

Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (April 3, 1969 - September 3, 1969)

Papago Point and the Little Colorado

[April 3, 1969]

My intention for the day was to check the descent into Havatagvich Canyon north of Chikapanagi Tank, but when I was about 20 miles west of the village on the Topocoba Road, it began to snow so hard that I was a little nervous about getting back on time. It snowed for another hour besides the hour that I took to get back to the pavement, and I decided to spend some time in the library at the Visitor's Center. I just caught up on some magazines and then leafed through one box of miscellany. The item that I spent the most time reading was an account by Masland of the 1948 Grand Canyon traverse. I noted that Garth Marston floated through Houserock Rapid on an air mattress.

After a late lunch I thought I would do a bit of rim strolling. As far as I could tell without optical aid, Cheyava Falls is booming right now.

I walked out to Papago Point following the east side of Papago Canyon. There are ruins scattered along the rim to the west of here from Zuni Point to the head of the east arm of Papago, but I couldn't see any today. There was a dubious wall, almost fallen down, guarding a couple of yards of the rim at the end of Papago Point, but I could see no room outlines either on the promontory or in the woods. The rim east of the point didn't produce any either to my hasty search. After staying close to the rim and walking out on projections for 15 minutes, I headed back to the highway. This lackluster experience was brightened by one exceptional occurrence. As I was leaving Papago Point, I heard a distant rumble a bit like a jet plane, but more uneven. I got back to the rim facing west in time to see a column of dust rising above the rim. There had been quite a large rockfall at least a half mile away. There were a couple of places on the opposite cliff that had fresh looking scars, but I believe I identified the place, not really big as such things go, but definitely more of a fall than I had ever seen before. I only wish I had been looking in that direction with a clear view when it came down.

In order to use the rest of the afternoon to best advantage, I decided to go and see the high water in the Little Colorado in the narrows at the dam site. It had been several years since I was there where the Bureau of Reclamation had built a high ladder down to the place where the inner gorge is 70 feet deep and only about 30 feet wide. Still I remember how to drive near the place. One goes down the same approach road that leads to the Hopi Trail Crossing. I could see fairly fresh tire tracks that probably were made by the Holzhauser's Land Rover when they were ending their float trip from Cameron to this crossing. I drove the truck about a half mile farther than I had dared take my regular car, but it was good that I didn't try to go as far as the Land Rover.

When I reached the broad bench above the river, I remembered that I had been wishing I had a view of the entire river at the Hopi Trail Crossing. Father Garces had said that they had crossed at the farthest west place where horses could get across the river. I hope my slide shows that this is the place. Even with the present high water, the river splits around two or three islands.

As soon as I had this picture, I hurried back to the dam site hoping that there would still be enough light for a few pictures there. I believe that one ladder at the top of the route down through the natural bridge has been removed purposely, but the other ladders are still in place. The high ladder seems to be braced about as well as when it was new, but it sways slightly. I was very careful not to move so as to let the vibrations build up. Two of the rungs have been smashed, but I don't think their failure is due to rot. Stones may have fallen smashing them.

The water was boiling through the narrows, but still it didn't seem as deep as I had hoped. I would estimate that it was only eight to ten feet deep.

After the storm the sky became as clear as it can be in Arizona and all the colors were striking. I have never seen the Painted Desert looking better.

Black Tank Wash and Highwall Spring Trail [April 7, 1969]

Ever since reading Frank Casanova's article on the historic trails to Supai, I had wanted to see the Kilauea Trail, now shown on the map near the High Wall Spring. Also from the story that J. W. McKinney, in 1884, had left Bass by going ahead down the main Cataract Canyon and then had gone back to Williams via Black Tank Wash, I was eager to see how readily one could leave the canyon bed here. I fumbled a bit in reaching Platinum Tanks. I left US 180 on the Wilaha Road and after seven miles reached the old train station. In about seven more miles I hit the road going north to the big ranch where dams stop the flow of the main Havasu drainage. From here on one finds little brown signs directing one to Supai. I watched the mileage and figured that I should go north when I came to a gate with high posts. In about three and a half miles the road along the east side of the fence gave out in some rough country. Rather than spend the day walking from there, I thought it would be better to drive ahead and see whether there might be a better approach road. Shortly after passing the next little brown sign for Supai, I came to a road going north. It is 14 miles and two gates from the main road to Supai. About eight and a half miles north on this pair of ruts, one reaches some big cattle tanks that I took to be Platinum Tanks. I drove past the water about a quarter mile without a road, and then headed northwest. The canyon rim there had to be Black Tank Wash and very near where I first looked down to the bed at the top of the Coconino, I found a constructed trail. This was a bit to the north of the vertical drop in the main bed and on the east side. There appeared to be a way down from the opposite rim but I couldn't make out any trail. My trail stayed above the Toroweap and crossed the bed or else it just led to a deep and broad rain pool. Some game trails seemed to go along the clay slope above the Toroweap along the west side of the canyon. I got down the main bed to the actual Coconino where I found some more pools just above a sheer drop of at least 150 feet. The only possible descent was around the corner to the west, and to reach it one would have to go back above the Toroweap. The wall looked so steep that I gave up without a closer examination.

After lunch I went back up on the east side and followed the rim a short distance to the north. From there the Coconino around the corner from where I had eaten looked much better. Instead of thinking that the story about McKinney had to be wrong, I began to feel that a good climber might be able to make it. By this time I had decided to go east to the High Wall Spring Trail and get down to the spring before time to

camp. The weather was rather cold and the rim here is 5680 feet. I thought that I would come around from below and try climbing the Coconino in Black Tank Wash at the end of my trip.

It was good that I was carrying a map because I had to consult it to identify the promontory east of the bay of High Wall Spring. When I first reached the rim, I was a bit too far east, but I soon went west and found a few cairns. Instead of starting down right by two cairns, the trail really begins about 50 feet farther to the west. There were a few confusing alternate routes, but the upper two thirds of the trail is really quite clear cut. After getting through a not too exceptional part of the Kaibab rim, it slants west to a very unusual talus that completely covers the Coconino. At places this talus of clay and rubble is only about 30 feet wide, but this is enough to accommodate the switchbacks. A horse still has no trouble getting up this route.

There are two Indian ruins to the northwest of the foot of the trail. One on the left about a quarter of a mile from the foot of the trail and the other about the same distance on the right side from the foot of the High Wall Spring spur trail. The latter is much more interesting with well preserved storage bins.

The spur to High Wall Spring is also well defined. The spring itself is unimpressive, a wet spot in the gravel and sand that collects into a tiny channel for about 30 yards and then disappears. The Indians have two picks and four shovels stored under an overhang which I chose for a sleeping site. It may be necessary to dig for water at certain times of the year, but in early April the flow was faster than I could take out of a little pool with a cup while I was filling my canteens. The water gathers from the bed which is full of horse hoofprints, so I would rather drink it after doping it with Halazone.

On Tuesday morning I had eaten and was walking away by 6:45 a.m. The bay surrounding the spring area is one of the best for the high walls and interesting pinnacles. By moonlight I considered it especially attractive. As I walked down canyon in the morning coolness, I looked up at the Supai walls that form the inner canyon and then above to the rims 1600 feet above the bed and thought that here at least is one of the unpublicized beauty spots of Arizona. While hundreds of people were crowding the campsites north of the village at the falls, I had the feeling that one could spend weeks in the upper arms of Havasu Canyon without meeting another person. There are horses and cows, but they are left to shift for themselves. The animals keep trails open along the bed, and I had no trouble in making good progress down to Moqui Trail Canyon where Allyn Cureton and I had been several years ago.

When I retrieved my pack which I had left at the junction with Black Tank Wash, I resolved that if I went up the Black Tank arm and was unable to climb the Coconino, I would be at least two hours longer in getting back to the Kla la pa Trail and then to the car. As it was, I would have a good day of walking without exceeding my strength, so I resolved to come back for another inspection of Black Tank Wash. I went back past the spur to High Wall Spring without needing to make the detour for more water and went on up the Kla la pa Trail. At the top I spread the map out on the ground and tried to get a sun direction to follow to Platinum Tanks. Apparently I oriented it incorrectly with a point that was too close for accuracy, because when I had been walking for about an hour, I finally saw the truck at right angles to my course about a mile away.

There were a few small birds singing most of the time, and I noted a number of flowers in bloom, but the show should be better later. I noted numerous droppings of bighorns or deer, but I saw none of the live animals. Just as I was thinking that I don't recognize antelope droppings, I saw a group of five at quite a distance. Even though there seemed to be no cause for alarm, they were at an all out run, giving a fine exhibit of high spirits and perfect health.

I came away with the resolution to go back and try the descent of Black Tank Wash and also to fill in the remaining part of the bed from the base of the Kla I pa Trail to the Kirby Trail. the study of further descent possibilities can be made more easily by following the rims from which the Coconino cliff can be seen. It is the most persistent barrier and it is usually obscured by the Supai cliffs along the bottom.

Across from Diamond Creek to Trail Canyon
[April 26, 1969 to April 27, 1969]

I arrived at the junction of Diamond Creek and Peach Springs Wash about 10:15 p.m. Friday evening. About 2:00 a.m., along came Jorgen, Doc Ellis, and Bill Mooz. They had had quite a bit of mechanical trouble with Bill's truck. We drove down to the Colorado River in the morning. It was high enough to put water under the table in the pavilion at the east end of the parking lot. I was hesitant to cross in my kayak although I got as far as the middle. I could almost hold my own against the current there. We held a council. I suggested some other projects such as going west for a good inspection of Travertine Creek, but Jorgen hated to admit that we had to change plans. He suggested some other projects such as going up river beyond the riffle formed by the canyon on the right bank and checking the idea of crossing there. When we did this, we all agreed that the water was considerably quieter and that if we should carry my kayak and Bill's rubber boat along the cliffy shore that far, we could cross safely. Bill deflated his two man boat which weighs about 16 pounds and proceeded to the place. When Jorgen and I had carried mine a short distance, I suggested that I could row it across where we were if I carried no passenger and then I could carry it through the tamarisks above the riffle and come across from the right bank to do the ferrying. This worked out all right although I had some trouble finding my way through the brush with the boat over my head. On the downstream side of the right bank delta, I noted very fresh beaver tracks in the sand and there were some beaver felled trees. I didn't see any sign of the cache of motor boat oil and gas that was there three months ago.

Bill could row upstream along both banks and he could propel his craft surprisingly well with the stubby oars. He took the packs over while I took Jorgen and Doc in two trips. We were ready to start up toward the rim of the Tonto at 9:30 a.m.

I had noted a route through the Tapeats at the top from the other side. We left our boats safely above the waterline and behind some tamarisks so that no wind could move them either. The best route up was somewhat east of the break in the Tapeats which is only about 50 yards from where the rim goes north along the side canyon. This route is more direct and perhaps a little easier than the one Bob Packard and I had used inside the side canyon. It took a bit over 30 minutes to reach the burro trail on the Tonto.

Progress was rather easy along here. We had agreed to pass up the route to the rim which Bob and I had used in favor of going along the Tonto to the mouth of Trail Canyon. I wanted to be sure that we could

camp by water, the river, and I figured that with our rather late arrival on the Tonto level, Kelly Spring by the immediate climb was out. Furthermore, it had turned colder than normal, and Bill and I wanted to get by with our light weight bags. There were three or four detours back into short side canyons, but this stretch of the Tonto is far better for progress than any other part I know about. Not far from Mile 224 Canyon we saw that it was better walking on a lower level that had broadened into the main terrace. The fracture that made this part of the trail not so pleasant was the profusion of joints of jumping cactus on the trail. We all tangled with it, but I may have been the worst off as some spines came through my shoe leather at one time.

The good terrace gave out around Mile 222 and the burro trail was often quite obscure in the jumble of rocks, but it was actually continuous. I don't think that a horseman would want to stay in the saddle along here. It was about here that we came to a couple of good overhangs. One of them seemed to have the remains of a wall in it. Before we came down to the lower level we passed one of the finest mesal pits any of us had ever seen. It was as big as many a mine dump and had a well formed circular depression in the top. Not far north of the two good overhangs right next to the trail, we came to another some yards above our path. At one end of this good overhang was the only cairn we saw on the entire trip. Doc examined it and reported the absence of any can or message. One of the fine features of the trip was the prevalence of flowers in bloom. The Tonto was alive with the red tassels of the Ocotillo, the yellow of composites, and especially with the blooming cactus of several kinds, prickly pear, staghorn cholla, and a small one with green flowers. The finest display was just as we arrived at the rim of Mile 220 Canyon.

The Tapeats forms quite a cliff above the latter canyon. We found a sporty climb down a break that Doc declared feasible from a view from the rim. Bill went down with his pack on his back but I handed my pack and canteens to Bill and still had trouble getting my toes on the shelf below. Jorgen used Doc's knee as a step and made out all right. On the way back we used a better route only a few yards to the east that Bill had noted. Bill said that from below anyone could see that the place we came down was impossible.

We considered camping on the delta of Mile 220 Canyon, but Jorgen particularly thought it would be better to move our packs ahead to Trail Canyon, since we planned to go up it without them. We had to climb well above the river to get north to Trail Canyon, and on the first part of this lap, we encountered a trail that all of us thought must have been man made. We got down to a good campsite just above the bed of Trail Canyon and put our packs down.

It was now after 3:30 p.m. so we wondered how well we could inspect Trail Canyon before we would have to turn back. We soon came to a small flow of water in the Archean rock but by the time the Tapeats formed the walls, it was gone. There were no noticeable obstructions in the bed, which was mostly gently rising gravel. Burros had formed a good trail all the way up and we encountered two in the flesh. Higher up, on our return, we saw two more. After walking for about half an hour, we came into the open valley above the Tapeats. Fifteen minutes farther we passed a tributary from the left facing upstream. About 20 minutes later we came to a major fork. The stream beds seemed to have brought down about equal amounts of gravel. We remembered from the map that the north arm came from near Kelly Spring so we assumed that it would be the best route. The burro signs seemed more obvious in this arm, but we did not really inspect the bed in the west arm.

It was soon past the deadline for the turnaround that I had considered best, but we hadn't seen what the canyon would do to get through the Redwall, which by this time seemed to be close. About 5:15 p.m. we got our answer. The north arm is absolutely out (wrong, go up between the two forks and then north). There is a high fall coming out of a narrow slot. We looked for a bypass but didn't see any hope even though we considered climbing up far back from the fall and then following a ledge toward the fall (right). Our conclusion is that any trail down from the rim must have come down the west fork (wrong).

If my feet hadn't been sore, I might have considered getting up at dawn and going back to inspect the west arm, but I was having some trouble with blisters and I wanted to make sure I got back to the car without too much trouble. Perhaps the solution is to go up the route that Bob and I followed and reach the top with time to explore the route down. If I would cross the river and sleep on the right bank and start early, this would probably be feasible.

When we got back to the river, I ferried Doc across. After enjoying a swim Jorgen and Bill rowed down through the riffle in the small rubber boat while I took the kayak down to the parking lot at Diamond. There was really no danger, but I got a sort of thrill from the boils and cross currents. It was different from the other places I have used the kayak.

When we got to my truck, we found a note from Art Foran saying that he was sorry not to have seen our crossing on Saturday morning, but that he was up Diamond and Robber's Roost for several days to see all that needed viewing.

Black Tank Wash
[May 3, 1969]

The objective of this trip was to get a close look at the possible Coconino descent west of the main stream bed as it drops over the Coconino cliff in Black Tank Wash. Three students accepted my invitation to go along, and by 6:45 a.m. Heather Bunte, Sally Lockwood, and Denis Troyer were with me going out of town on US 180. We used my former route, the road through Wilaha. On this second trip over this road, I was more careless and didn't watch the mileage. We overshot and came in sight of the Supai road before I realized my mistake. On the return to Platinum Tanks we took the road that goes northeast to the tanks from farther west than the one I had used before.

Somewhere I was careless and must have run over a sharp rock. When we were about half a mile off the main track a front tire went flat. I hadn't tried changing a tire at home, and now we discovered that the rod which was supposed to unscrew to release the spare froze in the nut which was wrenched loose from the thin clamp which was supposed to keep it from turning. We tried various makeshifts since I hadn't carried a wrench to grip the nut, and finally we decided that we would have to walk back to the main Supai road and try to hitchhike for help. We knew that it would be an eight mile walk just to the road. In about one and a half miles, we sighted a ranch house and decided to take a chance that we might be able to get help there. Only Mrs. Raney was at home, but she found a large wrench and took us back to our pickup in their truck. On the way we met Mr. Raney who was on horseback. Using the wrench to stop the nut from turning, and also oiling the threads, we got the spare free, and finally got the spare mounted in place of the flat. We had wasted about two and a half hours in this interruption.

While we were going for help we saw several antelope. We also saw a large but harmless snake quite near the disabled truck. On the drive to the area we had sighted a large hawk perching next to the road. Later we were to see a cottontail and two coyotes, so we felt that the trip had been rather rewarding as far as wildlife sighting was concerned.

We parked the truck when the road was about to cross the main bed of Black Tank Wash. To reach the crucial Coconino cliff, we should have stayed in the bed for about a quarter mile and then taken to the west side along the plateau. This was our route on the return, and it was much more direct than the way we went, up on the east side of the bed, then down to the bottom where it makes a swing to the south, then up and down into a draw from the east, and finally along the draw which was my former route to the trail. We found the trail and used it to go down to the Toroweap level. It was still well defined around the corner to the west, but it went on past the place where I had thought we should get down through the Toroweap to the Coconino rim. This was not hard to accomplish. We could have gone down another 50 feet of Coconino, but from what we could see from above, there would be no safe descent below that. Since I had promised to be home by six or a little later, we didn't have time to check out everything very carefully. There was still a fair amount of rather scummy water in the large pothole in the Toroweap bed.

A daring climber might have used a long crack in the Coconino for the descent. I had my climbing rope along, but there was no time to try it. Something that now interests me more than the descent area we were checking is a long talus under the east rim of the canyon. My impression is that across Black Tank Wash to the northeast there is a place where one could go along below the Kaibab cliff and then get down to a talus that covers the Coconino with only a 15 foot rappel. I would surely want to check this place the next time for a concealed crack that might allow a ropeless descent.

Success at Black Tank Wash

[May 17, 1969]

Five members of the hiking club came with me this time, Heather Bunte, Sue Barker, Sue Varin, Dennis Troyer, and George Billingsley. We used the Wilaha approach again. Along the road to Supai from the W. Delta Ranch, we had the thrill of being raced by an antelope. It began running all out well over to the left of the road, but it was determined to speed up until it could cross in front of the truck. I had been going along this relatively smooth part of the road at 30 mph. I moved up to 35 mph, but the animal finally tore across in front of us rather close. My camera was in the camper behind. George missed the picture also since he would have had to shoot through the window screens. I had intended driving to Platinum Tanks by the road I had used on 4/7/69, but it seemed to be going too much toward the east and I went back to the route we now knew better, the end of the loop road that meets the Supai road farther northwest. We parked where we had two weeks ago and walked north along the west side of the wash. It takes about 25 minutes to reach the head of the rough trail going down to the water at the top of the Toroweap. Three of these holes are rather large and the water is a dark green. These natural reservoirs must be the origin of the name Black Tank Wash. Before we started down, Heather and Sue Barker came with me north along the rim to see how the Coconino descent might look from there. The part to the west of the sheer fall didn't look very reassuring from that angle. We could also see that the talus over to the northeast across the canyon didn't cover the Coconino, but we saw that it would be possible to get down

through the Toroweap. I felt sure that the rope would reach if there were any way to fasten it. If all in the party would belay me, I figured that at least I could go down.

When we first went down from the rim, I led the girls out around the point west of the wash with the intention of getting a close look at the descent. Before giving that route up, I wanted to see exactly where I would have to turn back. As I approached the place to start down through the Toroweap, I changed my mind. I thought it would be better to go around to the east and get down the sure place first and then inspect the other place from below. George, Sue Varin, and Dennis were down in the bed of the wash and then did a daring climb up to a shelf in the Toroweap. They saw us heading for the east slope and came on to join us. Sue Varin elected to go back to the car. George didn't feel too spry either since he says he is very sensitive to heat.

We made our way along the steep gypsum clay slope to the place to get down one ravine through the Toroweap and then west around until we were above the long talus. The Coconino was far from vertical here above the talus. George went down 25 feet until he came to a ledge that almost overhung, but the footing only about eight feet lower looked not too bad. After we ate lunch we came back to this spot where we had seen a fairly large rock lying on a fairly level ledge. I didn't like the thought of even four people giving me a belay. I would rather have the rope tied around a tree or a rock that can't become tired. The rock was about the same size as our anchor at the Elves Chasm descent. The 125 foot rope reached far down below where one could walk away. While the others watched the rock for any movement, I used the Jumars to go down. It would have been easier to rappel, but I liked the idea of being able to change my mind and come back up from any part of the descent. I found that I could have walked up the Coconino here and just about touched George's shoe, but he would have had to give me help to reach and climb on his shelf.

The others carried my pack and rope back for me while I went down to the bed and then climbed up the talus west of the sheer fall. All but one place on a rather steep ramp looked fairly good from a distance. By this time my canteen was empty and I was spurred on by remembering the pool's above. Much of the ramp wasn't difficult but I had to use minor toeholds frequently. It was hard enough so that I would have faced in on the descent as well as in climbing. Then I came to the place that had worried me from a distance. I soon saw what I had to do, drop down a bit to go along a ledge which was very narrow where one had to crouch to go under an overhang. Then at the end of the ledge there was a nearly vertical crack. Here I could see that man had used the route ahead of me. Three very old juniper logs were jammed into some cracks. A crotch in one of the logs furnished a needed step. Above these logs the holds were poor and I tried wedging my arm into a narrow crack. I could go a bit higher this way, but I couldn't get out on top. After descending a step or two, I tried getting out of the safe fissure to locate some meager steps on the sloping rim of the crack. I didn't feel very safe here, but this device got me up. There was one more slight embarrassment when I had to pull myself through a clump of brush, but I already knew I would make the rest of the way without real tension. The top of this route leads right by a small natural window, a sign that is better than a cairn for remembering the way. I was soon back to the Toroweap slope where we had been two weeks ago, and then was soon back to the water waiting for the others to join me.

Thus it would have been possible for J. W. McKinney to have come out via Black Tank Wash when he became separated from W. W. Bass. However, it seems very illogical to use this difficult route if you

have come along the bed of Cataract Creek right by the good horse trail east of the High Wall Spring Bay. I wonder whether the Indians became so used to all the holds along this route that they would come up for water and then go down again. This passage was enough of an ordeal for me to feel that once might be enough. I felt like quitting when I was ahead. I am a little surprised that the Indians didn't develop the route I had come down. If some holds were chiseled in the rock, I think it would be a safer way up to water.

It was 3:30 when we got to the truck. I had thought a little of going around to inspect Havatsgitch Canyon for a suspected descent, but we figured that it would be a little late by the time we got there over roads that I don't know. Instead we reached home before 6:30 p.m.

Route up from Secret (Oak) Canyon
[May 24, 1969]

What Stan Jones calls Secret Canyon, the USGS calls Oak, and the Navahoes call Black Water Canyon seemed like a good objective for our first trip on Lake Powell this year. We had been in there once before with Reider Peterson when we had our former boat which was a few inches narrower than our present 16 foot runabout with its six foot beam. We had shut off the main motor and used the three and a half horse one and the had used paddles and finally our hands on the walls. I wanted to see how far we could go at the present stage, possibly 20 feet or a little more above what we had gone over two years ago (May 1969 3553 and May 1967 3507).

This time we were able to take a shortcut over the narrow wall that used to separate this canyon from the main riverbed. The water came about five feet above the rock wall. I believe we could use the motor farther than formerly, but before long we were paddling again. If we had had another couple it would have been easier. Roma couldn't do much without hurting her shoulder that had been giving her some trouble. I sat on deck at the bow and sculled, but the slight breeze seemed to be doing as much for our progress as my work. Finally we came to a widening in the canyon where we could at least turn the boat around. There is a rift in the rock crossing the canyon here, and I felt sure that I could climb up in either direction. There was also some fairly shallow water on the west side and we could see by the ashes where some party had camped here recently.

While Roma read a book she had brought, I climbed up to the west. My canvas, rubber soled casuals worked fine on the rock and I could grip slopes where I might have been worried about the footing in ordinary hiking shoes. Quite soon I was up at a level where yuccas were blooming in the sandy soil and many water worn builders showed that they hadn't moved since the Colorado was at this level. A gently sloping, mostly bare rock valley went down to the west to the river cliff at one crack. I was sure there was no other way, and I had to go up and test all the holds before it proved entirely feasible.

Instead of providing me with a simple walk to the highest point at hand, this crack really led down to about the level of the platform from which I had come. However, by going up a few yards and walking along a sloping ledge, I found a place where I could go up the bare rock slope and reach the top of this butte.

The view certainly made this 20 minute climb worthwhile. One could look down into Aztec Creek at the boats already checking their speeds for the marina. I could follow the course of Secret Canyon for a short way and see the boat and Roma five hundred feet below. To the east a bit farther was the open grassy area north of the canyon containing the old hogan and the beaver spring where the horse trail goes up to the east. Broad reaches of Lake Powell showed both to the west and the east.

It would have been very interesting to have used the same time paddling the air mattress to the end of the line in Secret Canyon, but I was glad I had done this climb. It appeared that if I had stayed somewhat lower, there would be a way to follow the slickrock country indefinitely to the south between Bridge and Oak Canyons.

When I got down from the climb, we tried to advance up Secret Canyon in the boat, but right away it became so narrow that we gave this up. Either possibility would appeal if there were more time to go along the high slickrock route perhaps clear to the trail beneath Navaho Mountain, or to paddle an air mattress to the dry land along the bottom of the canyon. The country is fantastic and these bits of exploration rank with anything I can think of in the Grand Canyon.

Jicarilla Point
[June 2, 1969]

Al Doty and Jim Sears went with me in the truck out to pole 410 along the old telephone line along the park boundary west of Hermit Rest. When we were nearing the rim we came on a new Jeep road and decided that this must be part of the new trip route that Fred Harvey is offering tourists as an overnight camping trip to the west part of the park. Jim followed this road back to the main park boundary road and learned that it leaves the latter just a little west of where we parked. Since my truck could negotiate this spur as easily as the other, I will be able to get more than a mile closer to Jicarilla Point in the future. The Jeep tour planners must have favored the area because it is a long way from Hermit Rest to Havasupai Point and also because of the natural bridge. A little past the end of the road we came to the place where Al and Jim had built a cairn to mark the route down through the Kaibab about 150 yards southwest of the bridge. Someone had demolished the cairn, but we soon found that this was the right place and it was also familiar to me from eight years ago when I was interested in Jicarilla and Slate Canyons. The 12 foot drop near the bottom of the main top cliff where I had left a rope before still looked as if I should have a rope, but the others had come up here holding to slight projecting bulges in the limestone. At the end of the trip, Al and Jim went up promptly with no trouble, but I had to drag a bare pinyon pine trunk to the place and I got up using it as a brace. I might have wedged it securely in the crack a few yards to the north where I had come down before using the rope. This crack would be easy if I took the trouble to build a pile of rocks for a stepping stone at the bottom.

We made our way around the corner and went along beneath the bridge finally getting down to the saddle between Slate and Sapphire. I had no trouble finding the petroglyphs I had seen years ago, just to the west of the saddle. Then the boys took me to the ones they had found a few weeks ago, about 50 yards north on the Slate Canyon side at the same level at the end of the possible walking. It is a much more elaborate display with pictures of many types including the human hand and foot. They looked fresh and sharp although they have no protection from the weather. In reaching them we had gone past a poorly preserved

rock shelter. There was a way to scramble up to a higher level of the Toroweap just north of the ruin and Jim showed me a still less well preserved ruin at the higher level. No sherds were in evidence nearby.

One can proceed at this higher level and start going down steps in the Coconino. At places this ridge is quite narrow and generally there is no chance to walk along below on either side. Attention to route finding is necessary as well as care not to step on loose rocks. Eventually we came to the crack where Jim had climbed down into Slate but we didn't care to repeat his feat of strength and nerve. Just a bit farther Al announced that we couldn't proceed. I had begun to think that the whole area was a bit dangerous and I didn't want any accidents while I was listed as chief of party. We gave up and went back.

After our minds were made up, we looked north and Al saw how he had gotten past the place before. He had worked his way around below the top of the steep place by following a slight ledge to the west. Then he had let himself down a very steep slope using seams in the crossbedding as holds. This was the final difficulty and he had been able to get off the spur ridge to the shale in Sapphire. Later we saw that a similar ramp on the Slate side might be still easier. This route ought to be quite safe if one were to hang a rope at the crucial place. The climb to the top of Pollux seemed fairly easy.

We probably should have returned to the attack, but by now we were out of the mood. After lunch Jim proceeded along the rim and drove the car back to pole 355 while Al and I walked the rim toward Diana so I could see where they had left the rim and so I could show Al where we had found a break, the place where Jerry Bortle had climbed to the rim without a rope but where I found a rope very consoling. Al's break looked very similar to ours, but it was several hundred yards farther west. I am sure they needed a rope. When we came to ours it looked harder than I had remembered it. The cairn was still there and I recognized the fir where the rope was tied.

Gunther Castle

[June 3, 1969 to June 5, 1969]

Donald Davis reached our home Monday evening. We picked up Al Doty at his apartment at 6:30 and some time later we were headed for the north rim. Doc Ellis had been there for a couple of days and had done a bit of looking at what he thought I had proposed for the route. We killed some time at headquarters and ate at the cafeteria before starting for Cape Final.

Doc left his Jeep at the start of the fire road E6 and then came with us to near the end of E7. As usual, I parked west of the crease in the surface that indicates a small monocline that accounts for the formation of the ravine we used in getting down through over half of the Coconino. Right at the rim one needs to find a break in the ledges but the next route finding is down in the Coconino. One needs to find the right place and use care in getting down about three drops and then he comes to the big one. I could see why I had almost given up when Bortle and I had brought a rope down here. Even with more experience than I had had then, I could still feel insecure about going over the side of the cliff. I used a sling clipped to a carabineer with three or four turns of the main rope through the carabineer. There is a broad ledge about 50 feet down, and it was a good thing for me that I could get off the rope here because the rope had twisted so many times that it was in a hopeless snarl and I couldn't have rappelled another two feet until I had straightened it. I should be careful in the future to see that the rope is free below me. We should have

carried our packs down on our backs. It took extra time and was hard on the packs to lower them separately. I had remembered the system of shelves clearly. When we had gone down the 50 foot rappel and then the 25 foot one, we had to move to the east and do one more difficult spot about 10 feet by tying a short rope to a bush growing at exactly the right place. The ledge below this short slide is meager but adequate and it leads to the forest floor.

Going along through the forested Hermit Shale was surprisingly slow. There was very little thick brush but there were places where the shale was bare and hard and the footing was precarious. On the return, Al called my attention to a deer trail keeping to a much lower level than the base of the cliff where I led the party on the way down. It was far better walking. At the base of the Coconino in the descent ravine there was still a snowbank. We were so sure that all of us would want to walk out the long but different way via the Lava Kwagunt Saddle that we pulled down the short rope from the bush expecting to take the long rope away from the top at the end of the trip.

My impression of the best way down the Supai to the Juno Saddle was very indistinct. In general I thought we should keep to the north, but right away I had to modify this. After looking along the top ledge to the north, we had to come back almost to the middle of the basin to find a break. There were a few options, but after two or three hard places, the rest was a walk down. When Al and I returned by this route, I found a deer trail through the top of the Redwall. On our way down from the saddle we followed the deer trail to the west until it disappeared in a ravine. After this we stayed in the same ravine, a better route than I chose on the way back up. On Thursday morning I led Al uphill in the juniper covered slope. This seemed to be much better until we found that we had to cross several steep sided ravines. Coming up we saw every kind of walking including a couple of rockslides. We finally crossed the right streambed and found the trail at last as it crossed the ravine we were going up. It took us about one and a half hours to get down from Juno saddle to the ruin.

Soon after I had pointed to the white pictograph on the ceiling of the overhang at the ruin site, the others were showing me several less distinct but identifiable petroglyphs. We speculated about the loopholes in the wall of the remaining room and whether the other rooms could have been built as high with stones since there are so few cluttering the smooth floor. We wondered how many times this area has been visited during the last few years. When we started downstream again, we found footprints in sandy places which Donald subsequently learned to be those of Bill Breed. We stopped for the night well below the major spring where the great rock stands on end in the bed. In fact we were only a few minutes west of the tributary that arises east of Point Chiavria. In going along the terrace north of the main bed and west of this tributary, we noted quite a variety of pot sherds. However, no room outliners were seen but no stop was made to search for them.

We stopped after 7:00 p.m. but in time to get our meal by daylight and the temperature was only a pleasant 83°. Our bags were on the warm side but it was quite cool as we made an early start away at 5:30 in the morning. By 6:15 we were starting up the tributary called Chuar. Before we reached this place, we had seen a bighorn on a terrace to the south side of the running stream. Walking was easy here and we had a fine view, but for this short a distance it did not save any time. Walking up the dry shale bed of the Chuar arm was so easy that we soon suspected that we had been pessimistic in thinking that it would take all day to climb Gunther Castle even if possible.

When I had been flown over the area, I had looked carefully at the Redwall ravine opening to the south from the southwest base of Gunther but I was not so sure of the best way to get through the Tapeats. We were afraid, justifiably as it turned out, of a dry fall in the bed of the wash coming from the right Redwall ravine. We went up the slope south of this drainage. If we had kept a bit farther east we would have missed an interesting region of haphazardly broken Tapeats and we might have had a smoother walk without dropping down into a couple of minor valleys.

Going up the shale in the bed and passing some steep places in the Muav was fairly routine, once I left the bed and found a deer trail bypass. However, the other three in the bed made at least as good progress as I. Al seemed to have the most pep on the way up and on most of the way down. Donald spent some time looking for cave openings and saw a couple which he checked on the return. From the place I had been sure that we could go through the Redwall. Then we kept going up and to the west and found ways through all the upper cliffs out the middle of the west side. My impression is that the breaks were easier to find and negotiate than they had been in getting up Jupiter and there was no exposure and inadequate grips as there are on Pattie. When Donald reached the top and looked around, he let out a howl of dismay because he could see a small surveyor's marker made of wood and well anchored with wire standing near the north end. When we noted the large coil of unused wire which had been dumped nearby, we concluded that the surveyors had come and gone by helicopter and that we were actually the first men to climb Gunther Castle since the Indian occupation.

It had taken us just four hours to go from the running water in Lava to the top of Gunther. We were on top for an hour admiring the views and eating an early lunch. One could spend a long time just soaking up scenery and identifying the points and pinnacles in sight from Gunther. We wondered why some fairly insignificant humps have names and others much more magnificent ones do not. Doc Ellis thought that Caleros Butte would be climbable, or at least worth the effort, but I thought that Cochise Butte would be more to my liking. It appears to be a mere walk up.

Below about a third of the Redwall, Donald checked a cave on the east of the wash. It has a smooth floor but is only about 20 feet long. There were no signs of human use, but Donald found a hummingbird's nest with two tiny eggs.

When we reached the top of the Tapeats, we decided to follow the easy slope to the west. Donald went farther over than the rest and saw that he could get through the Tapeats in the main arm coming from the north. He went down here and arrived at the junction a few minutes before we got there. Doc checked the bed in the arm where we had been through the Redwall and he reported an impossible drop in the lower Tapeats, so we went back up and down the way we had all climbed in the morning. We enjoyed the shade of a big rock where Donald was waiting for us. The bare shale bed from here to the running water concentrated the heat of the sun and all of us were really feeling the heat when we reached the stream. Al found that the kippers he had eaten on top of Gunther were unsettling. We cooled off in the shade or by sitting in the water and then proceeded up to our campsite. After another rest we carried our packs up to the Indian ruins called Juno Ruin by Reilly. Al had started ahead of the rest saying that he felt upset at the stomach. I joined Doc and Donald as they went along the terrace to the north of the stream. When we got back in the bed, Donald called our attention to the fact that Al wasn't leaving any tracks in the sandy

places. We supposed that for some reason he was avoiding them and proceeded. We were weary had hated the thought of a return to see what could be holding Al back. When we had reached the last of the water and still didn't see Al, we began to worry. After giving him 20 minutes to come along, I started back with Donald to see what could be the matter. We soon reached Al but we found him in sorry shape. He had tried to throw up a couple of times and was perceptibly white. Donald went back to tell Doc what was up, and I stayed with Al to carry his pack. He finally got to the ruins where we were to camp and lay on his bed without eating much for dinner or breakfast.

As we were ready to go in the morning, Donald called our attention to a live scorpion a few feet from where Al's bed had been. I found a big spider under my pad on which I had been sleeping. In the night I had heard a rodent. All in all this site is a favorite of some undesirable camp mates. Donald and Doc decided to go out the long way, up the north arm of Lava to Hartman Bridge and on to the Lava Kwagunt Saddle to go up the Coconino west of Point Atoka. Donald saw a cave opening opposite Hartman Bridge and went up to check it out. He let out a shout when he saw what this shallow hole contained, seven unbroken pots. The biggest contained three little ones and they all had neatly shaped sandstone covers. One of them also contained a little basket. The progress was slow and there was little if any water in the bed. They had to stop for an hour to melt snow to drink when they came to a snowbank. After they had done this, they soon came to a trickling stream. They finally came to a ravine that looked easy from below, but about halfway through the Coconino they had to do some real climbing and pull their packs up by rope. It got dark while they were halfway through the Coconino but they had Donald's carbide light and reached the north rim campground by 9:15 p.m.

Al and I went up as we had come down. He was really worried at how weak he felt as we were going up through the Tapeats, but his digestion improved somewhat as we proceeded with lots of rests. He was able to eat chocolate cookies but not much else. When we stopped for lunch at the snowbank below the rope, he enjoyed half of a packet of instant mashed potatoes. Al rather easily climbed up to the bush where we had fastened the second rope with just a slight boost from me on the shelf below. He pulled up the packs using the Jumar slings and then I got up by hanging to the same ropes fastened to the bush again. We Jumared up the main rope with our packs on our backs and then climbed to the car by 3:15.

On Friday morning we took our time getting off after talking to Henderson about the pots that Donald found. Then we stopped for a long visit with Ed Abbey at the entrance station fire tower. Before we left we were joined in the tower by Chuck Sigler and his assistant. It was good to get acquainted with these people. Donald was most interested in how Sigler and Petrillo had climbed Mount Hayden.

Discovery of undisturbed Indian storage grotto, Lava Canyon
[June 5, 1969]
(written by Donald Davis)

A party including Dr. Harvey Butchart, Alan Doty, Clarence E. "Doc" Ellis, and I made an exploration trip into the Lava Canyon area below the east rim of the Walhalla Plateau in Grand Canyon National Park, June 3 5, 1969. Our descent the afternoon of June 3 was by a break in the upper cliffs north of Cape Final (a 30 foot rappel was required at the base of the Coconino), thence east along the Hermit bench and down the Supai to the Juno Temple Cape Final Saddle, and down the Redwall and the Cambrian

formations via deer trails northwest of this saddle. This route reached the bed of Lava Creek in the Tapeats sandstone just opposite the small Juno Ruin cliff dwelling and slightly above the main spring source of Lava Creek which wells up to the bed. We camped about a mile downstream from this area, and spent the 4th accomplishing our main goal the first known foot ascent of Gunther Castle, from the south via an upper branch of the Chuar drainage (the peak had, however, been visited by surveyors presumably by helicopter). That evening we moved camp upstream to the Juno Ruin.

Next morning the party decided to split; Butchart and Doty elected to return to the Rim by the original route, while Ellis and I would go out by way of upper Lava Canyon to the Siegfried Pyre Walhalla Plateau Saddle and north along the Hermit around the base of Point Atoko, thence southeast and up a Coconino break south of the upper end of the bay north of Point Atoko a route Harvey Butchart had followed some years before.

One objective in choosing the latter route was to see the rarely visited Hartman Natural Bridge, located in the lower Redwall on the west side of the Redwall narrows of upper Lava Canyon, west southwest of Siegfried Pyre. On reaching the area below the Hartman Bridge in mid morning, I saw two apparently solution openings in the middle part of the Redwall on the east side of the canyon, directly opposite the Bridge. A long talus slope covered the lower Redwall below these holes and it seemed that they might be accessible, so I determined to investigate them, primarily to see whether they were the openings of extensive caves. While Ellis climbed toward the Hartman Bridge, I ascended the opposing talus slope and a high angle rock scramble of about 50 feet above the slope. On reaching the right hand hole, I saw that it was only a short segment of solution tube, obliquely intersected by the wall, but that it contained a row of excellently preserved Indian artifacts lined up along the right side. I shouted the discovery to Ellis, who at once started back across to join me with his camera.

The most prominent objects were four large corrugated gray jars, each stabilized by careful positioning of small stones around its base. These were still covered by the original lids, just as the Indians had left them, and were scarcely even dusty although they were only a few feet from the outside and were clearly visible from the entrance. The lids proper were flat sandstone slabs about three eighths to one half inch thick, either rectangular or rounded off to fit the individual vessels. These lids were for the most part held firmly in place by rough limestone weights which were probably picked up from the grotto floor. I took care not to disturb the artifacts in any way except to lift the lids and observe the contents. Two jars proved empty, but one contained three small black on white vessels of varied decoration and design. One of these was small, wide mouthed and ovate; the other two were larger and jug like, each with a handle. The remaining, and largest of the corrugated jars, was 19 inches in diameter and height and narrow necked. It held only a well preserved small bowl shaped basket, barely possible to fit through the opening! All seven vessels were essentially intact, though one of the empty corrugated ones had received rim chips while in use, and another had a long crack visible from the inside.

Adjoining the pottery were a few perishable items. The most interesting was a bundle of cane rods that had originally been tied together into a structure that would have resembled a slatted divider or blind if unrolled. This was falling apart due to disintegration of its delicate tie strings. Seven unworked sticks of unknown purpose were also scattered about. We photographed everything in the cache, using carbide light to attempt photography of the small painted vessels without moving them from their container or

even touching them. I may have replaced the lids on this jar askew from their original position; on the other three they were replaced in very close agreement with the original orientations.

Notes were made at the site, using a pocket tape for measurements; details of the site and contents adapted from these notes are appended to this report.

Fascinating speculation may be ventured as to the purpose of this isolated site. The pottery is of types characteristic of Juno Ruin and other sites which, according to analyses by Schwartz, Euler and other archeologists, date from the period of largest Pueblo populations in the Canyon, around 1050 to 1150 A.D. However, Juno Ruins the nearest habitation site known is two miles down canyon from the grotto. The highest permanent water in the bed of Lava Creek is, at present, more than a mile down canyon. It is noteworthy that two of the containers held only other containers, while the other two, though painstakingly covered, were empty. The latter could have held water which has evaporated; but the largest, narrow necked one would have been best adapted for water storage yet the basket found inside it presumably precludes this. The site is three or four miles difficult travel from either of the rim points we used as access. It is interesting, though, that a tributary enters Lava Canyon from the southwest almost opposite the grotto, just down canyon from Hartman Bridge. We did not explore this, but it appeared possible that there were traversable breaks in both the Redwall and Coconino along it (the other formations appeared to pose no problem). If so, the cache would be along the most direct ropeless route from the Juno Ruin area to the rim. This needs further investigation. The fact that the artifacts did not include food, and were never recovered by their owners, also leads one to wonder whether the people left the region permanently after making the cache.

While I was in the grotto, the area was struck by a sonic boom so violent that vibrations could be felt in the bedrock for several seconds. It is possible that the configuration of the canyon may have intensified the sound. No damage resulted to the artifacts being examined, but I can readily see how delicately balanced walls would be endangered by such shocks.

The adjacent (left hand) opening was slightly larger than the right one but contained no artifacts. Our ascent from the area went as planned, but was tedious, especially on the Hermit Shale traverse, because of dense brush (including thorny locust and rose) and many steep slick walled ravines. There was still melting snow in the Hermit north of the Siegfried Saddle.

I recommended that recovery of the artifacts be attempted only by helicopter landing in the canyon below. Any attempt to backpack the larger vessels to the Rim would more likely than not result in breaking them. A few jolting falls and striking of the back on limbs or rocks are routine in ascents from such areas.

Descriptions of Lava Canyon Indian site and contents
(adapted from field notes)

Description of grotto

Truncated solution cavity in central Redwall near base of sheer cliff above long talus slope, facing roughly west in east wall of upper Lava Creek about a half mile WSW of summit of Siegfried Pyre; elevation about 5,800'. Cavity 10' long; entrance ovate, 5" x 40"; floor sloping up toward rear; interior 6' high near front, 20" high at rear most pot; artifacts lined up on right side with just enough room for two people to fit in besides them without contact.

Description of contents, front to rear

Bundle of cane sticks (30 or more?), to 32" long, loosely fallen into about 5 groups formerly tied through holes three and a half inches from ends into curtain like pattern.

Corrugated gray to reddish jar, 10" x 19", narrow (5") mouth; 1 small sandstone lid carefully shaped to fit inside lip; 1 larger sandstone lid shaped to fit atop lip; rectangular sandstone lid above; 2 limestone weights with 2 small stones chinked between contents 1 small (4" x 2") bowl shaped basket.

Corrugated gray jar (notes on size missing about 15"?), wide mouth; 3 thin flat sandstone lids with 1 rectangular limestone weight contents 3 small black on white pots, 2 of these with handles. Corrugated gray jar, 8 1/2" x 8 1/2", wide mouth; 1 flat sandstone lid, 1" thick with no weights empty.

Corrugated gray jar, 14" x 14", wide mouth; cracked flat sandstone lid with 2 heavy limestone weights empty; has crack in lower part of inner side.

Additional items, exact positions not recorded: 3 shaped sandstone lids loose behind pots. 7 unworked sticks, 5 on floor and 2 in ceiling niches; largest 5' long and bow shaped. Purpose of these not evident.

At this writing (July 23, 1969) I have not received Photographs.

Clubb Route to Merlin and Modred

[June 9, 1969 to June 12, 1969]

Merrel Clubb had told me years ago about this route down past South Big Spring to where the Redwall is broken on both sides of the main Shinumo Canyon northwest of Elaine Castle. Donald Davis, Dave Nelson, Jim Sears, and Chester McQuery were able to go with me when I finally gave it priority for this second week in June. I had been too warm even in my summer weight bag down in Lava Creek during the preceding week, so I merely carried a cotton blanket and long Johns. The weather turned cold on the rim with frost two nights, and three of us who had traveled on my suggestion about light bedding were a bit chilly.

Head Ranger Veitl gave us the key to the Point Sublime Road. We had no trouble except in one meadow. Snow was still melting and keeping water in the ruts, but we drove through all right. The high center on parts of the road from the Point Sublime Road to our parking place in South Big Springs Canyon might give an ordinary car problems, but my truck cleared all difficulties. We had quite a few fallen trees to

clear as we walked along the level bed of the canyon for the part where the old east half map shows a trail leading to one of the Matthes Evans bench marks. It was hard to be sure where South Big Springs are located. We expected more of a flow than we found, but eventually we realized that we had passed the springs. Davis particularly was surprised to see a lively little stream in the top of the Coconino Formation.

I should have studied the faint tracing Clubb had put on my map. When we came to the Coconino we at first went down into the increasingly narrow gorge until we were stopped by a fall. Then we climbed back out to the south and followed the rim southwest until it seemed clear that we were reaching a higher cliff with no break likely. When we looked across to the north there seemed to be a much more favorable route so we began back tracking. Jim Sears found a possible route down to the talus on our side, but I was cautious and vetoed it. It was routine to get across where the narrow gorge began and soon we were going down a safe place on the north side, just where Clubb's pencil tracing on my map shows a route. The hazard here was rolling rocks and there were a couple of near misses. The Hermit Shale was easy and soon we noted that we were penetrating the top ledge of Supai.

For four hours since leaving the car we hadn't had a real view of the Grand Canyon, just forested slopes. Suddenly this was reversed. First we heard a new noise, then the brink of a fall with gusts of wind shooting clouds of spray back at us. I didn't go far along the edge to get a good look at the fall, but it was obviously falling free a distance between the heights of Havasu and Mooney. There were comparable falls below without counting the Redwall. This permanent stream doesn't carry a large volume here but, almost invisible to all but aerial observation, are some beautiful cataracts. If a name is desired, I would suggest Clubb Falls. It was now late enough to think of camping. We were by water and we found some flat ground for sleeping under the scrub oaks on the terraced banks. As night came on swallows put on a show of aerial acrobatics.

We were now able to see the cross canyon break in the Redwall that Clubb had discovered. On Monday evening, Dave and Donald scouted ahead toward Elaine Castle and reported that there seemed to be a fair chance of getting down the Supai in that direction. That agreed with what I remembered from my instructions, so on Tuesday morning we backed up to the rim of the Supai and started southwest. At places along here the going was exceedingly slow because of the brush. When we were about halfway to the Elaine Saddle, three of us were just about fed up with this bushwhacking. We thought of going back and seeing the best part of the Paria Canyon or perhaps doing the alternate project of seeing Sowats and Jumpup Canyons. Chester was neutral, but Donald stuck firmly to his guns and defended rather hotly the original idea of seeing Clubb's route. We agreed to go on without our packs and get the view from Elaine Saddle before calling the retreat. After the first few bad places, the brush eased up and we even found some signs of a deer trail. The view from the saddle was all that we had hoped and just as we were leaving, Donald found an old shirt. I wondered whether it might be Merrel's and brought away a couple of the buttons of this western type shirt.

We didn't get a good look at the route through the top of the Supai in the direct line with the Redwall break, but we noticed a deer trail leading down through the upper Supai cliff when we were on our way back to where we had left the packs. Still when we reached Jim who had stayed with the packs, we picked them up and started for the car. After 100 yards of retreat, we reconsidered and much to Donald's satisfaction headed for the deer trail going down to Clubb's break in the Redwall. There were no real

further problems of route finding with the deer trail as a guide to the bed of the ravine along the fault. On looking back we decided that the straight ravine was probably impassible at the top, and on checking I find that this agrees with Clubb's advice.

Through most of the entire trip, Jim got quite far ahead of the rest of the party with Donald having to encourage Chester who brought up the rear. It was true here in this ravine, and Jim came to the place rather close to the bottom where a large chockstone has lodged. He found that he could climb down on the west side but that he would need help in handing the pack down, so he waited until the rest came along. I believe I recall that Merrel said a lone man would need a rope here for letting down the pack. Water was flowing in the main bed at the bottom of this Redwall break and we had our lunch here. Before going on, several of us walked up the main stream until the Redwall stopped us at a small fall, only a few hundred yards. I seemed to recall that Art Lange and Aley had been here also and had gone up the Redwall to the north with poor results in trying to get through the top of the Supai. I would like to check with them about this. The immediate vicinity and all the other upper canyons of Shinumo seem peculiarly impressive even by Grand Canyon standards. They are so narrow and rugged. Beautiful vegetation abounds although it makes the going difficult. Both in Merlin Abyss and in Modred, I saw numerous examples of what I took to be Arizona cypress but which Davis thought to be a larger type of juniper.

The flow of water where we had reached the bed disappeared underground before long. I hadn't noticed the last pool and my canteen was about empty as we reached the junction with Merlin. After Dave and I had waited quite a while for Chester and Donald, I went back to get more water as well as to be sure that all was well. However, in something like 20 minutes walk below the junction, we came to a great spring. The water emerged from among boulders on the west side and formed a flow equal to the flow in lower Shinumo during early June two years ago. This made walking down the creek difficult, and we tried going along the shale up on the east side above the brush. When I saw what sort of difficulties this was getting us into, I announced that I would try the creek again. I lost ground in getting down to it, but I decided to wade where convenient. Most of the others were worried about what a soaking would do to their boots. After about a half hour of going along split up this way, Jim and Dave came down to the stream again, and as hunch would have it, they met me precisely. They found ways to cross the creek on logs or rocks while I waded. We made about the same speed down canyon as Chester and Donald who were still up on the shale since we heard them yell as they were approaching a side canyon on the east. Here they had to come down and they got far behind us in the end. Finally, south of the big tributary on the east, we came to a place where the canyon widens and we took to the open Tonto level on the west. We got on a good burro maintained trail that I consider to have been designed by man. Since there were a few trees growing in the trail that must have been there for a century, we decided that the original trail builders were prehistoric Indians rather than Bass and his assistants. This trail soon had us looking down over the Tapeats cliff into Modred, but we didn't see a way to get down to the junction of Merlin and Modred as we had agreed before separating from Donald and Chester. Jim later found and lost a way to do this without wading either creek, but at the time, Jim and Dave went up Modred until they could get down to a good campsite and I went back up Merlin until I could get down to the break and also see the trail up on the Tonto if they should be following our tracks. I shouted about every three minutes while I got supper here and prepared to stay overnight if I shouldn't encounter Donald and Chester before it got dark. Finally my shout was answered from just across the creek. Chester and Donald had been headed for the junction of the creeks. They waited for me to finish my soup and then we followed the trail right to where

Jim and Dave were camping. There was a recognizable trail down through the Tapeats to the place, and on Wednesday morning I found that this trail continues up on the south side of Modred to the Tonto level and is easily followed around into Flint. Very few live burros are left after the massacre by helicopter several years ago, but the trails along the Tonto are still in good shape. We found burro manure well up in Marlin and Modred and we even saw what seemed like fresh tracks. On our way around into Muav Canyon along the Tonto level on Thursday we finally came to some recent burro droppings but we still didn't see any live burros.

Our campsite near the mouth of Modred was the finest we could desire. There was even rain protection under overhangs with level sleeping space. It had been looking like rain and there had been a few drops. Jim and I placed our beds under shelter at the first of the night, but Chester and Donald waited until rain began to fall about 1:00 a.m.

Most of the gang were late sleepers on Wednesday morning. I fooled around until Donald woke up and then told him that I wanted to walk the Tonto around into Flint to close a gap and form another complete route from the rim to the river. I figured on getting back by one or two. As it turned out, the trail was nearly perfect and I lost it for only short stretches a couple of times. I was able to go around to where a distinct side canyon comes into Flint and get down through the Tapeats in only 105 minutes and return to the campsite in Modred before noon. Counting a route as distinct from another if it differs in over half the distance from the rim to the river, I now have 17 routes from the rim to the river from Nankoweap to Kanab Canyon.

While we were discussing the probabilities of being able to use the route up one arm of Modred that George Beck had found, a helicopter came along not far above us. It appeared to have come in from Marlin and went up Modred and back. We wondered whether the pilot had heard of our plans and wanted to check on our progress. Ranger Veitl knew nothing of this machine when I asked him about it.

We found the progress up Modred about as difficult as it had been in Merlin. We split up again and figured on joining forces at the junction of the main bed and the arm that originates below Elaine Saddle. None of us would brag on our routes. I tried to stay out of the brush rather high on the north side, but I got into a lot of difficult ravines. I did come on one fairly broad terrace down near the stream where I had noted a broken metate. At another place on the north side, we found a mescal pit and some bits of pottery. Davis found some distinct ruins along here which were not shown in Schwartz's article concerning his trip with Clubb in 1957. Sears found a couple of cairns and some bits of trail on the south side of the creek. He also pointed out a trail on the south side above the brush that would have been far easier than where we were among the ravines on the north side. Still I covered the leg from our camp to the junction with the Elaine arm in 110 minutes and came back in 96.

When I reached the junction going up canyon, Dave was waiting at a good campsite. Donald and Chester were still behind and Jim had been first again and had gone on to the place where the big rush of water was coming out of Abyss River Cave, a flow about like the volume of Oak Creek at Call of the Canyon Lodge. I left my pack with Dave and went up to check on Beck's route. Jim went with me since he had already seen the mouth of the cave. We had no trouble from the water above the cave although there were places where it was above ground. The bay to the southeast seemed to have very steep walls and I felt

sure that Beck and Dunn had not tried to climb there. Beck had marked my map and I could tell where we were supposed to branch to the right. After about 300 yards along here Jim and I came to a fall of about 25 feet. It was not straight up and there were minor ledges about one and a half inches wide placed perhaps four feet apart. I would grant that very good climbers could go up here without a pack, but I wouldn't want to tackle that polished rock surface climbing free. Since we had no rope along to pull up the packs, and since there was no way for a man to stand halfway up to relay the packs. I shifted the probability of success by this route from 95% to 0%. Jim is a much stronger climber than I, but he concurred in this decision. We then went up the other arm. It stops the walker in a most dramatic high fall topped by a huge chockstone. All this area is exceedingly photogenic but I had used my last frame in the forenoon. When Jim and I got back to Dave, Chester was there but Donald was exploring the arm beneath Elaine Saddle. He told us later that he had found a fine cave with good decorations, respectably large and branching. He also was able to climb the Redwall and he thought that the Supai would also go. He now considers the best way down into Modred to be off the south side of Lancelot Point and then down from Elaine Saddle into this arm of Modred. He didn't try entering Abyss River Cave since there was such a large flow of water out of it at this time.

Because of the unseasonable cold, Jim and I didn't want to spend a night at a high elevation short of the car where we had warm bags. We went back after giving our support to the others and slept at the trail crossing near the mouth of Modred. On Wednesday morning while I was on my trek to Flint, Jim had found a way through the Tapeats down to the mouth of Modred, but when he tried to recover it as a crossing route on Thursday morning, he couldn't find the place again without quite a bit of delay. We gave up trying to use his shortcut and went along the rim up Merlin until we came to an obvious crossing. The trail along the rim of the Tapeats down Shinumo and around into White Creek was fine and easy to follow. We missed the Indian sites on the talus near the creek, but for quick travel, the Tonto is the way. We were around to Redwall Canyon in just over four hours from our campsite. Jim was interested in the old chockstone suspended in the impressive narrows of the Tapeats both in Redwall Canyon and in the boxing of White Creek. We also admired the way the trail gets by on bare ledges in Redwall Canyon and the ravine immediately to the north. We ate a snack at a broad place where our trail came down into Muav Canyon below the top outcrop of Tapeats. There was a mesquite pit here also.

The old map showed the trail staying to the east of the bed for some distance north of here. We followed it until it seemed very poor and then we just went up the bed. We found water in the Muav as usual and also a separate showing higher and nearer the Redwall climb, although the bed had been dry for several hundred yards immediately south of the place to start up. The temperature was just pleasantly warm for our entire hike, but we were sweating enough along here to enjoy a ten minute dunk in the cool water.

Maintenance man Bryan Swift and a companion had gone over the route from the plateau to the bottom of the Redwall last summer and had tied plastic ribbons to bushes to indicate the best route. They had even brought a pruning hook down here but hadn't used it. In fact they had gone off absentmindedly and left it hanging on a bush. Dave brought it out on Friday. Jim and I had some trouble finding the trail even with the help of the ribbons. It seems definitely worse than it did in 1957 and perhaps worse than in 1967. I found my campsite at the base of a shale cliff near the lower water and I also noted where I had had a fire above the Redwall. My recollection was rather poor of the number of Redwall spurs and ravines between them north of the place where the trail goes down the Redwall and the brush seemed thicker than ever. In

fact Donald came out on Friday saying that he didn't understand why anyone would prefer the North Bass Trail to the Clubb route to South Big Springs.

Jim and I noted a cave across from the Redwall ascent that was near the top of the Redwall across the canyon and unlike nearly all the numerous cave openings at this level. It seems to be accessible from the rim above. I also pointed out the large hole in the wall near where the Redwall shows as you come down Muav Canyon. We proceeded up the Supai in the bed of the creek with numerous obstructions from fallen trees and brush. Still we followed the few cairns successfully and built a couple more ourselves. We had seen a little water in the bed right at the top of the Redwall and then we came to quite a bit more about where the Supai begins to get steep. I am sure we did things a bit differently from what I had done before, but we got up all right with no major mistakes. I found bighorn tracks near the top of the Hermit and we got out to Swamp Point in nine and a half hours of walking time from Modred. We then had ten miles to the car.

Frustration near Cape Royal

[June 18, 1969 to June 20, 1969]

I had been invited to cooperate with Doug Schwartz who was excavating a ruin about 1.4 miles north of Cape Royal. I drove to the north rim in time to get another visit with Ed Abbey at the fire tower, lunch at the cafeteria, and then go out to the dig. The gang was having Wednesday afternoon free, but I finally located Schwartz reading in his easy chair under a pine on the rim. Before this, I took two of the boys down the break south of the promontory to see the pictographs and then we walked around below the island and returned on the north side. We found an old tennis ball on the route down to the wrecked cars, and the next day I even found part of a shovel on the talus material. Generally I consider such a find as evidence of trail construction at some time, but I would interpret this differently. Some worker on the highway broke his shovel and threw it over the side of the cliff. Later Wednesday afternoon I took Doug and a couple of others north to the Point Atoka route through the Coconino. We found it with very little wasted movement. This time I started off the rim just a bit too far to the west, but we soon located the deer trail and went over halfway through the Coconino. That evening I went over my map with Doug and gave him the times required for a man on foot to do various trails connecting with the Unkar Delta.

On Thursday I started down to get through the Coconino with as little use of a rope as possible to try to establish a ropeless route for Indians from the rim down to Unkar. I had come down here in August of 1967 and considered a rope necessary for safety just at the very end, but I had needed to chimney down a crack before I had felt the need for the rope. This time I reached the chimney but it looked worse than I had remembered it. I had expected to let my pack down the small cliff by my rope, but now I wondered whether I would get in trouble trying to go down the crack (later I did this alone with a pack). I believe if there had been a companion to get me out of a jamb, I could still do it. After giving this route up, I loafed around camp until afternoon and then went over to have another look at the area around Cliff Spring. On June 2, 1965, Norvel Johnson and I had gone down to within the last 15 feet where Donald Davis had succeeded in going through to the bottom although he admitted that it was a bad pitch. I decided then that I would want a rope in my hand to make this friction bit, but now four years later solo, I balked at a place higher up. On rereading my notes, I see that I recognized the difficulty here, but Norvel and I passed it

without packs. I felt rather depressed that now four years older I would lose my nerve for this sort of thing. In partial compensation I followed a deer trail along the bench at the top of the Toroweap. It is mostly easy and clear walking but surprisingly far to reach the wall going toward Wotan's Throne. I went out on the wall and had a fine impressive view of the Throne and the break in the wall.

Zoroaster and Brahma and points west were also striking from here. I am sure I could have gone ahead and gone down a ravine to the Clubb Route through the Coconino, the one that Allyn and I used with the aid of three ropes. I noted that I can walk from the car parked at the Angel's Window viewpoint at the beginning of the Cliff Spring Trail and get to the east side of the wall to Wotan in about an hour. It is faster but not easier to go down the east side of Cape Royal.

On Friday morning I tried my idea that the Kibbey Butte Route to the bottom of Nankoweap might be improved by following the Hermit south of the neck leading to Kibbey along the Hermit with the idea of going down the Supai over on the north side of the saddle leading to Bradley Butte. I parked at Greenland Lake and got to the trail. I recognized the place in the Coconino where it is natural to keep to the left on a deer trail going down and then take the alternate route where there is still some manmade wall showing on the way back. Down in the Hermit, the route is mostly low near the rim of the Supai, but at best it is poor with lots of fierce brush. At the end of one and a half hours I was not yet to the farthest west ravine. I got some good views down canyon, but after careful study of the possible route through the Supai, I concluded that this idea is no good. It would take longer to get through the Hermit part, perhaps impossible to get down the Supai, and then very bad to get back to the break in the Redwall.

Citadel Route, Cliff Spring Route, and Lancelot Point
[June 26, 1969 to June 27, 1969]

Wednesday afternoon saw me driving back to the north rim after a good visit with our daughter and her children. I had also been dissuaded from making this a long week of hiking by some digestive trouble. I got to headquarters in time to fill out a permit and meet Joe Hall. He agreed to go with me down to the bottom of the Coconino as I continued with the idea of going down into Vishnu Canyon. When we left on Thursday morning Gerald Thornton also went with us to see me off and check the idea that the ravine to the west of the car wreck would go without using a rope. I was carrying two ropes in my pack as well as the Jumars and a carabineer for rappelling, so I figured that this time I would go the whole way regardless.

After noting the pictographs we continued on down past the wreck and found all the usual interesting places in the route. We got down to the ledge just below the blunt tower to the east of the ravine, about a third of the way from the bottom of the Coconino. I pointed out the oblique crack just east of the big pine which I proposed using as the rappel rope anchor. Thornton got over into that crack and was soon down below. Joe did likewise while I rappelled. Then Joe looked a bit and found another, wider and easier chimney just a few yards farther to the east. It is among some huge blocks of fresh looking breaks and some of these blocks of sandstone seem to be perched rather precariously. However, I imagine that they have been there for centuries. Joe went up far enough to come out just below the blunt tower and make sure that he could get down to our route above my rappel. I feel sure now that his route is the one I had used two years ago (No, I think I used the crack of Gerry Thornton).

Joe was leading as we walked down the talus below this place and he brought us to a break that led toward the talus in the ravine to the west. He hesitated at the same bad place where I had stopped two years ago. It appeared that with enough nerve one might be able to hop across a gap in the narrow ledge but the result of a slight miscalculation would be fatal. He stood back as Gerald came up. Gerald got down on the edge of the break and held to the sandstone which fortunately slopes the safe way for a grip. He could let his feet down until they rested on a rather badly sloping meager surface. Then he had to turn around and grip something to pull up on the other side of the break. After this he was through to the talus in the ravine. Joe performed the same maneuver and likewise made it through this route without a rope while I rappelled off an overhang, went down the shale until I was sure I had crossed our former route along here, and came back up the rope using the Jumars. Before doing these two hard places, I had decided that I still wasn't feeling quite up to par and that I would give up the arduous two day trip. It turned out that I had enough strength to carry the pack up to the rim as fast as Joe wanted to walk with only a canteen.

After taking Joe back to camp and enjoying a leisurely lunch with the Halls, I felt at loose ends for the afternoon. I had formed the ambition of going out to look around from Lancelot Point the next morning. At last I felt the impulse to make good on the route through the Coconino just east of Cliff Spring. I had reread my log concerning the previous descent and I knew about the three ways through the difficult part about one third of the way down the Coconino. This time I looked harder at the top of the ledge and found the narrow crack that I had used to get down on the other occasion. It is over to the west of the bare rather steeply sloping exposure. As before I left my Kelty above this place and now I went down with my lighter rope coiled around my neck. This crack is too narrow for anyone at all large. I was a bit worried that I might get wedged into it, but I know that I had come down here before while Norvel Johnson had preferred using the natural holds on the exposed slope. On the return I tried going up the crack, but there was no room to maneuver and I had to give it up. Then I tried going up the bare rock to the east where Norvel had come down, but near the top the steps were too far apart for comfort. Instead, I went down and came up west of a small promontory where we had ascended four years ago. I may not have found the easiest way here because I had to pull myself up at one place using the base of a shrub and a safe rock for the other hand. The walking is very easy below this hard place. I went over into the bed of the ravine where water had been running only a week ago. Now it had stopped but there were still two pools, and on the return I drank from one since I had left my canteen with the pack. Again at the bottom of this easy part, I came to the pile of great blocks which makes the descent of the remaining Coconino possible. The place hadn't changed, but I realized that my memory of the situation was not exact. I could get down easily by holding to the upper edge of a rock and giving a slight jump down to a safe landing. It might be impossible for me to jump that far back up on the return, so I doubled my cotton rope around the base of a conveniently placed hoptree clump and proceeded where Norvel and I had retreated before, and where Donald Davis had gone on. Now I realize that a rope would be unnecessary. One could build a small rock pile below or simply lean a stout stick against the rock to help get the additional 15 inches of reach required to grip the good hold above. Of course a rope that one carries is less trouble to find than the rocks for the pile or the stout stick or log. The Hermit Shale area below was most interesting. A broad area was covered with Coconino debris and there were unusual shrubs and trees growing here. To the east of the descent the wall of Coconino overhangs slightly and there were a number of seeps. Deer trails led to this water, so it may well be permanent. I merely made a loop down to the Supai, took some pictures

and came back to the car. Donald Davis and Bill Stewart intercepted me while I was driving back and they decided to join me on a trip to Lancelot Point. I had been planning to go out on the Point Sublime Road the night before and get an early start, but instead I waited for the others and we got not such a very quick start. We took both cars so I could come home before the others, but where we came to the fire road going up on Lancelot Point, three miles up the Swamp Point Road from its junction with the Point Sublime Road, Bill and Don got in with me and we drove up a very bad incline and then along the south edge of the point for 1.5 miles to the road end.

We stayed rather close to the south edge of the mesa until we came to a big valley that we needed to cross. It was a detour to go east to where we could cross and then a little later we arrived at another. Eventually we came out for a view into South Big Springs Canyon and could see the Coconino descent. We now saw something we had missed as we went along the bed through the Hermit Shale. At two places on the north side there were broad wet places in the Coconino cliff. As we watched we were intrigued by a ghostly white spot that moved around on the broad ledge at the base of one of these wet places. The explanation was easy. It was really a waterfall, and the wind was moving it around and shifting the spot where the water was dashed to spray at the bottom.

We continued along the north edge and finally came to the point. We could see good chances of climbing the Toroweap at the top of Elaine Castle at a niche on the north side, but it wasn't to be assumed that this is sure. We had fine views into Modred and Donald could see about where he had come up through the Redwall below the Elaine Saddle. He told me that there is no real difficulty in the Redwall climb, no place where one would have to take off a pack to get by. Donald and Bill set off to try getting through the Coconino. They wanted to have a crack at Elaine. I felt lacking in pep again, mostly from lack of sleep, and I wanted to drive back to Flagstaff by daylight, so I stayed behind. (Bill Stewart waited while Davis got a first ascent of Elaine.)

We could see numerous ways to get through the Coconino on the south and west sides of the Modred Bay and there seemed to be some routes through the Redwall besides the one Donald had checked. It is an area worth more study.

Payoff east side of Papago Canyon
[July 7, 1969]

I had been studying the rim above the east arm of Papago Canyon for some time. (See logs of February 4 and 18 and November 11, 1967, and June 21, 1968.) Where Donald Davis might have succeeded in one try. I had first gone to the top of the Coconino and stopped, and then I had gone through the Coconino and along the shale to the yellow rockslide, then I had done all of this over and had reached the rim of the Redwall before giving up. Now my plan was to bring my rappel outfit down and get through the Redwall too even though I had given up thinking of this route as ropeless.

The new men at the desk weren't very happy about making out a permit for me to go alone into an area entirely unfamiliar to them, but after some questions, they authorized me to go. I left the car by 8:15 with

a stimulatingly cool temperature. I had parked a little east of the near approach of the road to the head of Papago, and I walked rather directly to the rim. From there I could see the small tower of Toroweap Sandstone that serves as a marker for the head of the ravine through the Coconino. I knew I had to walk northeast to get off the rim. When I was distinctly to the east of the Toroweap Pillar and saw that the upper cliff would be clearly impossible beyond, I began looking for a way down. I have a feeling that I do this Kaibab descent a little differently each time. On my way from the first view from the rim and the place I went down, I found a large ruin that I had missed before. It is about 25 feet x 8 and seems to be in one room. The site is where the rim drops sharply eight or ten feet down to the east.

The notes about the route through the Kaibab and Coconino in the previous logs seem to cover the situation. I hadn't reviewed them before the present trip, and I felt that I was solving route problems with only a vague knowledge of the best way. Still I got through faster this time, 35 minutes for the Kaibab and 55 for the Coconino. I felt weary and weak on the return, but I noticed that I did the Coconino in 50 minutes after a rest, the Kaibab in 25. Near the bottom of the Coconino at the bottom of one rather hard place I noticed for the first time a short piece of juniper with the lower end buried in the talus. The upper end makes a good step. I half believe that this was placed here by the Indians. It is much less surely artificial than the logs I have seen elsewhere, but feel sure that the Indians who built dwellings along the rim must have used this route of descent. It was here also that I used my rope to lower the two half gallon canteens and then tossed the coiled rope down 12 feet before climbing down myself. If one were coming down with full backpacks, he would want to lower it likewise.

This time the shale seemed like rather poor walking, but I noticed that it took me 35 minutes to reach the head of the slide through the Supai and although I felt that it was worse on the return, I did the same lap in less time. Through the Supai I stayed high and crossed from one slide to the next before the ravines developed. At one place I found myself going too far north and getting above a Supai cliff, but there was little wasted effort in reaching the same ravine in the Redwall where I had found the smooth drop. It was 10:53 a.m. when I got here.

I had brought a piton and hammer for an anchor for the rope, but before I used them, I looked around for optional places to place the rope. Just to the south out of the ravine, the broken ledges come up quite high and there is a juniper for tying to. As I was deciding where to use the rope, I looked over the edge and noted that I could climb down the first step and that I would have excellent chances for continuing. A little lower there was also only one safe way through, but the rest was routine. By noon I was down to the high fall in the Tapeats where I ate lunch under an overhang. In three and a quarter hours I had reached the Tonto and my former route up from 75 Mile Canyon mouth thus completing another rim to river route. On the descent along the Hermit I saw two bighorn sheep, an ewe and a large lamb.

Elaine Castle
[August 9, 1969]

Jim Sears and I drove to the north rim and slept just outside the locked gate leading to the Swamp Point Road. It rained a little and we were glad to be snug in the shell camper.

In approaching this park entrance, I had made the mistake of overshooting the turn to the south up the hill on the big logging road. I kept on west until we crossed Dry Park and then turned toward Quaking Aspen Canyon. Eventually I got back to the Fire Point Road and turned east until I came to the Grass Canyon Ridge Road. Not far to the south is the sign for the turn to the left to the dead end at the park boundary. In the morning we found the key and drove into the park.

There had been a lot of rain since we were here in June, but the ruts were only a bit worse. The locust brush seemed higher and thicker on the Lancelot Point Road, but there was no trouble in driving to the same place where we had parked with Donald Davis and Bill Stewart.

I had been so pleased with my bypass of the deep ravines on the return from Lancelot Point before by the swing to the north that I wanted to show Jim this improvement over our former route to the point from the car. The joker was that I over did this idea. I kept on to the north as long as there were valleys draining to our left. Finally when we had been going north and a little west for over an hour, we came to a very deep ravine which was a real effort to cross. I still didn't realize what was going on and kept on heading ravines as high as possible. Suddenly almost two hours away from the car, we came to a fine road with no fresh tire tracks on it. I now knew that this must be the Swamp Point Road, but as it was up on the plateau with level ground on both sides, I still didn't realize where we were. Now we went southwest and after crossing one more shallow ravine, we came out on the rim with a fine view over the Grand Canyon. I was amazed to see what we had done. We were on the north side of South Big Springs Canyon a little to the west of the chute that leads down to our Coconino descent of the former four day trip. We gave up the idea of going down the south side of the end of Lancelot Point and found it not hard to go off the rim directly down to the Coconino break. It took us considerably less than two hours to go from the road west of where the road in from the boundary meets the Swamp Point Road down to the bed and on to our former camp above the fall through the Supai.

Here we ate an early lunch and proceeded by deer trail or bushwhacking to Elaine Saddle. I was feeling the heat by now and I needed more rest stops than I usually do and certainly more than Jim did. Still we took a bit over an hour for this contour. After a break we went up to the base of the Coconino from the saddle and then around to the south. There are at least two ways through the top of the Coconino after you have pushed up through the brush. The walk to the base of the cap rock of Toroweap is routine. Right away as we started around the cliff to the west we found two Indian ruins that Donald had noted. The summit block forms a fine roof over a low space with a smooth floor for much of the way around to the west. It would shelter one from the most driving rain.

The break in the Toroweap on the north side required some testing of holds and acrobatics, but it was safer than some other parts of our trek. For instance I slipped on a rock in the streambed and tripped another time in the woods and fell both times. We easily found the fine big cairn that Donald had built and we added our names and date to his in the bottle inside the can. It was a more impressive climb than either King Arthur or Guinevere and the vista was as spectacular.

We knew that Donald had gone up the Coconino on the south side of Lancelot back from the point, but we thought it would be worth the time to try the place just south of the end. Near the top of the Coconino we split up to try two places. I went east of a huge crag and Jim tried the route to the west. He came out

above me, but his place was more risky than mine. I had only brush to fight, and then we found a trail around to the west at the very top. We got to the car from the point in one hour.

Granite Creek

[August 24, 1969 to August 25, 1969]

As usual, the plans far exceeded the performance. I had talked about an epic trip for seven days that would include establishing the route from the rim to the river at Granite Park, then backing up to reach the river via the fault valley to the north, floating down to Parashant and seeing its lower gorge, then on down the river to inspect three canyons on the west, the two versions of Indian Canyon, and Trail Canyon. After spending one of the seven days at home and planning to spend the last at the geology seminar, I shortened the trip to include only the descent via Granite Creek and the inspection of the canyons directly across from Granite Park. The actuality was considerably more modest.

On the way Saturday evening, I ate at Grand Canyon Caverns and met a waitress who said that her father in law, Norman Imus, knew the whole Walapai Reservation better than anyone else. He had been about everywhere hunting mountain lions. He now mans a fire tower near the Supai Road, but if he were not there, she told me how to find his home in Peach Springs. Her directions were easy to follow and I went right to the house in Peach Springs.

Mr. Imus was suffering from knee injury but he sat up on the bed and visited with me for quite a little while. He fully shared my enthusiasm for the wilderness and told me some of the places he had been. He was down in Diamond Creek with the man who wrote his nickname on the slab of rock, Tiny, in charcoal. Norman had hung the can on the tree and he also told about finding a plow down there. He knew the circumstances of the project, but I didn't make notes on that. He had also been down in Quartermaster by the trail and knew quite a bit about National and Mohawk Canyons. He had walked from Mohawk around into Prospect Valley. He had worked as a surveyor at one time, and he fully understood maps.

Mr. Imus wasn't too happy at the thought of white people roaming the reservation wilderness areas because he said that there are places which are sacred and might be desecrated by souvenir hunters. He said that one old Indian had buried most of his family on a certain promontory and finally was buried there himself. Norman was afraid whites would like to scratch around and pick up bones. He also said that he knew some stories about fighting between the Hualapai and Paiutes, but that he wouldn't pass them on or discuss the old tales. I mentioned that the book by Spier had already put one story in print, but that didn't make him any more willing to tell me any tales. I dropped the subject, but a little later I asked him whether the name Moho Canyon made any sense to him. He assured me that it is the same as Mohawk. His certainty about this makes me wonder again about a route up from the river via Mohawk (found it).

He also said that there is a trail down Granite Creek to the river since he had seen its head. I should have brought out my map then and had him point to the trail he meant, but I was getting the impression that he didn't want to encourage me too much. However, he did say that there is a running stream down Granite Creek. When I was back from the two day walk, I went to the fire tower and had another talk with Norman. This time I spread out the map and showed him where I had been. He showed me where his trail

into Granite Creek is, and I saw that I had found it. Furthermore, it only is a route through the Supai down to a small spring at the top of the Redwall. There was no water running in Granite Creek more than a few yards from the spring. Norman said that he hadn't been down the trail he had seen, so I carried two gallons of water from the car as I had planned all the time. The Williams Quad 1:250,000 map shows no road down the valley through the Aubrey Cliffs north of Frazer Well, so I was prepared for the route to be rather rugged even by pickup. I knew that Jorgen and his friends had come this way twice by four wheel drive vehicles. Even after our recent rains, however, this part of the road was not too bad. I slept Saturday night in the shell camper at a three way fork in the road north of Frazer Well. In the morning, I took the middle fork with some tank 14 miles away. The last named destination, with no mileage indicated was the Riedenour Mine. When I saw Imus at the end of the trip, he told me about this mine. It produced copper and uranium and is located at the end of a very precarious road that takes one over the mesa to the west of Prospect Valley. The road is so steep that a pickup must have the back end loaded with rock to get traction coming out. The only thing that surprises me more than the weird places prehistoric Indians built their dwellings is that the prospectors found mines where they did.

On Sunday morning when I got down below the Aubrey Cliffs and followed what appeared to be the main graded road. I had thought it would go along Prospect Valley, but instead I soon was driving up a ridge that separates the valley from the Granite creek drainage. I had thought I would be walking down the valley due west through the junipers and pinyons without a trail, but after a 75 yard descent from the ridge, I came to a good road. It was far easier walking than zigzagging through the trees. If I had found the right approach, I could have saved about 40 minutes of walking at both ends of the trip. The road goes down the valley four or five miles, but there are washouts that would stop anything less than a four wheeler.

This upper end of Granite Creek may not be a simple erosional formation. There seems to be some signs that it was started as a graben. Or perhaps the hills with Coconino and Hermit Shale lower than along the walls are merely the result of slides. The valley floor changes abruptly where the Supai shows at a dry fall. The road splits. First I followed the branch to the northwest thinking that it might lead to the trailhead Mr. Imus had mentioned. When it started uphill, I turned around and took the branch to the south. When I could see that it wasn't going to take me back to the rim, I left it and walked west to the rim of a tributary in that direction. I learned later from Norman that this road goes up into an alcove valley to a spring. Soon after I came back into the main bed I was at the first showing of Redwall. When I returned on Monday, I went right up the point between the tributary and the main canyon and got out on top of the Supai. While walking near the rim, I came to a big cairn and then a smaller one. Norman confirmed my conjecture that this was his trailhead into the Granite Creek. It was indeed the best way down to the spring, but I would say that this was its only purpose.

Below the spring the canyon began to get narrow. The bed was always covered with gravel and of a gentle grade. Still there were a few places where I had premonitions that I might be stopped. I had to use my hands a couple of times to get past short drops. When I could see limestone cliffs 500 or more feet above, I began to think that the rest of the way to the river should be clear walking. Near the end of the first narrow stretch, I came to a couple of rain pools. Where it opened up about a hundred yards below these pools, I found a fair sized cairn out of the bed to the right, and a very recognizable trail going up and to the north. I followed it for a few yards thinking that perhaps it held the key to the long route to the

river. Then I concluded that it might just be a route to bring stock down to water, and I resumed the trek down the bed.

Very shortly I came to evidence of the peculiar upheavals in this area, Supai Sandstone forming the bedrock of the creek. To the west there was red sandstone far lower than the limestone I had just been through. Actually, the five or six hundred foot exposure of limestone didn't represent that great a descent of the bed. There had been some block faulting. Now in the open, the bed turned to the south more than west. Here were some ocotillos and barrel cactus. There followed a succession of limestone gorges, lesser in length and narrower than the first. On a north facing slope I found a colony of crucifixion thorn. There were smaller groups in two other places along Granite Creek. Since I knew that it is common in Diamond Creek and is represented in Mohawk Canyon, I would have been surprised not to see any here.

There was a covey of Gambel quail ear the bed at one of the open slopes. Just as I was about to enter the narrowest place I had come to, I had the thrill of seeing a bighorn ewe bound up the steep slope to the north. A little later I saw two more on the south side far above. Only a few yards into this new narrows I came to the end of the line, a slot just a bit too wide for chimney climbing. I checked a ledge to the right but decided that it wouldn't go anywhere. I went back to the open area and followed the bighorns who had gone up the slope to the south. After quite a detour crossing a ravine and then going down a slope farther west, I got back into the main streambed. In doing this I passed a fairly clean rainpool and saw a bigger one down in the main bed above the place where I reached it. There had been other rain pockets in the limestone of the various narrows higher up but they were swarming with yellow jackets.

I have a healthy respect for these vicious creatures. About a year ago I was stung and a few weeks ago again. While I was resting in the shade not too far from one of these rain pockets I was stung again, on the side of the thumb. I knew what to expect, and by Monday morning, my left hand was puffed up. The itch lasts for several days.

It was now nearly 4:30 p.m. and the heat was getting to me. At the first of the day I would walk for an hour and then read a few pages of a book. Since noon, it was more like taking a five to ten minute break every 30 minutes. I had now come to a level where the Redwall seemed to be at its lowest appearance. I soon came to a place where the bed dropped away. I might have gone around this obstruction to one side or the other, but there seemed to be a similar fall ahead where both walls were sheer. My impression was that the canyon deepened rapidly in the north tending reach. I was feeling very weak by now and decided to call it a day. My two gallons of water would fix me up for dinner and breakfast, and I knew where I could get more by walking back 15 minutes.

After a night that was mostly too warm but too mosquitoey for sleeping without using my cotton blanket, I couldn't decide what to do next. Without much conviction I started to ascend the slopes to the south and west to have a look at the Redwall in that direction. I could remember that quite far to the south near Mile 220 the Redwall is broken facing the river. I was rather sure that this was not true near Granite Creek, but I thought that another tributary might give access to the bottom farther to the west. As I was toiling up the slope in the Supai again, I was sweating so profusely at 7:00 a.m. that I began to worry how I was going to take the heat later in the day. I also consulted the map and saw that I was still far from the river. I had no right to hope for a better route through the Redwall farther west. I had intended to spend the day

looking for a route and then probably come back in the evening to the water pocket. As I was weary from the heat and already foot sore, I took the coward's way and started out. I had wasted about an hour trying to make up my mind. I considered conserving my altitude and trying to go out a different way, far to the south of the main channel to head the tributaries in that direction, but I figured that it would mean a lot of up and down walking besides the extra mileage. On the identical way back I needed more rests than on the previous day and reached the pickup by 6:15 p.m. On both days there was some relief from the heat in the afternoon because of clouds and a few drops of rain.

On Tuesday I saw the country by truck. First I drove on up to the top of the mesa north of Granite Creek. I was especially thrilled by the view over the area where I had walked the day before. From a point about 15 minutes walk from the car, I could recognize Diamond Peak and tell something about both Indian Canyons. Trail Canyon goes in the wrong direction to be seen well from here, but its companion just to the south seems to have some promise as a route to the rim (no). Then I drove on and looked to the northwest. Finally I went back and tried the road north in Prospect Valley. It seemed to have been little used lately and I gave up where it crosses the wash about 6.5 miles north of the house trailer and ranch buildings. After a short, but cordial visit with Norman Imus, I headed home.

Redwall between Grapevine and Cottonwood Canyons
[August 28, 1969]

Allyn Cureton had found how easy it is to go up the Redwall at the head of the west fork of Cottonwood and then had taken my suggestion about doing an interesting hike down Grapevine to the Redwall rim and around into Cottonwood. He had followed the Redwall rim clear around to the Grandview Trail in Cottonwood and then had gone back to the top on the trail. Cureton had found the remains of a miner's camp on the terrace above the Redwall.

Bob Packard went with me to the south rim. By the time we were ready to leave the car at Grandview Point, it was 8:20 a.m. and a fine clear day. It was Bob's first time down the Grandview Trail, and we wondered at the care with which the old paving stones had been placed one by one. We also noted that more and more of the trail was sliding down the hill. When the timber cribs finally slide away, it will be a real mountain climb to get by those two places.

As usual in going down into Grapevine Canyon, we turned off the trail at the first notch and went out on the ridge at the top of the Coconino. We went north a bit farther before starting down this time and found the going better. It also helped not to have snow lying on the loose slabs of sandstone. In the Supai we went north a little, but soon we saw that we had better go down a ravine to the east. There were a couple of breaks in the top ledge but Bob found a faster way than mine. In fact he repeatedly got ahead of me during the whole day whenever we split over minor variations in the route. Only at the end when he got knee cramps and began to feel the affects of a cold did I ever have to wait for him. Walking north along the Redwall rim was fairly easy also, simpler and faster than it usually is. We noted the place to go over to Cureton's break in the Redwall, where you can walk down from the southeast end of the west fork of Cottonwood. We wanted to find the miner's camp and perhaps walk out on the promontory separating Cottonwood from Grapevine, so we continued to the west.

We had passed some very smooth places on the terrace and I was beginning to wonder whether we had missed the camp. Bob was ahead and he saw the clutter of large cans. There must have been several men in the party and they must have lived there for many weeks. On the uphill side of a big rock there was a large room outlined with a low stone wall. A long straight pole and some old canvas showed that the men had lived in a tent. A wood heating stove and quite a bit of stovepipe showed that the weather had been cool. Canteens, a few bottles, long steel drill bits, pens, and wooden kegs for transporting water made up most of the debris.

Cureton hadn't seen any of the diggings, but as Bob and I went out on the top of the promontory to the north and west of the camp, we came to several places which had been prospected to a depth of several feet. One place had yellow clay and rock, and another had blue and green copper ore. The view from the end of the promontory was as fine as it is anywhere in the canyon. We could see a bit of the water of Grapevine Rapid and another bit of the river farther upstream. On the return we found a narrow defile where we could go down through the top of the Redwall. Then we had to slant to the north to get down the rest of the way to the bed. It was time for lunch when we arrived at the bit of shade of a juniper in the bed. We were still high above the regular Tonto Trail, so we followed a dim burro trail at our level around into Cottonwood before going down to the bed. It was a slight shock to find no water running in the wet arm of Cottonwood. We had to go up to the very highest part of the grove before we found any water at all, and it was just a trickle forming a shallow bog. I had to scoop out the moss to get my canteen deep enough to fill it. From here I studied the possible Redwall descent northwest of the spring and decided that it would be difficult if not impossible without a rope.

We went out in good time with a slow rain to cool us.

Inspecting Havatagvich
[September 3, 1969]

Earl Paya had told Allyn and me that there is a way from the bed of Havatagvich Canyon up to the plateau. We had told him that we had just been up the Moqui Trail so we thought he could not confuse that tributary with Havatagvich. In April, 1966, I had checked along the rim beginning from near Chikapanagi Tank and had decided that if there was a way to get down, it would have to be close to the tank. Betty Emery had flown the area with Bill Martin and she had reported that there is no way clear through the Coconino. Still I didn't want to say that Paya was wrong without a close look on the ground (Paya right Cf. 2/6/71).

On August 28, I was afraid to drive the dirt road for fear of getting stuck, but it had dried up some by now. The Topocoba Road was better than it had been three years ago, but there was water in the ruts at the 19 mile tank. I got the rear wheels clear past the water, but they lost traction and stalled in the slick mud beyond. After a few minutes of fussing, putting pebbles under the tires and digging the wet mud away, I got past this place.

I left the main road just beyond the cattle guard 1.6 miles past the Pasture Wash crossroad. If I had taken along the Williams Quad map, I would have been watching for the road that forks away to go to Chikapanagi Tank, but as it was I missed this and went on. I also hadn't reviewed what I had written concerning the other trip. I had a feeling that I was overshooting the right place to stop the car, but I drove on and took the fork that goes to Moqui Tank where the dam is built with dressed stone. At the end of the road there is quite a cluster of buildings. They have quite a clutter of odds and ends lying around such as a plow, a farm implement to be pulled by horses, and a police van. I was confused about my location, so I went west and looked down from a point. This made it clear that I was on the south side of Moqui Trail Canyon. After 40 minutes for this detour, I drove back and parked less than a half mile north of where the road from Pasture Wash swings north to go out the way I had come in. My biggest mistake was made when I passed the fork that leads clear to Chikapanagi Tank. It branches to the west only 2.8 miles from the cattle guard on the Topocoba Road.

Just as I had done three years ago, I walked towards Mount Trumbull and hit the other road. When it seemed to be going unduly far north, I left it and came to the place where the trail goes down into Moqui Trail Canyon. With my bearings established, I walked north and hit the Chikapanagi Road again and stayed with it until I was close to the tank. There were six ducks on this bit of water.

To go back a bit, while I was eating lunch near the head of the Moqui Trail, it began to rain in the distance. On one side of the main storm, what I took to be about 15 miles away, I saw what I took to be a minor tornado. A thin, curving tube reached down to the ground. What may not be a true indicator was a broad brush of dark material that formed a sort of ragged flower pot at the lower end.

At the point of Chikapanagi Tank there is broken a part of the rim which provides a route down through the top cliff. There is a clear trail going down and south here. I thought my quest was over, but the trail ended in about 30 yards at a place where someone had been excavating for a shallow mine. The way down to the Coconino needed care, but there was no real difficulty. Once I dislodged an unusually round rock as big as a volleyball and it rolled all the way to the bottom, at least 700 vertical feet.

There were three scallops in the Coconino that would make it possible to get through half the formation. The one farthest south seemed to offer the best route, but there would still be something like 60 or 70 feet for a rappel (150 foot rope). A large rock is resting on the slope at a convenient place to tie the rope, but I decided against going down for fear I might have trouble sliding the Jumars past the lip on the way back. I worked my way along the steep gypsum slope and looked well at the Coconino in the bed of the ravine. There are a couple of pools. I could get down over halfway but then I was stopped. I got out to the rim on the south.