoned the lodge from the telephone three-fourths of a mile down the trail, I would have intercepted the car. As it turned out, I waited near the rim in a shed and didn't see the car when it checked back about 10:30 p.m. Then they took the kids back to Flagstaff. In the meantime, Mrs. Surwill had gotten Miss Tyson and Miss Burton to babysit for her and came back up to the canyon to get Ben and me. Roma was quite disgusted at the mismanagement at the tail end of this expedition, and I don't blame her!

From Tanner to Hance Rapids by water [September 18, 1954]

At the first hiking club meeting, I told how I was going to float by mattress from Tanner to Hance Rapids. Gary Hanson, from Winslow, besieged me with the request that he should go too. He talked a big line about how much canyon hiking he had done. We both took it for granted that he could manage himself in the water. I also invited Dale Slocum and he brought Young Veasey. In fact, Dale drove his car for the trip. We took bedrolls up to Lipan Point Friday evening so as to get an early start on Saturday. It was my first time down the Tanner Trail.

I had learned something about the trail, which is not shown on the official map, from Mr. Pullen. We followed his directions and followed it well enough until we were below the Redwall. We must not have been looking carefully from above as we came down, because from the Redwall switchbacks you can see what the trail does next. First I went to the right of the little knoll, but I soon decided that this was wrong. I led the others down into the ravine to the left, which was correct, but when we got down into the wash in the Muav Limestone, we didn't notice that the real trail goes along at this level or actually climbs a bit to the left. We went on down and then couldn't make up our minds. Slocum and Veasey decided to head for the bottom of Tanner Wash while I got Hanson to follow me north along the slope above the Tapeats Sandstone. We went along here with no great difficulty and actually came to within a few yards of joining the real trail without seeing it. When the Tapeats cliff was replaced by a rocky slope, we went to the bottom of the wash. Slocum and Veasey were nowhere around. I took a chance that they were not ahead, after we had waited for them for 20 minutes, and went up the wash looking for them. They had been stopped by the same fall in the Tapeats that later killed Father Gavigan and they found the same bypass to the west that Mahaney and Owens used. I was going up this bypass when they started down it, so it was obvious that their route was slower than ours. When we got together again, I hurried them down to the river because I could see that we might have trouble with darkness again and I didn't relish going up the Hance Trail after dark.

We ate a quick lunch and took off. It is easy to walk below Tanner Rapids to start, but I wanted to show the others what you could do on a mattress, and I rode through this one. The others did likewise and we were off. In no time, however, we saw Veasey out on the bank walking. He had begun to feel sick and shortly after, he threw up. Since he was Dale's guest, I asked Dale to go back with him by land to the car. By this time Hansen was quite far ahead of me, but he waited and we proceeded together. He was good enough in the water. This is supposed to be an easier stretch of the river than the part I had been down the preceding week, but we were caught by eddies and taken back upstream more than once. The only rapids we bypassed on land were Unkar and 75 Mile. When a wave tipped us over, we both had the same reaction, to let our feet hang down while we lay across the middle of the mattress crosswise. This worked fine for even the worst water, but where a lot of rocks were showing, I preferred to have us walk rather than risk collisions.

It was well after three when we got to Hance Rapids, and by the time we had eaten some more lunch, we had started up the trail by 3:30 p.m. I thought we might be at the top by 8:30 p.m., but I hadn't reckoned on my hiking companion. Again he had no wind, and it was completely dark by the time we were going up the ravine in the Supai. It was after 11:00 p.m. when we finally hit the road. For some reason, Gary

was so sleepy, he wanted to lie down with no more cover than a deflated mattress and go to sleep beside the road. He took both of the mattresses to do this, and I walked on, hoping to get my sleeping bag out of Dale's trunk and tell them that we had made it out all right. When I reached the car, Slocum and Veasey were not around, and the trunk was securely locked. I walked on to Desert View but I couldn't find a warm place to lie down there either. The shed where a generator was running was warm, but the floor was a mess of dirty oil. I got all the water I needed and went back to Lipan Point. Finally I built two fires and sat between them with my head down on my knees. However, I didn't get any real sleep until the sun came up. I stretched out under a juniper where the sun could reach me and slept for about an hour.

Veasey and Slocum had started back along the river from a little below Basalt. First they thought they could save time by going up the valley west of the ridge where the trail comes down. Then they decided they couldn't climb the Tapeats anywhere and returned to the river, thus wasting quite a bit of time. Actually, they could have gone up the Tapeats at one place and came right out on the trail, since I left the trail there on another occasion They filled their one quart canteens at the river about 4:00 p.m. and started up. Somewhere they found a cache of canned goods left from the search for the body of the seasonal park ranger who was killed by a fall off the Tapeats cliff down here. They must have gone up the bottom of the wash using the same route as on the way down, because they said a seep which had had water in it in the morning was dry by evening. They tried sleeping with the flat air mattress for warmth. It's too narrow to do much good, but they spent the night in one place without trying to continue after dark.

On Sunday morning, I could have carried more water down to them, but I was afraid I might become a drawback without any food in me. Joe Lynch at the ranger station couldn't let me have any. I called Flagstaff and Veasey's wife came up with food for the rescue. By the time I was starting down to meet them with food and water, Veasey was about out. Slocum had given him the last of the water to help his speed. I went down to meet Dale and we came up together about 1:00 p.m.. So ended another snafu!

Grandview, Tonto, and Hance Trails in one day [January 23, 1954]

Some of the students wanted to take an overnight hike between semesters, but I overruled them saying that it would be too cold for sleeping out even at the bottom of the canyon. We compromised by taking a one day hike. The three girls elected to go to Plateau Point, following the spur away from the Bright Angel Trail at Indian Gardens out to the viewpoint overlooking the inner gorge. We let them out at the head of the Bright Angel Trail and then went to talk to Frank Sylvestre about the loop trip down the Grandview Trail, along the Tonto across Hance and Mineral Canyons to Hance Rapids, and then up the Hance or Red Canyon Trail. He thought that we should allow two days for such a trip but that we could get to the river and back by way of the Red Canyon Trail all right. He told us a little about finding the break in the Redwall from above on this trail but said that it was quite a bit easier to see from below.

Boyd Moore, Robert Gardner, and I thanked him and started driving east along the rim road. I felt in the mood for something ambitious and I figured that I had companions that were at least my peers in hiking, so I convinced them that we should go over the whole loop in one day. We made very respectable time down to the mines by Horseshoe Mesa, but in crossing a slope of mine tailings, we got the first hint that

Gardner might be a handicap. He took a long time making up his mind to come over the way we had.

We crossed Hance Canyon without going clear around on the contour as the Tonto Trail seemed to do. However, we were about as high as the place where you first find water when going down the wash. When we ate lunch, it developed that Gardner had only one can of Sardines and a box of Cheesits. Before long he was complaining about his internal workings and slowed down practically to a standstill. It became clear that he would not be able to make it out in one day. Since I had to meet the girls and take them back to Flagstaff, and since I thought I had better bring some more food to Boyd and Robert, I left them with the advice to get to Hance Rapids and try to keep a big fire going all night.

The territory was new to me and I was not carrying a real map, although I did have a crude sketch of the route. I was not positive of the identification of Hance Rapids, and when I saw no trail going up Red Canyon, I was a little uncertain that I had the right canyon. However, I followed my best guess and proceeded after leaving a message and a flashlight on the sand at the rapids.

I followed the route along the bottom of the wash for a mile or so and then I began to worry about getting caught by a dead end in the Tapeats, so I climbed out to the left on the shale and went towards the most promising break in the Redwall. It turned out to be the right place except that I didn't follow a ledge around a promontory and go up by the regular trail. When I saw a chance, I climbed up a crevice and got out on top of the Redwall. The way ahead from here seemed very dubious. It seemed to me that the bottom of the Supai, a shaley slope above the Redwall, might pinch off to nothing in some of the bays ahead, so I considered going high up on the Supai right where I first came out on top of the Redwall. It was a toss-up, but I decided to proceed south before ascending. This turned out to be the right decision, because although the ledge became a narrow and rather steep slope in the shale in a couple of places, it never gave about entirely and I reached the valley below Coronado Butte without any real trouble.

About here darkness fell and I just had time to pick out the most likely part of the Coconino to ascend before I lost sight of everything farther away than my feet. It was quite dark, a moon-less night, when I reached the Coconino there was quite a bit of snow on the rocks, but I had the great satisfaction of finding signs of trail construction here where it was most necessary to find the right route. Above the Coconino, there was quite a bit of vegetation, and I was able to go on up even though I had lost the trail again. It took about fifteen minutes more among the junipers to find the highway and it was a fairly long and cold walk before I came to the car parked at Grandview Point. It was a good thing that I had kept my Machinaw instead of leaving it at the river for the boys.

As I was driving along the rim road towards the village, I met a car which stopped after it passed me, so I stopped too. It was Frank Sylvestre with the girls who had become worried. I took the girls back to Flagstaff with me where we arrived rather late, about midnight. I set the alarm to allow about three and a half hours of sleep, but I lay awake quite a bit thinking of how cold the boys might be getting. After picking up all the food that was handy, I started back to the canyon before daylight. The boys were supposed to be walking up the Red Canyon Trail to meet me. I had more trouble locating the right place to go down through the Redwall than I had had on the ascent, and it was nearly noon by the time I was down in the bottom of the wash about a mile or so from the river. I hadn't seen the boys at all, but just as I

was about to round a bend out of sight from anyone above, Robert Gardner hailed me. I climbed up and we had a meal together. Boyd had given up about 11:00 a.m. and had gone back to the river to retrace the route we had followed the day before while Robert had persisted in following some burro trails that didn't lead much of anywhere. After eating, Robert and I went back up to the car which we reached about 5:30 p.m.

As luck would have it, I had brought another flashlight with me on Sunday and before I had gone down the Grandview Trail very far to meet Boyd, I was using it. It was most gratifying when I saw another flashlight coming up a long way off. He had also seen me coming. I reached him about 8:15 p.m. and we ate a fairly good meal cold out of the can. It was almost 1:00 a.m. before we were back to the car with no casualties. It turned out that the boys had kept quite warm down at the river beside their big fire and had been able to sleep for almost an hour at a time before it was necessary to build the fire up again.

Tragedy between Point Imperial and Desert View [May 24, 1955 to May 27, 1955]

My air mattress experiments were carried out in September, 1954 when I had begun by going from Hermit to Boucher Rapids, then from Hance Rapids to the Kaibab Bridge, and finally from Tanner to Hance Rapids. All had gone well both when I was by myself and when I had a companion, except when Ben Surwell had been carried through a short but sharp rapid after I had given the word to land and walk around it. When Boyd came to Flagstaff for the start of the trip, he then told me that he was practically a non-swimmer. I told him that swimming had very little to do with the case as we would be merely paddling over the sides of the mattress or holding on and kicking with our feet when we get tipped over. Since the superintendent of the Park had denied my request for permission to go through the Park by that method in the high water of late May, I suggested that we go down from Lee's Ferry to Nankoweap Creek and get out when we came to the Park border.

Roma and Wanda Euler took us up to Lee's Ferry to see us off. In the short distance from the boat landing to the mouth of Paria Creek, Boyd decided that it was not for him. I waited and we walked over to the car together. We had to cross the quiet water of the lagoon to get to the road, and I should have seen the great difference between the way I crossed with a few gliding strokes and the way he inched across very slowly. I told myself that he would catch on with a little more practice.

We went back to Flagstaff and decided to see Goldwater's newly discovered bridge by a different route, down from Point Imperial along the Nankoweap Trail. Dale Slocum wanted to get some good pictures of it, so he joined us on the project. He took us to the North Rim in his Austin. He was to return the same way we were going down while Boyd was coming with me out to the river, along the bank to a quiet stretch where we would cross, and then go out by way of the Tanner Trail.

One mistake was starting as late as 2:30 p.m. from Point Imperial. We had to follow the rim around to the north, but we still didn't see any signs of a trail where we thought one ought to be. This bothered Dale considerably, and he was always stopping to look at his map. He had two gallons of water while Boyd and I had only an afternoon's supply. After protesting Dale's needless delays a few times, I suggested that we part company and that Boyd and I could then perhaps reach water before time to camp. That suited

Dale too, so we hurried ahead while he went on studying the map. Later I learned that he spent the night in the woods at a high elevation with his water, heavy photo equipment, and no blanket.

Boyd and I worked around to the north to get down to the saddle at Saddle Mountain. Here we could have studied the map to good advantage ourselves, for then we would have seen that we were supposed to get below the highest part of the Supai right at the saddle. As it was, we followed the Hermit Shale clear out to the east end of Saddle Mountain. This was slow going and darkness caught us here with too little water left in the canteens to let us think about eating much more than a raw carrot.

In the morning we were convinced that we had missed the trail completely, but we found a crack in the Supai where we could climb down to the ridge separating Big Nankoweap from Little Nankoweap Canyons. This climb was not dangerous although in a couple places we had to hand our knapsacks down. We saw traces of the trail at this lower level, but we soon lost it again while we were trying to get down to the creek in Big Nankoweap. Some of the way down the Muav was pretty much of a scramble, but we eventually got to the creek and ate a combined meal consisting of supper and breakfast by 10:00 a.m. on the twenty-fifth.

While we were moving our packs upstream to a place where the creek again had water, marked by a grove of cottonwoods, we passed a peculiar place in the bed where the bottom appeared as smooth as flagstone. We went on without our packs and made good time following the directions Goldwater had given in the Arizona Highways article to head for Mount Hayden and then to turn so as to keep it on one's left. As we approached the Tapeats, we scrambled up where there was a break on the north side and were soon rewarded by a good look at the bridge. This was the third time it had been seen from the ground in historic times, first by Goldwater and his helicopter pilot and next by a ranger who climbed down to the top of the Redwall from Point Imperial. The fourth time was when the Life photographer and his party, including Dale Slocum, got clear below the bridge off Point Imperial using ropes. Dan Davis reported in May, 1956, that a guide has cleared out the Nankoweap Trail so that horses can make the trip. I took color pictures although the bridge was in the afternoon shade. I stretched a string across the span, and when I got home I measured the piece and found that the bridge is 147 feet across and, from the pictures, one might conclude that it is about the same in height. The Life party give the width as 162 feet without saying how their measurement was made.

After a night where we had left the packs, Boyd and I got an early start on the twenty-sixth. It was easy to go down to the river along Nankoweap Creek and we were impressed by the way the broad, open valley gives way to the narrow canyon at the fault line a couple of miles from the river. On a broad rock in the middle of the streambed, there was a distinct trail cairn, probably set there to show where one should leave the bed to take the Fault line Trail. We also noticed the Indian ruin at the top of the talus south of the mouth of Nankoweap Creek. We had the objective of reaching the mouth of the Little Colorado on the other side of the river for our campsite, so we did not climb up to investigate the ruin.

Walking along the bank was not too difficult although the river was high and we were forced to plow through a good many thickets of willow and some mesquite. Before we came to Kwagunt Canyon, we decided to try out the air mattresses. Boyd got along quite well and seemed quite pleased with that method of travel, but we didn't get far from the west bank and were careful to land safely above Kwagunt

Rapids. I tried towing him by a short rope we had along, but we could make almost no progress that way, and he remarked that he could see that we were strictly on our own when out on the river. Between Kwagunt and 60 Mile Rapids there was a lot of swift but otherwise untroubled water but we passed up the chance of crossing until we were rather close to the mouth of the Little Colorado River. I should have remembered the slowness with which Boyd crossed the quiet lagoon and we never should have entered the river where the current was 10 miles or so an hour. I also should have had Boyd wait for me while I crossed it two ways before he attempted it.

As it was, however, when we came to a place where an eddy would carry me half way across, I decided to start. Boyd elected to watch my progress. It wasn't good, for the current swept me down a short rapid back to the west side of the river. After I tried some more to paddle to the east bank, I gave it up and landed on the original side. I climbed up on a ledge and tried to signal Boyd not to try it. While I was looking upstream to locate him, I saw him riding swiftly by in the middle of the river. I hurried to join him, but I might never have seen him again except for the fact that he was stopped by a big eddy below the mouth of the Little Colorado. All I could see of him was his mattress in a big roll with his legs locked around one end and his hands gripped around the other. He was first caught by the backwater at the east side, and I cut over there trying to intercept him. I had to be content to follow the current myself but before could I overtake him, the current at the top of the eddy had taken him downstream again but now it threw him into the bigger eddy on the west side of the river. I identified this later as being just upstream from the wash which comes in from the west, north of the place where the TWA plane fell 13 months later. This eddy seemed to be as big as three tennis courts and it was a closed concern. After both of us had gone around a couple of times, I caught up with him. I couldn't get him back on top of his mattress with his pack completely waterlogged, so I had him drop it off. With the help of my hand, he got back on the mattress. He was white from shock but he talked rationally about having very little strength left. I had him hold on to my feet for a time, while I tried to paddle for both of us. It was after sundown, and I was beginning to worry about how long we could take the cold water. We passed within a few feet of a projecting rock in our repeated circuits of the eddy, but the current was always too strong. I should have decided that our best bet was to get into the center curret again and try to land somewhere else. After a time, Boyd let go of my feet, and I thought he had got his strength back and was going to try to paddle himself again. I don't know why I didn't fall in behind him and stay with him, unless I had the idea that if I could make the bank I could throw him a line and pull him in. At any rate, we got quite far apart and for some reason, he was the first to escape from the big eddy. While I was wheeling around for my turn at getting out, I could see him propping up on his elbows in an effort to get his head farther above the water. Then before he disappeared downriver, I could see that he had upset and was lying on the underside of the mattress again and still hadn't learned the trick of holding on to the middle with his feet down and his head up. This was the last I saw of the best hiking friend I have ever had. I followed downstream through the turbulent water where I was holding on to the middle of the mattress making no effort to get back on and paddle because it would have toppled me again very promptly. When it was too dark to see anything at all far away, I began working over to the east bank which was now lined with willows. There was so much water in my knapsack that I found it difficult to get back on the mattress, but I did a few strokes of the scissors kick and was soon climbing out on the bank. My matches were still dry and a fire was easy to get going, but eating anything was another matter. I felt that I should try to keep up my strength for the job of getting out the next morning and telling the story, but falling asleep was difficult. Walking along the bank the next day, I prayed that somewhere I would see a miracle and that Boyd would be waiting for

me on the bank; it was all a waking nightmare. At the foot of the Tanner Trail, I dropped off the food I no longer needed and Boyd's as well which I had brought across the river to lighten his pack. I found that a heavy heart is the worst load a person can carry up the trail, but I made it to Joe Lynch's home by five o'clock and told my story. Roma almost fainted when I told her over the phone. Sam drove to Desert View to pick me up. I was no help in the ensuing days because I was sick the night after I got home and was weak for several days after.

Atoko Point Route [sometime in the summer, 1956]

After a lecture by the arctic explorer, Steffanson, he was approached by a little old lady who remarked "Your talk was very instructive, but didn't you have any adventures?" The explorer is supposed to have stiffened and replied "Adventures, Madam.! Adventures are a sign of incompetence."

My rambles in the Grand Canyon have been seasoned very slightly by adventures. I usually have a good idea about what will go before I attempt a project. I may not know all about a route, but I've developed a good ability to interpret maps and distant appearances. I want a better than 50% chance of finding a route before I begin the search. An example was my hope to go off the rim of the Grand Canyon west of Atoko Point in order to get into the beds of Kwagunt and Lava Creeks. These areas have interested me ever since Dock Marston told me that an old time miner named Harry McDonald had been seen leading his burros toward the rim on the Walhalla Plateau on his way to his diggings at the mouth of Lava Creek. According to the map and current information, no way was known to get down between the Nankoweap Trail at Saddle Mountain and the Old Bright Angel Canyon Trail.

Marston had suggested the north side of Cape Final as a possible descent route, so I tried that first. Actually, I inspected it from the rim at Naji Point and thought it looked quite good. I could see a big forested ravine that seemed sure from the rim down through more than half of the Coconino, and the lower third of that formation was obscured by forest trees. When I went over to check it, I was not encouraged by a deer trail, and when I got through more than half of the Coconino, I found the lower part possible only by using a 40 foot rappel. This was not a route for McDonald's burros, but on other occasions I used it for a rappel route that saved hours in getting down to the bed of Lava.

I had an agreement to meet a friend at the North Rim Campground in the late afternoon, but there was plenty of time to stop at the viewpoint looking towards the mouth of the Little Colorado River and check the north side of the promontory leading to Atoko Point. I could see a promising break only about one-quarter of a mile from the highway. When I drove back about 1.3 miles and parked near the low point of the road, I acted impulsively and started down the ravine at the very head of Kwagunt Canyon instead of going over to the break I had chosen. This idea worked fairly well in that I got to within 20 feet of the bottom of the Coconino, but I couldn't do the final vertical drop.

It was an effort to backtrack up the dirt filled ravine and get on a deer trail going east. This route led to a viewpoint near the base of the Kaibab that showed me the broad bay where I had hoped to get down. I soon was encouraged by noting a deer trail descending here. To be honest about reporting this route, I had to scramble over some big rocks and down some rock slopes where a loaded burro would have needed

some help from a constructed trail. I did get down to the Hermit Shale and found a nice little spring a few yards to the west at the base of the Coconino. That day I didn't have time to go any further. This discovery may not have solved the question concerning McDonald's burros, but it made possible numerous trips down into Lava and Kwagunt Canyons and to the top of Siegfried Pyre.

Notes: South Bass Trail [October 20, 1956 to October 21, 1956]

The road from Pasture Wash Ranger Station direct to Bass Camp seemed too badly washed out to attempt in a car, but I was able to drive to Signal Hill and Havasupai Point. I might have gone on from Signal Hill to Bass Camp by car, but instead I parked there and walked the distance in 35 minutes. There is part of a rock house here, and just under the rim below the house there's some sort of cistern (?) or shelter (apparently artificial, at least in part). Could this have been the cave where G. W. James did his writing? (I later found out that it was not; James study is further to the west.)

Starting down at 10:10 a.m., I was below the Coconino by 10:30. I did not see the altered trail shown on the map which joins the regular trail at the top of the Coconino. Down on the Hermit Shale I lost the trail for a while but found it again by 10:50 a.m. and noted a small pile of fitted rocks which seemed to mark the junction of the trail to the west under Chemehuevi Point. At 11:17 a.m., I was starting down off the terrace at the top of the Supai east of Mountain Huethawali. I had missed the trail on this terrace but found it lower down before rounding the point to double back south to the head of the gorge in the Redwall. The part of the trail down through the Supai was about the most clearly defined of all except possibly the very top part of the trail in the Kaibab. From 11:17 to 11:31 a.m., I was on this stretch and had arrived in the wash below most of the Redwall at an old broken down gate. Brush had grown over the trail pretty badly along here.

From 12:00 to 12:30 p.m., I was eating lunch directly under the cave in the Redwall on the west side of Bass Canyon. I would suppose that this cave is inaccessible unless one were prepared to use some hardware. From here for quite some distance, the trail gets quite far above the wash on the east side. By 1:06 p.m. I was down in the wash again. At 1:20 p.m., I came to the striking folded strata which James called Wheeler Fold. This was about at Bedrock Tanks (which was completely dry) where I made the foolish decision to climb around and up on the east side over a spur instead of finding the easy way down past the tanks and soon out of the wash a little to the east. I could have done this without ever having to waste effort climbing. By 2:10 p.m., I was taking my picture of Bass Rapids, having thus taken four hours in the descent including the half hour for lunch.

The trail went on downriver past Shinumo Rapids, but that was where I turned back and made camp on the sand above Bass Rapids. There was only a little driftwood for fire building, but the site was beautiful and the weather was perfect for my bedroll.

The current above the rapids was very moderate even in the middle of the river, and I paddled upstream on my mattress until I came to a good place for landing on the other side. I took about 55 minutes to walk from there over the hump to Shinumo Creek. I couldn't go any further because it was getting late enough to think about supper. The trip back across the river was even easier.

I started hiking out on Sunday at 7:00 a.m. and was back to the rim at Bass Camp by 2:05 p.m. after taking a half hour out for lunch and an hour and a half to circle Mr. Huethawali. Mystic Spring, which is located one mile north of its supposed position on the Matthes-Evans Map, had been dry a long time to judge by the fact that there were no water-loving plants to be seen anywhere in the vicinity. The wild burros had used the trail recently enough, but the only ones I saw were in the junipers up on the rim.

The only sign of fairly recent use was a couple of new looking tin cans near the top of the Supai where the trail is about to leave the plateau. Perhaps that was as far as the hikers went. Some very rusty cans were set up apparently as trail signs lower down. One thing of interest was the sheet iron boat high on the rocks at about the high water line near the rapids. It still had two pairs of oars and numerous empty oil cans inside for buoyancy. Incidentally, one of the striking features of this part of the river is the narrowness of the channel and the resulting waterline which stands possible 40 feet higher than the low water level.

South Bass Trail to Copper Canyon [November 10, 1956 to November 12, 1956]

On Sunday with Allyn Cureton and Don Finicum, I doubled back up the South Bass Trail and climbed up to the Tonto Trail missing any established trail for some of the way. When we came to Copper Canyon, we timed ourselves at an hour to get clear around it. We turned back when we came to the next deep bay (which Allyn and I timed in December at 35 minutes) and dropped down into Copper Canyon where we found the mine with plenty of water in the vertical shaft. We then came to a trail which went towards the river but we left it to skirt the cliff upriver. We had to do some scrambling to get back on the river trail rather high up, but from there it was easy to go back to the sandbar above Bass Rapids.

South Bass Trail to Copper Canyon [December 28, 1956 to January 1, 1957]

Allyn went with me on this trip. We drove the car clear to Bass Camp by the direct route, but on the way back to town damaged the oil pan. We spent the first night at the Copper Mine. On the second night we went to Elves Chasm and back to the next wash upriver. Garnet Canyon water was salty, but the next creek downriver was even more salty. On the third night, we were back at Bass Rapids. We spent the fourth night in the barn at the Pasture Wash Ranger Station. The trail down to the mine from the east drops below the rim right at the little fall. Allyn found a narrow strip of tinfoil in Garnet canyon. I believe it was from an airplane. With a real early start and a light pack, I believe one could walk from Bass Camp to Elves Chasm in one day. (four and a half hours to Copper Canyon and six hours more to Elves Chasm.)

Boucher Trail to the Tonto Trail and across to the South Bass Trail [April 18, 1957 to April 20, 1957]

I got an early start from Flagstaff but I needn't have. When I reached Hermit's Rest, it was snowing hard and the ground was soon white. I waited until 9:40 a.m. before I decided that the weather was going to be tolerable for an extended walk. A few more snow showers fell for the next hour, but by the time I reached the Dripping Springs Trail, the weather was looking up. Dan Davis had really dashed any hopes that I

might have had about the Boucher Trail. He said that it was less visible than the Old Hance Trail, which is only existent for a quarter of a mile or so through its whole extent. He said that the only fairly easy walking was right on the edge of the cliff, and that after so long a time, it became quite nerve wracking. It seems to me that he must have had a poor day of trail finding, because I'm sure that I was on the trail 95% of the time, and very seldom was I even close to the edge. The trail was usually from fifty feet to one hundred and fifty feet from the top of the Supai cliff. It was at least as easy to follow as the Tonto Trail and I would rate it decidedly better preserved than the New Hance Trail and not to be compared with the Old Hance Trail. For long stretches, one could walk along at a good clip with no hesitations about being on the trail. I noted about 10 cairns along the way.

It is essential to have a map along when it comes to descending the Supai. One part of the trail has fallen away making it impossible for a horse. I missed a piece of the trail here by not swinging left immediately after the first cliff had been passed. In fact the whole trail through the Supai is the hard part to follow. There is quite a bit of choice in getting down to the top of the Redwall after the Supai has been passed. Just below the top of the Supai, there is a convenient overhang where I ate lunch during the heaviest snow shower (the last shower).

The descent through the Redwall is most interesting. t hardly seems possible that anything better than hand and toe holds could be constructed down a place so steep, but there are actually short switchbacks all the way down. Some of the trail has fallen away, but it would be easy for a wild burro. Below the Redwall, the trail is hard to see, and I missed it for some distance. I feel sure that if I went over it from the bottom up, I would be able to locate much more than I did. For that matter, I missed a long stretch of the Tanner Trail the first time I tried it. As proof that the Boucher Trail is still in reasonably good shape, I cite the fact that it took me only five hours and 10 minutes to get from the car to Boucher Camp, carrying a full pack and a half gallon of water. It took 25 more minutes to go down to the river. In view of the distance on the map, the rate of travel compares favorably with that on other trails. I a.m. sure that one could get from Boucher Rapids to Hermit's Rest quicker by the Boucher Trail than by going first to Hermit Camp via the Tonto Trail and then up the Hermit Trail. However, a map would be more necessary along the Boucher Trail.

Two Park Service sleeping bags are suspended from a wire inside the old roofless stone cabin that is all that is left of Boucher's Camp, just as Dan had said. It is so small that when Louis entertained his guests, they must have slept in their own tents. (However, three men have slept inside the cabin at one time.) It seemed about big enough to hold a cot, a small table, and a chair. Dan didn't pinpoint the location very well when he said it was right at the junction of the Tonto Trail and the Boucher Trail. A better way to locate it is to say that it is only a few yards away from the junction with Boucher Creek, which incidentally has a permanent spring a little higher up. This spring had gone underground before it reached the cabin, and the creek was flowing on the surface. In September, 1954, Boucher Creek was dry clear to the river, but now it appears and disappears until about a half mile from the river where it flows continuously. It may well be a permanent stream higher than the cabin also. South of the cabin on the same side of the creek, there were signs of terracing and one very small rock building, roofless now, that might have been for chickens or a hog. There definitely was no sign of a Camp at the junction of Topaz and Boucher Canyons. Judging by my rate of walking, I would estimate the distance from the Camp to the river as being between one and one and a half miles. The river was already running a good flow, and

the rapid looked considerably more impressive than Sockdolager was just a few weeks ago. While climbing around to take a picture, I looked upstream to check the desirability of going back to Hermit Rapids along the bank. It seems doubtful that this would be faster than going up and over the Tonto Trail. The mine shaft is there as reported. In fact it is only about fifty yards from the cabin north across the wash. The shaft only goes in about 40 feet. I'm not a good enough miner to state whether Boucher had copper there or was just taking a shot in the dark. It makes a nice cave to get out of the weather, and I slept warmer just a little way in than I would have under the sky.

Going from Boucher to Bass Canyons is quite a lot better right after a rain. There are water pockets near where the trail crosses Slate Canyon, Sapphire Canyon, in a tributary about halfway to Turquoise Canyon, at a nameless ravine just east of Ruby Canyon and in Ruby Canyon itself. In addition there was running water just a little above where the Tonto Trail crosses Slate Canyon and right where it crosses Serpentine Canyon. The flow was meager so they may well dry up in the summer. There are many burros in this whole area, so there may be small seeps higher near the base of the Redwall, but the burros may well go to the river itself for water when necessary. I looked as well as I could from several places, and I think that a person would have no difficulty going down Ruby and Serpentine Canyons all the way to the river. I carried a full gallon of water at all times across this stretch, but on the day after a rain, this is unnecessary. The pockets at Ruby Canyon were big enough for a bath which I proceeded to take. The total walking time from Boucher Creek to Ruby Canyon was 10 hours, and from Ruby to the Bass Trail four more hours. My estimate would be 35 miles for the whole stretch. There were many places that would be hard for a pack animal, but I don't think the trail was ever much better at these places, so I suppose stock could be taken through still. There was only one place, at the head of the canyon just east of Serpentine, which was clearly man-made. This was a short stretch of retaining wall. I missed the trail many times but there was no embarrassment, but on nearing the head of Serpentine, I should have dropped below the top ledge of the Tapeats somewhat back from the end.

All in all, this was a fine time of year for the trip with an abundance of flowers and birds. I avoided the possibility of rain at night by putting my air mattress under an overhang at Ruby. It was unseasonably cold on the rim at Pasture Wash, and on Sunday I walked back to the car at Hermits Rest just ahead of another snow storm.

HIKING LOG:

9:40 p.m. - Left the car.

12:10 p.m. - Ate lunch near the top of the Supai.

2:50 p.m. - Arrived at Boucher Camp - 25 more minutes to the river, 35 minutes return.

4:40 p.m. - Stopped at the mine at Bass Camp for the night (17 miles for the day).

6:00 p.m. - Left the mine at Bass Camp.

7:15 a.m. - Left for Slate Canyon.

8:35 a.m. - Arrived at the head of Slate Canyon (water pockets and running water about 200 yards above the trail, probably dry in the summer months).

10:30 a.m. - Took a picture of Sapphire Rapids from above Agate Canyon.

11:00 a.m. - Reached the head of Agate Canyon.

11:50 to 12:10 a.m. - Hiking to the head of Sapphire Canyon.

12:50 p.m. - Started up after lunch.

1:25 to 2:10 p.m. - Hiked to Turquoise Canyon. Water halfway (picture).

3:05 p.m. - Pictures near bench mark at mouth of Turquoise Canyon.

4:30 p.m. - Water at the draw just east of Ruby Canyon.

5:05 p.m. - Ruby from north side.

5:55 p.m. - Stopped at Ruby Canyon (water pockets, bath, could go to the river) 25 miles for the day.

6:12 p.m. - Leave Ruby Canyon.

6:50 p.m. - Took two pictures of the mouth of Ruby Canyon.

8:00 to 8:25 p.m. - False Serpentine canyon. Trail construction (picture).

9:10 p.m. - Arrived at Serpentine Canyon. Running water. Trail drops below the top of the Tapeats. I goofed!

10:00 p.m. - Took pictures of Serpentine Route to the river.

10:40 p.m. - Took pictures of Bass Rapids.

11:10 p.m. - Arrived at Bass Trail.

Phantom Canyon

[May 4, 1957 to May 5, 1957]

Allyn and I had a little difficulty keeping our feet under us while crossing Bright Angel Creek in its high stage. The high water is due to the melting snow from the North Rim. We carried rocks for ballast. Phantom Creek was also high and we had to wade constantly instead of hopping across it. By lunch time (45 minutes upstream.), we were almost to the place where the engineers have now fixed a cable to assist in climbing around to the left of a small fall. About an hour and forty-five minutes later, we came to the pleasant surprise of an aluminum ladder at the fall in the Tapeats Formation. This fall is northeast of Cheops Pyramid. The isolated woods on the north of the canyon is just below Sturdevant Point. There must be a spring there. 45 minutes from the fall to the mouth of Haunted Canyon and an hour more to the split in Phantom. About a quarter of a mile northwest of the fall is the only overhang we saw in the whole area of the upper valley. A very rusty can and a low rock wall show that it was used as a Camp possibly twenty or more years ago. The real mystery was the cow chips we noted. How did anyone bring a cow in there? Later I found our how. By a horse trail that leaves the North Kaibab Trail about a mile downstream from Ribbon Falls (McKee and Davis). At one other place we noticed some old burro manure, but not enough to indicate the presence of any wild burros in there for a considerable time.

We turned at the angle in Phantom Canyon and followed the creekbed for almost an hour into the Redwall (43 minutes to come back to the packs at the angle). There was an interesting chute at the top of the Bright Angel Shale and two rather impressive falls higher up. We were finally stopped at a place where the high water took all the room. It was a sharp turn in a very narrow part of the canyon so that we couldn't see whether there was a high fall beyond. The canyon was very narrow and dark here, similar to the box at Ouray, Colorado. In low water in the fall, one might go higher and see what is around the corner.

The almost dry branch which goes on to the base of Shiva Temple also splits in a manner not shown very clearly on the map. Instead of tapering down to a narrow slit, they turn into large rounded overhangs which would have beautiful waterfalls in wet weather. The one on the west would give a fall of at least

around 250 feet. A little to the south, there is a narrow slit tributary which cannot be climbed even when dry, but between the big dry fall and this slit, there's a talus slope which goes high up on the Redwall. I believe the rest of the cliff can be climbed here by working first to the south and then following a ledge with some green growing on it up and to the north into the notch above the big fall. In one long day, one might climb Shiva Temple and return here.

In going back to Bright Angel Creek, we chose to follow a deer path which went up and over the blunt ridge east of Cheops. We crossed to the south of a shallow valley which was mostly bare red rock and came out in view of Phantom Ranch. Instead of going down to the river where the telephone line crossed, we found a rock cairn indicating an old trail through a break in the Tapeats cliff. Getting through here involved scrambling down over some rather large blocks so we still didn't think we had found the way that the cow had followed to the upper valley. There was another marker down at a saddle in the Archean rocks which directed us to Bright Angel Canyon itself. It was a steep and rather scree covered slope down to the north end of the campground, but the return was about an hour shorter than it would have been if we had come out the way we went in (up the bed of Phantom Creek). Furthermore, the views were most interesting and we ran into acres of beautiful, flowering cacti (Mariposa tulips and Indian paintbrush). Remember the Indian cave lookout above the spring halfway up Haunted Canyon? Also, Boyd and I tried to climb the Redwall at the end of Haunted Canyon. I very nearly succeeded, but one place about eight feet long seemed a bit too risky. If I had crossed that, I'm pretty sure that I would have been able to do the rest. We found penciled names in the little cave above the spring that's the source for Haunted Creek. (Mr. McKee tells me that horse parties used to go into Upper Phantom Canyon by getting above the Tapeats at or near Ribbon Falls and following the bench along the base of the Redwall. They mentioned the lone steer of Phantom Creek.)

Horse trail from Bright Angel Creek to upper Phantom Canyon [July 25, 1957 to July 27, 1957]

Dale Hall and I walked down to the Bright Angel Campground between 8:00 and 10:00 p.m. Friday evening. I got off fairly early by myself Saturday morning to see about the horse trail to Phantom Canyon. It started just where I had figured it did, about a mile south of Ribbon Falls where the valley opens out. There were several cairns along here although I missed the trail, if any, more than I found it. I began to feel pretty sickish from the heat by eleven and it took me from 8:00 a.m. until after 1:00 p.m. to get from Bright Angel Creek to Phantom Creek. Heading the canyons and gulches is time consuming, but in cool weather it wouldn't have taken nearly so long.

I found two cane beds with a trickle of water coming out of the larger one directly below Johnson Point. The bigger oasis below Sturdevant Point has a most luxurious appearance with big cottonwoods, but I couldn't see any water on the surface.

I was so pooped that I sat in Phantom Creek quite a while and then took my time preparing some soup and then eating it. The end of the trail doesn't show much as it gets down near the creekbed of Phantom. I think it has gone by way of scree slides, but it is near the overhang with the can and cow chips.

When I started on, I moved about as fast as Allyn and I had done in cool weather, but I did rest some while sitting in the creek water. It took just 45 minutes again to get from the fork to the final box at the end of Phantom Canyon. The bed was dry this time, and it was easier walking. There was a trickle of water in the shale chute at the lower end of this branch, but the Redwall was dry where we turned back before. I was able to walk up the ramp and around the corner where I saw exactly what I had guessed I would, an impassible fall in two steps. At the top was a big chockblock. The grotto was about 30 feet across at the bottom, but higher up the canyon it appeared to be only half that wide. From most of the bottom you couldn't see any sky at all. A couple of points of interest you encounter in going up this branch besides the falls are spots where the creek runs under rocks which have fallen together in such a way as to form natural arches. There is a long vertical slit cave on the right as you go along which is inaccessible. One point that I think I can settle from my observations here is about deer trails. I had been wondering whether a well established trail always means a through street. The answer is negative. There is a well established trail around one fall in Upper Phantom Canyon, and only about twelve minutes walk farther up everything without wings is completely stopped.

On Sunday morning I got off before six feeling full of pep again and went down to the vicinity of my arrival the day before. I started up the slope with the intention of crossing on top of the Muav Wall from the base of Isis to the base of Cheops. I had started up either too soon or too late to do this, and I wasted almost an hour going up and then returning to the creekbed. The next time I started up, I was doing it the way Allyn and I had gone up towards the saddle east of Cheops. I had forgotten exactly where it takes off, but it is definitely west of the head of the fall in the creek where the ladder is fixed.

After passing a couple of ravines on the deer trail, I headed up to the base of the Redwall at the northwest corner of Cheops. I left my pack at about the level of the saddle that I would use on the way back, and headed up towards the top with only my canteen which I had left behind at the very base of the Redwall.

There is very little chance to miss the way up or down this approach ridge. At times it looks a bit impossible, but when you get closer to the bad spots, there are good holds. Plenty of the rock is rotten which requires considerable vigilance. I don't think I have been up anywhere before so continuously exposed and airy. Sometimes the ridge seemed only about six feet wide with 300 foot drops on both sides. I put up two or three cairns to guide me back in the best places. I would say that this involves more risk than Shiva Temple. One interesting feature is the natural window right where the ridge joins the very top of the Redwall.

I was on top about a half hour and got some pictures, all overexposed, up and down the river and one good one of the pyramid to the south which surely looks sharp from this direction It was a thrill which I may never repeat, but there are a lot of other possible buttes in the Grand Canyon. I noticed that it took an hour and 40 minutes to reach the top after I left the bed of Phantom Creek. The ridge itself took me a half hour going up and the same to come down. To get back to Bright Angel Creek, I followed the same old trail Allyn and I had discovered, but this time the rocks were so hot that I couldn't make good time at all. I ended the trip to the creek with a dry canteen and was glad to sit in the water again. After some swimming in the pool at Phantom Ranch and eating at the campground, I got going up the Kaibab Trail at 2:45 p.m. and got to the car at 7:30 p.m., an indication that my hiking is slowed down badly in the heat.

At the head of the short canyon just west of Sturdevant Point, it looked as though one could climb up through the Redwall. Then one might follow the top of the Redwall around above Haunted Canyon and eventually up to Widforss or Tiyo Point.

Great Thumb trip
[May 25, 1957 to May 28, 1957]

Allyn Cureton and I visited Dan Davis and talked trails on Friday evening, May 24, 1957. He advised us against trying the road to Topocoba Hilltop because of mud, so the next morning we drove around to Hualapai Hilltop and started down the trail by 12:15 p.m. We reached the creek in two hours and started up the long trail immediately. When we arrived at the last level ground below the spring, we set up camp. We were both more nearly exhausted from the heat and the heavy pack when we arrived at 6:30 p.m. than at any other time of the trip. We noted that the two springs in Lee Canyon, one a little above the mouth of Rattlesnake Canyon and the other about halfway from there to Topocoba Hilltop, were flowing very well. We took a cooling bath in the first one in a very fair sized natural bathtub.

The next morning we got an early start and were in fine shape again. I want to ask someone about the old road that was partly built up towards the ravine which comes down from the draw at the beginning of the trail. Perhaps a mining company was trying to put a road clear to Supai. They must have been intending to build quite a trestle across the sheer cliff up into the notch. We had already noticed one section of roadway farther down the canyon. The grade is so steep at the upper end that they must have been thinking in terms of horse drawn wagons or Jeeps, but of course this was done before the time of the Jeep.

We noticed that the rain barrel by the hilltop warehouse is still effective with a good sheet of screening to keep the bugs out of the water. We left the road directly up the faint trail to the north and made our way cross country past the telephone line to Supai and on to the road leading north. We saw where this road branches; the main part turning to the west and the other continuing north along the east rim of the plateau for a good part of the way. The views east as far as Desert View and also down to the river are terrific. If there were a good road along here, it would be a tourist must. It is easy to see why the trail along the Esplanade ends at Forster Canyon. There are impassible slopes in the Hermit Shale. The rim along here is particularly unbroken by ravines, the drainage being to the west right up to the east rim. There are some interesting sinkholes near the rim however. We noted tire tracks from some truck far beyond where the actual road gives out and becomes a trail. We reached the head of the Great Thumb Trail about 5:00 p.m. Finding the little spring at the bottom was rather difficult as the one cottonwood tree growing there is practically hidden by the steep side of the ravine. The flow is so little that it just about stops completely in the heat of the day. There was a shovel under an overhang so that one could clean out the sandy pocket where the water collects. On Monday we started on to round Gatagama Point. We noted at least two places where one could climb back up to the rim in the general area of the spring. There was a little water left in pockets from the rain on the previous Friday, but most of them were dry by this time, and we began to discount the possibility of getting all the water we might want anywhere we looked. The going soon became very tedious although the views in this wonderland of rocks were correspondingly striking with lots of mushroom racks and other fantastic formations. We didn't investigate the possibility of going down the fault into the west arm of 140 Mile Canyon because we could already see that our time was running short. By noon, we had come to the seep spring in the east arm of Olo Canyon, but it was pure

luck that we saw it at all. By 2:00 p.m., we could see that we would not get to Supai in one more day, so in order not to miss Jim's commencement, we took what might have been our last chance to climb out to the rim. It was very hot so our progress up the talus above the Coconino was slow, but we found a very good deer trail on the slope above the lowest part of the Toroweap and followed it east to a draw in the Kaibab. Just as we thought we were about out, we came to a vertical cliff in the middle of the draw with what seemed like impossible sides. However, I saw one possibility, and Allyn found a better one right near it. After we passed this with some difficulty, we just had to hike on to get to the top of the plateau. The deer must be able to negotiate this place, but I would like to see them do it. It must require some fancy hopping. We were carrying enough water to take us through a normal supper, but we hiked on until dark before bedding down.

Tuesday morning as I was reading before 5:00 a.m. and about to wake Allyn, I caught a flash of light out of the corner of my eye in the direction of Yucca Flat. When I told Allyn, he said that we would probably hear the explosion of an atomic bomb about 21 minutes after the flash and we did. In fact we got two reports. We didn't try to eat breakfast there, but in two hours of walking on an empty stomach, we got to the warehouse with the plentiful supply of rain water. We were able to go down the long trail and up the short arriving at the car by a bit after 5:30 p.m. It was furnace like in Havasu Canyon, but we found a breezy, shady, side canyon where we ate lunch in the shade and had the luxury of actually shivering a bit when the wind came through. We figured that we had walked about 90 miles in three and a half days.

Shiva Temple [June 6, 1957 to June 8, 1957]

We got to the North Rim and ate lunch in the campground. After dropping in at the Administration Building, we drove as far out the Tiyo Point road as we could. In fact, we bypassed three fallen trees by end runs through the woods for short distances. Finally, we were completely stopped about four miles from the point. We walked to the end of the road and studied the view of the route to Shiva. Then we found a pool of stagnant water and prepared to Camp. The mosquitoes soon convinced us that it wasn't a good place, so we went back to the rolling meadow near the clear stream in the basin. Here we didn't notice mosquitoes until late afternoon, and they gave us no trouble when it got quite cold at night.

In leaving the road to turn the car around, I misjudged the nature of the ground and got completely mired. We worked with the jack putting on chains and putting rocks and wood under the wheels for a couple of hours that evening and about three more hours the next morning, but we were finally convinced that we would have to have help. By the time I walked into the village and got a ranger to help us, which he did quite easily with a Jeep, it was after noon. We spent the rest of the day trying to go down the canyon just east of Tiyo Point, and found that it was impossible to get through the lowest part of the Coconino Sandstone. Then we came back up to the road by a direct route and went out the faint road marked with yellow diamond shaped tin markers which was labeled Shiva Xp Pt, presumably meaning Shiva Expedition Point. It seemed to end far back from the rim and it also seemed to be going too far to the west. From the double diamond which seemed to mark the end, we walked southeast past a couple of tributary ravines and came to a point which seemed like an excellent place to leave the rim on the way to Shiva Temple. After making sure that we could get below the Kaibab Limestone here, we walked back on the level and encountered Shiva Xp road just a little way from its junction with the Tiyo Point road. We

marked it and returned to the car and our campsite in the basin. An interesting feature of the basin was the prevalence of turkeys and also the noisy coyotes that were quite near us the first night. Another circumstance was the heavy frost on our bedrolls by morning. I was very glad to have two sleeping bags along.

We got off early Saturday morning and left the car by 6:20 a.m. The point of departure from the rim was just east of the draw whose west side extends into the ridge which points out towards the saddle leading to Shiva. We followed a deer trail a bit to the east below the highest part of the Kaibab and then went down a gully in the Coconino. After some floundering on the steep Hermit Shale, we followed a deer trail and made good progress towards the saddle. This deer trail is rather high just under the Coconino cliff most of the way.

On the first big clearing of the saddle, we parked the gallon canteen under a tree and went on with two quarts for both of us. Just south of a small hump which separates the saddle into two sections, we found a large mescal pit or yant oven. There is some pretty bad manzanita on the east part of the saddle which we had to buck on our way to Shiva and avoided rather well on the way back. We knew from reading and our own observations where to go up the shale to the sandstone on the east side of the northern projection. On the sandstone, we went south for about a 100 yards and started up in earnest. The way up is rather difficult at times, requiring some chimney climbing of a rather easy type. That is, the chimney work is for only short stretches of say six or eight feet at a time. The peculiar part is that there always seems as if there might be a dead end around the next corner. At one place I took the precaution of building a marker, and I was glad I had when we were coming down. The toughest place for me was a crevice I had to inch my way up near the top of the Coconino. There was an artificial pile of flat rocks for a step at the top of the crevice. Allyn helped me here by climbing up and stepping across above a large plant. He yanked it out of my way and I was able to proceed. Above the sandstone, we went to the west and up to the rim by a well established deer trail. The trail was not defined right to the head of this route through the sandstone, but one wonders whether the deer can go down where we came up. If they can drop about straight down for eight or ten feet and land on a three foot ledge, they could make it, but I can't imagine them going up this way. For about three extra miles, one could go around to the southwest corner where there is a simple rock slide over the Coconino and then a deer could come back to the same break in the Kaibab that we and the other parties have used.

We reached the top of Shiva in three hours and ten minutes from the time that we left the north rim. We found a sort of lean-to and three milk cans which had been used to air drop water right where we came over the rim. We also found an old wooden frame that was probably used for a work table. We crossed to the south side and ate lunch looking towards Boucher Canyon. We inspected the southeast corner and couldn't see any sign of a cairn that Kolb said he had built on each corner. We did see the broken milk can which had come loose from the parachute, and we saw plenty of deer signs including antlers. In fact the antlers seemed more plentiful than they do in comparable areas on the two rims.

After spending two hours on the Temple, we started back and got to the point of departure in two hours and 45 minutes. This time we climbed the Coconino at the end of the point which is directly above the saddle. It's shorter that way and we could have done even better if we had stayed on a deer trail on the east side of the ridge instead of going up on the top of the ridge. It seems hardly possible that the experts

in 1937 could have taken one day to get down on the saddle and another half day to get to the top of Shiva. The four mile approach to the rim and the corresponding return to the car at its end are the only things that keep this from being a simple day hike for anyone in our hiking club. The official party had the downed timber cut away so that it could reach the rim by car. We found a V-8 hubcap in the woods on the way to our point, but I can tell from a picture in Natural History that they started from a point some distance to the west.

The Search for a trail into Lava [August 19, 1957 to August 21, 1957]

Otis Marston had the note that Charles McCormick had met Harry McDonald, the miner who had shafts near the mouth of Lava Creek, with his two burros somewhere on Greenland (Walhalla) Plateau. However, no one seemed to know anything definite about the location of any sort of trail south of the Nankoweap Trail.

Some friends and I walked out to Point Atoko and followed the rim to Naji Point with the objective of studying the north side of Cape Final where we thought the trail ought to be. We saw a considerable break in the Coconino near the end of Cape Final, and there is also considerable faulting in the Redwall east of the point. This seemed to be the best bet. The next day, I went out there by myself to investigate. The Kaibab was no obstacle, and I made good progress down the Coconino, although there were a couple of places where trail construction would be necessary before burros could make it. Just as I was beginning to feel smug, I found that the bottom of the Coconino consisted of a 60 foot sheer cliff, so I had to admit defeat.

As there was still quite a bit of time, I parked at the viewpoint called Two Rivers Junction and did a bit of looking. On the north side of the promontory leading out to Point Atoko, there seemed to be some promising breaks in the Coconino. I walked along the rim to the ravine at the base of this promontory and found that I could have parked very close to this place. First I went down the main ravine and got to within about 25 feet of the bottom of the Coconino, but from there it was sheer. I then climbed to the top of the Coconino and proceeded east a few hundred yards. Here was my last chance for the day, because I said I would be back to camp rather early, and I didn't want to worry anyone by staying out too late. This time everything went smoothly. There was an obvious deer track clear to the bottom, and a burro could have done this ravine with no improvement, unless one would like to cut a bit of brush. Furthermore, from Cape Final I could see that there is a very promising break in the Redwall just west of Hubbell Butte. This ought to provide a trail into Lava Creek, although I'll have to walk down here before I'll know that I can.

Thunder River and Tapeats Creek trip [August 26, 1957 to August 28, 1957]

This trip was taken with Dale Hall, and the principal objective was to reach the source of Tapeats Creek (not of course to be confused with Thunder Spring) and visit the cave which Don Finicum had found.

We arrived by car at the rim from Big Saddle Camp in time to eat our lunch. Not much farther on the way to Crazy Jug Point, the car wouldn't pull up the rough, washed out road and we took off on foot.

I didn't know where the break in the Coconino was, and we used a little extra time finding it. However, we worked west from where we went down the Kaibab, and this was right. We not only found a possible place to get through the Coconino, but we found the trail itself. A bit lower, we lost the trail again, probably by going west too soon. Then we found it for a while, and lost it once more, this time probably by going too far south towards the outer side of the Esplanade. After quite a bit of scrambling, we got to the main trail just about where it drops into the little defile above Surprise Valley. The rest of the way to the campsite was without incident. The total time from the rim to the Camp was four hours and 50 minutes. Dale Hall appreciated a cooking pan that he found at the cache of supplies. He had an \$18.00 kit of dried food but not a utensil for cooking. He also located a line and a fishhook, but was unable to catch a single fish.

On Tuesday, after a night during which I was a bit cold in my one cotton blanket and Dale was a bit sore from sleeping on a concave but not very smooth rock, we started off for the source of Tapeats Creek. I followed a plan that I had made before. We went up the trail until the way leaves the stream about a third of the distance up to Thunder Spring. Crossing there, we had a bit of a rock climb to get around the Tapeats, which Dale thought was a bit risky towards the top.

At the top, I decided to do my hiking in the coolest possible costume, my underwear shorts. As I was folding my trousers up to put away in my knapsack, my watch slipped out and rolled over the ledge and only stopped when it was about 60 feet and a couple of bruising bumps lower down. It was a pleasant surprise for me to find it still running when I came back that afternoon. We left a rock marker at the top of this climb, and it really helped when we came back the same way.

At the level where we found ourselves, the going looked a bit bad with plenty of little gullies in the way, so we climbed through most of the Muav and went along rather close to the Redwall until we could see the springs below us. Near the end, we had to go lower because there were plenty of rough gullies at our level. I would guess that it took us around two hours to complete this travel by contours, and it appealed to us as being a lot easier than fighting our way upstream through cold and swift water.

We saw one place where a person might swear that there was a bit of artificial rock building for a trail. After considering it for some time, however, and looking at the surroundings, we decided that it was just a coincidence. Perhaps the same sort of thing got Lauritzen started on his speculation about the Spaniards and their gold train. We saw no deer signs along this upper level, but when we returned, we followed the lower level, just above the Tapeats and were on a deer trail a good part of the time.

The water from the spring flows south, and then when it reaches the main canyon, which is usually dry, it turns west until it turns south again just before it is joined by the water from Thunder Spring. The first north-south section seems quite a bit shorter than the next west-flowing part of the creek. It is also much steeper, about half the grade of the creek below Thunder Spring. This point is not brought out in Lauritzen's description, nor does the water issue quietly from a depression in an amphitheater which can only be entered so he says, from the tunnel-like streambed. The springs are in a jumble of rocks at the

base of the Redwall, or rather a little lower in the Muav. The whole area is overgrown with verdure, trees, vines, moss, and ferns. The rocks as big as rooms, have fallen from above and make travel through this area quite a problem. The actual springs in the Muav are pretty well obscured by all the small rocks and the side valley itself is a V-shape both in horizontal cross-section as sell as vertically.

The cave, which quite clearly used to be the main outlet for the water, is above and to the northeast of the spring area. For 60 feet, the mouth is quite wide, about 35 feet by 10 feet high. There is an upper branch beyond this, but the main arm goes left at a lower level. This one is quite straight for a hundred yards and had a pool covering most of the floor. During both nights, Dale was slightly bothered by the mice. In fact, one took a nip at his ear the first night and some of the food sacks had been nibbled at. The temperature was about right for my cotton blanket the second night, quite a contrast to the night I spent at Shinumo Creek about one week before, when I lay on top of the bag and perspired until 11:00 p.m. with only my shorts on.

We made the trip back to the car with a little more use of the trail in about five hours and 20 minutes. Dale was definitely a stronger hiker at the end than I was.

North Bass Trail to Shinumo Creek [sometime in August, 1957]

Seven miles on the Point Sublime road to W4, and then 14 more to Swamp Point. In one meadow, a big rattlesnake crossed the road just in front of the car. I just saw the fat body. I backed up and looked, but the wheels had missed it.

I noticed the tree ladder lookout on Swamp Ridge and climbed it. I couldn't see the Canyon but the cliffs in Utah were in plain sight.

From Swamp Point, Steamboat Mountain is a striking feature to the west. Crazy Jug Point, near Big Saddle, is also a prominent landmark. I took pictures of Steamboat and Point Sublime. The trail over to Powell Plateau is still in fine shape although on the way south from the saddle there is a spot for a few yards where it is a bit overgrown. From something the ranger said, I inferred that this was improved by the CCC. There is a frame cabin with stovepipe and glass windows just west of the saddle. One window was broken and can be unhooked so that a person can enter the cabin.

The trail across the plateau is marked by yellow metal blazes to show the most nearly level route to traverse the length. The markers are a bit too far apart, but the walking is easy. There were plenty of deer visible, and one buck had about the biggest spread of antlers I've ever seen. A coyote stood and watched me at about 100 feet range, and only ran when I was just ready to take a picture.

I missed Dutton Point by going a bit too far west and reached the rim above Hakatai Canyon. I followed the rim to a big recouple at the head of Waltenberg Canyon. Wheeler Point looked tempting, but by the time I had reached a place to cross Dutton Canyon, it was 5:00 p.m . Since it would take until dark to reach the car, I started back. On the way, I traveled more directly, but it would have been very slow and

uncertain on a cloudy night. It was just cool enough for my Dacron bag by the car, and the one mosquito didn't bother me for very long.

I was on my way down the North Bass Trail by 7:05 a.m. on the 18th.It took a little over an hour to see Powell Spring and return to the trail. There is an old trail, wide but badly overgrown in places, which in general follows the bottom of the ravine towards Powell Spring. Maybe it went beyond the spring, something that is not clear now. The lowest pool from the spring is up Grass Canyon a few yards from the bottom of the ravine which eventually becomes Tapeats Canyon.

The trail from the saddle east going just below the Coconino is still good as far as an unnamed seep spring which is only about ten minutes walk from the saddle. A chimney is all that is left of a rock cabin just east of the seep. As the rock work has no adobe mortar, it must be the construction of a white man.

The trail seems to go on east, but soon splits into two deer trails. I decided I should back up to a steep ridge west of the spring and then head downhill. Most of the way down, I just followed any handy gully to avoid the brush, At the lower part of the slope to the open wash below, I was on a narrow ridge which had an obvious trail down it. The gulch just east of this ridge had a nice little stream flowing down it, but the water went underground just before it came to the main wash which comes out of the east side from Powell Plateau. This is evidently where the Bass Party camped on the way to Point Sublime. It is strange that the main wash from the west should have gone farther east from the spring below the Coconino and cut back across the running stream. There is a recouple marker where the trail comes off the ridge into the wash, and farther on I saw the bench mark at elevation 5697 feet set in a rock on the west side of the wash. This observation was accidental because I missed it when I was coming back. It took me over an hour to get from the bottom of the Coconino down to the bed of the wash. There must be a faster way!

The travel is easy down the wash through the rest of the Supai. This formation is definitely arched down from Powell Plateau into Muav Canyon. This is the only place that I've seen the Supai bent.

There is no chance of missing the place where the trail leaves the wash at the beginning of the Redwall, because here the bottom drops out. I soon missed the trail in the junipers by going too far away from the edge and thus missed seeing a natural bridge just a 100 yards or so from where the trail leaves the wash. On the way back, however, I saw it and took three pictures of it. It's not much to get excited about, just a hole in the red limestone about 50 feet in span in the Redwall where it comes out on the canyon wall. You next go behind about three or four promontories of Redwall which are higher next to the canyon than they are to the west. The trail goes down the north side of the last of the series. I overshot and had to study the map and backtrack. You go south on a ledge below the promontory and then down a brushy slope first north and then south to the creek bed. There is a shallow cave near the trail just before you reach the ledge and several inaccessible caves near the top of the Redwall across the canyon. Another small one was noted nearly in the center of the ravine where the trail goes down to the ledge.

Before you reach the Muav Formation, there is running water for half a mile or so. This was where Clubb and Schwartz made camp after coming all day from the nearest place on the Shinumo, not a very long day's run. I had a late lunch here and started on after a cooling bath about 2:00 p.m. There were better bathtubs a bit lower where the Muav starts. Except for one short detour where there is a short fall in the

Muay, you keep to the wash until the Tapeats makes another forbidding canyon. Burro signs are obvious here, and are found as high as the cave near the top of the Redwall. Although I heard some braying lower down, the only burro I saw was on the steep slope below the Redwall where the trail comes down.

When you finally see Shinumo Creek below you, you can follow the map across a shale slope to the southwest and then descend when you come to a barrier cliff. Or, as I found on the return, you can go down a well established burro trail that goes through a break in the Tapeats rather near the bench mark. This follows the crest of a ridge that goes down quite a bit more directly.

The heat below the Redwall was pretty bad. Rocks in the shade felt quite a bit hotter than body temperature. The cold water of Shinumo was a relief. Ants were all over the ground and when I hung my knapsack in a mesquite tree, tiny ants got into about everything. I arrived at 5:00 p.m. after taking over an hour to see Powell Spring. This made the trip down take about eight hours and 45 minutes overall. After cooling off a bit, I went on down and saw Bass' Camp and Shinumo Gardens. This flat impressed me as much better farm land than anything Boucher had. In fact, it seems to me that it is about the most inviting place to irrigate and grow things of all the possibilities in the entire Grand Canyon. It was just a bit farther to the trail that I had covered last October. I got back to my pack by 6:30 p.m.

On the way up, progress was smooth except at the very beginning and again at the very end. It was still only 5:30 a.m., and in the dim light, I couldn't locate the trail I had come down. I had to descend and go up the burro trail along the ridge. Also at the end, I did not recognize the significance of the trail cairn telling me to leave the wash and start up the ridge to the Coconino. Instead I went up the main wash towards Powell Plateau and had to fight manzanita for a good hour to get over to the saddle.

Down Cottonwood Canyon to the Colorado River [September 14, 1957]

Roma went with Don Finicum, Allyn Cureton, and me to the head of the Grandview Trail. She toured the rim while we started down the trail at 8:45 a.m.. We went out to the trail off Horseshoe Mesa near the end of the west spur and then across the Tonto to the edge of the inner gorge where Cottonwood Canyon meets the Tonto Platform. The boys agreed that the view downriver from there is about the finest they have ever seen of the gorge.

We then backed up and went down into Cottonwood Canyon via the ravine on the east side which is just south of the edge of the gorge. There is no difficulty in reaching the bottom of Cottonwood here, but before you have gone very far down the main wash, you come to a series of barrier falls. We backed up a few steps and then climbed out of the wash to the west. At the small saddle we found a very old rusted tin can and considered this a good indication that we were on the historic Grandview Trail. After descending a short distance, however, we found that the way down below the falls was barred completely by cliffs and we had to work our way much higher before we could finally descend. We found a slightly risky way to climb past some granite pinnacles and then we were able to get down without further trouble.

At the bottom, we went back up the wash to view the lowest of the dry falls which had stopped us. These drops seemed to be fewer and considerably higher than the corresponding barriers in Hance Creek. The

lowest one seemed to be about 60 feet high. Perhaps they had fixed ropes and rope ladders to get by these falls, although I rather doubt it in view of the height. There were pools deep enough for a float below the falls. It was only a matter of minutes to walk from here to the river. It seemed even farther directly down to the water than I had remembered it from my previous trip, probably 50 or 60 feet almost straight down.

We ate our lunch in the shade of the rocks just a few feet back from the river and were pleasantly surprised that it wasn't uncomfortably hot. The air currents were interesting here. Once when Allyn held up a piece of paper and released it, it went directly upwards for a couple hundred feet and then came down just as fast only a few feet from us.

Don's recently broken toe was bothering him on the way down, and when Allyn and I went in search of a way to get to the river, he rested. Only a few feet farther away from the river, we found an easy way to go up and to the east. Just a few yards of walking and we came to a simple rockslide clear down into the water. I thought sure we had found the official end of the trail until I remembered what the pictures showed at the bottom of the trail. I then realized that still more searching will be needed. However, I'll still bet that this is an easier way to the river than the historic route, which I now believe must be somewhat farther downstream. To return, we might have climbed up to see the spur trail off the Tonto to the west, but since I had come down that way on Thanksgiving, 1954, I elected to go up to the base of the Tapeats to the west and then follow this level south. The walking proved to be fairly easy and we even had burro trails part of the way. Perhaps this is what was meant by the map which showed the trail coming down Cottonwood Canyon to the river. The only place where the trail is a bit indirect is just before you reach the dry arm of Cottonwood Canyon where the trail, very distinct here, goes up to the Tonto Platform.

We followed the Tonto around until it came to the branch where the spring is located. While the boys rested next to a standing pool of not very choice water, I went upstream to see whether the spring was flowing higher up. It got better the farther I went, but it seemed to start much higher than I wanted to take time for. On the way back, I came to a place where there had been some sort of structure, perhaps only a board floor for a tent. What seems most puzzling here were the pipes for bringing water from higher up. They were standard plumbing size. This site had been used rather recently too, for there were some cans of K-ration type lying around. These may date back only a year or so when some men were working on the trail down the west side of the neck to Horseshoe Mesa, according to Dan Davis.

Don and I went up the regular trail to the mining area, but Allyn insisted on going out the upper end of Cottonwood Canyon, where from a distance it appeared possible to get through the Redwall. He reported later that it was quite difficult to do this, and that he had to prop a tree trunk up to climb past a certain ledge. He made the trail above just ahead of Don and I, but he wouldn't have if we hadn't taken the time to investigate O'Neil Spring at the end of the spur trail just below the Redwall as you are going up to the mines. I came to a fair sized hole under some rocks, but there was no water in it at this time of year. It was damp, however, and had one willow growing out of the middle of the depression.

We got down to the river from the rim in three hours and 45 minutes, and came back up in four hours and 40 minutes when the 20 minutes spent investigating the spring was deducted.

Badger Creek Rapids [October 27, 1957]

We were taking Gene Foster's truck and station wagon to Lee's Ferry. The others in the party wanted to see the Glen Canyon dam site and would not get to Lee's Ferry before 5:00 p.m., so I had the opportunity for a hike in the area while waiting for them.

After an early start from Flagstaff, I got to the parking lot by Navaho Bridge about 9:00 a.m., and soon afterwards started downstream along the south rim of Marble canyon. There were numerous small ravines and one larger one that took me about 15 minutes to find my way across, but I had no idea that my progress was as slow as it turned out to be. In about an hour, I was only opposite 60 Mile Wash and after almost two hours, I was only down to Badger. One point of interest was that the river was flowing very smoothly all along here and another was a big rockslide on the north side of the river a bit downstream from 6 Mile Wash. It covered the lower cliff and from its top, one could work west to a ravine which cut through the upper Kaibab cliff. It was pretty clear that one could go on out from there.

The side canyon from the south whose mouth is at Badger seems to be larger than Badger Creek Canyon itself. I took 40 minutes to get back along its rim to a place where I could go down to the bottom of the branch farthest to the east. This branch is one of the most interesting places along the route to the river as both walls overhang and give it a very gloomy, yet romantic appearance. Walking is very easy here as all loose debris has been swept away by floods. The natural steps in the bottom of the canyon are sometimes embarrassingly large, but the only place where there is any doubt about progress is at a place where someone has fixed a chain to make the climb safer. Near the river, there are big rockfalls which slow a person down considerably.

Just at lunch time beside the rapid, the sun came out nicely and I enjoyed a bit of suntanning. I thought that this should be Soap Creek Rapid to judge by the length of time it took me to reach it, and if it was, the proper way to leave the river was directly across and up the creek to the north if one would rely on Davis' instructions in his booklet Escape Routes. Since my approach from the south fitted Badger, I decided not to chance going up the canyon directly across, but rather to get out on the north side of the rockslide and hanging valley mentioned previously. I knew I didn't have time for further exploring and still make connections according to my agreement with the others. I was able to walk upstream on the south side without too much hindrance from the willows, mud, and rocks. There were at least three places along here where I saw beaver tracks and willows cut through. When I was in sight of the talus slope, I crossed the river on my air mattress dropping about three widths of the river downstream in the process.

The climb out was without incident. However, the walking on the upper bench below the upper cliff was rather precarious. When I reached the top, I angled toward the east and ran into 60 Mile Canyon which kept branching and keeping me turning more and more to the west. The walls were vertical until the canyon was only 30 feet deep. When I finally got across, I soon came to the highway and had about two miles to walk to Navaho Bridge. I had been traveling about eight hours with another half hour for lunch.

Clear Creek [November 9, 1957 to November 11, 1957]

Dan Finicum and I took this trip while Allyn went to Trinity in the opposite direction. We made it from Bright Angel Campground to the water at the end of the Clear Creek Trail in three hours and 45 minutes. Some flood since last spring had caused more devastation than I would have thought possible. It had made a new channel, much deeper than the old and had torn up the willows and had covered the ground with boulders where there had been cottonwood leaves and grass over the sandy areas. Most of the cottonwoods are still standing, however, and in another ten years, maybe this area will look more inviting. Farther up where the canyon is wider, the devastation is not so noticeable. The supply cache was not disturbed. We put our packs down at the Indian ruin where the long arm of Clear Creek meets the canyon with most of the water. Between 4:00 and 6:00 p.m. we got up to Cheyava Falls where I snapped a couple pictures. I noted that the source of the falls is about one-fifth of the way down from the top of the Redwall which would make the falls something like 400 feet high. There would be about 200 feet of cascades below this before the water reaches the streambed below. Even though the previous weeks had been unusually rainy, there was only enough water coming out to keep the rocks wet. On Sunday, Don and I checked my theory that the trail Hance had patented, going past the asbestos mines over to Clear Creek, should get down to Clear Creek along the short canyon which starts near the gap between The Howlands Butte and Angel's Gate. This turned out to be correct. There is a good deer trail at the head where it is easy to get through the Tapeats. Then we circled the west side of The Howlands and came to the short bay which drains down a wash just east of the mouth of Clear Creek. It was fairly easy to find a place to get through the Tapeats. We came down on the east side of this bay, but we noted three places on the west side which should have been just as easy. In descending the steeper slopes to the river, we had to pass small ridges to the west several times to find suitable rockslides, but we made it to the river where we could go east a few steps to look up the actual wash we had been in most of the time. The Cal Tech party and also Stanton camped here. It took about 15 minutes to go the tenth of a mile from here to the mouth of Clear Creek, although there was no real difficulty in negotiating the interesting schist.

Going up the bed of Clear Creek was a simple matter of walking along the gravel and stepping over the water about a million times. At one place the canyon becomes very narrow and steep walled. We thought we were coming to an impassable fall and would have to backtrack considerably, but the worst was a ten foot fall that we could climb around by merely exercising care in placing our feet. Even a fall wouldn't have been serious, only a wetting after slipping down about ten feet into a pool of cool water. We walked without hurrying from the river to the end of the trail in two hours and 25 minutes, which would make the hiking time from the Colorado River to Cheyava Falls less than four hours.

Thunder Spring, Tapeats Source, Deer Creek, Kanab Creek, and Hack's Canyon [November 27, 1957 to December 1, 1957]

Kenny Burch drove Allyn Cureton, Don Finicum, and me to Big Saddle Camp and then drove the car back to Fredonia for us. I learned from him that there was a corral and a spring quite a distance up Hack's Canyon. One thing that surprised us a little was to see that someone was still living at Big Saddle even though the hunting season was over.

We didn't try to drive the car beyond the camp since the snow was eight inches deep and the ruts in the road made by a Jeep were now solid ice. It was a cold but beautiful walk through the winter woods, quite

a contrast to the dry, red regions below where we would be spending our time for the next five days. We passed the marker I had left to point out the head of the horse trail. We thought this was probably the route known as the Big Saddle Trail but later found out that it was not. The marker consists of four short sticks leaning against a big pine tree on the south side of the car track. Don took Allyn out to the point where he had left the rim before off Monument Point. As an experiment, I scrambled down to a deer trail below the first cliff in the Kaibab Limestone just before we were to start up a grade to get to the point. My route was rather slow requiring care, but I arrived just before the others at the meeting place. We decided not to try the steep climb off the east side of the point where the Coconino sticks out the farthest south. We followed the bench along to the west, perhaps a half mile, until we could get down without danger. It did require a drop of about four feet, however, and to get up there one might have to build a bit of a rock pile. We reached the regular horse trail from Little Saddle before it came to the main water pockets.

The rest of the way down to Thunder Spring was without incident. This time we crossed the water from the spring just below the upper fall, worming our way across a log that spans the stream with one end in a perpetual shower of spray. We had a tussle to get through the jungle here and out to the bench just below the Redwall. The footing wasn't a bit good with our packs to balance and it took us an hour and a half to go from the spring to the point where we could look into the gorge where Tapeats Creek starts. I am quite sure the distance from this spot up to the source is less than half the distance back to Thunder Spring, but the going was so slow uphill that it took another hour and a half to reach the cave just as it was getting dark. We had time to pick up enough firewood and that was all.

After a leisurely supper we deposited our bedrolls in the dry right-hand branch of the cave where the ceiling is low and the cold air of the outer world does not come. Then we went exploring into the perpetual night of the cave. It was much dryer than it had been last summer although I was correct in trusting that there would be a rain pool right at the mouth. We were able to walk right through places where I had paddled my air mattress last summer. Keeping to the left, we came to the end of a couple of modest branches. Then I went back to my bedroll and read the Readers Digest by candle light while the other two did the real exploring. They found a branch that would be to the right as you go in. It soon came to a five foot rise and then turned to the left. The boys found one of the waterproof matches left by their friends the previous spring. A little farther was the waterhole that had stopped the fellows before. You could hear running water ahead. Don and Allyn found that you can step on a ledge to your left and get past this water. Rather soon the corridor opens out into quite a large chamber, possibly 30 feet wide and just as high. In places the flashlights didn't show the ceiling. This soon brought you to the main stream. If you could wade against the current here, there is no telling how much farther you could go into the mountain, but we were willing to turn back. It took 12 minutes to get back out from this spot when the fellows took me in to see their discoveries the next morning. Cavers who have entered since, say that it goes back 3000 feet or more.

We had a most comfortable night in this air conditioned cave even though it gave one a peculiar feeling to have to strike matches to see by the watch whether morning had come. In the morning, I found out that mice had gotten into my raisins! We found a metal support for a camera at the mouth of the cave. An indication of an earlier visit by a white man. After we ate and took the morning trip into the cave, it was 9:00 a.m. before we finally got started on, and again it seemed pretty slow to get back to the Thunder River Trail. We had lunch by the spring before we started over to Deer Creek.

On entering Deer Creek Valley, we followed the horse trail north of the small spring which forms the fall and then crossed the talus to take pictures of the spring. We kept to the east of the cane beds at the bottom of the valley for about half the way to the exit gorge and then crossed to the west side of the stream. We found the ledge through the lower part of the gorge most interesting and noted the way the stream cuts such a narrow channel so deep in the rock. I missed the best way to get down to the river and led the boys through a terrific thicket of cane and thorns. Allyn finally showed us that we could get down the last steep place by holding on to trees. The river was low enough so that we could walk far away from the falls to get a picture from any angle we wished. The deep, clear pool at the bottom of the falls was a fitting end for the beautiful 100 foot falls out of the 60 foot deep slit in the cliff.

We followed the river bank with no particular difficulty for about 45 minutes until we came to a sandy beach which had a fair amount of wood nearby. Just before we got here, we were perplexed by some peculiar tracks in the sand until we decided that they were caused by rocks rolling down from the cliffs above. Besides the marks in the sand, we also saw where the corners had been knocked off other rocks. The night here was a cold one with strong wind squalls at times. Sparks flew so badly that Allyn and I had to abandon the fire in a hurry. Deer Creek Rapids was rather unimpressive. We saw much better rapids between miles 138 and 139 as well as at Fishtail and Kanab Canyons. For about a half mile we had to climb up away from the beach. Fishtail had a particularly impressive wave at the very beginning that had a way of crashing upstream with a big splash. We ate lunch at the only sunny place we had seen all morning directly opposite 140 mile Canyon. From about here on, we saw bighorn sheep tracks almost everywhere there was any sand. We also noticed some Indian ruins on the south side near where we had camped. At about mile 143 we came on a recent campsite. Someone had outlined his bed with a row of rocks and had put down a lot of weeds for a mattress. There was a rock fireplace, and what surprised me more were tracks from a burro in places where the rain would wash them away in a short time. We had made such slow progress in the forenoon that we could hardly believe it when we arrived at the mouth of Kanab Creek. It was good that we had the picture from Dock Marston taken 85 years before. It matched perfectly when we walked past the sand dune and looked out towards the river. Progress up Kanab Canyon was fairly easy and we saw rather soon one place where seep springs had produced a lot of greenery. There were fairly frequent terraces covered with mesquite which also had trapped driftwood. When it was only 5:00 p.m., we came to one of these. I had a premonition that these spots wouldn't occur very often, so I called a halt for the night. I slept very warm here under an overhang with a good fire burning all night. The thing that made me wakeful was the worry that the creek would have so many meanders in it that the mileage would be too much to allow us to finish the trip on schedule and get to the college by Sunday night. We talked about how I might have to walk on by myself and ask someone else to meet the fellows on Monday. We decided to eat in the dark on Saturday morning and be ready to spend all day walking.

I got off by myself as soon as I could see enough to stumble along and passed under one dripping spring almost at once. I soon decided that I could make better time with my sneakers on so as to wade where ever it was handy. The day was cold and I was rather surprised to see ice frozen in places where the water was perfectly quiet. Don and Allyn soon caught up with me. The walls in this part of the canyon are 800 feet practically straight up and the bottom of the canyon sometimes is only 20 feet wide. There were quite a few caves high up in the Redwall and at a number of places we saw more seeps and deposits of

travertine with maidenhair fern and other vegetation making the area on the wall green. I missed all pictures along here because there wasn't enough light. Little by little, the top of the Redwall seemed closer until about 2:00 p.m. we were at last above it.

Now we were faced with the problem of knowing which was Hack's Canyon. We thought we had recognized the main canyon from the east, Jumpup. In fact, we thought we had passed it twice! I was pretty sure of the second candidate for this honor, because the canyon bed was covered with gravel instead of having a lot of rather large rocks rolled down as in a steep short canyon. About an hour before I had figured that we were due to find Hack's, we came to a canyon with quite a wide mouth. There was quite a bit of pasture for the cows we had been following for some time. We decided that the place needed investigating because we would be sunk if we went right by Hack's. It proved to be a very interesting place with springs and grotesque rock formations. About the time we came to an awkward fall barring the way, Don found a horse trail leading around it, and we thought that was proof that this was indeed Hack's Canyon. When we got above the Supai out into a big bay below the rim cliffs, the trail petered out. I reconnoitered and decided that we could not even climb out in the vicinity, so we went back to the creek for the night. It was another thing we learned that day besides seeing another interesting place. We now were sure that we were past Jumpup Canyon. I knew from the lay of the land that we must be within something like an hours walk from the mouth of Hack's Canyon. We had supper and started to walk by moonlight.

Very soon we came to a big supply of dead cottonwoods and it looked like too good a chance to miss because we knew that it was going to be a cold night. Allyn and I used the fire all night, but still it was so cold that water froze solid in a cup. To make matters a bit worse, my mattress went flat, punctured by something I couldn't see on the ground in the dark. Again on Sunday morning we were ready to break camp by the first light. It took about an hour and ten minutes to reach the mouth of Hack's Canyon, making the walking time from the river about nine hours all told. It took four and a half hours of good fast walking to get from the mouth of Hack's to the car parked at the mine. A distinctive feature of Hack's Canyon is that the stream bed is nothing but gravel spread so as to have a gentle gradient. There is a campsite under an overhang on the north side near the mouth which has some names written on the rocks as well as some tools and old horse shoes. We took two hours to reach the corral and spring and about two and a half more to reach the mine. Most of the walking in Hack's was very easy, quite a contrast with some of the going early on Saturday when we had to work our way around big rocks which had tumbled off the Redwall cliffs. It is a bit hard to understand how they get stock to the mouth of Kanab.

When we got to the car, we had eaten our lunch about an hour before, but that didn't stop us from enjoying some huge pieces of turkey that Don's mother had left for us. We could testify that the two good falls near Thunder Springs and Deer Creek Falls, The Colorado River, and Lower Kanab Canyon make this route about the most interesting five days we could think of.

Comanche Point and the Little Colorado River Gorge [December 29, 1957 to December 30, 1957]

I parked the car at Desert View thinking that I would be coming out by the Tanner or possibly the Red Canyon Trail. I hadn't noticed the access road E14, which leaves the highway just southeast of the

checking station. I thought that I was supposed to connect with the one marked E15, which leaves the highway two and a half miles from Desert View, and I was surprised how quickly I came to a road. Actually I had walked a mile through the junipers when I could have been on the road all the time. This is a fairly good road and would be all right for an ordinary car in good weather. It makes about eight turns to lose altitude to go down to the base of Cedar Mountain.

With no fresh memory of the map, I turned north on E15 when I was still quite a bit west of Cedar Mountain. This is the same as the old road shown on the east half map of the National Park. I didn't have the map with me or I would have kept my bearings better and I might have looked for the cabin marked on the map. I did note the way the road follows the wash which leads into Straight Canyon. Incidentally, this road would not be a good one to try in a car. The road was easy to follow up from Straight Canyon, but then it seemed to go west towards the rim of the Grand Canyon where the map shows it turning northeast. I left the road here anyway to look into a deserted hogan which was a little north of this west bend in the track. I believe I caught what was left of the track near Comanche Point.

This point was not part of the plan, but it looked so close that I couldn't resist the impulse to drop the pack and go over to it. There is a fresh surveyor's marker on it, possibly a year old replacing one that was a lot older. Of all the viewpoints along the rim of the Grand Canyon, perhaps this is the only one which gives 360 degrees of view. The closest horizon is the one back of Desert View, say six miles away and the farthest is Navaho Mountain and the Hopi Mesas, exactly opposite the Grand Canyon. Comanche Point is also unusual in that it rises up to a point as well as sticking out into the canyon. It's surprising to note that it's still above 7000 feet elevation here when the rest of the region is dropping fast to the east. I picked what appeared to be the biggest bay in the rim of the Little Colorado River Gorge south of the bend marked by Big Canyon and Salt Trail Canyon on the far side. The little brother of Cedar Mountain, which was somewhat south of the line to this bay, served as a further guidepost in reaching the chosen place. I had to cross a couple of draws to keep from going too far to the north and I came to another wagon trail which seemed to come down from the southwest about where the road was shown on the east half map. One branch crossed the wash and went to the north towards Cape Solitude while one track went down the wash to the east for quite some distance.

About a half mile west of where the road leaves the wash to go east of Little Cedar Hill, there's a peculiar rock wall which doesn't seem to have any purpose. It is about straight, paralleling the streambed about 60 feet long by four feet high and two feet thick. While I was preparing to take a picture, I put my canteen down and then moved to a better spot for the picture. When I was through with the camera, I didn't know where the canteen was, and it took me a number of minutes and considerable worry to locate it.

The road led me up on a flat northeast of Little Cedar Hill and then I figured to reach the north side of the bay, I would have to leave the road and head northeast again. I got back to the same canyon I had been in just as it came to the rim. I could see that the ravine farthest east on the north side of the big bay seemed to be the most probable place to descend, but it was too late to think about getting to the river that evening. Right below where I made these observations, there were several waterpockets mostly frozen solid, but one had only an inch of ice over a foot of water. So I filled the canteen and used the Halazone tablets for the first time. When I reached the next canyon north of this, I decided to camp, especially since

there was such a neat overhang to keep dew off my sleeping bag. It seemed cold and lonesome as night came on, but the air mattress and the two sleeping bags did their duty and I was not cold during the night.

After a breakfast of crackers and raisins (eaten in bed), I got started for the day's hiking about 7:45 a.m. I intended to be back in about three hours at the most, after looking into the main gorge from the rim and scouting the top of the ravine I had thought possible the evening before. After my reconnaissance from the rim I started down the ravine at 8:30 a.m. There were at least three places which were real climbing puzzles, but each time I found a fairly safe way to get down without a rope. Perhaps a knapsack would have to be lowered by a rope at a couple of these places. At the place near the top of the Coconino, I kept to the left wall. Near the bottom of the same formation, I left the gully and went around on a talus which led back to the bottom of the same ravine. At the top of the Supai, I was quite baffled for a few minutes, but I found a good way right near the main channel along the left wall. It was easy from here to the top of the Redwall, and again I was mighty glad to encounter water pockets which I used on the way down and particularly on the way back.

A quick look showed that the Redwall here was impossible. Another observation was that the stream fills the bottom from wall to wall in places, and it constantly swings across cutting off all chance for a person to walk through here along the bank. You would need to ferry an inflated mattress to negotiate the deep spots, and I wouldn't want to try that in the winter. I had a feeling that the real Blue Spring Trail might be to the south, so I followed the bench above the Redwall for a half hour without finding the way down. I did see one good spring coming into the muddy main stream from the left wall. I also noted a saddle in the Supai where the bed has made a gooseneck. I was able to identify this on a map at the museum and I was able to conclude that the regular trail to the river was only about 40 more minutes walk upstream from where I had turned back. Since I had no lunch along and wanted to go home the same day, I quite exploring at 11:00 a.m. and reached the rim in two and a half hours, which makes me think that this route compares favorably with the regular Blue Spring Trail which kept Wing and Womack busy for a whole day when they were carrying heavy packs and using a long rope. There were no trail markers along this route, but I saw the hoof prints of a deer along the bench above the Redwall.

When I was at the top of the Supai, where the various ravines draining into this bay all come together before they go out to the river, I noticed a very promising route from the south side of the bay. It would have led me considerably farther from my campsite so I didn't try it. I would estimate that it is quite close to the top of the Blue Spring Trail as marked on the map. At 3:00 p.m. I was through a big lunch, packed and ready to go. I filled my canteen at the same water hole in the ravine to the south and then headed across the flats to the road which leads south on the east side of Little Cedar Hill. I soon came to a branch which led to a tank near the rim of the Little Colorado River Gorge. After a good many ups and downs and bends in the road, I decided to leave it and head more directly for Cedar Mountain. After two or three minor valleys, I saw why the road was not direct. There was a whopping big canyon between me and the butte. t was just about dark but the moon would be bright, so I dropped down to the bottom with the intention of climbing out on the other side. The bottom of this canyon, latter identified as Straight Canyon, was so easy to follow by moonlight that I settled for following it. In about two hours I was back on the old track, E15, at 7:30 p.m. and by 9:15 p.m. I was at the car. The view of the Painted Desert at sundown from the slopes just before reaching Straight Canyon was something to remember for a long time.