

Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (August 24, 1960 - June 10, 1961)

Through Marble Canyon

[August 24, 1960 to August 29, 1960]

I got off to an awkward start by taking the bus to Page. Mack Andrus saved me from having to wait until 4:30 a.m. Wednesday to get the bus back to Bitter Springs and then to walk 14 miles just to get to Badger Rapid. He saw me on the street shortly before supper time and put me up in his trailer with slides and music for entertainment Tuesday evening. He even drove me out to have a look at Waterhole Canyon where he had heard you can get down to the riverbank. We didn't see just how to do it, but it's several miles from the road to the river. On Wednesday morning he drove me clear to Navaho Springs and I walked down to Badger Canyon and got started on the trip about 8:15 a.m.

I could see that I wasn't going to make fast time on the trip as soon as I saw that it had taken me almost three hours to go three miles from Badger Canyon to Soap. I didn't explore Soap, and I stopped for lunch about mile 12.5. A little ways above Soap I noticed and photographed a peculiar rock sticking up on edge. Some water was flowing between it and the shore, but it was so far towards the left that I don't think any boat would be likely to strike it during high water. I don't remember precise locations, but I saw ducks of two sizes scattered through Marble Canyon and a few big herons. Twice I saw little catfish, and I would insist that one of them drifted close to me just to look me over.

Sometime before I reached Sheerwall Canyon. I was pretty sure that the Supai was becoming the dominant stream side formation. It was most interesting to a person who recognizes the various kinds of rocks in the Grand Canyon to notice which he is passing through. It seems a miracle that one can descend through several hundred feet of cliff with never more of a fall than the rapids that drop a few feet in a thousand forward or sometimes three or four feet in a hundred forward. Of course the secret is that the rocks come up much more than the river goes down. The riffles and rapids seem to come on the average of about a half mile apart, and at this stage of water, there is always a good way to walk around them all through Marble Canyon.

About an hour after the lunch stop on Wednesday I could see and hear that I was approaching a pronounced rapid, presumably Sheerwall, the canyon coming from the left. There were a series of falls in the canyon right close to the river, and I noted a trickle of water. It appeared that both sides could be walked. I had in the back of my mind that at some time, the current might swing against the outside of the bend strongly below the boulder bar, and I might be in an awkward position to proceed. Hence I worked over to the right on the inside of the bend opposite the boulders brought down the side canyon. This was a mistake as I could see when I got close. The rocks I had figured to get out on were separated from the real bank by several feet of deep and fairly swift water. There were now three courses of action as I stood on a flat rock and assessed the situation. I could paddle like mad upstream along the right bank and eventually be high enough to cross to the other side. I could push off towards the middle and go right down through the waves and trust that I would clear the rocks along the edge, or I could make a lunge for the bank and hope that I could get a good grip on something even if I couldn't get my feet on the bottom. The latter was

what seemed best at the time, but I couldn't grip anything and I went over the falls next to the big rocks. I was hanging to the mattress with my feet down in the deep water. There was no danger of dunking, but I did scrape my shin on a rock. The pack was floating behind and was hanging by only one shoulder strap when I got through. It shipped a bit of water. I guess I must have felt a bit of strain at the surprise, because I soon felt a thirst that was unusual. I interrupted the trip to treat some water with Halazone before I continued, and about 4:30 p.m. I stopped for the day to give my blanket and stuff time to dry out. All this accounts for the short run of about eight miles the first day. It was luck that a few minutes before this mishap, I had decided that my legs had plenty of sun for one day and had put on my trousers. I suppose the skin would have been broken much worse if there had been no protection. I believe I camped about Mile 16, at least before I came to House Rock Canyon. The place was on sand at the top of a talus of broken rock. At this place and the stop Thursday night, there were no ants or flies. I believe they were entirely cutoff from the rest of the world by the cliff and the water. This is truly the ideal kind of camping, cool all day from being in and out of the river, and not much bedding needed at night to keep warm. I was burdened by a heavy pack with food for 14 days, however, and I was worried by the sad shape my knapsack was in. One strap appeared that it might tear off at any time. The first night, the air mattress held air properly, but by the second, it had to be blown up twice during the night, rather a bother unless one is wanting relief from insomnia anyway. At this very first stop, I decided to give up the river trip at either Nankoweap or Tanner. Still I went on with the full supply of food for two more days.

Rather early on Thursday morning I arrived at what I took to be House Rock Canyon. At least it looked distinctly possible to climb out here. I went up this canyon to the right for about 20 minutes. There were rainwater holes in a number of places, and one of them looked so clean that I took a good drink on the way up and another on the way back. There were three places where it seemed a bit like luck that one could climb around falls, but I reached a place where the wash was opening out near the top of the Supai and decided that I had taken about enough time for that study.

About a mile and six-tenths further on I was impressed by a house-sized rock in the middle of the river and took a picture. I had Boulder Narrows on my list, but apparently I didn't connect this rock with the feature until Bob Euler told me so after I got home. I stopped at North Canyon for lunch, and offhand I wouldn't have thought climbing out here to be feasible although I didn't investigate the possibility. After starting on, my next check point was Stanton's Marble Pier at Mile 23. Somehow I had the idea that his pier might be a vertical column. When I thought I might be getting close, I noticed a thumb sticking up from the Supai cliff ahead and I stopped to take a picture. Before I started on, I recognized the real thing, a projection of gray polished limestone on the left bank (not Stanton's Marble Pier). (There is no milepost at mile 24.7 RW.) This is the top of the formation that gives Marble Canyon its name and also its most distinctive views. The river is cutting into 500 feet of rock for the next 18 miles after which the greenish shale seems to be definitely the water level formation.

The next check point I looked for was a broken down section in the left wall at about Mile 25. This was obvious and striking through the Supai, but I'm not sure how one would climb out as the Kaibab Limestone at the top seemed rather continuous, not to mention the Coconino Sandstone. I had heard terrible things about the rapids at Miles 24.5 and 25, but at this stage they didn't seem particularly impressive. Of course I walked around them, but I did that for all the riffles. I must have landed 25 times in the course of a day's travel. The horror stories about navigation through both Marble and Grand

Canyons always stress the fact that the rapids are much more ferocious in the harder formations such as the Redwall and granite. At this stage, there seemed to be long quiet pools with very slack water, and then rapids, but not noticeably worse than they are elsewhere. I would agree that there are fewer distinct rapids and more current between President Harding and Nankowear Rapids than through the Redwall, but I wouldn't have picked out the Redwall stretches as unusually dangerous. The quiet glassy pools running straight for almost a mile with the walls rising 2000 feet and more formed the finest views of the trip. Along some of these corridors the face of the cliff would be honey-combed with large and small caves and crannies. Now and then a side ravine would cut down with most intricate carvings through the stone.

The canyon to the left with a trail in it at mile 29 (according to the notes) eluded me completely, but somewhat before this I took a picture of a deer or other trail coming down from the left. It seems to me that it was in a region not too far below the broken walls at Mile 25. It would be fun to come through here again with time to check out these trails to the rim. There seemed to be a possible ford where this trail came down from the left, and I think one could walk the talus from here to Vasey's Paradise. (I found out later that you couldn't unless you went above the Redwall.)

At Mile 25.5 is listed Cave Spring Rapid. If I know what this means, it is a little spring coming down through the sand on the right bank, and the cave is somewhat below in the side of the cliff on the right. There is a big block of limestone resting on the lip of the cave, but in low water it would be almost impossible. I believe that Art and Ray succeeded in getting into it from their rubber boat, but it was a real feat. I don't know which cave near Vasey's was the one where the split twig figurines were found, but this might be it. (I found out later that it wasn't, they were in Stanton's Cave.)

My Thursday night campsite was about a mile below Cave Springs. I can visualize the first campsite clearly and also the third, but no special features of the second stand out. It was on the left side on the sand not as high above water level as the first site. I do remember that when I started in the morning, I was able to walk quite a little distance before it was necessary to get wet. No matter how cool it felt in the night, a little struggling with the big pack and I would be warm enough to appreciate a wetting even rather early, long before the sun struck the water. Then if the wind blew, which wasn't often in the early morning, I would soon be too cold again. After the third bivouac, I went back to my old system of lying on two air mattresses. That was fine and warm. I had been leery of difficulty in picking them up when I was about to leave the water, but that was really no trouble either

Some of the time I didn't feel particularly sure of my location, and when I started Friday morning, I hoped to get to Vasey's by lunch time. I hit it with a bit to spare, for I had time to go up to see the Indian ruin and the skeleton near the shallow caves just east of Paradise Canyon and then move on to Vasey's before it was time to eat. I looked rather carefully, but I couldn't see how Stanton led the party out of Paradise Canyon. It seemed to me that they would have had to improvise some sort of ladder to get up the wall right at the river. Maybe there is a break somewhere upstream, for one can follow the bank along here for several miles.

At Vasey's, for once, I didn't have to wait for the tablets to make the river water safe. The food I brought wasn't very appetizing, but it seemed to serve the purpose of nourishment. For breakfast there was grapenuts (soaked in water) and dates. For lunch more grapenuts and water, dates, and either cheese or

peanuts. For supper there was Lipton's tomatoe-vegetable soup, sardines, and dates with the possibility of ginger snaps wherever they appealed to me. I hardly ever was conscious of an appetite, which worried me, because I was surely leading an active existence. I often thought of Nevills' remark that you couldn't run the Colorado on hard tack and beans. In rebuttal, I thought that Powell's first party would have been only too happy to have had plenty of hard tack and beans.

One hears so much about the charm of the greenery at Vasey's that it's a bit ironic to see that a great deal of this is the finest stand of poison oak that I've seen anywhere.

On the way from Vasey's to Redwall Cavern, a bit over a mile farther, the scenery is most impressive with the cliffs rising from the water quite often on both sides. It's fortunate that rapids never occur with nothing but the straight walls beside them. As I approached Redwall Cavern, I didn't share the Kolb's feeling that it was too good a campsite to pass up. It would be a fine place to spend a rainy night, but there was a regular sand storm going on under the overhang which I was most happy to avoid. There were a few windy hours while I was trying to sleep on the sand bars, but in general I didn't have much trouble compared to the mess of wind often kicked up in Glen Canyon. There wasn't any rain while I was away from home for eight days, but not long after I got back, it began trying to make up for the extra dry summer. I was glad I was not cooped up under my plastic sheet. There are some compensations to being through with a rough camping trip where you don't even have a tent.

There were no good check points for the rest of Friday, but I found the next morning that I had been making quite good time. I must have stopped about Mile 38.5. Anyway, it was right near a fine alcove. There was a narrow entrance at about high-water level. Inside you found yourself in a huge stone kettle. The stream during a rain would pour out of a notch almost into the middle of the pebble covered floor. The whole thing was similar to Powell's Music Temple but on a grander scale. At this third campsite, I finally decided to abandoned the food that would obviously not be necessary since I had decided to climb out the Tanner Trail. I was glad to get rid of three-fourths of the cheese I had brought, a mess if there ever was one in all that heat. Oil soaked through the plastic bag and messed up things generally.

Perhaps the lighter pack accounts for the fact that I would make better mileage from now on, or perhaps the current just got better when I got out of the Redwall. I thought it was too early to begin watching for Loper's boat, but I stopped to take a picture of some fantastic overhangs with a lot of swallow nests on the ceiling. Later on I learned that these are well known features, the Royal Arches. When I was putting the camera away I happened to notice the old boat pulled up by a mesquite tree. President Harding's Rapid came along sooner than I had expected it to. The formation near the river began to look like the Nankoweap Area. As soon as I began to look at every bend with the idea that it might be Nankoweap, of course it seemed rather long in coming, but I reached Little Nankoweap before 4:00 p.m.

For two years I've said that I would like to go back up Little Nankoweap Canyon and see how far up the north branch one can go. When I was actually back there, it almost took some will power to make myself start. I guess I was a bit overwhelmed by all the fine things I had already passed and my curiosity was rather beaten down. There was also the question of the feet. My new sneakers had shrunk when wet, which was all day every day, and they had chafed blisters. I didn't know how effective my adhesive tape patching was going to be, but I finally summoned my resolution and started up. Very shortly I saw the

first human footprint I had seen during the entire trip. This time when I came to the obstructions in the bed, I climbed way up at the very foot of the Redwall cliff, but before I came to the north branch, I came back to the stream level. I found that I could have gone on around the corner and entered the arm higher up. I followed the deer up a talus around the lower obstruction, but higher where the arm splits again, I was stopped completely. I got back to my pack in about 45 minutes.

Sunday I started as usual around 7:00 a.m. and reached Kwagunt about 9:40 a.m. By the time I was ready to hike it was nearing 10:00 a.m. It took about an hour to reach butte fault. There was no water running down to the river, but I began to find more and more on the surface as I went up. Nankowep Creek was running clear to the river. The two springs in Kwagunt are only about 40 minutes walk above the butte fault. I went on up past the place where I had built a signal fire, past the place where I reached the main bed down the break in the Tapeats, and went on to see how the main arm gets through the Tapeats. There is a neat narrows here, but the bed is well buried in pebbles and boulders, so there is no climb needed. On the return, I used a bit of time looking for Indian ruins at the base of the Tapeats on the north side of the wash, but without success. A person could spend quite a bit of time going up all the branches and combing the terraces in the open. When I returned to my supplies, I moved down to the river and spent the night as usual on the sand. While I was getting the soup started, a coyote stopped not so very far away and stared. Finally I yelled to him and he jogged a little farther away and they gave me his attention again. When he got ready, he finally moved on.

On Monday I got off to the earliest start yet, about 6:20 a.m. I wanted to see how much faster I could make it to Tanner than I had by way of the butte fault two years ago. It was much more pleasant to get in the water quite a bit and then walk along the beaches if I got impatient with the slow water. I recognized the place where Boyd and I were swung around and around. Now there was no difficulty to keep out of the back eddy. In fact, I was never given an undesired ride upstream in a back eddy on the entire trip. I also was never tipped over except in Sheerwall, although there were times when I got into the race below a rapid and was twisted around several times in the turbulent water. The currents up beside me or diving under would sometimes make me balance carefully to keep from spilling, but on the whole, there was not much excitement. I ate an early lunch at the Hopi Salt Spring area, and I reached Tanner by 3:20 p.m. a very pleasant and easy trip.

Here I loafed in the shade of a big rock and finished the Reader's Digest for September. On Tuesday morning I started up the trail rather early and made good time until the sun got warm. I had cut the water supply rather short to avoid unnecessary weight, but towards the top I was wishing I had been more willing to carry more. The last little swallow was at the top of the Coconino, but I made the rim in under five and a half hours, good time for me in hot weather. I still had to walk to Desert View where I joined my friends Dave Keim and Marshall Scholing. Marshall drove me back to Flagstaff.

Eastern end of the North Rim

[October 1, 1960 to October 2, 1960]

I left home before 6:00 a.m. but I made a few picture stops along the way, especially on the way south from Jacob Lake since the aspens were glorious at this time. I also saw a few bow hunters scattering

across the parks toward the forest. At a service station opposite Kaibab Lodge, I learned that the road to Saddle Mountain is now being used by trucks bringing out the fire killed timber before it deteriorates.

Jerry Foote had recommended the East Rim Scenic View, so I took that detour. It was only about 3.5 miles over there. There is a forested canyon below you, but the real view is the distant scene, Vermilion cliffs, Navaho Mountain, etc. The slash in the plain formed by the Colorado River is impressive and rather close, but one has no idea of the depth and grandeur of the gorge through which the river flows. I met a couple here who said that they regarded the aspens as more rewarding than the Grand Canyon which they were just leaving. They felt frustrated that they had not had a mule trip to the river, and they asked me whether the South Rim was enough different to be worth a visit. I should have told them that they would surely be able to find a mule on the South Rim. From there I went and parked the car at the Y where the roads to Point Imperial and Cape Royal fork.

I was rather sure that Dock's pictures were not taken up Neal Spring Canyon from here, and I wanted to see what the canyon became lower down. A short distance south of the picnic area where you see the sign warning against overnight camping, I noticed a wooden water tank on the left up a bit from the bottom land. A large pipe came up out of the ground and dripped water constantly into the tank which had only six inch deep water in the bottom. I couldn't find the spring from which the pipe came. Thirty yards from here was a bridle path sign pointing the way to Bright Angel Point in one direction and Point Imperial in the other. No vestige of the path remained, and I would be rather surprised if there is still a guide around who can follow these bridle paths from point Sublime and even more remote places in the forest.

A good deer trail led south down the valley to another spring, probably Greenland. Here there is a scaffold and leading down from the steep eastern slope is another large pipe with some sections detached. I couldn't account for the scaffold at the time, but now I think it was built to support a tank. These developments were probably connected with the cattle ranching on the North Rim before the Park Service took over.

A short distance beyond Greenland Spring, you come to the drop-off in the Coconino Sandstone. The deer trail soon disappeared, but there was no difficulty in continuing down. There were several spots in the Supai which forced one to think twice, but there were always safe bypasses. Schellbach had placed the pictures correctly if he meant the one of the head of Neal Spring Canyon to be the head of Bright Angel Canyon in the Coconino. There was absolutely no scrambling down through the Redwall. It developed the full 500 feet of depth in only a few hundred yards. The map is incorrect in showing permanent water right to the head of the Redwall. The bed is dry until you get below the tributary from the east which comes by the word Vista on the map. About 50 yards below this junction, six four-foot jets of water cascade out from the west wall and fall about eight or ten feet to the bed. These falls are only a few yards apart, so that they virtually form Bright Angel Creek in one sweep. The creek is very beautiful for the next quarter or half mile with very little drop and the Redwall cliffs hemming it in on both sides. I would like to go back and get right up the creek to the falls. It took me 50 minutes of scrambling through the brush along the top of the Redwall to the place where I got my view of the source, and then I decided to proceed to the Old Bright Angel Trail up to the rim. This turned out to be a good decision, because I reached the trail at Trough Spring in only about 20 more minutes. There is still some telephone wire along here, and I was able to find the overgrown trail up to the east without too much trouble since I knew where to look. I well

remembered how I had to turn back here the time before since I didn't have a map along and only found this trail when I came back the next day and looked down from above. When I reached the rim, I studied the map and decided to go along north through the woods until I could turn east and drop down into the valley in the vicinity of Greenland Spring and return the way I had come. I kept postponing the turn east, and when I thought I had surely gone far enough, I ran into the blacktop pavement and knew I had overshot. The present road follows the old single track wagon road, which I could still see near the bottom of the canyon.

There was still some day left, and after I had eaten some cheese crackers and drunk all the water I wanted, I left the canteen and pack at the parking lot at Point Imperial and started to look for the break in the Coconino which leads down from just north of the Point. I found it so easily that I should have been leery of a change of luck later. I knew I would have to hurry and I didn't note landmarks along the cliffs as I should have. First I thought I would just get close enough to photograph Hayden from below, but when I had done that about 5:45 p.m. I decided to go up to the base of the butte. Then I decided to go on around it as the Hunts had, even if I would have to climb the Coconino by the light of the moon. I must have hurried still faster on the way back, because I picked the wrong point to pass before I started looking for the way up. When I began looking, it was dark, and I was frustrated at two or three places by a straight wall. Finally it dawned on me that I had passed the right place sometime before, but the progress was so slow and difficult through the brush and thorns that I couldn't bring myself to go back and find the right place to climb. I reached a break in the Coconino that offered a chance and started up. Over halfway to the top, the going got bad, and at one place I had to backtrack. Finally I found that I would have to use both hands and hope that the rock would hold. When I was past these spots, I sincerely hoped that I wouldn't have to go down them in the dark. At last I was relieved to see that I had the Coconino below me. I reached the rim in very poor condition from lack of food and then walked for almost 15 minutes just to reach the car. By that time I was ready to blow up the mattress, pile into my two sleeping bags, and drop off without really eating more than a little bread and a few raisins. The sleep was about the best I can remember out on the ground and the sun was up before I was.

Next I tried finding the way down to Kibbey Butte, but apparently I started too far to the south in the neighborhood of Brady Peak. I didn't give the place Art had marked on my map (which was at home) a try. There was no chance of getting down at the two places where I looked down. The first one took me two-thirds of the way down, but that wasn't good enough. I'll have to go back and try the place Art had indicated. This was frustrating, and I also noticed that I was weaker than I usually am, presumably from going to bed without supper.

To do something easy before the long drive back to Flagstaff, I went down near Cape Royal and took the short walk down to the spring past the Indian ruin (GC222). It's a nice walk and gives you some very interesting views. I particularly noticed how it would be to go along the talus from this canyon around below Cape Royal. This doesn't look a bit easy and safe, but it looks better than trying to go from the east along the ledge above the bottom of the limestone. (I discovered in later trips that the bench east from Cliff Spring is the best way.) The bottom of the limestone blends into the Coconino in a vertical drop. I believe I remember now that Merrel told me you should go down right near the end of Cape Royal itself. I should have looked at that when I was right there.

Another thing I should have done when I was near the end of the cape was to cross the ravine and climb up to look down into Clear Creek and across to the three temples: Deva, Brahma, and Zoroaster. When I had driven north some distance, I got the impulse to do this, and I walked for 45 minutes due west without coming close to the rim. I did show enough sense this time to leave the car at a place where the paving changed so that I would know which way to walk when I got back to the road, but I felt frustrated again and rather foolish as I consulted the map and noted that where I was, 6.5 miles north of Cape Royal, I could have walked for miles and come to Bright Angel Canyon without ever seeing Clear Creek. I had shown bad management four times in two days, rather a record for me. I did have the satisfaction of deciding where all of Dock's pictures had been taken, and I had taken the only picture I know of the source of Bright Angel Creek. However, if I can't show better sense of direction and distance in the future, I had better quit while I'm ahead.

To the mouth of Epsom Creek
[October 15, 1960 to October 16, 1960]

I had intended to make a serious try for the mouth of Fossil Creek this time, but two and a half inches of rain made the road west from the village impassible. It seemed like an opportune time to finish what James, Dad, and John Waltenberg started on August 3, 1898 - to go to the mouth of the second canyon west of Indian Gardens. This is still nameless on the map, but I've called it Epsom Creek since last March when I noted that the water in seeps along this bed are foul with Epsom salts. In fact, the bed is crusted with the stuff.

The weather at 6:00 a.m. was so bad that I almost gave up the trip entirely, and actually I didn't leave until after 8:00 a.m. when it stopped snowing. On the way into the park, I met seasonal ranger Kaas (not sure of the spelling). He said he's also interested in hiking and exploring the canyon and that he hopes to get on as a maintenance man so that he can do more of it. He said they won't let him officially do any solo hiking, but he has done some anyway. The Bright Angel Trail seemed sloppier than I had ever seen it before, and one had to walk in the gutter as much as possible. The stream was flowing down through the Supai, and one could hear a little fall over the edge of the Redwall. It rained rather steadily until almost 5:00 p.m. but my trousers didn't get really wet since the drizzle was so fine. I began to get a bit wet just before it stopped.

It took me about an hour and 20 minutes to walk to Indian Gardens where I ate an early lunch and read my new Time. The trip from there along the Tonto to the head of Horn took one hour and the rest of the way to the head of Epsom took an hour and a quarter. I made the same mistake that the James party did and went over to investigate the edge of the east arm of Epsom where one can't descend. This did not take long, and when I came to the branch where I had come out last March, I kept to the right and found a good overhanging ledge not far down. There was enough dry ground under it for me to sleep out of the wet and I left my pack here. I should have found my firewood then and put it out of the rain before going on about 2:40 p.m. I hadn't been carrying a full canteen of water because I had thought I would camp near a supply, but now shelter from the rain seemed more important than lots of water, and I even decided to leave the half full canteen with the pack and merely drink plenty when I found some in rain pockets. I knew I would be rock climbing, and I wanted both hands free if possible.

The route along the base of the Tapeats on the east side of Epsom wasn't level or real easy, but neither was it particularly hard. There were frequent burro droppings but only a few places did they actually form a trail. I chose to keep along the top of the granite even when it meant a detour around a shallow bay. At the last angle before I came into the bay where the chute goes down into Epsom below the obstructing fall, there is a pinnacle you have to detour around. A notch between it and the main Tapeats seems inviting, but the drop on the east side convinced me that I shouldn't try this short cut. On the east side, when you do go down and around, there is a tricky place where a steep ravine in the granite cuts out the talus. It would probably stop the burros, but I found numerous bighorn sheep droppings beyond here.

The main branch of the chute looked rather passable, but there seemed to be sudden drops lower down. I could look across and see that the ridge dividing this bay from the next one east was well broken and only about 45 degrees with the horizontal. I was pretty sure that I could descend there and then come back to the main chute. This worked out very well and I got a bonus in the view to the east. I saw that there was another chute going clear to the river over there, but I kept to my purpose of going down Epsom.

At the bottom of the chute, there were some good rain pools where I had all the water that I could drink. I was below the main fall that stopped me in March, but right in front was another minor fall of about 15 feet with a chockblock to complicate things. The right wall didn't look inviting, but the left wall was made of a most peculiar brick-red rock, probably granite. It was crumbling and eroding in odd pits between veins of limey material, and these pits were my salvation. I was able to climb past the obstruction on the left. The bed was all gravel and boulders sloping gradually to the river below, and I was pleased to see that I had not greatly exceeded my time limit of four hours in reaching the Colorado River. The flow seemed to be quite a bit higher than it had been in late August, and the water was a deeper red than I could remember on any other occasion.

The return was up the main branch of the chute and this turned out to be easy enough. When I came to the notch, I was tempted to take a shortcut and avoid going around the outside of the pinnacle. This turned out to be a bad decision. I could go up several yards to the east of the notch, but it seemed very unsafe to try to get around the corner into the notch. I kept going higher until I was six or eight feet above the bottom of the notch. I had already come up past a couple spots that might give me a bit of trouble going back the same way, but mostly I was just stubborn about throwing away the work I had already put into the project. The corner into the notch was what gave me fits. I had to hold to the rough sandstone mostly by friction and step with my left foot around the corner where I was slightly off balance. Then I had to reach my right foot across the notch just a little farther than seemed safe. With a slight lunge I made it. When my foot was across the gap, I easily shifted into a push and soon was standing on the other side with an easy descent. Just before getting around this corner, I had kicked a loose stone out of my way to prepare the footing, and the smashing and falling far below had worked on my nerves. I was both relieved and a little shaken when I got back to safe travel, and I resolved not to try any more short cuts, especially when I was alone.

Using rather more paper than usual, I was able to get wet catclaw burning and had my usual soup, sardines, raisins, and bread. There wasn't much water left, but I had breakfast with it too. The night was no longer rainy, but I was glad to be in my cozy niche. The Dacron bag was precisely warm enough. On the way back to Indian Gardens on Sunday morning, I didn't go out of my way looking for water, but

there were some good rain pools in the east branch of Horn just below where the trail crosses it. I ate a second breakfast at Indian Gardens, but I still felt famished just as I reached the last switchback at the top. The chill seemed to take more energy than the climbing.

My criticism of James' account would be that there are no blocks in the bed of Epsom of any great size and that they went down the bed to the obstruction more like one mile than three. I a.m. surprised that they decided to climb around on the granite between Epsom and Salt instead of going up and following the base of the Tapeats on the east. If they had used better sense, they could have reached the river in the same time they spent getting stopped.

Rainbow Bridge

[November 11, 1960 to November 13, 1960]

Allyn was about the last student to show up for the start, but he had to call Dr. Abler who had overslept. My car got off around 7:00 a.m. but we stopped to take pictures of the Elephant's Feet and again at Inscription House Trading Post where the gas pump was not working immediately. Before we got our gas, Dr. Abler came along in the Fiat. He said he had been driving over 75 on the good road.

I drove my gang down to Navaho Mountain Trading Post. We had been noting that the road was somewhat better than it had been six years ago, but there are still some steep grades both on the bedrock and in the sand. We talked to Mr. Cameron who tried to discourage us from walking at all. He said all the hikers say they can make it all right, but lots of them get into trouble. He told us that we could drive out on the road about four miles before we came to a grade that was too steep for an ordinary car to come back up. His directions about finding the road made us think that it was right at the turn into the Indian school. When we didn't find it there, rather than hold up the other three who were going back around to Rainbow Lodge; Jim David, and I started out on foot from there.

As it turned out, the hikers didn't get started from Rainbow Lodge until 2:00 p.m. With darkness expected about 6:00 p.m. they were caught coming down the Cliff Canyon hill in the dark at the end and they camped before they came to the spring. Allyn had forgotten what I had said about the spring being in Cliff Canyon. He found some water in a pocket near where they stopped and they had supper without dying of thirst. In the morning when they started on, they moved camp to the exact site where I had camped before with Jim Butchart, Jim McGaffin, John Wilson, and Dick Kern. They got down to the bridge before noon.

Jim, David, and I weren't sorry that we had cut cross country without staying on the road because we ran into a fine Indian ruin with the notation PE7 painted on the wall. We did strike the road shortly before we came to the steep hill about two hours after we started or about 2:00 p.m. Instead of following the road to the east and around to the west on the grade, we cut downhill to the west and had a bit of a climb or scramble near the bottom. The scenery was already fine as we looked towards the north wall of Navaho Mountain and Navaho Begay. The foreground is still flat with scrubby brush, but the mountain is protected by a whole palisade of white towers.

Before the Jeep trail gave out, we decided on the basis of the map that we should take a sheep trail off towards a break between two low mesas. The pass was the place where the regular trail began, and we

agreed that Mr. Cameron had done some good work to keep it up that well. Four canyons had running streams: Cha, Bald Rock, Nasja, and Oak besides the tributary of Bridge where the trail comes down. There were many places where it was hard to see any way for a trail to proceed through the wilderness of rock. The drop down into Bald Rock was especially picturesque since the trail turned abruptly to the south and followed a ledge right across the face of the sheer drop. The part of the canyon south of the place where the trail comes down soon goes up to a sheer wall. The cottonwoods and junipers along the bottom are especially fine and the bed of the creek is clean rock which often leaves flat surfaces. Jim and I chose to camp at 5:00 pm so that we would have this beautiful place to spend the night. The air was quiet, but it came down from the snowfields on the mountain almost 6000 feet higher, and I got uncomfortably cold at night, but by 5:30 a.m. I was lighting the fire and getting back in the sack to enjoy it. Saturday dawned fine and frosty, and we had high spirits as we started on. My hands were a long time warming.

I believe we decided that Nasja Canyon is about the place which is known as Surprise Valley, or else this name should be applied to the region hemmed in by the cliffs a little farther on. There were quite a few footprints along this entire trail. Some were evidently made by hikers with special boots, but there were many that we identified as belonging to Navaho shepherders. Many long stretches were densely marked by sheep hooves. One thing that particularly intrigued us were the tracks of the tote gotes. They got along quite well on this trail, but they left many spots of red paint on projecting rocks along the rougher trail on the west side of the mountain. We called it tote gote blood. Considering the fact that the riders were at Rainbow Bridge on September 12, we thought the tracks lasted rather long. We noticed one arch to the south of the trail, only about 30 feet in span and not much for shape either. If this is Owl, they seemed rather hard up for arches. The one I noticed in the tributary to Cliff Canyon is far more impressive.

A short distance beyond Oak Canyon, the trail curves to the south and then back before it enters a long straight fault crack. We looked casually down the fault and remarked to each other that we could see clearly that no trail could be in it. However, when we went on up to the northwest, our trail seemed to disappear. As we went back to investigate, we met a Navaho woman on a horse. We couldn't make her understand our English, but she gestured forming a bridge with her thumb and fore finger and pointed down the fault crack. We were within a few feet of the main trail and hadn't noticed it. We knew that we could have located it without her help, but we had been careless not to have already investigated down there. When we were through with this fault, which was better than Redbud Pass, we came down to another running stream, and this time we knew there would be no more climbing to reach Rainbow. At the fork with the other trail, we put our bags out to air and ate our lunch. By noon, we were ready to go on, and judging by the total elapsed time for the trip on the two days, we decided that strong walkers could make the north trail to Rainbow in one day, especially if they took advantage of the easy part of the road and drove four miles farther than we did.

There were fixed ropes at the harder parts of the climb to the top of the bridge, and Bruce Baldwin, Jim David, and Susanne Osborn went to the top of the bridge using them. Allyn was careful to do it without touching the rope except to push it out of the way. Mrs. Presson and Larry Abler started back before the rest. I went down through the narrows to the junction of Bridge and Forbidden Canyons. Allyn walked with Jim and me back to the rest who already had potatoes baking in aluminum foil. I was rather weary when we hit camp about 4:45 p.m. I guess I hadn't eaten enough of the right things.

The night was windy, but we slept warmer and got off to a fairly early start about 7:00 a.m. Most of the party were out before 11:00 a.m. I carried the sleeping bag Mrs. Presson had used, and then I returned along the trail and carried the rest of her pack the last hour of her trip. My car left the lodge shortly after 1:00 p.m. and we were at the campus before 5:20 p.m. I noticed that we took two hours only getting from the lodge to the blacktop highway, although at one place in the sand on a steep grade, the passengers had to jump out and push the car.

Apache Point to the Redwall above Elves Chasm
[November 23, 1960 to November 24, 1960]

The start on Tuesday was slowed by a broken fan belt and the need for more stop-leak in the radiator before I could go up on the Topocoba road Wednesday morning. I left the car shortly before 10:00 a.m. near the park boundary south of Apache Point. Following the compass, I reached the point in 85 minutes, noting the pit with the shallow cave to one side at the bottom. This is near the east rim and is about eight minutes walk from the point. I recall that it took two hours from the car to the place below the Kaibab where the trail starts down through the Toroweap and Coconino.

From the slope down the Coconino and Hermit formations, I thought that the route down the Supai would be easy. It would be to follow along the Esplanade past two or three minor ravines to the first big promontory reaching east, the one that points just south of the name Elves on the map. It was about 15 minutes walk from the bottom of the steep trail along the contour over to this promontory, and the easy way down it is right at the end. Several of the platforms are easy to descend, but when you are about halfway to the bottom of the Supai, they get harder. I made the mistake of trying to go south into the next ravine, but the cliffs become impassable in this direction. I thought I checked adequately to the northwest also, but I missed a good crack a bit to the northwest of the end. I did check over this way, but apparently I didn't go far enough or look carefully. It was getting so late by this time that I figured there was no use in going back to the top of the Esplanade and following my former route down into Royal Arch Creek as there would be no time to do anything new, like going along the talus out to the terrace just east of the bridge. I had agreed to meet Allyn Thursday night on the Topocoba road, and I had only food enough for two meals on Thursday. If I had known what I would decide in the end, I would have gone after water in a serious way and stayed down there.

As it was, I retraced my steps to the top of Apache Point. I had enough water left for supper and breakfast, so I stopped at the cave in the pit eight minutes south of Apache Point quite close to the east rim. It was easy to throw down enough firewood for three nights, and I spent the warmest, most comfortable night of the trip here with a fire going all night. The only mishap was a hole burned in the sleeping bag cover by a spark. In the morning, I went back to the car for more water and immediately returned to Apache Point. On both trips from the car to the point, the compass worked fine and I hit it just right, but on both trips back, I angled much too far to the west and had to walk more than a mile along the road to the car. At least I knew which way I had to walk, which was more than I knew for sure the time I hit the road too far east. I should take time out and mark a trail across here from the nearest approach by road to Apache Point.

When I went down below Apache Point on Thursday, I tried going into the ravine just north of the promontory. This was a mistake as the progress along the slope below the top was much slower than it had been on top the day before. However, I did get a good view of the way ahead and down. I could see burro trails on all levels below including right along the top of the Redwall, so I knew there had to be a weak place in the cliffs. I finally found it and marked the most crucial break with a rock pile. Along the top of the Redwall there was only time to take some pictures. I noticed Royal Arch from directly above, but I couldn't see the opening. There was a cave across the gorge just below the top of the Redwall east of the bridge which had a deep notch just above it. I suspect it is another keyhole bridge, about 15 feet wide and 40 feet high at the mouth of the cave. Another observation from here was the seven foot rock pile the surveyors had left at the bench mark on the terrace east of Elves. The talus leading to it is steep, but I saw a deer trail going along it. The return was uneventful, except that I saw an old rock house ruin south of the point, probably about 15 minutes walk.

Above Royal Arch

[November 23, 1960 to November 24, 1960]

I had intended to sleep by the car out by Apache Point Tuesday night, but a broken fan belt and the need for some stop-leak fluid in the radiator kept me in the village and I didn't start walking away from the car at the park boundary until nearly 10:00 a.m. Following the compass, I made good time to the point. When I first saw the rim, things looked peculiar and I climbed a dead tree to see my directions. They were all right, and I reached the point in 85 minutes from the car. It took 35 more to go down around the point to the break in the Coconino where I sat down to eat lunch. I was down on the Esplanade in about a half hour after I started. I got to the right promontory, the one that points towards the line of the Redwall paralleling the river. It was rather simple to find breaks in the various small cliffs near the farthest east points, but about two-thirds of the way down the Supai, there was a 30 foot cliff which seemed to have no breaks. I gave up looking about 2:00 pm and started back up. It seemed that there would be no time to find anything down Royal Arch Creek and return to the car Thursday evening according to plan, so I headed for the car rather than trying to find water and stay down there. As I reached the top of the Esplanade and looked back, I was still convinced that there should be a way to get down to the top of the Redwall where I had been looking for a route. I decided to try again on Thursday after getting some water at the car.

Wednesday night I held up at the bottom of a limestone pit about eight minutes walk south from the point and quite close to the east rim. It didn't take very long to throw down enough wood to keep a fire going for three nights instead of the one I was originally intending to be there. I used only one sleeping bag that night and it was the warmest of the five of the entire trip. In the morning, I went to the car being careful to hit the road west of the park boundary so that I would know which way to walk, but I did such a good job of veering that it took me an extra mile of walking. After refilling the canteen, I turned back to the point and Aztec Amphitheater.

This time I studied the promontory from a distance, but I went down into the ravine on the north side and had to walk over south going to get back where I had been so easily the day before. However, I did find the crucial crack that led me down to the burro trail along the top of the Redwall. I wish I had time to go on down into Royal Arch Creek, but I had given my word to Allyn to be back at the Great Thumb turn-off

Thursday night. I did get an interesting look right down on the top of Royal Arch, and I noted a game trail along the talus leading out to the terrace above Elves on the east. I could see quite clearly the rock pile built at the bench mark which is shown on the map. There is also an interesting looking cave up near the top of the Redwall to the east of the creek. It might be a miniature keyhole arch, because there is a notch coming down part way above it. Perhaps there is a small hole clear through, but I couldn't see any light.

The only thing worth noting on the return to the car was that I swung too far west again and had an even longer walk to the car than I had that morning. I should learn to get back to the car better than this before many more trips.

Fossil Bay

[November 25, 1960 to November 26, 1960]

After a cold and uncomfortable night doubled up in the back seat of the car, I got away by 7:15 a.m. After walking about an hour, I became uncertain about the weather. Allyn hadn't shown up, and I didn't want to run into a real blizzard, but I finally made up my mind that it wasn't going to get bad for a while at least. It took about the usual four hours to reach the break in the rim. This time I marked it with a three rock cairn. The footing down to the Esplanade seemed as bad as ever, and I was rather surprised at my own persistence when I decided that this route was feasible.

There was plenty of water in the rain pockets at this time of year, and if I had better sleeping equipment, it would have been ideal for a trip along the Esplanade. I ate lunch at the water where the main arm first meets the Supai bedrock. Progress along the west side of the inner gorge of Fossil seems easier than along the east side, and I was starting down into the fifth ravine along the west about one and a half hours after I had left the water pocket. This was not the one I had picked out from the rim above, but I thought that since I could make it easily below the highest cliff here, I should use the chance.

This proved to be as far down as this ravine would let me go, and I had to take the precarious route around the point to the next ravine south. Here I could go down another notch, but then I had to cross the wash and get around another ridge before I could finish the trip down to the bottom of the Supai. There has been a big slip of the Supai along here, and acres of rock are crushed and lying every which way. The very edge of the Redwall supports a steeper slope than the region a little higher, so I kept up here to go on south to the semicircular bay in the Redwall where there might have been a route to the river.

It was just as we had suspected from the other side. The short descent to the top of the inner talus was too difficult, and then the last part of the talus below was eroded into a practically vertical wall. I believe that this part would be feasible with two ropes for assistance. Possibly the whole thing was easier 50 or 80 years ago. The sleeping was pleasant down at this level and I found a little patch of horizontal sand in the steep stream bed. In the morning, I walked around to the south side of the bay and got a good view of the river. From here it looked easy to go up the slope and walk out at the ravine south of the one I had started down the day before.

When I went out, I inspected the possibility, and all but one place of about 15 feet, which might be done by a nery climber without the encumbrance of a pack, would have gone all right. This would have been a

real saving of effort in getting out, but as it was, I used discretion and went back along my previous route. As it was, I had already slipped three or four times and had skinned my hands in several places as well as hurting one shin. There were still plenty of bighorn sheep tracks and droppings, but I didn't see any sheep this time.

By the time I reached the rim at 1:40 p.m. the sky was beginning to threaten again. Having chilly walking gave me more pep than I had ever had along here, and I covered the 10 miles in three and a half hours. By evening, the sun was out and the moon was bright for several hours. I finished my magazine by candle light and then tried sleeping on the ground. The wind came up and I got into the car. Then I decided to drive home or at least start. When I was about 20 miles out from the village, it began to snow, and by the time I had reached the checking station, the air was so thick, I had to park. I drove on about 6:00 p.m. and reached home on icy roads at almost 10:00 p.m.

Fossil Bay

[November 25, 1960 to November 26, 1960]

I spent an uncomfortable and cold night in the back seat of the car where the Great Thumb road leaves the Topocoba road and got a fairly early start on Friday morning. I hesitated for a while after I reached the high ground along the rim because the weather began to look threatening. It took about four hours to reach the break in the rim. Allyn hadn't showed up, so I went on figuring that he wasn't going to try to join me. There were some fresh bighorn droppings, but I saw no sheep either day.

The water in the deep pothole was only a few inches down from the rim, and there was cleaner water in the shallow pockets. I ate lunch here and went on along the southwest rim of the inner gorge afterwards. I stayed rather near the rim with the idea of not missing any good descent, and as a result, I had to cross several ravines where they were awkwardly deep. Once I tried to push up and get my knee on a ledge but my knee slipped back and I came down in disorder where I had been standing on a shelf only a couple of feet wide. At this time and about two other times, I skinned places on my hands. I finally found a good way to get below the first cliff, along the side of a ravine, the second blue line counting from the north that goes directly into the Redwall gorge on the map. Then I had to follow the contour around to the south into the next and when I reached the bed of this gully, I still had to go along the level around the next small ridge to another arm of the same drainage. From here one can go just about anywhere. The talus is steeper at the very top of the Redwall than it is high, so I kept up away from the rim and went on south to the big semicircular bay in the Redwall which has the talus within it. It seemed hopeless to go down here without two lengths of rope, a short one at the top, and one about 50 feet long for the steep cut away part of the talus lower down. It didn't look a bit inviting when I was there by myself, but now, a month later, I wish I had the ropes and had gone down to the river. Maybe I'll get the expert climber, Bob Eger, to go with me and make sure I'm doing it right. The night down here at the edge of the Redwall was fairly comfortable. From beyond this bay, it looked as if the departure from the Supai gorge could be made very easily by going up and out at the ravine south of the one where I had entered. It may be a safe route for the bighorn sheep, but I was frustrated by only 15 feet of cliff that had some breaks where a daring climber might have gone out. I thought the spills I had already taken were enough, however, and backed down and went out the way I had come in. I saw another mesal pit in one of the ravines through the Esplanade, but I can't pinpoint its location now. I walked fast when I arrived at the rim and got to the car

in three and a half hours counting the time it took me to get food out of the pack and eat as I walked. I should have started for home when I got to the car at 5:00 p.m. but instead I tried camping there and wound up spending most of the night trying to get home in a blizzard.

Letter to Dock Marston

[November 27, 1960]

907 W. Summit
Flagstaff, Arizona

November 27, 1960

Canyoneer Dock,

I'm getting behind with my replies. Thank you for all the information about the longer trail to Rainbow. I should have asked for material such as that concerning Owl and White Crag before hand. We got Owl for sure with pictures of our own, but we didn't see White Crag. The one I saw off Cliff Canyon is practically invisible from the trail itself. I stayed on the trail this last trip, and I wouldn't have known it went through. The time I spotted it, I must have been going along the bottom of the wash. I don't fancy my discovery as anything special, because someone else I mentioned it to had noticed it on his only trip to Rainbow.

Likewise, thank you for the account of the second ascent of Zoroaster Temple. That surely makes my type of climbing seem pretty tame. There is a German mechanic working at the local VW garage who wants to get a partner to do some rope and piton climbing with him. I'm not sure whether I want to start on that sort of thing at this time. I know of two college students who might be more interested.

I have just come back from four days in the canyon by myself, and my interest in such jaunts is not at a very high pitch. My projects went a bit askew and I seem to get more lonesome than I used to. I may as well give you a summary. Tuesday I got off almost an hour later than I had hoped to, and the fan belt in the car broke on the way up there. I was lucky it didn't break on the Rainbow trip. I drove 30 miles as it was with the water much too hot, and the pressure forced some small openings in the radiator. A can of stop-leak fixed that, but it was around 8:30 a.m. Wednesday before I got away from the village. I had planned to spend the night at the car out near Apache Point, but it was around 10:00 a.m. when I finally started walking towards Apache Point from the place where the road crossed the park boundary. There is a sign along the road at the place which makes it a good jump-off. I used a compass through the junipers, and I reached the point in an hour and 20 minutes. My goal was to get down the Supai by a new and easier (I hoped) route along a promontory that points right towards Royal Arch. It looked like a sure thing last May when I was heading the other way. By 2:00 p.m. on Wednesday, I thought I was stopped completely after getting down two-thirds of the Supai. My food was just planned to take me back to the car the next day and I had already taken so long that I would not have time to reach the bench mark above Elves, so I turned back. By 4:30 p.m. I was up on the rim about eight minutes walk south of the point where I had previously noted a shallow cave at the bottom of a pit in the limestone. I had enough water

for the night, so I gathered a lot of wood and kept a fire going near my bed all night. This was not the first time this pit had ever been used, because there was some smoke black on the ceiling. It was by far the most comfortable night I had on the trip, but a spark sometime in the night burned a hole in my sleeping bag cover. On Thursday I went back to the car to get a refill for my canteen and then turned around to see whether I could try a bit harder and find the way clear to the bottom of the Supai. The solution was only a few yards from where I had been on Wednesday, and actually I bungled the approach through the top layers worse the second try, but this time I got to the edge of the Redwall and took a picture of Royal Arch from directly above it. I did settle a couple of points that had been bothering Pat. From the air he thought that the talus below the Redwall on the east side of the creek was too steep for a surveyor to reach the bench mark on foot, but I saw a game or burro trail quite clearly along there. I could also see a well built rock pile about three or four feet high where the bench mark is located. Another observation was a cave or bridge just below the top of the Redwall to the east of Royal Arch. I believe it's a miniature keyhole because there is a well defined notch right above this black slot. There was no light showing, but this may be because the hole down from above is quite small. I would estimate the mouth of the cave or slot as being 15 feet wide and about 40 feet in the vertical direction. It would be interesting to look down on it from the air to check whether it goes clear through. It may be a job for expert rope climbers to reach the rim above this formation on foot.

Going back to the car through the woods from Apache Point seems to be a jinx for me. The first time I did it, I hit the road over a mile to the southeast, and the two times I did it recently, I went more than a mile to the northwest even when I was using the compass. Perhaps I had better take the trouble to blaze the trees. It is surely disconcerting to get from the car to the point in 85 minutes and take 120 to get back.

I had given Allyn the plan for the five days, and only two were allocated to the Royal Arch area. If it hadn't been for that, I would have carried food down for several days and really visited the bridge and the bench mark. There was a real easy burro trail along the top of the Redwall and now I think I could reach Royal Arch from the car in less than the eight and a half hours it took the first time. I left a cairn to mark the trickiest place to find in the Supai. Allyn had thought he would like to join me Friday morning to go down into Fossil Bay for the rest of the time, but he didn't show up. Our agreement was that I was not to expect him until he showed, so I didn't wait to get started walking Friday morning. This time I built a cairn at the break in the rim where you can start down into Fossil. The footing is so precarious here that I'm still surprised that I call this a route. Between the scree here and lower down in the Supai, I didn't fare very well on this trip. I slipped three times and in checking myself, I skinned various spots on my hands. I'll have to be more careful or give this kind of thing up. Right now I'm in the mood to swear I'll do my walking along the Muir Trail or something as well defined.

The nights were mostly unpleasantly cold even though I was taking two sleeping bags, but the days certainly gave me more vigor than I had last May. Allyn and I both thought that there should be a shorter way down the Supai on the west side, but I had luck to find it at all, and trouble in locating it. The ravine I had picked out before from below and from the rim turned out to be impossible unless one wanted to take a chance of a fatal fall, but a neighboring ravine to the north gave one a chance to get below the first almost continuous cliff. Then I had to follow a rough talus around the point into the next one to the south. Here I could make it down another fourth of the way, but I had to follow the talus still farther to the south before I could go the rest of the way to the horseshoe indentation in the Redwall where we thought the

Indians might have been able to get down. A short rope or a ladder would land on a steep slope of consolidated clay and rocks. Erosion has cut away the bottom of this to vertical walls, so I feel pretty sure that the Indians couldn't get down there now without two ropes, and the lower one would have to be fairly long. I just took a picture or two and came away. My night down there on top of the Redwall was quite comfortable and I found water in potholes other than the one where the main arm reaches the Supai, the place I have camped before. This time I spotted another sign that whites had been here, an old rusty can which would hold more than a gallon. It was quite near the main pothole. I also ran into another mescal pit, but no bighorn sheep.

Saturday night was so cold by the car that I finally decided to drive home or at least into the village. It was a good thing I did, because the bright moon turned into a snowstorm and I just made it to the pavement when it began to come so that I had to stop the car and wait for quite a while. I don't think I'll attempt anything as remote as this for a good long time.

Sincerely,

Harvey Butchart

Boucher Camp and Slate Canyon
[January 1, 1961 to January 3, 1961]

I stopped for Allyn Cureton without giving him advance warning. By the time we were heading down the Hermit Trail, it was 11:30 a.m. We were rather surprised to see quite a few tracks of hikers who had pretty well packed down the snow for us. They all went towards Dripping Springs instead of on down the Hermit Trail. When we were eating a late lunch north of the drainage below Dripping Springs, we waved to a couple of women hikers who were returning from Dripping Springs. The trail along the Hermit slope was quite easy to find and follow almost all of the time. There was no snow along here, but we got into it when we had passed Yuma Point.

There were deer tracks all the way along here through the snow. I began to wonder whether we were going too far, but I was correct in my recollection of the place where we should turn down through the Supai, it seems that the level trail comes to a natural end, at a shallow ravine. I saw the rocks I had placed on the end of a stump, and I saw for the first time a fairly large cairn on a large rock just beyond the turn in the trail as it starts down through the Supai. Deer tracks led down a little way to the overhanging rock, but we didn't see any lower. I tried again to photograph the place where steel bolts in the rock are all that is left of the trail construction. Below this first cliff, I couldn't remember whether we should keep up at a fairly high elevation or scramble down lower. The snow here obliterated direct evidence of any trail. We went lower almost immediately and later learned that we should have stayed up near the base of the top cliff. We did recognize quite a bit of the trail over to the west rather close to the main ravine. The going was simple when we finally came down to the top of the Redwall, and we thought there was time to climb Whites Butte. We left the packs near the break in the Redwall as the trail starts down into Boucher Canyon and went to the top of the butte and back in 37 minutes. There were no signs of previous climbers. We left a very small cairn at the top. I estimated that it would take us about an hour to go down the Redwall and the other formations to the mine shaft. I was only about three minutes too optimistic, but

darkness hindered us at the end. We had to do some guessing and scrambling without feeling sure that we were near the official trail. When we hit the Tonto we recognized it, but I wasn't sure which way to follow it. After a few steps in the right directions, and a few in the wrong, we turned around and went in the right direction. I remembered pretty well where to look for the shaft, and we were soon busy with our fires.

Boucher Creek was running above ground just a few yards away although only a few yards below the bend in the creekbed it went underground. There was more debris lying around the mine than I had remembered, a shovel, a number of large bottles, some pans, and a big can. Unfortunately, for warmth inside the shaft, it slants slightly downwards, and when the air is colder outside, a draft goes in along the floor and out along the ceiling. I used both sleeping bags before morning and they were more than adequate.

On Monday, after inspecting the rock cabin and the smaller structure to the southwest on the edge of the creek, we got started walking towards Slate about 8:30 a.m. It was cold until we got started up the Tapeats from Topaz in the only sunshine we saw all day. Incidentally, the roast turkey I brought along kept fine. During the warmer time of the day, I kept snow in the plastic bag with it. The trail was quite easy to follow along here. We saw about eight burros over toward Slate. It took about two hours to walk from the mine to where the trail crosses Slate. We noticed that there is a break in the Tapeats near the river that would let one get down into Slate on the west side. We figured that one could also make it down through the schist. Allyn called my attention to a mescal pit just southwest of where the trail crosses Slate.

Within about 15 minutes of our start up Slate, we began to find water. Most of it was ice which made it very pretty and different appearing from that of the usual dry streambed. There were quite a few seep springs with some water actually flowing. We reckon that they would give a year round supply. The most water seemed to be from about the middle of the Bright Angel Shale, but higher there was another section that had pools and ice.

There were a couple of places where chock-blocks in the narrow bed forced us to do a bit of climbing. There was still burro manure above the harder one of these. I don't think the burros could have gone up right where we did, but maybe they have a longer way to do it. Finally, just after we passed the fork where one branch goes toward Jicarilla Point, we came to the real dead end. We figured we were already above half of the Redwall.

There were four holes that seemed like possible caves. We began checking the southern ones first. The two in the promontory between the two arms were duds. Allyn went to check the western one of these. He wasn't sure, but he thought there might be a way to the top of the Redwall here. There were deer signs along the approach. There were a couple more cave possibilities that we thought were inaccessible. This area shows a lot of fracturing which may explain why there are so many holes around. Our third inspection likewise turned out to be nothing, but we went on around a spur then up (downstream from the fork) and found two more caves. The lower one was just a good shelter from rain, about 20 feet deep and without even a level floor big enough to sleep on. However, I thought the roof was smoke stained and there was a piece of charred juniper at the entrance. Only a few yards higher was the payoff, a fine cave. You go right into a chamber with a level floor thickly covered with fine dust. It is about 100 feet by 40 feet by 12 feet high. There are no big rockfalls to mar the even floor, and there are a number of good

stalactites but more fine stalagmites. The cave seems perfectly dry at the present time. We noticed a piece of wood well back in the cave with no signs of having been burnt. Behind this room, there were about 80 more feet of passage ways. This part of the cave had many rockfalls in it, and a rather wide but low passage led down and outside. One could scramble back to the mouth of the cave along the slope outside this exit, but we preferred to go back by the interior route. A hole in the ceiling might go up quite a bit farther than we could see.

We went back to Topaz Canyon without further incident. Since it was still only 5:00 p.m. we hurried down to see the river. It was surprisingly clear. From above, all the quiet stretches were a deep green, and the white caps in the rapids were really white. One could see a dirty stick a foot under water, and I think one could have seen something that was shiny and twice that deep.

After another comfortable night in the mine, we returned by the Tonto and Hermit Trails. I hadn't remembered how rugged this part of the Tonto Trail was, especially in heading Travertine Canyon and going out around the point just east of Travertine where it follows a rather steep and rocky surface. The location of large deposits of travertine quite far away from the present streambed seemed odd. There are some very fine views along this route. One can look down out Hermit Rapids and also have a clear view of Boucher by turning the other way. It took us just under three hours to go from the Boucher Mine to Hermit Creek where we ate an early lunch. The walking over the snow covered rock slides in the Supai sections of the Hermit Trail was pretty discouraging. We had snow for miles along here, and we concluded that we could have returned faster by the Boucher Trail. In fact it took four and a half hours for us to go from Hermit Creek to the car.

In Slate Canyon, I collected a fossil that Dr. Allen thinks is coral.

Redwall north of 75 Mile Canyon and Escalante Butte
[February 18, 1961]

I just missed the take-off of the college hikers because I couldn't get the old car to start. I couldn't make up my mind how to spend the day, but about 8:00 a.m. I invited Jay Hunt and John to go with me to the canyon. We stopped to call and arrange for someone to take John's paper route, and we also inspected the Little Colorado River Gorge at the two viewpoints.

It was about 10:15 a.m. when we finally started down the Tanner Trail. Jay and John were plenty fast going down the trail, and they were also very good on the talus where there was no trail. Jay couldn't find his regular hiking and climbing shoes so he had to go in a pair of very heavy shoes shod with tricouni nails. They were fine on gravel, but he slipped on the solid slabs of limestone.

We found the going along the southwest side of Escalante butte just difficult enough to be interesting. There were no bad spots but we had to watch our footing. Across the saddle on the Redwall ridge there is a small butte of Supai rock which for obvious reasons we call the Wedding Cake. There didn't seem to be any easy way up it, and I probably would have passed up the chance to do a first ascent, but Jay was more optimistic. He insisted that we could do it all right, so I went ahead at the place he had picked for a route. It was about as difficult as anything I have ever done, except for Courthouse Butte below Sedona, but I

made it all right ahead of Jay and John who were helping each other. We built a small monument on top of the Wedding Cake. We used two belts fastened together on the descent, or at least Jay and John did. One of the belts broke when I was trying to give support to Jay, but he was almost down to the ledge when it happened, and the consequence was nothing serious. On the way up to the end of the Redwall promontory, we came to a place where the limestone had left only eight inches of width of level rock. If one lost his balance here, he would probably not catch it again in falling to either side. Jay and John walked easily across here, but I got down and walked along the side holding to the fin of level limestone. I could see that they are not as cautious as I am. On the way back, I walked across here but I really put one foot forward and then took a sort of jump to clear the bad place. There were several places where the top of this fin is only eight to ten feet wide. The view from the end is really something. Unkar Rapids is in full view as well as all the wide part of the canyon upstream. You can see a short piece of the river at 75 Mile Rapids and you can just see the beginning of Hance Rapids. On the way back we went to the south of the Wedding Cake where there seems to be a regular deer trail. When we were nearing the Tanner Trail, about 15 minutes scramble, I would say, I noted two rather large cairns at the top of the Redwall.

It was 2:30 p.m. when we were ready to start up Escalante butte. John stayed below to fix a blister that was just beginning to form. Jay had shown at the end of the climb back to the trail that he wasn't going to be a very fast climber to the top of Escalante Butte, and when we were about a fourth of the way up it, he got a cramp just above his knee and had to drop out for 10 minutes to massage it. He then continued up a climber's route to use his arms rather than his legs. When I had reached the top, I was frustrated by not being able to get to the top of the summit rock where someone had built a fine cairn. I might have made it if I had been willing to jump across a five foot span from a companion rock to the summit block. Instead I gave it up and started down. When I saw Jay coming up, I waited for him and he let me climb from his shoulders to the top block.

The return was uneventful. We found that John and I could keep up a much faster pace on the long grade than Jay could.

Soap Creek

[March 4, 1961]

I arrived at Soap Creek in time to drive out to the rim and take a picture from above the rapid. About 10:50 a.m., I had my pack on my back and was looking for a way to go down the creek. I purposely didn't inquire for directions as I thought it was more interesting to do my own exploring. I went down the draw that is seen just east of Cliff Dweller's Lodge, not realizing that there are two major arms of Soap Creek. There were numerous places where the bottom was rather muddy and what surprised me most were long stretches of soggy ice at this low elevation. At one place, about 100 feet below the rim, it was touch and go as to whether I could get down from a ledge and safely count on getting back. I saw a place where someone had been piling rocks for a step. Only a little farther I came to a great cliff, possibly 200 feet high. Just before the stream reached the cliff, it starts cutting deep into the sandstone making some fine falls in the narrow cleft. There is a good chockblock across the last narrows above the cliff which a person can walk across as on a bridge. From here I could see that there was another major arm coming from the west and I judged that it must offer the promised way down to the river. I wasn't sorry for this delay, for

as it turned out, the falls in the clefts and the abrupt cliff were the most interested features that I saw the entire day.

After I'd retreated a bit and climbed out to the west, I went southwest until I came to a tributary of the main, but dry, arm. There was a spot or two near its end where the climbing required both hands, but I found a small rock pile in the main bed which indicated that someone liked this route. There were quite a few places lower down at the bottom of the Kaibab Limestone which called for two hands, and I found a fixed rope fastened around a smaller rock wedged between two big ones. One could have bypassed this place in the bed if he were willing to go quite high on the right side and climb a talus, but the rope is a real help. The walk from the rope to Soap Creek Rapids on the river takes about 70 minutes.

It was sprinkling more or less steadily all the time I was getting to the river, but as it was beginning to rain harder, I decided to head back to the car. In fact, when I came to a fine overhanging rock, I ducked under it and read the Readers Digest for a while to let it stop. The next day promised fine weather, but still I drove back to Flagstaff Saturday night.

I saw some peculiar fossils, some that resembled white rings arranged like vertebrae. There were many rocks of quite a green color and many slabs of limestone that weathered with a knobby surface. I would allow about two and a half hours to go from the highway to the river and about the same time to return. It's an interesting trip, but I like Jackass Canyon better, the one to Badger Rapids from the left side of the river.

Desert View to Cardenas Butte

[March 25, 1961]

Dan Davis had told me that you can get down the ravine which slants down west of the promontory at Desert View, but I had put off trying it myself. The hiking club decided to go with me, but we had the usual troubles getting off when we had intended. We made it away from town about 7:00 a.m. One thing that I was not too happy about was that a new hiker showed up to go along, a man who was definitely on the heavy side, but by his own account, he was experienced. We took a little time to see the Little Colorado River Gorge at the scenic view. The wind was blowing so hard here that some of us thought that we should steer away from the rock climb until later in the day when I thought, according to the weather man, it would be better. We compromised by saying we would look it over from the top and decide whether to go ahead with the scramble down the ravine at the start of the day. The ravine was protected from the wind, and we decided to go ahead. There were minor delays such as getting one of the boys away from the curio counter at Desert View, but we finally started the scramble at 9:15 a.m.

There were at least two ropes along as well as food for two meals. At the top of the ravine, we encountered about the hardest problem in route choosing. However, there was no need for using a rope. I had misjudged the difficulty from my view of the ravine from the top of Escalante Butte. This was somewhat of a let down for the boys who were recent graduates of Bill Buck's technical rock climbing school. One of his students was frustrated even before we started. On the very day before the hike, Sid Wilson had tried to fall to see how it feels to have the belayer stop you and had sprained his ankle quite badly doing it.

The heavy man and one other member of the club who hadn't done much hiking that I knew about, soon showed that they weren't going to be able to keep a good pace. We had a bit of a pow wow and decided to escort them back to the top. There was no resistance to this idea on their part. The heavy man said he had donated a pint of blood the day before and that might have affected his strength. He had quite a time following Allyn back up to the trail. I had thought Allyn was going to show them the top of the Tanner Trail, but the two preferred to stick around Desert View or do a bit of driving in the car.

There was quite a bit of trouble with loose rocks. One person could go up or down here with never a care, but shouts of warning to the ones below about rolling rocks were quite frequent. Most of the rocks didn't pick up much speed, but a time or two, the misses were too close for comfort. On the whole, this is a practical route rather than just a good stunt. I believe I'll use it for future trips to the river. It seems shorter, but I suppose it isn't actually any faster than the Tanner Trail. One very real advantage is that it leads one right by the only good water hole in the entire area. I remembered where it was from my trip down the Old Tanner Trail which comes down from the rim nearest Cedar Mountain and across below Desert View along the top of the Redwall. The water hole is in the Redwall near where the wash makes the big dive. The water was rather black when I was there in early October, 1959, but now it is quite clear. However, it was only about a foot deep, and I wouldn't guarantee that it's permanent. I hadn't remembered the soil and gravel that partially fill it. Possibly this silt had been lifted since I was here before. I've considered the possibility that the hole I saw before was a bit farther down the wash, for there was room for another hole before you reach the drop-off. However, I rather think that this was the same place I saw before.

We ate an early lunch by the big rock where the trail curves into the bay between Escalante and Cardenas Buttes. Allyn had walked around this and had found the good overhang, a snug shelter from rain, and we sat here to eat our lunch. I remember that when we stopped, the sun was shining, but before we went on in about 40 minutes, the pellet snow which had been starting and stopping most of the morning began again in earnest. Several of us found bits of pottery here, some of it painted. I also found a bit of obsidian. This made us think that it was a favorite camp of the Indians and not just a place where white men had gotten tired of carrying pottery fragments from across the river.

Our second main objective was Cardenas Butte, but by the time we were ready to start on, it was really snowing. I had already picked the route, so we had no real trouble on account of poor visibility. I probably took them to the top by a little more strenuous route than would have been necessary. At a couple of places we had to use our hands, and once we had to go around a corner on a narrow ledge. There was no view from the top but we had glimpses of the ridge from time to time, and we were reasonably sure that we had reached the real summit. There was no rock pile in evidence so we built a small one ourselves.

We had thought we would climb Escalante too, but the weather continued quite bad. Finding the trail with two inches of snow over everything was a bit of an experience. For once I could see the use of the cairns. Places where the trail had been obscured by slides of shale didn't show at all, but we knew that the walking would have been much slower if we had lost the trail for good. Just about the time our clothes were beginning to feel rather wet, the snow stopped. In fact, we got a fine view down the canyon from the

ridge of Supai at the head of 75 Mile Canyon. There was no doubt about following the trail from here on to the rim. I led the procession at my fastest comfortable pace and did the last steep part in 52 minutes, par for me I imagine. Besides the three inches of new snow, at the top there were still banks of snow filling in the trail.

Rider Canyon

[April 3, 1961 to April 4, 1961]

The map seemed to indicate that it would be about the same distance from the highway to the place where Rider Canyon begins to have straight walls as it would be from the Cram Ranch. I elected to go in and park the car at the ranch because that would let me see what sort of affair the ranch is in. A car was turning off the highway just before me, and I met Sherman Jensen, the present owner of the Cram Ranch who lives in Fredonia. He led me into the ranch, and we had a little visit. I mentioned the Finicums and he told me about a place along the rim above the Colorado River where a piece of the rim has split off. He thought you could go down to the river there, and he also told me about the rock piles at regular intervals along the rim.

When I got out of sight of the Jensens, I stripped to my underwear because the weather was already rather warm. I followed the wash down to the first big swing to the north. Here I got out on the south side and tried to follow the most nearly level ground. The plateau along here has no troublesome bushes on it, and the walking is quite easy. I seemed to drift farther south than I had intended, and I came to the end of a car track at an empty cattle tank. When I went south across here, I came out on the rim with a fine view of a side canyon which my map told me was North Canyon. There was a little water in it, and the part I could see before the last bend near the river, made me think that one cannot go down it from the rim to the river. I had come out to the rim above the Colorado on purpose with the idea that it might be easier to go down where Jensen thought one could. As I turned left along the rim to go towards Rider Point, I passed a fine view of Boulder Narrows. The place where one can get off the rim is just a little north of the direct line of the river as it goes past Boulder Narrows. I had very little trouble getting down to the last 20 feet of the Coconino Sandstone, and the rest of this would have been easy with a rope, but as it was I had to climb back up really feeling both the heat and grade.

The series of rock piles were farther along quite close to Rider Point. There seemed to be nothing comparable to the place I had started down near here, so I believe the place I tried was the one Mr. Jensen had told me about. The views down to the river and into Rider Canyon were really something. As I followed the rim of Rider to the west, I could see the canyon become much narrower although it retained most of its depth. Close to the gooseneck, the canyon is terrific, like something out of Dante. Finally, I was able to get down to the bottom about a quarter of a mile south of the place where Emmett Wash joins Rider Canyon. There was good water here in rain pockets, so I had a good night. I slept under a shallow overhang to avoid accumulating dew on my bag.

I started down the canyon quite early the following morning. There were tracks of more than one person in the sandy places. The canyon is an interesting one with many overhangs and huge blocks which have fallen down leaving the route only a tunnel under them. After two or three quite steep drops where one has to look a little for the route, I came to the beginning of the gooseneck where the canyon deepens

sharply. Very shortly I was stopped by a chockblock. The most feasible route was down a hole behind this block, but the ledges didn't seem inviting. If I had gotten down, I might have had a time getting back. I tried the talus along the left, but it seemed to stay at one level while the canyon was getting deeper all the time. I didn't check the talus on the right, but it seemed to offer no better luck. I should have had a rope with me. There was a two by eight board about five feet long nearby, and I could have put this across the hole to tie the rope to. The tracks in the sand seemed to turn back here too. There were songbirds about, and quite a few flowers were blooming. It was a good trip, although I was a bit too cool in bed and a bit too warm hiking in the day.

Mrs. Baker at Cliff Dweller's Lodge told me a lot of things about the area, such as a prospector named Haines was working up and down the cliffs with ropes and a boatswain's chair. She told about a cavern near the rim on the left bank somewhat upstream from Tanner Wash that could be entered from above and offered an access to the river from the second entrance. (I later found out that this was false. The cave is called Piate Cave and is at Mile 22.7 and there is no lower entrance.) She also mentioned a Yugoslavian who had come down the river to Lee's Ferry in a one man rubber boat and bought a few provisions before attempting to go on to Bright Angel Creek. He was never heard from again. She also told about the man with Elmer Purtymun who drowned in Glen Canyon. His wife wasn't satisfied with the amount of money he left her and suspected that he had survived and was living in Mexico under another name. Also about a family who went fishing at the mouth of Soap Creek and lost a youngster when he slipped into the river. She also told about a man named Red Wolf who had lived in a shack at Lee's Ferry. He said he had walked over the Grand Canyon from one end to the other. She also reported that Paul DeRoss had spent the summer after the plane wreck in grave robbery, although he had never been caught at it.

Right Bank descent into Marble Canyon at Mile 19
[May 7, 1961]

We saw the Reilly party leave in their plane for home about 10:00 a.m. A few minutes later I was on my way to try to finish finding the hoped for route down into Marble Canyon a couple of miles below Rider Canyon. This time I drove to the Cram Ranch and then turned southwest along the road which soon swings east on the level ground between Rider and North Canyons. It was only seven and a half miles along this road to its end at the dry cattle tank. From the parked car, it was about a 20 minute walk to the break in the rim. After leaving the valley with the tank in it, one crosses another draw which shows on the map before he comes to the break. It is about one-fourth mile south of the angle where the rim starts curving east and north towards Rider Point. This angle is at Mile 19 of the river and the ravine cuts down through the Supai to the river. It's the first one below Rider.

I went off the rim just as I had before, slanting down the broken part of the Kaibab to the south. Below this on the talus, without thinking it out, I went farther to the north than I had the other time. In fact, I passed the big almost cubical block which seems to be perched so precariously near the bottom of the talus where the Toroweap Formation begins a new cliff. After just a bit of trail seeking in this region, I not only got as low as I had before, but I found two breaks in the lowest part of the Coconino, the part that had stopped me before. I was carrying the rope, but there was no occasion to use it.

Below this you want to work down the talus with some traversing to the north so as to get into the ravine which cuts through the Supai. In fact the entire 1500 feet of the canyon divides very well into thirds: getting down below the Coconino, then down to the top of the Supai, and then down the ravine through the Supai. It took about 67 minutes to get from the rim to the river with a few minutes used in route finding. Going back up took 68. On the way back, I was not too sure of the right place to hit the Coconino, but I concluded that I should keep to the north of the steep place where the Hermit Shale is showing so well, and I was right. If there were any deer or other animal tracks up and down this route, I didn't see them.

When I got to the river, it was still quite early and I decided to walk upstream at least as far as Boulder Narrows. The day was cool even at the bottom of the canyon, and the only disagreeable feature was the wind which lifted the sand into my eyes. It seemed to me that the river bank was easier to follow than it had been from Deer Creek to Kanab. I had to do a bit of crawling through holes under the big rocks at Boulder Narrows and in one place I had to let myself down while holding with just my hands, but even while I was taking pictures, I needed only 75 minutes to cover two miles along the river, and 60 minutes was all it took to get back. There were birds and rabbits as well as a sea of flowers in bloom up on the Marble Platform, but I saw no life down along the river. My progress along the bank here makes it seem not too hard to walk down from Soap to this route then up to the rim. I would still like to study the possibility of getting up and down Rider itself. This occasion was the third time I had missed a good break in the cliffs the first time only to discover it on the second attempt. I have had this experience before in the Supai above Royal Arch, on Picacho Peak, and here at Mile 19. Allyn Cureton and I stopped at Cliff Dwellers for gas. I also hoped to get a little more of a line on Ralph Haynes' activities. I had the good fortune to meet the man himself. He seems to be quite outspoken and intelligent. He did not bear out the report that he casually gets a boat now and then and goes down through the entire Grand Canyon to Lake Mead. He says he knows the river only as far as Nankoweap Creek. He has gone past Saddle Mountain and down the Nankoweap Trail and has made a complete circuit of Chuar Butte (this in itself is a very difficult trip). He did this to look for minerals along the Hermit-Coconino contact just 10 days before the great plane collision. Haynes bore out my conclusion that you can't travel down Rider to reach the open part. He also says that there is nothing to the idea that a corral was ever built on the bottom, down near the river. He pointed to a place near the junction of Rider Canyon with Emmett Wash as the location of such a corral. However, he said it's possible to climb down into Rider and checked the place on my map, just a bit west of the place where the line one mile west of the east edge of the quad map meets the south rim of Rider. A number of fins of limestone have been split away from the rim. I noticed this place when I was here during Easter vacation, but I didn't spend any time checking the lower ends of these cracks.

We parked the car at the end of the same road I used when I went down to the river at Mile 19. We got to the rim of Rider by heading a bit west of north and then following along the rim. We could see one of Haynes' 100 foot dry falls at the end of the narrows where the canyon starts to widen out. We soon noticed the great blocks split away from the south rim. Some of the cracks thus formed ends where the wall is still high and steep, but the last one to the northeast looked like a promising one to go down. Near where it opened on the canyon wall, there were two chockblocks where the only good route was through holes under them. The second of these was so small that a big man might have trouble. Allyn was feeling

the worse for the Spanish dinner we had the evening before so he lay down in the shade while I headed for the river.

There was one obstruction in the part I had not reached from the river last August. It's near the top of the Supai. I could have jumped the seven or eight foot drop in the middle of the wash, but I knew I should find a way to return before I did that. The ledge on the left looked inviting, but there was no way down. During my trip along the left side, I saw a way to get down from the ledge on the right and went back to proceed with that route. The three or so other places in the narrows near the river where one has to bypass falls required no study. You do the only thing possible and that is the right way to pass them.

The river was high enough to back water into the sandy channel. Only a few boulders were uncovered below the mouth. I saw at a glance that I probably could not go back down to Mile 19 along the beach as I had just three weeks earlier. One would have trouble landing to bypass rapids at this stage of water flow. I hope that the two faculty men thought better of their idea to go from Havasu downriver in a two-man rubber boat. Houserock Rapids itself shouldn't give an experienced boatman too bad a time at this stage. The big water was really roaring, but it was all over at the left wall and there was quite a bit of swift but almost smooth water to the right.

On the way from the bed of the wash to the rim, Allyn threw up and naturally took far longer to get out than he normally would have. If we had been walking steadily, I believe it would have taken me about two and a quarter hours to get from the river to the rim. This fits rather well with Dock's information about men leaving the river and coming out in three hours when they were preparing to bring Nims away from the river. The figure of eight hours to locate the route is also consistent, so we should go back to Rider as the Nims evacuation route. Ropes would have to be used to raise a stretcher along this route to get it up the outside of the chockblocks and also down near the river where a climber needs both hands for a few yards. Along the route at Mile 19, I feel that the stretcher bearers could carry it better without ropes.

Just as we were ready to enter the crack where the rim was shattered, Allyn showed me something he had noticed on the way down, a couple of vertical cracks from a few inches to a foot wide. Air which seemed a good 10 degrees colder than the rest was blowing out of these cracks at what seemed to be about 10 miles per hour. A rain was coming the next day, and I presumed the barometric pressure was falling. The cold wind was just as strong at 5:00 p.m. as it had been at 1:00 p.m., so there may be a whale of a cavern underneath.

We camped beside the main gravel road just south of North Canyon Wash. We had intended to study the possibility of getting to the river at Mile 30.4 next, but we had passed the road to Buffalo Tanks without seeing it. Instead we arrived at Buffalo Ranch in time to talk to a group of men who were putting up a new fence. The young boss said that an observer from the air who thought that one could go down from the rim along the north side of South Canyon must be wrong. He said that the only place to go down was about 1.2 miles due east of the ranch and that the best way to reach it would be to drive to their dump about two tenths of a mile north of here across a small drainage. He insisted that we would need a 50 foot rope to do it even here. We thanked him and drove to the dump. We could see what he was talking about, but when we got there we found a nice crack between the rocks where we could walk down. From here we angled north into the bed of the wash, a minor ravine which hardly shows on the map. From here to

the beginning of the Supai, there was nothing to report except that we found a seep rather close to the place where we hit the bed of the wash. Reilly's report that there was more water at various places was absolutely correct. We also observed places where the north rim was broken. This seemed to be true of the rim for about a fourth of a mile, but we couldn't tell from below where the best climbing would most likely be. We also noticed a place where one could climb through the Coconino and Toroweap in Bedrock Canyon where it comes into South Canyon. We couldn't see how to complete the trip up to the rim, but now I can see how it could be done. One could go along the top of the Supai, or even higher, until he reached the break in the rim where the 30.4 Mile Fault reaches the rim.

The Supai and Redwall in lower South Canyon presented a number of puzzles. The bypasses sometimes required a bit of thought and guesswork as to which side would allow a decent that was not visible from the fall in the middle of the wash. At one place in the Redwall, one had to go along a not very level ledge by friction alone and come down when a break occurred, but the last two obstacles were the real worries. They were chockblocks where there was no chance of going up and around. With just a bit of slipping and jumping, we managed the first one with the assurance that if one of us braced the other, we would be able to climb back up. At the second, I fastened the rope with knots tied in it to help my grip on the way back. Allyn was able to climb up both sides of the block without the rope, although I would have been unable to do it. We saw sneaker tracks of someone who had come up this far from the river. It was only about 300 yards from the beach, and Allyn noticed that the block is visible from the cliff near the skeleton. On the way back, I had to take off my shoes and wade through a pool which I had jumped across on the way down. Allyn showed me a wrinkle he had either just thought of or possibly had learned in his climbing course this spring. He arched his back and kept his hands on one wall and his feet on the other with his face down and was able to side-step his way across the 20 feet of this difficulty. His extra height helped. I probably would have fallen on my face in the water when I was halfway over it.

At the river, we first explored the Stanton Cave by the light of matches because we had forgotten the flashlight. We tried to get clear across to Vasey's fall, but the rock was too slick and the water was fast below it. We ate at the first greenery with a little trickle coming from the corner of a rock where we could fill our canteens. I'm sure I didn't touch the poison oak, but I contracted a mean case of poisoning just when I thought I was through with some I had gotten previously in Oak Creek Canyon. Before starting back, I showed Allyn the ruin and the skeleton.

On the return, we took the way out to the north side of South Canyon coming out about by the number 30 on the quad map. There was much bad footing both of loose rock and places where the grips were poor. Right at the top we did some climbing that was about as precarious as I ever want to tackle, but we saw a much better place around another point. With more experience here, we could come up quite handily. The total time from the car was nine and a half hours.

The 30.4 Mile Fault:

We had a bit of trouble locating the road leading toward the rim for the inspection of the 30.4 Mile Fault route, and we ended by driving through the wild flowers and low brush at 10 miles per hour until we came right out on the rim. We were northeast across some ledges from the slump block. It was not clear from a distance whether there was a good route off the rim, but when we got there after a short search, we

found one that required both hands for only a few feet and then was a simple walk down to the Supai. One has to go right at first below the top cliff to get down the Coconino and then turn toward the fault which shows so well on the map. The complete breakdown of the Redwall at the river is striking on both sides of the water, but try as we might, we couldn't locate a route through the Supai. We checked out about five ravines in the zone of fracture, but each time after we had descended 100 feet or so, there would be a series of impossible cliffs. Our failure was especially mysterious when Allyn found a bit of broken pottery and a not very old can near each other just below the top cliff. As I said above, this may have been an old Indian route down to water in South Canyon rather than a route across the river at mile 30.4. (It's possible to get through the Supai farther north of the main fault, however Jensen says that one of the ravines we gave up on is better.)

One observation that was most impressive from the top of the Supai was the trail leading down to the water on the left bank of the Colorado, and we could see very clear trails along the bench at the top of the Redwall going both up and downstream. Climbing the Supai on the left side of the river looked perfectly possible, but it didn't seem possible to get through the top cliffs anywhere near the cave. We gave up the search for a route down through the Supai after an hour and a half and had lunch back at the car.

Wotan's Throne and Kibbey Butte
[May 30, 1961 to May 31, 1961]

After our frustration at Mile 30.4, there was time to go to the north rim and do a bit of scouting for Clubb's route to Wotan's Throne. We found a way off the top, right near the seats in the naturalist's lecture area. When we couldn't go any lower at this place, we turned to the left and Allyn unnerved me by proceeding out on a narrow shelf looking for a break. Just as I was about to give him strict orders to come back, he yelled to me that he had it made. When I followed, I had to crawl on my hands and knees for a couple yards to get under an overhang where the ledge only made an open tunnel less than a yard high. Just as the ledge was giving out completely, there were some holds and a groove that allows one to descend. Then we angled down and to the right until we were near the top of the Coconino. This ledge continues, with a convenient window at one place to walk through and around to the head of Clubb's chute. This is just east of the fin that points toward Wotan's Throne. We came back in the morning with two ropes and water and food for a long day's climb. There was an immense chockblock at the very top of the chute. Allyn scouted for a bypass while I prepared a rope to let us down a hole behind the block. When I had finished tying the knots for stirrups and hand grips, we started down. I discovered that one could do this without the rope by bracing his back against one wall with his feet against the other. I had thought that this was the place Clubb had used the only rope in his entire descent, but I was in for a big surprise. The going was easy until near the bottom of the Coconino where there were two big steps left, each of them about 50 feet straight down. We decided how Clubb did this. We could get down a few feet farther by going out of the chute to the left. There is a pinyon pine on the rim of the rock here, but I didn't have either the experience nor the guts to take on the climb back up a vertical 100 feet even with the prussic slings we had brought. Allyn's 120 feet of nylon rope went unused. Maybe I'll practice going up a wall like that and come back for another crack, but my respect for Clubb and the Walter Wood party, who climbed Wotan first in 1937, went up 100%. I wish I had asked Merrel how he goes up a rope.

It was still early when we reached the car, so after lunch we went back for another crack at what I had bungled last fall, finding Art's way down through the Coconino near Kibbey Butte. The afternoon before, we had decided which way it should be from Point Imperial, but it was easy to think that every ravine through the brush should go clear down. I had to restrain Allyn's desire to go down before I thought we had reached the right place. When we came to the one I thought was right, there was a good deer trail down it. Below the Coconino it was easy to proceed to the top of Kibbey. One wonders why such a minor point has a name at all. However, the view from here is fine and I was impelled to take pictures in four directions. We could see that we had come down the only feasible way through the Coconino. It's interesting to speculate on why the north sides of these promontories are the only places where the Coconino is broken through. (The route goes down the Supai and R-W south of Kibbey.) the route at Point Imperial and here are twins, both are out near the end of a point and facing north. The one which can be used to go below Point Atoka is back near the angle but also facing north. I suppose the explanation has to do with the decreased evaporation and more abundant plant growth with the roots splitting the rock. The only snow patches we saw in this part of the park were down here in the woods and the largest were at the very base of the Coconino.

Art had reported unmistakable signs of trail construction here, and I was about ready to admit that we were not going to verify that observation. However, on the return I tried to follow the best established deer trail I could find. At one place near the base of the Coconino, the trail seemed to disappear when I noticed that it went up a ramp separating two small cliffs. As it rounded the outward pointing corner, there was a small but definite retaining wall. I believe the explanation is connected with the big wooden gate we noticed lying across the old wagon road along the rim here. There was a lot of rusty iron nearby which evidently had been a cook stove. I figured that a toll gate keeper lived here and constructed a burro trail down to a seep somewhere below the Coconino. (I found out latter that this was not 100% true.)

Down the South Bass Trail then along the Colorado River to Fossil Bay
[June 7, 1961 to June 10, 1961]

On my way to Bass Camp, I stopped and had quite a good visit with Lynn Coffin at Park Headquarters. He told me two points of interest. First, Doug Schwartz was going into Nankoweap Basin by Helicopter and was going from there to Hance Rapids by rubber boat, looking for ruins along the way. The other point was that Dan Davis had broken the narrow bone in his lower leg on the Grandview Trail but had walked out with only help from a stick he used as a cane. Coffin was interested to learn from me that one can walk the bank from Nankoweap to the mouth of the Little Colorado River.

They have been doing something at the head of the South Bass Trail. There is now a register for hikers, and down the trail a short distance is a sign saying that hikers should consult the rangers before going down. I wonder why they don't have that information at the register itself. As I went down, I noticed the usual points of interest: the old dams in the bed just above the top of the Coconino and the old granary a little farther on.

While I was skirting the head of Bass Canyon, I got the impulse to start down through the Supai directly instead of taking the big detour formed by the horse trail. The best descent seems not to be at the most southerly arm but rather directly above where the trail crosses over and starts down the last half of the

Supai. The hardest place to get down is almost at the top, a ledge about eight or ten feet high. I noticed that deer seemed to go to the east and almost at the end of the ledge there is an angle where the drop is not much and where a couple juniper logs have been placed. On the way back, I noticed that they used to form a ladder as they still have large nails in them, although the rungs are gone. Down below where you join the regular trail, there are some good shady overhangs just off the trail to the east. A scoop is lying here also.

My pack wasn't very well planned. I had too many gingersnaps and even my lightweight sleeping bag was much too warm. I shouldn't have been starting with 28 pounds not counting my gallon of water. However, I made good enough progress and reached the copper mine before 4:00 p.m. after having started down about 10:00 a.m. I was gratified to see that I still remembered where the trail leaves the rim and gets down into Copper Canyon. Allyn found that place for me on our first trip to Elves Chasm. I had the feeling that I was making considerably better time than I had on that occasion. For one thing, I already had the pictures of this trail and area. There was no water in the pockets in the creek but there was still plenty in the vertical mine shaft. I used the string I had brought to lower the saucepan for water. After filling the canteen, I carried the pack on to a place near the bench mark below Hakatai Rapids. Hakatai Rapids seemed a bit unusual in that the major waves occurred above the mouth of the incoming creek. They seem to bear out Pat's idea about the cause of the rapids: the deepening by rocks brought down the side canyon rather than those rocks forming a dam.

By the time I had finished breakfast on Wednesday morning, I was a little dismayed at the small amount of water left in my canteen. I thought a bit about going down to the river near the Hakatai Cable for more, but I decided that I ought to be able to reach more in Garnet Canyon before there would be any dire situation for lack of water. Actually, I reached Garnet a little after 8:00 a.m. from a start around 5:50 a.m. Again, I felt that I was making better progress since I was by myself. I had looked at the scenery and taken pictures on the previous trip. One major difference this time was that the barrel cactus were starting to bloom. We had noted at Christmas vacation that the barrel type was more common along here than it is at any other part of the Grand Canyon that we knew about. Possibly the burros migrate to this plateau at this season. I heard a few bray, but I only saw one during the entire trip and that was up on the Esplanade near the top of the Bass Trail.

When I got to Garnet Canyon, I missed the way down to the bottom. It's easy to do it when you're on the higher version of the Tonto Trail. There's a lower version that leads to the rim and then shows trail construction over the edge and down to the bottom. I should have remembered this place where the canyon is quite broad and open. When I began looking over the edge, it was higher upstream and was quite narrow. I must have walked a quarter of a mile beyond the right place to get to the bottom before I found another way down. From here there were some impediments in the bed that made the walk a bit difficult, but I came to rain pools, or perhaps they were pools formed in the night from a seep. I filled the canteen at 1:00 p.m., using Halazone of course, and then I took a bath and shaved. Just below was another slightly deeper pool that held something I had never seen before, a dead frog floating in the water. Lower down the bed there are some quite clear pools with a bit of permanent water trickling through them, but to judge by the incrustation of minerals around them, the water may be bad for drinking.

When the statement is made that one cannot go down Garnet to the river, one is thinking of the direct drop in the bed at the lower part of the Archean. There is an impassible fall, but a marked trail takes off to the south along the upper part of the Archean and within a mile or so, there must be places to reach the river. I would estimate that the marked trail dwindles out to about nothing one-third of the way from Garnet to Elves, and the last burro manure seems to be about halfway between them. From here on you'll be on bighorn trails if you are on any trail at all.

When I came within sight of the slump block, I got excited. From my angle the place looked like a simple walk-up. I left the pack at the river and climbed up to look at it closely. Even with no pack, this climb made me realize how much the heat had taken out of me. It was a real effort to go up there. In fact, it took me a bit more than an hour to go up for a close look and return to my pack. When I was only 30 yards from the possible place, I could see what Pat meant by calling it impossible. (We have done this coming down with a rope. Gary Stiles went up here without a rope and then fixed a rope for others on July 7, 1979.) I agreed that with my climbing ability and by myself, it was not for me. Still, the bighorn trail I had been following went right ahead to the most nearly possible place for a climb. I wonder whether the critters come down there in great leaps checking themselves on the ledges too narrow for a real resting place. If they do, I would surely like to witness the fact. I would still like to come back in cool weather and bring a rope to make the descent safe. There may be some connection between the hazard of this descent and the bighorn skeleton I found down rather close to the river. Possibly the ewe broke a limb and then couldn't make it to water.

Even with this detour of over an hour, and in spite of my general state of near exhaustion, I reached Elves Chasm shortly after 3:00 p.m. I feel more certain than before that if one got an early start down the South Bass Trail and had cool weather and good shoes, he could get to Elves in one long day. Before I had a chance to get into the cool water for a good soak in the nude, Don Harris came along with his power boats. I was surely glad to meet him. The heat and the solitude had me in a rather dismal frame of mind. He showed us the best way to climb up to the swimming pool below the ferny falls. I noticed how one could climb around and get above this level, but I didn't attempt it. Don also told me where to find the register. Staveley and Georgie White have parked under the overhang, up against the cliff on the southwest side rather than under the big rock. The boat party stayed about 40 minutes and then went on to reach their campsite at the mouth of Tapeats Creek. I was a bit surprised to learn that some boaters don't regard watertight compartments necessary. If one of the Harris boats should capsize, it would fill with water and be rather hard to manage.

Beyond Elves, the walking was easy for a short distance and then it became discouragingly difficult. After I had climbed up and down a couple of times with a full pack, I began to look ahead to see if there might be a way down to the river coming up shortly. A few hundred yards beyond two large travertine crags, I saw a chance to go down to a small beach and decided to call it a day at about Mile 117.5. The first night I was there, a bighorn sheep came down to drink. I didn't see the animal, but I saw fresh droppings.

By this time my feet were getting sore and the going was obviously difficult the rest of the way along Stephen Aisle. I practically decided to retract my objective for the trip and settle for a view along Conquistador Aisle. In fact, when I started on without my pack on Thursday, I had resolved to turn back either at 9:00 a.m. or when I got a view along Conquistador, whichever came first. The view down

Conquistador came first, but then I thought I would proceed until 9:00 a.m. anyway. By then I could see that the way was smoothing out for me and that I might get to Forster Canyon by going ahead. In fact, I reached Forster before 11:00 a.m., and in another hour and a half I was at the mouth of Fossil Canyon. I had seen two things that had been put there by men, some tanks of heavy metal, each about a yard long, that had obviously been dropped from a plane at about Mile 120.5 and a rock pile just below high water level a couple hundred yards upstream from the mouth of Fossil. There was also the Kodachrome can and the note left by Bob Euler at the rock shelter under the overhang of the cliff facing the streambed on the left bank of Fossil Creek. I had taken about six hours to come to Fossil and I wouldn't get started back until after lunch about 1:00 p.m., so I decided to give up the main project of exploring Fossil. Of course now I wish I had taken the chance of getting caught overnight without food or a bedroll. The bedroll would hardly have been missed as I regularly had been lying on top of it until after midnight, and I could have done without food a little longer than usual. Now I'll have to go back for another trip to Fossil. It will probably be a descent by rope. Incidentally, I noticed another possible route through the Redwall at about Mile 124. There's a good chute cutting through the lower part of the Redwall where the top also appears rather broken. It might be awkward to bypass the cliff below the Redwall, but I think it should be possible. I'll have to go back in cooler weather and investigate it.

The walk back to my pack took a half hour less than the trip away and I had plenty of daylight. On Friday, I got back to the copper mine about 2:30 p.m. and loafed in the coolness of the shaft on one of the cots reading while my feet got a chance to recover. On Saturday, I was out to the car a bit after noon.

Both Wednesday and Thursday evenings, I found ticks starting to bite me.