Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (September 20, 1969 - January 28, 1970)

Hot Na Na Wash [September 20, 1969]

In 1965 Norvel Johnson and I had found that one can get down Hot Na Na through the Coconino and last year, Packard, Shough, and I had hiked a loop going down Salt Water Wash, along the river at the rim of the Supai, and up Tanner. At that time I had considered a similar loop starting down Hot Na Na and coming out Tanner.

As the summer heat subsided, Bob and I thought that it would be a good time, and he had formed a special liking for Marble Canyon. John Zhart and Ted Wykoff, two other faculty men, wanted to go with us. They had both had a long record as hikers, but Ted had not done much recently.

We got a fairly prompt start in my truck although John had been a host at a party the night before and was still feeling the worse for some beer. We left the highway at the Tanner Wash windmill and followed the road up the grade to the west rim of Tanner. I kept to the better established road that went north along the highest ground west of the Canyon. I knew I could make a better approach to the place where Hot Na Na becomes cliffy, but I wanted the truck to be where we could get out of Tanner without having to walk north very far. The display sign of the Bitter Springs Station was just visible somewhat north of east, and a steep little valley just west of the vehicle drained into Tanner. A road goes down this valley.

As we left the truck walking northwest toward the west end of the Vermilion Cliffs, we crossed this valley and were soon looking down into a bigger one with a good road in it, the nameless drainage between Tanner and Hot Na Na. Then we became confused by various valleys that were hard to identify on the map. We later realized that any of these would have led into Hot Na Na. We overshot the first tributary and went down the second. It led into a big arm which is the main fork to the west and we soon came to where the east fork joins it. A minor arm comes in from the right at the same place but it drains an area north of the east fork. North of this junction there are some chances to climb to the east rim, but the walls soon become unscalable. For a long way down canyon there were an amazing number of soft drink cans and even old buckets and sauce pans lodged among the boulders by floods. I knew we were in the right canyon, but there was positive proof when we came to the Coconino. I had just looked at my old pictures of Norvel getting through the Coconino along a ledge to the east of the bed. There are some deep rain pools here that I also remembered. On the return we came right up the bed and got past the pools and found that my old log was right there is no need to get out of the bed.

There had been some signs that sheep come down as far as these pools, but we saw no sign of any sort of trail below this place and the way was slow among the big rocks. Ted was having trouble by now. We should have warned him about the roughness of this trip, and he should have confessed before starting about his lack of condition. At this time he also told me for the first time that he had had a warning from his surgeon that he might need a second hernia operation on the other side to match one he had had a little over a year previously. We had figured that there would be no real trouble in getting down to the river

cliff in time for a noon meal, and that if we didn't get that far that soon, it would be a sign that our plan was too ambitious. About noon we had come down a short way into the Supai Formation and had found a seep spring with shade from a fine big rock. We ate here and decided to be content with a view of the river.

Bob went down the bed which meant that he did a bit of cliff scaling that the rest rejected in favor of the west slope above the Supai ledges. If we had gone to the east, we could have gone down a slide and continued along the bed. Bob found an impossible drop as he reached a place close to the river. John and I reached a broad platform at the top of the Supai near the river and then found some neat breaks that let us get down to join Bob. We three went along a lower ledge until we had a good view of Houserock Rapid and the river downstream. The clear green water contrasted finely with the red cliffs. We must have still been 200 feet above the water.

The trip to the river and back took about an hour. We took a leisurely bit of rest before we started back up the canyon. The day didn't seem too warm to me, but Zhart soon felt that his meal was not setting right. He needed the rests that Wykoff found necessary from his muscle cramps and general weariness. It was rather tedious for Bob to wait for us. I found that it was inexpedient to walk very far ahead of Ted because he was not very good at choosing the best route.

There are two shallow caves on the east side of lower Hot Na Na just above the Coconino. The original deposition of the rock material may account for them, but we also noticed that there is some seepage of water from above. The southern one particularly caught my fancy since from a distance it seemed that there might be a vertical shaft coming down at the back of the ceiling. Since Zhart and Wykoff seemed to need considerable rest, I detoured up to see the cave. The shaft ended only a couple of yards above the rest of the ceiling, but there was a shelf up there that must have made a cozy home for generations of large owls. At least on the floor below, I saw something that I had never run across before. There was a stalagmite about six feet high by seven feet long and one and a half feet thick made of the droppings of some bird of prey. The floor of the cave was littered with small bones, mostly broken into chips and slivers. This huge pile of droppings struck me as about as remarkable as an unbroken Indian pot.

After this delay, John felt much better, but we still had to wait quite a bit for Ted. As he was my guest I felt responsible and stayed with him while Bob and John went ahead to locate the truck before it got dark. It turned out that we were right on the beam even though we came back by a slightly different route. It was welcome news when Bob turned back from where he had been walking ahead to tell us that the car was in sight. We all reached it before 7:00 p.m. We had been away from the truck about 10 hours and we all felt that we had had a rewarding day. However, hikers who are just interested in going down Hot Na Na to the river cliff could approach the take off much better by driving down the road in the nameless drainage between Tanner and Hot Na Na.

There were several other rainpools besides those in the Coconino and the spring near the top of the Supai in the bed, but these should not be regarded as reliable. It had been raining abnormally during the last month. At one of the pools in the Coconino, three of us saw about as large a dragonfly as we had ever seen, probably with a four inch body. We also heard a few birds, canyon wrens and ravens in particular.

Mohawk Stairway Route [September 19, 1969 to September 27, 1969]

Jim Sears, John Wehrman, and Sue Varin decided to take advantage of a trip by George Billingsley and Jan Jensen to Tuckup Canyon to do what I have been talking about for some time, see whether there is a cross canyon route via Mohawk and Stairway. I had suggested that Mohawk would go if one should use one or more ropes, but I thought Stairway would be impossible. Without rereading my log in which I suggested that there would be several drop offs in Mohawk, I suggested that there might be only one. Jim, however, took two ropes along. I also helped him to the extent of giving explicit directions as to the road approach. George and Jan would remain at the rim above Tuckup until dark Monday evening, or 10:00 p.m., as Jim remembered it. At that time George was to conclude that their non arrival meant that they had returned up Mohawk.

George's part came off successfully. He reported two bad places in Tuckup close together near the river. He figures that they can be passed by a clever climber without a rope but that a ten foot rope in the upper place and a 30 foot rope in the lower make the passage much safer. Water was running all the way downstream below Cottonwood Spring, but it is so mineralized that it causes irregularities. He and Jan, after spending the night after midnight on the rim, reached the Colorado by noon. They went back up to Cottonwood Spring Saturday night and then made the trip over to Willow Spring on Sunday. On Monday, after firing some firecrackers as signals, they returned to the rim directly above Cottonwood Spring via a crack that is a bit hard to find. They took off for Flagstaff some time after dark.

On Friday evening, John, Sue, and Jim took off for Mohawk in John's truck. A few miles from the Supai road, they got stuck in the mud, but after two hours of work, including putting on chains in the middle of the puddle, they got the truck backed out of the pool to dry ground. Then they walked about twelve and a half miles and slept near the head of the Mohawk Canyon Trail. All they carried for night warmth were metal space blankets, so they stayed close to a fire each night. On Saturday they got down canyon to the dropoff at the bottom of the Redwall that had baffled me. On Sunday they negotiated this with a 50 foot rope and then rather promptly had to use another rope. This time Sue stayed on top and threw the rope down. Then she got down about 10 feet and skidded and fell the rest of the way with the two boys to arrest her fall at the bottom. There was one more drop of about 10 feet where they let Sue down by the rope while the two men jumped. At the mouth of Mohawk they built two large rock piles as a sign that they intended to cross on their air mattresses. Here John Wehrman proved to be the fastest swimmer going downstream very little to get across. Jim was afraid that he might even have to ride through the rapid since he was so slow to cross, and Sue also lost about two widths of the river while getting across. They got partway up Stairway before camping Sunday night. On Sunday they found a very interesting route up the Redwall using a talus to the west. They were encouraged by finding deer or sheep droppings and even two Indian arrowheads. There was no problem in the Supai and it was considerably easier than Mohawk. They pushed on and at the end of the day (Monday), Jim dropped his pack and canteen to try to intercept George before the deadline at the end of the road. He missed George by little more than 30 minutes and then had to spend a very uncomfortable night with no pack or fire. On Tuesday morning all three got together on top. For the next four days they just sat at the road end waiting for the rid that didn't come. Once a day one of them went down to the spring for water. Finally on Friday evening they decided that their food situation would force them to move and at 4:00 a.m. on Saturday morning they started by

road to reach the main road to Toroweap, about 12 miles away. Jim had forgotten to bring the map, and he had hesitated starting this trek away from water because he was unsure about distances. Actually they reached the main road in less than four hours and proceeded northeast along it. When they came to a fork they took the road to Craig Ranch because the sign promises gas and oil and presumably water and people to help. They were found about a mile up this road by a plane belonging to the Mohave County Search and Rescue Team.

Other activities of the week included George and Jan's effort at learning the score by going down Mohawk. They found the abandoned truck in the middle of the road and then slept a few hours near the trailhead where the other party had spent the night. On Wednesday they showed what sort of hikers they are by reaching the water and the drop that had stopped me in six hours compared to my eight. In getting to the river and especially on the return, George found a way to bypass each of the three drops without rope. At one place he found and used a short tree trunk leaning against the cliff, presumably placed there by prehistoric Indians. He also found a couple of arrowheads somewhere in Mohawk Canyon. He was guided along one ledge at a bypass by finding sheep droppings and he and Jan saw three sheep at a range that invited photography. On Thursday George and Jan got to the river and back to their packs at the spring and then reached their truck by 9:00 p.m.

On Friday morning all of us were properly worried at having let four days pass during which the three missing hikers might be in real trouble. The general alarm was at last sounded. The Coconino authorities flew George and Jan over to Kingman, and the Kingman Sheriff called out the search and rescue volunteers. I took John Zabat and Al Doty to the north rim starting about 3:15 p.m. after my last class. We intended camping at the rim above Cottonwood Spring that night and we thought it would be a good thing to go down Tuckup to see whether we could find any tracks of the missing three.

On Wednesday afternoon, I had gotten Bill Martin to fly me up and over Mohawk, up over the Esplanade and around the Dome with the return above Tuckup. We went upriver to Havasu Creek and then down to Prospect Canyon. If we had flown low over the rim above Cottonwood Spring, the search would have ended right then. Two of my impressions from the flight were that the promontory from the left one half mile above the mouth of National might indeed offer a way to get down to the water from the bench which can be followed out of National (wrong, no passage here observed from boat). Another was that the steep ravine called Mohawk on the National Monument Quad, about one and a half miles down river from the canyon called Gateway, may offer a steep route down to the river (no go either). There are one or two other places where the bench about 200 feet above the water is broken and where one could get to the riverbank.

To return to our proposed trek down Tuckup, we missed the turnoff at June Tank and drove on to see John Riffy. He straightened us out and told us that in the morning we should use the shorter road that turns off just south of the old Graham Ranch. Close to 11:00 p.m., we drove out near the Toroweap overlook and slept there. After a leisurely breakfast and an appreciative view of the canyon, the first from Toroweap for Zahrt and Doty, we drove back and started up the hill to the Tuckup road end. Near the crossroad about three miles from road end, we found a metal blanket spread out in the middle of the road with a note in a can on it. Almost immediately we were under Riffy's plane with George Billingsley as observer. They dropped a note in a can asking us to bring our note to the airport to help with the search.

Soon after we reached the main road in Tuweap Valley, we learned from a man in the lead Jeep that the three hikers had been found from the air up the branch road to the Craig Ranch. We soon had a happy reunion. It was fortunate, in a way, that we had not gone to our intended campsite the preceding night, or the all night drive of the search and rescue crew would have been in vain. At least I was on hand to bring the three hikers and George and Jan back to Flagstaff.

Impressions from the air [September 24, 1969]

The real purpose of the flight was to try to locate the missing hikers who were already waiting on the rim above Cottonwood Spring in the Tuckup Basin. I wasn't spending much time looking at routes not connected with their possible route, so this flight was not very productive of new information for me. Bill Martin took Ken Hanson, Glen Friede, and me quite directly to the upper end of Mohawk Canyon. The air to the west was a bit hazy from burning junipers, but Bill could steer toward mount Trumbull. We passed to the south of the Wilaha Road and I was impressed with the very meandering and steep little valley that Havasu Creek makes so far to the south. We could see where the walls become precipitous but I missed the place where the Kirby Trail comes down. We were too far to the south and west for a good view. I did recognize Black Tank Wash and we knew when we had passed the Supai road. I also identified features of National Canyon, and I was impressed with the short separation of the two canyons, National and Mohawk.

The plane settled down over the rim and flew along several hundred feet above the bed in the broad upper part. We went north over the Redwall narrows below the rim of the Esplanade. Bill stayed a bit to the left of center so that I could see more of the bed, but there were many places where we would be beyond a meander before I could get a view of the entire bottom. We knew that George Billingsley and Jan Jensen were somewhere below, but we missed seeing them. Later they told us that they had heard the plane and had run out into the most visible place nearby, in the Redwall narrows, to wave at us.

I got a very fleeting glimpse of a chockstone at one place which I took to be the 30 foot drop that had stopped me. For the rest of the way to the river I could see water in the bed but no further obstacles. George later told me that there are two further barrier drops. Sears, Wehrman, and Varin had used a rope at all three, but George, by careful search, found ways to bypass all three. He had to use a log that had been propped against the cliff at one place, presumably by Indians of a former day.

Next Bill began to climb past the mouth of Stairway and Fern Glen. We turned north above the latter after getting a good view of Alamo Window and went high enough to look at the Esplanade and fly north and east around the Dome. We noted Willow Spring but didn't go very close to it. If we had gone up over the rim at the end of the road above Cottonwood Spring, we would have seen the missing hikers camped there, but we swung around over Tuckup. It seemed even narrower from the Redwall down to the river than Mohawk or National. We would surely have missed seeing hikers in its bottom.

Then we flew upriver to the mouth of Havasu Creek. In addition to keeping a sharp eye for anyone along the bank, I casually watched for breaks so that one could get off the bench above the bottom river cliff to the water. They were few and far between, but there were a few. I saw one on the north side, but I am not

sure whether it is upriver from the mouth of Tuckup, or below there. After passing the place, I remembered and looked back at the thing on the south side a half mile upriver from the mouth of National that I had thought to be a travertine cone. I couldn't make out its composition, but it may well offer a route off the bench (no).

We continued on downriver to Prospect Canyon. Going down and also while returning, I remembered to look at the ravine or short canyon called Mohawk on the GCNM map, about one and a half miles below the mouth of the big Mohawk Canyon. The aerial view made it look surprisingly good for a descent route. It is surely worth a try (easy?). Perhaps I should carry rope while checking this one. If I would leave the bed of Mohawk in the Supai and get down to the river here, I could come up Mohawk, assuming I had a good climber like George along. He could take a rope ahead for pulling our packs and giving me a lift.

Bill took us up Mohawk and at this time Ken saw Hualapai Indians on horseback below us. They had talked to George and Jan and had been very discouraging about what was to the north. They thought that no one could get through and that only one's bones would ever be found if he should try. After circling for altitude, Bill took us over the end of the road where we could see George's pickup. We followed the road and saw the other truck and then went home.

Beaver Canyon [November 11, 1969 to November 12, 1969] [cf., logs of 11/11/61 and 4/9/67]

This was intended as a trek with Paul Fife of the U of A math staff, but at the time he was under the weather with a bad throat and couldn't make it. He had interested five of his department members in the trip and they came anyway, John Leonard, Richard Thompson, Joe Kelly, Bill Conway, and John Krimnel. Norvel Johnson was my guest, and it was our intention to get the others down to the Redwall rim and then head them along the trail to the Havasu Falls Campground while Norvel and I would make our way down the narrow gorge of Beaver Canyon through the Redwall to its junction with Havasu Creek.

We left the Supai road via Camp 16 again. We had to go through two stretched wire gates this time to reach the road north to a metal tank along the pipeline. This would be Wate Tank on the National Quad map and we continued on to the tank due west of Higgins Tank, the large clay dam. Here we should have swung east to Higgins Tank, but I didn't remember this point, and a good track leads much farther north along the pipe line, which I followed. After some curves it finally stopped at a clay dam with only some wheel tracks in the grass going on to the northwest. Here we got the point that I had come the wrong way. Four of the party were in a VW following my lead. The owner of that vehicle was quite a bit more cautious about the bad road than I was in the Ford truck, and this slowed us quite a bit.

We went back and over to Higgins Tank and then north. After we got up the hill north of Bishop's Camp, Joe Kelly decided that his VW had had enough of the grades and rocky roads and all seven got into my truck. We soon came to the fence where you turn due west for six tenths of a mile and had no trouble recognizing the turn to the north. About five vehicles of the Phoenix Chapter of the Sierra Club had been along here the previous weekend.

It was already about noon so we ate before starting down the trail. While putting my pack and extra water in the truck Friday evening, I had put down my new canteen on the trunk of our Chevy next to the truck and had forgotten it. When I was ready to hike, I had no canteen other than a plastic jug, but that was only a little more awkward. When we started on about 12:50, Norvel led off, but he couldn't locate the trailhead. I was just a bit uncertain too, but I recalled that it goes down a few yards into the notch and then turns to the east just below the rim. Quite soon it becomes perfectly clear for the rest of the steep descent through the Kaibab and Coconino. Then one picks any route through the blackbrush slope and finally gets into the bed of the wash.

Although I had read my former logs just before starting, when the big drop in the bed occurred it took me a few moments to note the trail bypass to the left and up at first. The lower end of this bypass is easier still to miss on the return, and I marked it with a two stone cairn on the top of a large boulder in the middle of the bed and another small one to one side of the conglomerate material where you start up. I saw our footprints leaving here, but Norvel passed it by even with my cairns in place. There were a couple of other places through the Supai where very short pieces of trail bypassed rough drops in the bed.

The three springs noted in 1967 in April were still running in the fall. In fact on the return we ate lunch by one just above the Redwall where the two small cottonwood trees mark the seep in the gravel of the bed. I also got a refill at the middle spring just above the big drop. Norvel thought that this water from the Supai gave him cramps, but I didn't notice any indisposition worse than I can attribute to the effort of a big hike.

Five of the seven reached the Redwall rim in 110 minutes from the truck, but we had to wait 15 more for the slower walkers. I gave the Tucson men careful instructions about the place to climb down to the trail near Havasu Falls, and then Norvel and I started to look for Crowley's way through the Redwall gorge. First we got to the bottom of Little Coyote near where the trail crosses it. Just before it joins the other arm, from Beaver Canyon, there is a chockstone block that must be where the Crowleys used a shoulder stand. There was at least a 30 foot drop. To go down would have meant about 12 feet of working down a crack between the sandstone block and the smooth limestone wall. Then one could go through a hole behind a lower block and reach the last drop which appeared to consist of smooth limestone. I was about half willing to attempt a descent here since Norvel could give me a belay with the rope I was carrying, but he didn't like the idea of my trying to come up the rope with only knots for a grip. We had left the Jumars in the truck, and there also was nowhere to tie the rope. One should have a piton or a rod to drive into the gravel of the bed to furnish a place to secure the rope. After giving this place up, Norvel and I went down the bed of the Beaver Canyon arm. Here we soon found a smooth drop into a pool with a deeper drop ahead. We also went along the left wall of the main gorge to the north and inspected the next two notches. One of these had been used as an access route according to Donald Weaver on their trip up from Havasu Creek a couple of years ago, but both of them looked worse to me than the drop in Little Coyote. From this side we noticed a somewhat promising place on the right side of the main gorge, a sort of detached tower or promontory away from the right wall with red sandstone blocks lying in the crack next to the main wall both upstream and down. We decided then that if we didn't like this either, we would give up the project and follow the others to the campground. When we were on our way south to get over to the other side, we shouted our last word to the rest of the party who had found the trail and were on their way. At this break we were able to get down perhaps halfway to the bed, but we could see that below the sandstone blocks there was still a vertical wall of smooth limestone both on the north and south sides of the promontory. However, there are places to tie a rope here and I believe I would use this as a future rappel site.

When Norvel and I finally gave up and started after the others, it was 4:00 p.m. We poured it on and caught up when we were about halfway to the junction with Havasu Creek. It was just after five when we rounded the corner and looked down from above on Beaver Falls, and I knew we would have to hurry to get to the campground before dark. Norvel did fine until he began getting leg cramps. Two of the Tucson men kept up and we got a fine view of Mooney Falls in time to try for a long exposure photo. We also saw Havasu Falls by dim daylight, but by the time we reached the cairns marking the descent, it was definitely getting dark. I could see a few ducks on the way down, but when I reached the place to use one's hands, it almost needed a flashlight. By the time I had gone down and made sure there was no easier way, the other men had their lights in use. Norvel and I were the only ones who were not provided with lights.

I helped Conway and Thompson down taking the packs and then handing them on down. We walked down to the camp and then returned with just enough light left to make it back to my pack and white jug which I had left on the trail. By this time Krimmel and Johnson had come along and Krimmel was almost out of talking distance south along the trail. I took them down and this time we found that we didn't need to remove the packs at the steep place. We had one light for all three but we joined the others at the camp and I brought back enough water to make supper and sleep up along the trail to intercept Leonard and Kelly. Before I was through eating my soup, they came along and would have had to walk all the way to the village if I hadn't been there. We were all together at the campground before ten.

For the return the Tucson hikers went up the good trail to Hualapai Hilltop while Norvel and I went back up Beaver Canyon to drive the vehicles out. The previous day had taken a lot out of us and we took from 7:30 a.m. to almost noon to reach the spring not far above the Redwall. We started on at 12:30 and reached the truck by 3:30. On the drive out, I went to the east of Higgins Tank and found the road more direct to the main Supai road, but this turnoff, about two miles northeast of the Camp 16 turnoff, is not marked.

Apache Point [October 18, 1969]

After I was taken out by helicopter in April, 1968, Visbak, Ellis, and Johnson had some spare time as they walked out to Apache Point from Royal Arch. The pinnacle north of Apache Point looked like a fine point for climbing. When they reached the top they found an Indian ruin with good walls left and even a metate. I had been wanting to go there to see it too, and I also wanted to check the ravine below here to the west for a possible descent route to the Esplanade. Pat and Susie Reilly were visiting us, and they agreed that they would like a trip to the area.

It was a good anniversary for the trip since I had gone down from Apache Point on October 17, 1959, and had rediscovered Royal Arch on the 18th. I hadn't realized that this trek would be ten years later to the

day until I checked some color slides upon reaching home. We parked as usual just before the road starts up the hill northwest of the park boundary sign. The road had been dry and fairly good, and we could go along about 25 or 30 mph. Pat had brought his compass and we tried to follow a bearing to magnetic north. I also had brought a spray can of yellow paint, and I stopped fairly often to put a mark on the north sides of bare trees. We saw a few of these on our way back, but they were the ones along the horse trail paralleling the telephone line northwest of Quetzal Point. We could also see our own tracks in the dust here, but we followed the trail a little farther beyond where we had reached it, and we didn't see a single yellow spot all the way back to the road. On the way north we took one good look at the canyon near where we first came to the rim, and then we kept away from the rim where the walking was better. In 90 minutes we were right above where the trail starts down. I didn't immediately recognize that we were just to the west of the point, and I started along the rim in the wrong direction. I had always reached this place by coming along a trail from the east which leads to the descent just west of the point and I was confused by the direct approach. It was a very cool day and we were all glad to eat lunch in the sun down on a smooth and bare part of the saddle leading to the pinnacle. The sun was pleasant. Just below where we were sitting, I noticed three one gallon glass jugs of the type Colin Fletcher had used at his caches. The pinnacle is quite striking and merits a name compared to many places in Grand Canyon which have been named way back. If the name Apache Point should be retained for the headland on the main rim, one might call the photogenic pinnacle Apache Plume. Susie stayed where we had eaten and Pat and I took off to look for a way up. We stayed close to the base of the towers and soon saw a hollow among the round turrets that offer a route. After a bit of scree in the ravine, we came to a critical place. At first I headed up a steep place where the bumps in the impure limestone offered holds but then I went to the north into a groove. This was good at first, but there was a awkward chockstone at the top and I turned back to follow Pat who had gone up our first choice. Above this careful climbing there was just a good scramble over mostly loose material to the top.

We immediately found the four or five rooms together on the top. At places the walls are still two and a half feet high and the metate was certainly identifiable. It is badly pitted by weathering but the flanges along the sides are neat and definite. A mano or softer stone was lying in the metate. We also found several walls that stood like breastworks along the rim at places where a sentry might be on watch to note movements of people below or along the plateau. The views in all directions are fantastic, and I wonder as usual whether the scenery was the motivation for living here or whether it was for safety from enemies. It must have been a real problem to get water to this dwelling.

Pat rejoined Susie after this interesting climb and took more pictures while I went down the slope into the ravine to the west. Ever since my trip down the trail to the east and around below the point on the Esplanade, I had wondered whether one could go down here without a rope. This time, however, I brought mine along just in case it would be needed. It was unnecessary, however. Below the slide rock, the footing in the ravine was perfect with no big steps. In the lower half of the Coconino I came to quite a drop in the bed, but just to the south by an easy detour, the route continued easily. At one place there is a good sized rock pile put up as a step, so the Indians had used this descent. If I had known this descent in 1960, I would have saved at least an hour of walking time between Apache Point and Fossil Bay. It is a neat route and for some reason the footing seems better than it does on the other side of the promontory where the old trail goes down. For one thing, there are no ravines cutting into the slope below the west

side. I rejoined Pat and Susie on the rim just about when I had predicted using an even hour for this inspection.

They had gone directly up to the rim above the saddle instead of bothering with the trail. Here they discovered another surprise. There is a good projecting ledge near the top forming quite a shelter beneath. Pat saw that the ceiling is well blackened with smoke and there are now two five gallon cans of the type Fletcher used for his caches placed back against the wall. I was wondering whether Leydet had emptied the one we had found where Fletcher and I had left it and then had put it here or whether some ranger like Jim Baily had carefully hidden both of these here. I didn't move the cans nor try to see what is in them (empty, P.T.R.)

On the return we stayed fairly close to the east rim and got some more views. I am rather sure that the route used by Billingsley and his companions through the Supai on the east side of Royal Arch Creek is not the most direct. They could have come across the Supai terraces and reached the Redwall rim without first going down to that rim just south of the rope descent from the lower terrace. One can reach the Redwall rim above where one leaves the bed of the creek to go out on the lower terrace. I also noticed the pit where I spent the cold night in comfort by a fire. The dead juniper wood is still there for the next wayfarer.

We saw our tracks in the dust of the horse trail not far north of Point Quetzal and Pat saw a couple of the yellow paint marks I had made, but then we overshot and must have kept to the east of our former route all the way to the road. We reached it in 105 minutes from Apache Point, which meant that we must have walked farther and we were rather sure that we were southeast of the car which turned out to be an even mile from where we had reached the road.

There was still some of the day left so I took the Reillys to Havasupai Point. The checks of shade and sunlight over the canyon gave an unusually fine effect. Holy Grail came out strongly in the sun several times. Dox Castle and Arthur and Guinevere showed well as did the high points to the east. Isis was sharp and the profile made Osiris seem very steep near the top. Huethawali was of course very prominent to the west. We could easily hear the roar of Serpentine Rapid and it looked rougher than most rapids from the top of the plateau. It was a fine day and a great hour to be out on such a point.

Fault Route at Mile 30.4 and Saddle Canyon [November 1, 1969]

After giving up trying to get down through the Supai at Mile 30.4 with Cureton at the end of May, 1961, I studied Reilly's aerial picture and decided that we hadn't looked into the right ravine. I had also looked up from the river at the fault and couldn't see any definite stoppage, so for several years I had wanted to come back and give this another try. With my climbing rope and Jumar ascenders, I felt sure that we could get down to the river even if one couldn't get clear down barehanded.

Jim Sears went with me and after eating dinner at CDL, we slept on the ground near the Kane Ranch just off the road to Buffalo Tanks. Cattle that had been rounded up for sale in a pen not far off were noisy almost all right and our sleep was somewhat broken, but the temperature was just right for my warmer

bag. The moon and stars were brilliant and two planets were close together in the morning sky. We drove away in the morning until sun up before eating.

The roads don't seem to correspond perfectly with those shown on the map, but with just a bit of confusion we parked where I have been before, across a shallow valley to the north of the ridge above the slump block fault. By 7:45 we were on our way down and up and down to the fault ravine. On our return we found that we could have stayed close to the point and could have gone down directly to the crack next to the cliff, but I led Jim off to the west and then had to climb back up to the fault ravine. On the descent we were right next to the cliff and found the going steeper than I had remembered. Right at the top on the return, I took a route a few yards to the east and found it easier. This is also marked with cairns. Cavers on their way to Vasey's must be going this way. I not only found a series of cairns built since 1961 but a visible trail in the softer places. The footing was quite good around the base of the cliff to the south and then down through the Toroweap and Coconino to a ridge of talus material that extended down to the rim of the Supai.

As we headed back north to the fault zone, we passed a big block of red sandstone that was perched on a pedestal of still redder shale and then we scrambled back upgrade to the beginning of the fault ravine which I thought that Allyn and I had not fully examined because it starts higher than the ravines we spent our time in. I don't understand why Allyn and I missed this main ravine since I find on rereading my notes that we checked possible descents for one and a half hours before starting back. Possibly we looked at this and noted that there is a drop off about 100 feet below the top. After seeing this bad place Jim and I checked a parallel ravine still farther north, but it doesn't provide a bypass. We went down to the 30 foot drop and I got my rope ready for the descent while Jim tried it barehanded.

There are several chockstones wedged into the upper part of a rather wide crack. Jim got below the upper chockstone from the right side and then worked his way down the crack that is not quite vertical and which is a bit too wide for comfort. After ten feet of this, it widens with an overhang. The back wall has some protruding boulders that offered Jim a precarious grip at crucial places. He was able to get back up without any help from me, but it was a strain. When he had a chance to rest about two thirds of the way to the top, he had to stop for wind. This passage is possible without aids, but I was glad to use my rope and rappel down and come back up with the Jumars. I tied the rope to a large block 25 feet back from the edge of the drop, but I didn't succeed in getting the rope to stay the way I fastened it. After Jim was up and I began to put my weight on the Jumar slings, the loop around the big rock slipped and one side came up as if the whole thing might slip off. Jim should have told me to descend and let him fix it right, but instead, he held the rope freehand supporting my weight most of the way to the top. I didn't realize what was going on until I got out on top.

The rest of the way to the bottom was simple talus slope walking. The river was a beautiful clear green. The open approach to the water between the closed in vertical walls both up and downriver make this a most interesting route. It took us 75 minutes to reach the top of the Supai descent from the car and another 50 minutes to get down from there to the river. We could have shortened this by about 10 minutes by driving to the rim immediately above the descent fault.

When Jim and I were through eating next to the truck, we headed back toward the Kane Ranch to move on to the end of the road by the Saddle Mountain hunting camp. I noted car tracks leading away from the established road that must have led to the rim nearest our descent route at Mile 30.4. I passed one established track that seemed to lead toward the head of Bedrock Canyon but I turned south on the next branch. I figured that it should join the main road south and it would be shorter than going clear back to the Kane Ranch. This was rather rough and slow. Jim opened a stretched wire gate. He guessed that this meant we were now in the buffalo range, and this proved to be so. A little before we reached the well graded road leading to the ranch headquarters, we encountered quite a herd of buffalo in three groupings over the hills and hollows. I drove fairly close to one set and took some pictures.

All the main forest service roads in this area are in fine shape at this time of year and we got to the hunting camp a little before 3:00 p.m. We got our packs ready and carried enough water for a dry overnight camp. My guidance faltered after I took Jim below the rim of Saddle Canyon. When I was here in early September, 1963, and again in June, 1965, I had found a fairly distinct deer trail along a ledge below the top Kaibab cliffs. This time I was confused by the different levels. We finally got down to the one I had used before but only a little before we came to a fine break in the upper cliffs. On the return we found a very clear trail going up to the plateau here, and on top we could walk back to the hunting camp in about 30 minutes.

On the present occasion we put our packs down under a fine overhang where the floor was even. We expected to get back here just in time to camp. I believe this is the same place I slept through a rain in 1963. About 50 yards east the trail cut down through the ledge. We could always find a good way down here and at one place I noticed some rocks piled together to form a step. We proceeded as I had done with Norvel, along the deer trail on the south side above the shallow Toroweap cliff. Jim had no trouble keeping ahead of me all day, and this time he led down the slope west of the slide where I had been before. We didn't go down to the very last edge for a close look, but the drop seemed so great that neither of us seemed to feel much courage. For the second time I agreed to retreat without ever uncoiling the rope. We got back to the truck in less than 90 minutes using the shortcut up to the rim just west of where we had left the packs. There was time to reach Cliff Dwellers by 7:20 p.m., eat, and reach home before 11:00.

Even if we had taken the time to rappel down the cliff below the slide, we wouldn't have had time to look around below. I had to leave the hunting camp by 11:00 a.m. on Sunday to meet a dinner engagement that evening. If I am going to take the trouble to rappel down here, I really should drive up here on Friday evening and have two days to do some walking on the Esplanade. Perhaps I should examine seriously Euler's suggested route through the Coconino farther to the southeast.

There was rainwater in a pool at the bottom of the trail into Saddle Canyon from the north side, and from the looks of the vegetation below the overhang in the bed farther upstream, there should be a spring.

Redwall west of Cottonwood Creek [November 11, 1969]

Bob Packard and I had come down through the Redwall on the west side of the west arm of Cottonwood Canyon and we had seen the easy way up the formation at the upper end. Allyn Cureton had called my attention to this place and had been up and down here. From the Grandview Trail near Horseshoe Mesa I had noticed a place in the Redwall northwest of the spring where it seemed barely possible to climb, but this didn't look good from below at the spring. Still I thought it deserved a check. Al Doty went with me, and I knew that he could get up there if anyone could.

We took off from the top of the trail about 9:15 a.m. We could see hiker's footprints on the way down. While the trail is getting perceptibly worse every year, it is seeing more and more use. There are more and more places where the edge of the trail has worn, and the logs of the upper crib seem to be ready to fall. When we were five or ten minutes from the top, we met four hikers from Las Vegas. One was Howard Booth and he recognized me although he had seen me only briefly at Tapeats Creek in early June 1965. He told me that they had been down in the canyon for two nights, down the Hance Trail and up the Grandview with some time spent in going up the river as far as 75 Mile Canyon. Homer Morgan started with the others, but one of the men had so much trouble hiking that Homer had taken him back out. We talked a bit about the float trip from Indian Canyon down to Separation. Homer had told Howard that the trip had taken quite a bit longer than they had expected it to take. He also said that Morgan is now stationed at Boulder City.

We arrived at the spring a bit over two hours from when we left the car. After the recent rains, the spring was running better than it was last September, but it wasn't keeping water on the surface many yards from the bog at the highest trees. However, there was running water in the main bed as it approached the brink of the Tapeats fall. After we ate an early lunch and I got a refill for my canteen, we started up to the hoped for Redwall route.

It looked a bit better as we got to the base of the cliff. On the north there is a place where the first 20 feet are easy, but after that it is too smooth and steep. Ten yards to the south, there is a place that has rough weathered limestone with good holds and small steps. I needed to take my time here to play it safe while Al went up faster a few yards to the south. When we had gone up about 50 feet, I got stopped. Al could have gone on since he seemed stronger in the arms and doesn't mind the exposure. If he had been sure that this was the only difficulty, he might have continued. I wanted time to walk around the promontory to the dry arm to the west, so I rather insisted on coming down and getting on with the hike. We spent about an hour on this investigation. We slanted down to the burro trail near the creek before going on around.

When we got up past the descent route Packard and I had used, we could see that the way up is easy. When we actually started up, we soon found a very distinct trail with clear switchbacks. It continued to the top before it tapered off. It would have been interesting to go down and check the route that we had attempted earlier but I was rather sure that time would be short. As we walked the Redwall southeast, we noted another very easy way down the Redwall, to the west from the point that separated the main arm of Cottonwood from the arm with the spring. We wonder whether this is the quickest way to the spring. Traveling the rim of the Redwall from the trail over here is fraught with obstacles and many small ravines out through the rim. We needed more than an hour to go from the top of our Redwall route to the trail. The slide that covers the Supai is not too bad a way to go up. There is an unusual amount of open ground. We arrived at the car a few minutes before five.

In the early morning there were fine cloud affects around the buttes, and later the air was particularly clear. The shadows were great as we reached the car. It had been a great day for a hike.

Bass Trail, Arch Creek, Fossil Creek, and the Tonto Trail [November 25, 1969 to November 29, 1969]

The main objective was to check out the possible Redwall ascent between Forster and Fossil. A year ago we had just had time to look up at this place from Forster but our four days didn't allow a closer look.

I got an early start from home and I was making out the hike permit by 8:00 a.m. There had been some snow and the road west was wet or icy in spots. I wondered how soft it would be in the afternoon, but I figured that the next few days would stay dry. I drove at a good clip and was hiking by 9:30.

This time I watched for the remains of some dams that Bass had built in the bed of the wash where the Coconino first shows, but this time I couldn't identify them. They may have washed out since I thought I recognized them a number of years ago, or I may have identified them incorrectly then. A further possibility is that they have been silted in and overgrown. I did identify the cliff dwellings I had seen before and saw two others around the corner to the north and high above where the trail starts down the Coconino. The two close to the trail are each just large enough for a man to lie in, but they are well preserved under an overhang with the adobe mortar still in place.

Below the Coconino the trail branches, one part going down directly to the valley, but now someone has marked the branch that stays high with cairns. I followed this version until I could see that I should get down if I wanted to go west along the Esplanade. Progress is fairly easy along here although no trail develops for the first half mile. The old trails are going to disintegrate ultimately for lack of burros, but one can still identify one below Chemehuevi and Toltec Points. I had forgotten how rough this route is as it heads the canyons. I needed the map to remind me to keep on the trail until I was northwest of Montezuma Point. Last year the students had found a good going down the canyon that develops between Toltec and Montezuma after they had been stopped by the tributary of Royal Arch Creek west of here. I was interested in seeing the canyon they had followed to the rim of the Redwall, especially since they had identified Indian activity here in the form of mescal pits. However, I was also interested in scouting a more direct route to the Redwall rim of Arch Creek by staying west of their route. From Apache Point it had seemed feasible to get down through the Supai just about anywhere north of the tributary that had been checked and found impossible. I left the trail and went northwest in the direction of the point of elevation 4462 on the Havasupai Point Quad. I was able to get down the upper layers of Supai on the south side of this ridge, but then I found myself stopped. Playing a hunch I went west and north around this promontory and came to the first rain pools I had seen since I passed one at the head of Garnet Canyon. The distant view from Apache Point had been deceiving, and I was glad that at least I would have water if I couldn't get down. Still playing it by ear I went around to the north side of Point 4462. At first glance the wall still seemed unbroken but I found the needed detached block with a crack behind it and got down to the rim of the Redwall. I think I had saved a little time by cming this way rather than the route the students had pioneered.

Walking the Redwall rim around into Royal Arch Creek along a burro trail was routine but it does not go as fast as it does on the west side since there is a deeper tributary to head. Eventually I recognized the place where the daring students had descended the Redwall last spring. There is some breakdown of the rim and a long talus from below, but there is still about 25 feet of 75 or 80? wall. The students had reported finding artificial holes pecked in the rock to make the descent possible. The place looked too dangerous to me so I walked on for 15 minutes and came to a perfectly safe way down, right opposite the easy burro trail to the bed from the west. After I had gone down the bed and reached the foot of the students route, I left my pack below and went up to see what their route was like. I decided that the holes they had used were almost certainly natural. A man would have spaced them closer together. Even without a pack I preferred not to try the ascent here. About 5:00 p.m. I came to a big rain pool above a steep drop in the bed, the place where we had seen six bighorn sheep last year. There was a bare flat rock for sleeping, so I called it a day.

A short distance to the south of the Montezuma Point tributary of Arch Creek, I saw an almost certain route down the final Supai cliff. If this is correct, I could have shortened the time by an hour and could reach the Royal Arch in one day from the head of the Bass Trail.

On Wednesday I got away after a breakfast begun in bed while the stars were showing. I remembered just how to climb up from the creekbed to the bighorn trail out to the terrace east of the bridge using a ravine about 100 yards north of the junction with the Montezuma Point tributary. There is a good deal of exposure along this trace of a trail, but I am used to it now. On the terrace I went to the vicinity of the large cairn and then tried again to see the trace of a ruin that Doc Ellis found in the spring of 68, but I missed it again as I had a year ago. After the usual undulations in this terrace that seems so smooth from a distance, I reached the rappel site. I chose the wrong way down to the shelf, just a couple of yards to the left of the safe way. The hemp rope that Hildreth and Fulton had brought was still tied securely as the students had left it last spring and it seemed very sound. Still I did a body rappel using the cotton rope I had carried in. I tossed Art Foran's good climbing rope down to the landing and then carried it down to a place near the river where I thought I would surely be able to see it on the return. I didn't look back well enough because when I came by two days later, I must have been closer to the river and I missed seeing it. I was down to Elves Chasm by 10:15 a.m. the second day. Since I figured there was no need for haste, I took an hour's break when I reached a sunny spot and after walking until 12:30 I took another hour for lunch. This trip through Stephen Aisle, my fifth, was about the clumsiest. I got much too high. However I did see two mescal pits, one of which was associated with a sleeping site under an overhang. Two short sticks were leaning against the rock ceiling at either end. They would have been good for supporting a tarp, but that explanation doesn't hold water since I have never heard of the prehistorics making tarps. I was a little worried about reaching our former campsite by the river before dark, but as usual, progress along Conquistador Aisle was much better and I arrived in plenty of time to collect wood and get organized. I slept under a ledge which keeps off the dew. There were two rain pools on the flat rock so that I didn't need to use the river water while I stayed here two nights. Near morning of the first night, I caught sight of a mouse near my head, and the second night he really made himself at home. As I was dozing off he jumped from the wall on top of my bag. I moved out under the stars, but by 2:00 a.m. I got so chilly that I moved back under the overhang. In the meantime the mouse had sampled my cookies and margarine.

On Thanksgiving Day I got off to my usual early start after breakfast in bed. After studying my aerial pictures of the proposed Redwall ascent, I thought that I would have to get up the first shale cliff in the canyon just south of Enfilade Point and work along the slope north to the talus filled ravine I was interested in. Much of this was very poor footing and needed great care but I saw deer and bighorn droppings. Finally after going too high and then backing down, I got into the right ravine. Most of this is routine block to block stepping being careful about loose material, but there were a couple of places where one needed to reach for a grip and find toeholds. Near the top I had to scrap toeholds in the gravel and get off to the right on a grassy slope. From here I could have gone out on a ridge to the east that cut off the view downriver. Bighorn droppings encouraged me to follow a narrow ledge to the southwest, but this soon gave out. I could look across a small bay and see some places where one might proceed up to the southwest and perhaps get into a crack that goes on to the top of the Redwall, but the way over there seemed especially precarious and all the chances I had already taken had eroded my moral (this was okay). I wish now that I had parked my pack containing my lunch and had tried moving on and up. Instead I very cautiously backtracked down the ravine. If I did so I would have time to go quite a way up Fossil. Just as a gamble I continued on down the ravine to the shale cliff which my study of the aerials had said was continuous. At one place a talus comes within ten feet of the top so I went there, just to the north of the bed. Imagine my pleasure to find some breaks that got me down to within four feet of the talus. As I lowered a foot I found two stones leaning against the wall to shorten the reach. Now I knew that Indians had used this route. If I had known this before I went up, I might have persevered and gone on through. I may never get back here myself, but I would recommend it to strng and careful climbers as the most spectacular route from the rim to the river. If I ever go back, it will be from the rim of Fossil Bay because this seems to be the shorter approach. If there is some fairly reliable water hole on the Esplanade near where one should start down the last leg, this approach from above would be fine.

After getting back to the river, I spread out the map and decided against trying to go as far as Specter. I just went up into the very impressive lower gorge of Fossil. Dan Davis told me that he had walked up quite far, but I wonder whether he passed a couple of barriers. At one place I crawled underneath a big rock and up a sort of wall and at another I had to pull up by my hands. I went as far as the big round bay in the west side that has a great rock slide in it. I had looked this place over from the east side in years past and had even gone down to the Redwall rim and found that a rope would be needed to get from the rim to the top of the slide. The face of the slide has weathered to a vertical wall of rubble and clay and I think there is no chance that a manageable ravine would form between the slide and the wall. Clear out from the main slide there is the most impressive example of a round tower of this rubble and clay I have ever seen. Lower down, I noticed that the shale on the walls of the canyon is of strikingly different colors, brown and green with a sharp border. There was some water flowing which might be permanent at one place and there were more birds in here and in other places than I usually see in the canyon.

The return was without incident. I missed the mescal pits I had seen on the way out, and I stayed lower. I recognized the place where Art Foran and I had climbed up over one of the travertine spines that cut up the slope of Stephen Aisle and I finally recognized what I must have done on my first trip along here. One can get from the river up above the Tapeats about 200 yards north of where there is a pronounced fold in the strata and the igneous rock disappears. For the best route through Stephen, one should stay down near the river until he comes to this place. By accident I did this on my first attempt, but last year and this I was afraid that the progress along the river would be cut off by a cliff coming down into the water before

it would be possible to climb out. With the luck of a good guesser, I first followed the best route along the bank and then climbed up at the last chance to do it. Even on my sixth and presumably last traverse, I was afraid to go down to the river for fear that I might be stopped.

There was a trickle of water flowing in the canyon draining the Drummond Plateau, but it is the saltiest and bitterest I have ever tried. Perhaps the seep in the canyon east of Salt Creek is just as bad, the one I call Epsom. From here, with a few mistakes, one can follow a crude trail to Garnet. It is marked with infrequent cairns, and it leads to a large miner's claim monument. I saw no signs of actual digging. A little before reaching Garnet, I met Roger Field, and Betty and three of their friends were two or three hundred yards behind. I had a nice visit with them especially since it had been several days since I had talked to anyone. Allan Troop is a working geologist and his wife Janet teaches school. Don May is an accountant. They told me about finding several good rain pools in the next big canyon about an hour's walk back along the Tonto Trail. I had been hoping to get closer to the car then Garnet Friday evening so that I could go out on Saturday and this would be my chance. It was a fine campsite with a good overhang and no mice.

In the morning just across from where I slept I found a mescal pit and signs of a rock shelter. There was another such site about 20 minutes walk farther, but I didn't see any water nearby. About a mile downstream from Waltenberg Rapid I saw an impressive black rock sticking up in the river. What makes it unique is that there is a neat little harbor open on the side of the least water, the left. The river was low and all the rocks showed at Waltenberg, some right out in the channel forming real hazards. I was told at ranger headquarters that a boat party is going through at this time. I got to the car by using the flashlight for the walk from the top of the Coconino. This would have been unnecessary except that I bungled the approach to the Coconino ascent by going over to the base of Fossil Mountain looking for the trail.

A postscript to the foregoing account may be in order:

Only once had I followed the Tonto Trail around Copper Canyon. We found that going down by the mine from the west and coming up the trail out to the Tonto Trail was at least as quick and more interesting. However, Dock had sent me an account of a ranger trip down here 30 or more years ago, and they had noted an Indian ruin near where the Tonto Trail heads Copper Canyon. Since I had not seen this, I was curious as to what sort of ruin was meant. The only thing I could see was a very large mescal pit. Since these are recorded along with actual structures on the master list, this must have been the ruin referred to.

In going up the Bass Trail in the main canyon, I noticed for the first time how the Redwall is quite broken on the west side where the canyon is still wide open. Only the very top would cause trouble to a climber, and it might also be possible. There would be little reason to go up here since the Supai forms real barrier cliffs. There are many more cairns to mark the Bass Trail as it gets into the Redwall narrows at the upper end of the canyon. Someone has also pruned branches that were in the way. Where I had just noticed boards lying beside the trail below the switchbacks up the last part of the Redwall, I now recognized them as having formed a gate to keep stock either above or below. There is still some barbwire where the trail has come up through the Coconino also clearly intended to hold stock either above or below.

When the trail has come up through half of the Supai at the head of the canyon, it turns and goes up gradually quite far to the north. As I had found once before, it is possible to scramble up the breaks in the rest of the Supai and make quite a shortcut. I did this again and found the place where several short logs are wedged into the crack to form an aid in getting up an eight foot ledge. There is still a nail in one of these logs.

There was no excuse for one to become confused and go toward the wrong cliff to find the trail up the Coconino. The right bay and the one west of Fossil Mountain do look quite a lot alike, and the break in the Coconino is actually hidden behind a projecting point. However on other occasions I had never made a false move here. This time I actually got out the map and studied it and I still went wrong. Both of these bays drain into Garnet Canyon. One should note that he needs to cross the first big draw and follow the second to arrive at the trail. The students last spring had made the same mistake. When they found no trail along the west slope of their point, they realized that they were near Fossil Mountain, but they took the dare and went up the Coconino right near the end on the west side of Fossil. They didn't consider this particularly hard, but they built a few cairns just in case they would have to find the correct route down. I am sure they didn't make their trip any easier by their success because they would then have to traverse the rim of the Coconino without a trail and climb up to the rim through the woods.

Redwall routes in Cottonwood Canyon [December 13, 1969]

One of my ambitions was to go back to the place where Al Doty and I had tried getting up the Redwall northwest of the Spring in Cottonwood Canyon and try coming down from above using a rope. The student hiking club had also planned to go to Horseshoe Mesa, so I joined them and took a couple of the members in my truck.

George Billingsley wanted to rappel off the rim and visit an interesting looking cave below the west rim of the long arm of Cottonwood and the others wanted to look at the mines. Bob Dye, the new president, was undecided whether to go with George or come with me and try some rock climbing. The trail was covered with three or four inches of snow and I found that my shoe soles were much less effective in keeping me from slipping than were the vibran soles of the other hikers. I fell behind in the line going down, and in fact I fell repeatedly so that I had to exercise extreme caution in passing some of the places where the trail is no more than a foot wide on a shale slope. Bob went ahead with George, so he left the trail to go along the rim of the Redwall while I was far behind. I could see that the snow would make the steep slope down through the trees and slabby rocks even worse than the trail, so I changed my plan from following the Redwall around to the west of Cottonwood to the use of the trail to the bed of the canyon.

On my way down the west side of Horseshoe Mesa neck, I branched to the south and crossed the valley to go up to the point separating the main arm of Cottonwood from the one with the spring. I found that Al and I had come to an incorrect conclusion. The best way up faces the north instead of the west. At the very top, the west side forms a smooth cliff while the north side that looks worse from a distance actually has steps and hand holds. When I was getting a good start on the highest part of the route, I met Bob Dye coming down. I wanted to complete the route and so did he, so we merely told each other what we wanted to do and kept on going.

At the top I met George who was feeling the worse for lack of sleep the previous night. He had been unable to locate the cave from above and had come to the conclusion that his 50 foot rope would be inadequate anyway and that one would need Jumars to handle the return. He decided to rest and go back the same way. Actually he went down through the Redwall by the route that Bob and I had just used and followed the trail out.

I went on around the Redwall rim to the place where Al and I had tried coming up. While I was eating lunch there, I heard a noise and noticed Bob Dye down below. He had left his jacket and lunch at the spring and then had gone up to inspect the route I wanted to come down. However, all three of us had noticed that there is a very steep looking break about 200 yards south of where Al ad I had tried to climb. Bob preferred this place and found that it goes through. Most of it is a mere walk up a talus, but at one place for about 30 feet he had to do a rather severe chimney climb. The crack was so narrow that his movements were hindered. When he got out on the ledge above, about halfway from the top of the slope to the final cliff and the Redwall rim, he found a cairn at the top of a parallel crack. He concluded that this route would have been easier than the way he came up. When I told him about the mining camp, we decided that the miners had a direct route to the spring here.

Before I talked to Bob, I had decided to go down the trail into the west arm of Cottonwood and walk back via the Tonto Trail. After he told me of his success I was rather in favor of going down the way he had come up, but he didn't feel much enthusiasm for this. He had been under quite a strain in getting up alive, and he didn't like the idea of nursing me down his route even with a rope, and I didn't press for this project at this time. He said that his route out of Beaver Canyon, leaving the main bed about a quarter mile upstream from the spring, is easier than what he did in getting up the Redwall west of the spring in Cottonwood Canyon.

We were successful in finding the Tonto Trail sooner than I had on either of the other recent occasions and it took us an hour to go down the miners trail and get around to the spring. I had less trouble with the snow in going up, and we reached the rim from the spring in three and a half hours.

Saddle Canyon to Little Nankoweap [December 20, 1969 to December 21, 1969]

After three trips to the partial Coconino break just southeast of the dry Coconino fall in the bed of Saddle Canyon, I was still thinking that it could be passed using a rope.

In order not to let my thinking be swayed by anyone else, I went back there alone. After sleeping in the truck I got off to an early 7:15 a.m. start with only a lunch and my climbing outfit. There was a little snow in the shade, but the day was fine. I overshot the right descent through the Kaibab by one point. This turned out to be not too bad because I was able to climb right down directly to the crucial place in the lower Kaibab ledge which is accepted by the deer to get down and cross Saddle Canyon. Although it had snowed before Thanksgiving and after, there was no water in the pool where Jim Sears and I had seen it November 1st (wrong, I had looked in the wrong place). This time I did what I did when I first came here on 9/1/63. I went along the deer trail above the Coconino on the north side of the Coconino gorge and

looked across at the various possibilities. The shortest drop to good walking seemed to be farthest to the east, but it was around behind a point and I couldn't see whether there was much overhang or not. When I got around to the place I found that one can get down the Coconino to a hidden pocket big enough to support trees big enough to make safe rope anchors. When I was 20 feet down, I found a big overhang and soon the rope was spinning me slowly and then faster. The best that I could do was to shut my eyes and proceed to feed slack to the friction carabineer. In a shorter time than I thought it would take to be down, I felt a big change. I had the sensation of swinging many feet sideways, but when I opened my eyes, I saw that I had stopped spinning with my feet touching a bush.

There were parts of a deer skeleton near where I came down, which makes me think that some deer at least have a suicidal impulse to try 55 foot free falls. From the place at the top where I left my nylon jacket to prevent chafing of the rope at the lip, it would be more like 75 feet down, but a deer or bighorn might be able to check his fall at a couple of meager ledges in the upper 20 feet. I was feeling rather elated that I had finally had the nerve to reverse several frustrating experiences in which I had chickened out of a project. I should have brought down supplies for another good day and walked out Little Nankoweap. I soon found water in pockets down Saddle Canyon, and when I bypassed a fall by going into the first side canyon from the south, I found water running. This is probably snow melt and not to be trusted at other seasons (running for most of the year). There were two or three barrier falls in the Supai, but the bypasses were obvious and usually multiple. There was another rain pool where the limestone surfaced, so I assumed that this prevalence of water would continue along the Esplanade. It took me an hour and 45 minutes to get from the rappel site to the Redwall rim above the mouth of Saddle Canyon. The river, running clear, flows in a bed of green shale with the Redwall rising sheer and smooth for its full height.

After eating on the rim of the grand trench, I went back to ascend the rope and get home at a reasonable hour Saturday evening. I hooked on the Jumars prepared to go on up if the rope began to spin. However, when I was only about 10 feet off the ground the spinning became so bad that I knew I would be sick if I continued. When I had come to earth again, the best solution I could think of to check spinning was to fasten the rope to a shrub in such a way the spinning would be checked but so that I could pull the rope up when I got off at the top. I can see now that a fairly heavy stone anchor at the bottom would be better. In order not to have to use a hand to pull the main rope through the waist band I decided to leave the waist band off, a nearly fatal mistake. Besides, the wrist band is intended to keep the Jumar sling rope from getting away from one's body and it wouldn't have to go around the main rope. Again when the clamps were about 10 feet up, the rope pulled entirely loose from the shrub and the spinning started again. I began to descend but this time the Jumar slings got away from beneath me and my feet came up even with my shoulders. I was supporting my full weight with my hands and was unable to maneuver the clamps to descend. After a few desperate moments I had to let go and hang from my feet which were well fastened and held by the snug slings.

My first reaction was satisfaction that falling backwards hadn't hurt. I could touch a rock and grip a shrub right under the rope, and I could get my fingers in the dirt and work my way up the steep bank until I could rest my shoulders on the ground. Slowly I realized how serious my predicament was. There was ice unmelted in the pools below and I had on only a cotton flannel shirt. From what I have heard a man can't survive this kind of cold even one night. Even if I had had a knife, which I didn't, I couldn't have reached

the slings around the instep to cut them. I kept busy with pawing the ground to get more slack and then resting. Finally I concentrated on getting my feet out of my shoes. Several lunges were unsuccessful, but finally I got the laces untied. After several more attempts I got the laces loosened. Then with my right heel I managed to scrape the sling rope farther toward the toe and then the right heel was able to get behind the left shoe heel and push the shoe off. I was able to kneel on the left knee, but the foot was so bruised and painful that I don't think I could have stood and balanced on it. However, I soon had the right shoe off still hanging from the Jumars. After some more work, I had the shoes down and on my feet at last. First I crawled around and assembled things that had fallen out of my pockets, light meter, billfold with my truck key in it, and pocket watch. I knew at one time that my camera was also on the ground, but in picking up my day pack and canteen, I overlooked getting the camera.

About all I could do at first on foot was to topple around and clutch the rocks, but I was optimistic enough to think that they would get better as I used them. Actually, in less than two hours I was walking about as well as ever. There was no way to reach and bring down the Jumars to try again if I had wanted to. I was faced with the choice of sticking around nearby until Roma could send out a rescue, probably a helicopter, but that would certainly not be until Monday. I didn't have matches along, a bad oversight, and I knew I would have to stay awake all night and walk to keep warm, so I decided to do my walking in a self rescue out by way of Little Nankoweap. I had reached the rope at 2:20 and I got ready to leave at 3:40 so I must have been hanging upside down for 40 minutes.

While eating lunch I had studied the map and figured that going along the rim at the top of the Redwall would take about three times as long as the trip down to the rim, so five or six hours by full moonlight should do that leg. The way along Saddle Canyon on the south side of the Redwall gorge was rougher and less direct, but I got back to the river by 6:00 p.m. The first part of this walk went rather smoothly, but there are three big ravines to be passed by long detours around to their heads. There is a fault system that amputates Sase Nasket from the east rim and it crosses the canyon and chops into a promontory on the west side. I couldn't decide whether to go up and over using this fault. If I had had more than moonlight, I could have consulted the map and I might have tried by the full moonlight. As it was I compromised and climbed through a saddle only slightly lower than the one that goes behind point 4823. When I was definitely turning along Little Nankoweap, it was 10:45 p.m.

From Barbenceta Butte I had seen what I thought is a route down off the Redwall coming in from the river that would get one down above the barriers in the bed. In the moonlight distant details are not distinct, and after one half hearted detour below a cliff down to the bed of a ravine from the north, I gave up and followed the limestone as it sloped up sharply to the west. The catch is that there are several side canyons to pass. These were slow and just when I seemed to have them whipped, I came to the main Little Nankoweap going upstream to the north. The moon went behind the cliffs of Saddle Mountain soon after I entered this biggest detour. For a time I was on a Supai bench which seemed broader than the Redwall rim, but when it began to pinch out, I got back down to the Redwall. The whole place seems impressively steep, and when I finally reached the north side and looked across I could hardly believe that it was possible to go where I had just been an hour earlier. The moon was still shining on high cliffs, but I couldn't see well enough to dodge tree branches and thorns, and I got through with the richest assortment of scratches on my face and scalp to date. Cotton work gloves saved my hands while I was wearing them all night. The crossing of the main ravine of Little Nankoweap was particularly difficult. Along the first

level the ledge pinched off right next to a fall. When I tried the ledge 20 feet higher the same thing happened. There was only one more ledge below the Supai which formed a solid wall along here. To get above it would require a long backtracking operation and I knew that I didn't have any energy to spare. I had filled my two quart canteen at a rain pool in Saddle Canyon about 5:00 p.m. and all the food I had was four pieces of bread, six cookies, and more prunes than I would want. When I got back to the bed at the lip of the fall, this ledge went through although I had to get down on all fours to get under a ceiling. What won't a man go through just to save his life! I began to think thatI should have scratched a message on the bare earth at the rappel rope saying that I was heading for the Nankoweap Trail. It was darkest and coldest from five o'clock on. I hadn't eaten much in an effort to go slow on the water, and I often had to sit down and doze for a few minutes with my head on my knees. After a few minutes, I would get chilly and struggle on. Fortunately there was almost no breeze and the temperature which must have been near freezing didn't zap my strength. Finally at 7:45 a.m. with the welcome sun showing again, I was back on the Nankoweap Trail. Our college hikers had been along there in force only a few weeks before, and their tracks across bare clay slopes gave me courage to cross without hesitation.

There is a definite change in the trail in the last five years. I used to classify it as one third still good, one third good to show one the route, and about a third no good at all. With quite a lot more use by hikers and more rock slides across the trail the proportions would now be more like 5% still good, 90% good for guidance, and 5% nearly impossible to follow this from Tilted Mesa to the Saddle. There are now quite a few plastic ribbons and some cairns to mark the trail. The so called better places in the trail have more brush than I used to notice.

Soon after the sun reached me I was warm enough to hike without a shirt on, this on December 21. At one place I tried to get some sleep with the sun to keep me warm, but I couldn't even dose off. Near Marion Point there were some snow patches and I tried collecting some for the canteen. That is slow and I soon noticed some active drips. I put my canteen and an empty can under the drips and went to find a sunny place to rest around the corner. Right where I decided to recline were three plastic bottles that had been left by the hiking club when they came down during Thanksgiving. Two of them still had some water, so my problem was solved. I ate my bread and cookies. Three prunes seemed to be all I could stand. It took much less time to go from Marion Point to the Saddle than it had to go from where I first reached the trail in the middle of the Supai to Marion Point.

At 12:30 p.m. I was starting down off the saddle into the snow to the north. From weariness I was clumsy in the snow and fell repeatedly. Even where the ground was bare, the frozen mud with some wet mud on top was a hazard. I made it to the car in two and a quarter hours instead of the hour and 43 minutes Dirk Springorum and I had needed.

There were plenty of signs of deer in Saddle Canyon and other places I went through. I was rather sure of some bighorn tracks and droppings in Saddle Canyon below the Coconino. Some birds and a few flies were the only kinds of wildlife actually seen.

The towers and walls around Saddle Mountain are outstanding, and I again saw a natural bridge on the south side of Saddle Canyon east of the tributary with the running water. Norvel Johnson and I had seen

it, but we gave up the project of walking to it. It doesn't set any records for size, say about 30 feet long by 15 feet high. It is in a promontory and shows sky through it, and thus should be called a window.

All in all it was about the most harrowing trip I have ever done, from 7:15 one morning to 2.:45 p.m. the next day with my life in doubt for about 40 minutes and then the need to press to the limit to get back to the car. After a good meal at Cliff Dwellers and breakfast at home, I was still about five pounds below my usual weight. If I hadn't felt so pushed, I could have enjoyed the moonlight on the pinnacles and the sunrise. I wouldn't mind that hike again, especially if I could cut out most of the brush and other problems by finding the way from the bed of Little Nankoweap up into the Redwall rim. Maybe I'll use that route to recover my camera. Since it is wrapped in a plastic bag, it ought to remain in fair condition. There is also a better rappel site that doesn't involve an overhang, but it would very likely take more than my 120 foot rope.

Saddle Canyon [December 23, 1969]

When I got to the truck at the end of my thirty one and a half hour ordeal on Sunday afternoon, I had to call up Roma and relieve her worry and I couldn't take the time to go after my rope and Jumars. By Monday evening I was feeling up to the short walk required for their recovery. Bob Packard accepted my invitation to come along and see some more of Arizona.

We got away shortly after 7:30 Tuesday morning and made a gas stop at Cliff Dweller. It took only four hours to reach the hunting camp at the mouth end of Houserock Valley. After eating lunch we set off down the slope along the rim of Saddle Canyon. This time I watched our progress and led Bob down the correct break in the rim where some trail shows. I hesitated in leveling out on the right ledge, but I got to the right one after a little thought and marked the place with a red jacket that I wouldn't need any more. I wasn't absolutely sure how far east we should go either, but I found the right break where the ledge trail ends. Below here we went a bit to the west, then down and about 100 yards to the east around a point before getting on the talus that took us to the streambed. This time we saw the pool that Sears and I had noticed, but now it was mostly ice. In trying to follow the trail on the south side of the bed, I missed it the usual number of times, but we reached the place where I had tied the rope in one and a half hours.

Bob expressed the sentiment that no one would ever get him to rappel down such a distance. This wouldn't bother me as much as what he did when we were on our way back. He went out to Buck Farm Point to enjoy the view up and down the river. He went out on a little projection over the cliff and I preferred to look on. There was no difficulty in pulling up the rope with the Jumar clamps still in place and we went back to the car without incident in 105 minutes.

I had thought seriously of going down over the irregular and somewhat convex cliff at the west end of this broken area in the Coconino cliff. The descent seems to be farther, however, and I don't feel too sure of every move. If I would get down there it wouldn't take me long to pick up my camera that I left where I was hanging upside down. If I would run into any trouble about coming back up, I could still be prepared and walk around Saddle Mountain in time to see my way by daylight where I should get down from the top of the Redwall to the bed of Little Nankoweap. I think I ought to investigate this possibility further. It

is certainly true that the talus goes up from below farther at this area than it does anywhere else and if there are places where one could stand by and rest on the way up, it might be not too bad.

The view from Buck Farm Point is outstanding, but I suppose the views from Toroweap and across from Cape Solitude are justly more famous. The road to Buck Farm Point is well marked and not too rough, so it is actually rather easy for a tourist to get there. It ought to be given more publicity.

The Coconino in Saddle Canyon [December, 1969]

I became interested in finding a route down through the Coconino in Saddle Canyon when I heard that R. C. Euler, by using a helicopter for salvage archeology connected with the projected Marble Canyon Dam, had found a storage bin and a mescal pit in the Supai of the Saddle Canyon Drainage. At that time I didn't realize that there is a route down at the head of Buck Farm Canyon and another just north of the former National Park Boundary east of Saddle Mountain. I was interested in finding a more direct way for the prehistoric Indians than to go down the Nankoweap Trail and north or down South Canyon and turn south.

On my first trip down the road ending north of Saddle Mountain, I tried the bed of Saddle Canyon and found it stopped by a fall in the lower Kaibab or Toroweap. Then I located a break in the rim that takes one clear to the bed east of the fall. A deer trail guided me down here and along the rim of the Coconino. I found a piece of pottery on the north side of the rim of the gorge at the big drop through the Coconino. From the north side I could see that much of the Coconino was covered by a slide on the south side east of the head of the gorge. When I went around there to check it, I soon discovered that it didn't go clear down. I reasoned that during the Indian occupation 800 years ago, this landslide might have offered a route to the base of the Coconino, but erosion had cut the lower end into a vertical cliff of clay and rubble. However, at the east side of the slide material, I saw where I might fasten a rope and rappel about 85 feet to the bottom. I had brought a rope in the car, but by the time I got back to it, I was out of the mood to try the rappel. The next time I visited this place was with Norvel Johnson. I had carried the rope here, but Norvel insisted that I shouldn't try anything that risky. I should have left him the car key in case he had to go for help, and I should have gone down.

The third time, I came alone determined not to let anything dissuade me from the adventure. I left the car by 7:15 a.m. on the short day in late December and got to the rappel site without delay. I made sure that the rappel rope would reach the ground and started down with the carabineer clipped to the diaper sling and the main rope twisted around the carabineer two or three times. All went well until I got down about 25 feet and found that from there on I was hanging free of the wall. The goldline rope began to spin me faster and before long I was feeling dizzy and almost sick. I shut my eyes and kept on feeding the rope through the carabineer. Eventually I found myself resting on the ground and it didn't take many minutes before my insides began to straighten out.

The trip down through the Supai to get a view of the river from the Redwall rim was simple. I found a permanent spring coming from a south side tributary part way through the Supai. After eating my lunch while I enjoyed the impressive view of the river from the Redwall rim north of the mouth of Saddle

Canyon, I started back to the rappel site. Before three I was ready to begin the ascent using Jumars. When I had gone up a few yards, the rope began to twist me around and around. I remembered how ill I had felt in the relative short trip down and I thought it might be really serious if I became weak on the slow trip up the rope. I considered tying the lower end of the rope to a bush or a rock, and I don't know why I didn't do this. This might have checked most of the twisting, but instead, I elected to do away with the Swami belt that keeps the slings my feet were in from pulling away from the body. This wouldn't really have enabled me to move up appreciably faster, but somehow I thought it might.

When I was about nine feet up the rope, my feet slipped forward away from my body and the slings my feet were in were even with my chin. I hung to the grips of the ascenders until my hands gave out and I fell backwards with my feet still held tight in the slings. If I had been a bit lower, I probably would have hit my head hard on a rock directly beneath and if I had been just a foot higher I couldn't have touched the ground with my fingers. If the ground had been level, I wouldn't have been able to help myself either. The day was calm and I was warm enough with just a cotton flannel shirt, but I had seen ice in the shade and I knew that dressed as I was I couldn't survive the cold in that helpless position. I knew that no help would reach me for at least several days since my wife didn't really expect me home until late the next day, and I hadn't given her a good location of where on the north side of the Colorado I would be. I had to do something or else it was my life. I said a prayer for calmness in the face of the inevitable, and I didn't struggle aimlessly or give up either. I felt no sense of panic, so I might say my prayer was answered.

I also found that I could dig my fingers into the soil and go uphill since there was quite a steep bank. Once or twice I lost my grip on the soil and swung down again, but eventually I reached a stout little tree where I could get my left arm around it and roll over with a good view of my shoes. The rope was now pulled over about 30 degrees away from the vertical and I could lunge up and touch my shoes. After several attempts, I could get the shoe laces and untie the bow knots. If they had been snarled or tied in a double knot, I would have been helpless, but I got one shoe untied and then succeeded in also loosening the lacing and getting my right foot down to the ground. It was much simpler to get my left foot out of the other shoe and then I could take the shoes out of the slings. My feet had been gripped so tightly in the slings for so long that they were hurting. I didn't have any stomach for trying to Jumar my way back up the rope and I would have had to climb the rope to undo the Jumars. Instead, I started for the car by the shortest route I knew at the time, back down to the rim of the Redwall and south around Saddle Mountain to the Nankoweap Trail.

I filled my canteen at the spring, but still it was empty by midnight. Daylight gave out when I had reached the Redwall rim on the south side of Saddle Canyon. There was a moon through part of the night but I was walking with no trail where I had never been by day. Progress was slow, but I knew I had to keep going. I had a little food that was left from my previous lunch, but I knew it would be an effort to reach the car. Still I never entertained the idea that this would be impossible. When I got around above Little Nankoweap about midnight I could see that there was a possibility that I might find my route down to the bed above the impossible falls in the lower end. I was afraid of finding myself in a dead end and I thought the conservative decision would be to continue along the rising Redwall rim along the north side of the Little Nankoweap. I later learned that a deer trail goes through the Redwall to the bed of the Little Nankoweap and that I could have saved about five hours if I had taken this gamble. The long way around the north arm of Little Nankoweap turned out to be a gamble too. At the head of the canyon, I found that

the ledge I was on pinched out and I had to backtrack to a higher level. This second level also came to an end by the dry fall. The still higher level seemed to be my only chance, because the Supai higher than this seemed to form a really high fall. I found that this third attempt was possible and I had nothing to worry about between me and the Nankoweap Trail. The only bother was that I would run into dead juniper twigs that bloodied my face with stabs. The sun was rising when I reached the trail and I knew that cold wouldn't be my problem. I had lain down to rest a couple of times in the night, but I remembered that one isn't supposed to fall asleep when he is cold. By 10:30 a.m. I had reached Marion Point where I found a couple of plastic bottles with some water in them. Using it I could fill my canteen and eat the rest of my food. I was slow and weak, but I got to the car parked at the old hunting camp by 2:45 p.m. I was able to drive to Cliff Dwellers Lodge where the Bakers used their two way radio and got the word to Roma that I would be home late after sleeping for a while.

Miles 219 and 220 Canyons [January 2, 1970 to January 4, 1970]

After our inability in finding a trail in Trail Canyon (Mile 219 Canyon) last spring, we had received word from Aleson and Belknap that we were indeed in the right canyon. Aleson had said that we would find the trail in the long, north arm, and Belknap had said that the trail leaves the bed of the creek rather close to its mouth close to a cave in the south wall. When Visbak, Morgan, and Mooz were here again in September, they had seen the cave and had noted two sticks put in the cave evidently by Indians. Homer had tried unsuccessfully to reach the cave which is about 30 feet up from the bed. Belknap had told Mooz that the trail goes up near this cave, but he hadn't made it clear on which side of the bed. Last spring all of us had thought that the trail should go up the long arm toward the map location of Kelly Spring, but we had been stopped cold by a high fall in the bed. We had considered a bypass, but it would have been difficult and time consuming, and we were running out of time. On Jorgen's second visit, they had gone up the west arm only to find a dead end fall similar to the one in the north arm.

From a reprint of Aleson's log of his hike up Mile 219 Canyon, it appears that his conclusion that the north arm was the correct one was based only on his getting stopped in the west arm. From there he went back to the river quite short of water and feeling the worse for the heat. I would be interested in hearing more about Belknap's conclusion that he had located the trail. Perhaps he had only located a break where the burros get out of the bed to the Tonto level. The present trip would include one more day than we had allowed last April, and hot weather certainly would not be the drawback. Jorgen joined Doug Slough and me at Peach Springs about 9:00 a.m. on Friday and we proceeded down to the river over the road that is now just a little worse than it was last spring. Ordinary cars were using it clear to the river. Where the water of Diamond Creek would overflow the roadway, we traveled over fresh ice even in the late afternoon on our return. The four Mexican Hat Expedition boats were still on the bank with the oars and rowlocks removed to prevent unauthorized trips down to Lake Mead. Still I would think that they might tempt some people into the reconditioning needed and a canyon voyage.

We crossed the river as we had done last April. I rowed across alone and then carried the kayak above the riffle. One unexpected thrill was that when I started across with Jorgen and two packs, we hit a sudden boil and tipped far enough to ship two or three quarts of water. At last there was some use of the narrow deck and the cockpit combing. When we had steadied the boat, we got back into the quiet water and

proceeded to tip the boat over on the bank. Then it was clear that I would take only one man at a time and ferry the packs across by themselves. There was no problem after that decision but it would have been bad if Jorgen and I had gone overboard in that 46 degree water. Our packs were not waterproofed and although we had buoyant cushions we might not have reached for them in our excitement. My reaction would have been to swim madly for shore, about 70 feet away.

We used the route that Bob Packard and I had found on the way up and came down where we had last spring, to and from the Tonto. I was coming down with a cold and Doug and Jorgen had not been hiking recently, but we seemed to make about the same time that we had last spring. We used our old campsite against the granite just south of the bed of 219 Mile Canyon. After a leisurely breakfast we got started up canyon at 9:15 a.m. For some reason Jorgen missed the cave with the two sticks where Belknap says the trail leaves the bed. We certainly saw no place where a loaded burro could climb out of the bed at all close to the river. Plenty of wild burros use the bed and we also saw some fresh bighorn tracks.

Shortly after we had passed the tributary from the south, I saw what appeared to be an excellent way up the Redwall, a fault ravine coming down from the southwest side. Over the notch at the top, I could see a skyline that I was sure was the rim of the Redwall. What I didn't realize from this distance is that this Redwall rim is far behind the notch, clear across the next side canyon, in fact. I was walking ahead and soon picked a place to leave the bed. Jorgen and Doug continued along the bed, but I thought that they were only waiting for a more direct way up. Jorgen had mentioned seeing a cairn where the north and west arms come together, and I might have known he was interested in seeing what might be possible from there. I continued up the talus filled ravine even though I could see that the others had their own plans. When I came to the notch at the top, I could see that I was at a dead end, about 150 feet from the top of the Redwall. I proceeded gingerly along some meager ledges farther west around a corner, but from there I could see that they ended in a smooth wall. On my way back down I had a fine view of two bighorn ewes loping along a broad bench to the south that curves around into the south rim. I should have followed them immediately to see whether this route would lead me out to the top, but I continued down. While I was at my highest point, I could see Jorgen and Doug proceeding up near the angle between the north and the west arms. I assumed that they were intending to go along a ledge and get into the valley above the barrier fall in the north arm. When I got to the bed, I thought that I would be so far behind that it would be a waste of time to try to follow Jorgen and Doug. Instead I climbed to the top of the talus on the left side of Trail Canyon to try to decide where the bighorns were going. I couldn't see any breaks in the rim cliff then nor when I was going back to the river.

Jorgen's idea really paid off. They found no indications of anything remotely like a trail, but they also found a reasonably safe climber's route clear to the top of the Redwall. They assured me that by careful route finding I could have gone up without making any long reaches. They didn't try to go horizontally into the upper valley of the north arm (the right way). They found themselves on a knoll with a fine 360 degree view. Across the north arm they could see the Snyder Mine and they thought there might be a way down into the upper valley of the north arm, but no trail showed (trail construction in Mile 214 Canyon). Perhaps the trail from the mine down to the river, assuming that it is not a myth, goes down directly to the Tonto on the river side and then gets down the Tonto at the mouth of Trail Canyon. There is one other possibility that I wish I had checked. One might get up on the talus on the left side of the north arm and

then walk into the upper valley instead of using the precarious ledges on the right. I didn't check to see whether the talus goes along high enough (not possible bench on lower side of north arm).

I left Jorgen and Doug a note on a stick saying that I would return to the river and then go up the bed of Mile 220 Canyon and still get back to our camp by 5:30 p.m. I reached the last fork at the west end of the canyon without seeing anything that might suggest a way up. This is the only valley I can think of where the bed above the Tapeats splits and makes two distinct dry falls in the upper edge of that formation. There are a couple of easy bypasses of these last barriers and no rough spots in the bed above. However, the Redwall cliffs ring the valley without a break.

Before we started back Sunday morning, Jorgen and I went up the bed of Trail Canyon once again and climbed up through the granite and Tapeats on the north side just around the first bend. On the Tonto level we found the usual clear burro trail. On the return we went out above the river and then came down east of a tower of Tapeats Sandstone where the burros go up and down. This route down to the beach just upriver from the mouth of Trail Canyon fitted precisely with what Aleson said about going up and following a trail which went into Trail Canyon above the granite. The only comment I would make about Aleson's day in here is that unless the burro trail along the Tapeats rim is a lot slower than the bed, he was moving slowly to have used seven hours for his investigation. We could walk down the bed from the fork between the north and west arms in one and a quarter hours and I have the impression from Jorgen that one is stopped in about 15 minutes when he proceeds up the west arm. Harry must have felt the heat for sure.

Our return to the delta upriver and across from Diamond Creek was uneventful. I enjoyed a smooth ride down through the riffle by myself after getting Jorgen and Doug and the packs across the river. The weather had held fair with cold nights, 22 degrees Saturday morning. I saw more interesting birds than I had expected at this time of year.

Trail near Trail Canyon
[January 23, 1970 to January 24, 1970]
[Compare logs for April 26, 1969 and January 2, 1970]

Last April when we were stopped by the fall in the north arm of Trail Canyon, we assumed that the trail must be in the west arm. Visbak talked to Harry Aleson and heard that Aleson was sure it must be in the north arm. His log from years ago told of his inspection of the west arm where he was absolutely stopped. When Visbak, Morgan, and Mooz were here on their float trip down the river in September, they went up the west arm and agreed with Aleson that there is no way out in that direction. On January 3rd of this year Visbak and Shough were able to go up the Redwall near the angle between the west and north arms, but their route was beyond the capability of a burro although they saw some evidence of use by bighorn sheep. They saw where the Snyder Mine is located, near the head and across the north arm from where they stood. They saw no trail down into Trail Canyon from the mine. All of these negative results made me think that one should look in another area for any trail from the mine to the river. I had noticed an area north of Trail Canyon, about Mile 217.3, where great sections of the Redwall cliff had slipped. When Jorgen and I had gone up the left side of the river three years ago, I had studied it with the idea that there might be a route here. From that distance I couldn't be sure.

With this background I left Flagstaff about 7:00 p.m. Thursday evening. On my way through Williams I stopped at Cureton's and had quite a visit with Allyn. By 10:30 p.m. I had reached the midway campground in Peach Springs Wash, so I slept in my shell camper there. The night was mild, about 10 degrees warmer than it had been right by the river on January 2nd.

I drove on down to the river before it was really light except for the bright moon. While I was eating in the truck cab, I had the interior light on for reading. It was bright day before I finished what I was reading. After visiting briefly with Harry Wallace, a businessman from Ashfork who was staying for several days to fish, I got organized and rowed my kayak across. The river was fairly low but not as low as when I returned. I noted the beaver cuttings in the willows along the north shore. It was 8:15 a.m. by the time I was ready to start up to the Tonto. The route I used was somewhat to the west of where Visbak, Shough, and I had come down in the former trip, and it was no improvement. There was a steep place in a crack where I considered taking my pack off. Still it took the usual 30 minutes to get on the Tonto. By noon I was down on the sand at the mouth of Mile 220 Canyon although I had taken time for a few pictures and stopped briefly when my right knee began to hurt.

This time I made a few notes on some landmarks. The inaccessible large cave near the top of the Redwall is high on the right side of the river at about Mile 222.4 and the large mescal pit is right above the trail at about the same mileage. The overhang showing the trace of a rock shelter is a few minutes walk upriver from the pit, and the other overhang where Ellis inspected the cairn is about ten minutes walk farther. These signs of occupation are less than 30 minutes walk from the spring which in turn is about 45 minutes walk from Mile 220 Canyon. At the first of the year, we found only one streambed flowing a trickle but now after some mild storms, the next gully north is also flowing. I place these sources at Mile 221.5. There are numerous places where a burro can get down to the river along here, so water should be no problem to man or beast. There was one thing which I saw on the way north and missed on the return which aroused my curiosity. High in the Redwall to the east across the river, there seemed to be a rectangular cave opening and a streak across the cliff angling down to it that looked suspiciously like a crude road. I would like to fly by and see this place better.

After an hour for lunch and a rest, I moved over to Trail Canyon and left my pack at our old campsite. The way used by Aleson, which Jorgen and I had come down just before starting back on the previous trip, was a good way to the Tonto north of Trail Canyon. It takes less than 15 minutes to go from the beach to the Tonto here. I made the mistake of going up on the south side of the first big landslip. At the top I found several hundred feet of shear Redwall above me. To the north was a deep and broad ravine beyond which was a similar but larger slump block. However, this false climb was repaid by my finding two well constructed cairns. I have no good theory as to why they should have been built where they stand, but the line they indicate points across the valley to the top of the northern slide area.

I considered going down to the bottom of the valley and climbing up the talus material, but I thought it might be faster to stay on a high bench and work around. There were a few signs of bighorn along here, but the footing called for great care. By the time I had reached the top of the gray slump, it was 3:30 p.m., the time I had set to start back. From a knoll I had a good chance to study the route ahead. I looked at the way in detail and from where I stood, I would say it is 99% sure that a burro could walk up to the top of

the Redwall. Another half hour each way might have been enough, but when I started down, I intended to come back the next day and go clear to the mine if possible. On the way back to my pack, I began to wonder whether I had turned off the interior light in the truck when it got light outside. The more I considered this the more unsure I was that it was off when I left. Rather than face the prospect of walking back to Peach Springs and paying a wrecker to get me started, I decided to head for Diamond Creek. I remembered that Harry Wallace was going to go home on Saturday, and if I hoped to get his help, it behooved me to arrive around noon on Saturday. With this in mind, I moved my pack over to Mile 220 Canyon before cooking my soup. I had noted that one should be able to get to the top of the Redwall by the route I had inspected in about two hours and 45 minutes form camp at mile 219.

There was no freezing during the night and my down bag seemed a bit too warm. There was even a mosquito around during the second half of the night. Near midnight the bright moon began to be hidden by clouds which further strengthened my decision to cut the trip short. Well before six I began breakfast in bed and by 6:30 a.m. I was on my way in the faint light of the moon behind the clouds. By seven I was on the Tonto south of Mile 220 Canyon and by 10:45 I was putting my kayak in the river to cross. One variation on the return was that I took the high trail which Shough had followed on our other trip along about mile 221, but this comes out about even with the clearer lower trail.

Just as I came in sight of the mouth of Diamond Creek, I saw a rubber boat pull out into the current and shoot down through the rapid. I learned from Harry Wallace that it was the last of several craft 22 students from Prescott College were taking down to Pierce's Ferry. There were a number of one man kayaks decked over except for a round cockpit and the pilot tied a spray cloth around himself to avoid swamping in breaking waves. Presumably there is a quick release from this if one gets capsized.

There was no call for this change of plans because I had turned off the light. Mr. Wallace said that if it had been on he would have noticed it Friday evening and he could have disconnected the battery for me even though I had locked the cab.

I felt that the trip had been fairly rewarding. It seems fitting that the actual use of this route to the top of the Redwall and the trip to the mine should be made when I have Jorgen with me.

Deva Brahma arm of Clear Creek [January 26, 1970 to January 28, 1970]

Bob Euler had told me about a ruin on the south side of Deva in the Supai which has a spring nearby. He said he had the impression, from aerial observation, that there is a climbable break in the Redwall on the east side of Brahma and he suggested the ravine just east of the final e in Brahma Temple on the Bright Angel Quad (15 minute).

Checking this impression was the main project for this three day outing.

The weather had been fine for so long and off and on clouds would thicken as on Sunday afternoon, that I wasn't sure I wanted to take a chance on the weather, but when Monday dawned fine, I left. I know that some hikers think that going from the south rim to Clear Creek in one day is too much to attempt, but I

thought that I should still be able to hack that. I was pleased to be able to bring it off without too much fatigue, from 9:10 a.m. to 4:15 p.m. Originally, I had intended spending the rest of the day loafing and reading, but I got the bug to try again to find a ruin Merrel Clubb had told me about on two occasions. It is supposed to be on the south side of the arm coming down from between Cape Royal and Wotan and Clubb said I would find it on a high ledge of Shinumo Quartzite. I took just my camera and hustled down to the junction and up the right arm. The formations are a bit confused in here but I thought I was looking at the south wall often enough so that I couldn't miss it. I turned back a little later than I thought I should and after I was definitely in the Tapeats narrows, I still hadn't seen the ruin. This is the site that Clubb had a hard time getting into, but he found a piece of a basket in it.

The night was pleasant under a clear sky and I slept about nine hours, as I seldom do on the ground anywhere else. Still I got a 7:15 a.m. start and carried my gear up to an overhang shelter near the top of the switchbacks as you climb out of Clear Creak on the trail. Incidentally, this trail is in fine shape now, much plainer than it was in 1950, say. They have worked it over since the North Kaibab Trail was cut off from visitor use. Clear Creek itself, where one first strikes it, in 1950 was flowing along in a bed about three feet deep bordered by willows in a fine grove of cottonwoods. Then suddenly a flood about ten years ago cut an arroyo eight feet deep and fifteen feet wide and devastated the grove until only a few of the saplings were left in a field of boulders. Now minor floods have brought the bottom of the arroyo up and the few trees seem to be making an effort to restore the old appearance.

I carried my camera, canteen, and lunch away from the trail over the hump into the Deva Brahma arm and contoured along the south side of the valley. I would have made better time by going to the bed and then up because the footing was precarious. First I checked the arm of this tributary starting southeast of Brahma and climbed up the lowest fifth of Redwall before convincing myself that there was a sheer fall ahead. From a distance the ravine just east of the last e in Brahma Tempe of the Bright Angel 15 minute Quad had looked good. While I was contouring northeast from my first inspection, I came to a ravine which I confused with the one Euler had indicated. I could climb it, but I found that I had only reached a notch between the main wall and the point I was supposed to round to reach the right ravine. From the top of my climb I had a fine view of the ravine Euler had suggested, and I am morally sure that there is an unscalable fall near the bottom. My view was so convincing that I didn't bother to try it. However, I had seen a place on the north side of this arm, on the south side of Deva, which was not a ravine at all. The wall itself seemed broken into talus slopes and ledges, and I thought that around a corner there might be a place to continue to the top of the Redwall. I was working against time again since I wanted to camp that night at Bright Angel Creek, but I decided to go up canyon to have a look.

The old East Half Map is of no help concerning details at the upper end of this canyon, but the branches are accurately shown on the new Bright Angel Quad. When I came to the turn near the end that goes a little south of west, I could tell that it hooks to the south. By this time I didn't relish climbing the place on the north wall, so I resolved to have a look at what I assumed to be an impossible fall around the corner in the west fork. When I got to the angle, I found that it is a fault ravine choked with blocks of Supai from above. With liberal use of the hands (I left the Kelty and the canteen below) I made it past several chockstones and in one place it would have been impossible for me if I hadn't noticed a hole behind a chockstone. This was a fairly tight fit and it came out above into some dead oak brush, very well camouflaged. In fact if I had been coming down from above, I never would have noticed it. From above

the Redwall I could see that this place is caused by a fault with the west side 40 feet higher than the east. The Maxon Map omits any indication of this very local break. One can go in either direction along the top of the Redwall with ease, and the Supai is well broken leading up to the saddle between Deva and Brahma. I also noticed that there is a break in the Supai leading down from the top of the promontory above the saddle on the Deva side. I didn't know where to look for the ruin and I couldn't spot it.

It took about 25 minutes to go up the Redwall in this ravine and I was just as slow in getting back to my pack. I carried it down into the sunshine and had lunch. On the return to the main trail I followed the bed and found the going much faster. The drop over the dry fall in the Tapeats and Shinumo is most impressive. I tried passing this to the north but found that it was impractical and climbed back up and down to the trail. Even with the extension of the turn around time, I was only seven minutes late in getting back to the cache of my gear.

The night at the Bright Angel Campground was marred by one splashy little ten minute rain. I moved my air mattress and bag into the rock leanto. Just about that time the four young people who were crammed into the other half discovered a skunk and also a ring tail cat playing around in the crack in the cliff and they were trying to shoo the animals away with their lights for the next two hours. The rain was over so I spent the rest of the night where I had gone to bed. With an early start I came out in no hurry in four and one half hours including a couple breaks for reading a magazine. Taking it slow seems to pay off since I feel no stiffness tonight.

One observation that rather surprised me was that there are bighorn droppings and tracks up the tributary towards the Deva Brahma Saddle. At the ranger station I had quite a visit with Les Womack and he said that a tourist called him to look through a telescope to watch several bighorns right below Sumner Point on the Tonto across the river.

Another item was the sighting of a window in a fin which thrusts southeast from Deva. It is the Redwall but is thinner on top than the window west of the Kaibab Trail. The upper end of this tributary between Deva and Brahma is outstanding for the rough character of the walls and pinnacles. It is an interesting place even if there hadn't been any well hidden Redwall route.