

Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (November 15, 1970 - June 2, 1971)

Horseshoe Mesa mine and Redwall west of the Sinking Ship

[November 15, 1970]

Jorgen's friend, Ted Rado, flew to Las Vegas and came with him to our house Friday evening rather late. We enjoyed a slide show of shots taken while Jorgen, Bill, and Mac were floating down the river from Lava Falls to Spencer Canyon. On Saturday Jorgen and Ted drove to the south rim while I performed my duties of greeting parents during the forenoon. After a quick lunch I went to the Bright Angel Lodge and met Jorgen and Ted again. We left their car at Hermit Rest and then I took them to Grandview. It was a fine cool evening when we got to Horseshoe Mesa.

I have nearly always gone to the west of the last hump before one reaches the neck of Horseshoe Mesa but this time I noticed that the main trail really goes to the east. We hit the head of the trail off the east edge of the mesa immediately. There was the old piece of machinery, a sort of winch, and the low mine shaft just before the trail starts down. Ted had a huge pack and he felt that he couldn't negotiate the trail in its present poor style. I carried Ted's 35 or 40 pound pack from here to the mine while Jorgen handled my pack in one hand so that I wouldn't need to go back for it. There was plenty of wood near the mouth of the mine, but Jorgen went with me down to the spring below the Redwall for water. We had a fine time around a small campfire until after nine. I slept soundly 30 feet back in the mine where it was warmer.

Before going on in the morning, I walked back into all the arms of the mine shaft. There was no sign of ore in there now, but I suppose there must have been some at one time. I also scrambled up the ravine above the trail, but I couldn't go all the way to the higher level of the trail. We were ready to start on by 8:00 a.m. Quite soon Ted was lagging and I offered to trade packs with him. After some thought, he accepted the offer. This didn't solve his problem and he still lagged somewhat. When we got down to a knoll just above the Tonto Trail, Jorgen put down his pack and went on down with me to see the old inscriptions at the farthest south showing of the Tapeats. Jorgen carried all the empty water containers and we went down to the bed of Hance Canyon at the first chance. After showing a little water and then drying up, the creek began to flow well down in the impressive narrows.

It didn't take us long to walk up to the inscription overhang. Jorgen called my attention to the name N. J. Cameron, 1890, and also we saw where George Billingsley had carved his name with the date 12/4/66, the day that he and Bruce Mitchell got me to the top of the Horseshoe Mesa Butte. We also noticed the name F. Eiseman. Quite a few people now know about this inscription wall. Jorgen and I parted here and I went on up the wash to the Redwall promontory west of the Sinking Ship. I had been thinking that this should be climbable for something like eight years.

I left the canteen and pack below and carried only the camera. The logical place seemed to be the ravine opening to the south. It was a talus walk through half the Redwall. The ravine splits toward the top and I chose the south eastern branch because I feared that the other fork would leave me with an unclimbable wall near the top. There was one steep place where I had to pause and use some acrobatics. Higher still I

had to decide whether to walk up the bed of the ravine or climb carefully up the wall to my right. Again I chose the latter. When I got to the top of this pitch I was on the rim of the Redwall.

The last climb had been so severe that I preferred to find an easier route down. I found at once that I could get down easily to the same ravine northeast of the final bad pitch. Then I tried walking farther down here and bypassing this ravine. All was going smoothly but I thought that I might come to an impasse farther down, so I climbed a rather difficult section and got into the ravine I had used on the ascent. From below I saw that I could have come down rather easily where I had given up. Thus there are several possibilities here. The easiest route is quite similar to the miners' route down to the spring in the wet arm of Cottonwood. The ascent took about 30 minutes and the descent about the same. This upper end of the west arm of Hance is a fine scenic area. I returned to the Grandview Trail as on 8/8/67.

Mile 27 Wash to Stanton's Marble Pier
[November 25, 1970]

After Pat Reilly had called our attention to the cave and the possibility of getting off the rim of Marble Canyon at Mile 21.7 Wash, I had made several trips to the area, the most recent being on 1/14/67. Consult logs for April 24, 1966, and May 6, 1966, for details of the route down to the Supai directly below Mile 21.7 Wash.

For the present trek, Joe Grano and I drove up US 89 Tuesday evening intending to sleep somewhere out on the road approach. We couldn't locate the turnoff since I have been relying on seeing Curve Wash, the bay in the Echo Cliffs, as a landmark. On the return we noted that the right turnoff is 14.9 miles north of Cedar Ridge. We found one turnoff and followed it up the hillside until we saw a hogan that I knew was not on the right route. Giving up the idea of getting out near the take off at night, we slept at Bitter Springs.

As soon as we could see distant hillsides, we were on our way Wednesday morning. The road up the monocline away from the highway is worse than it used to be. I wonder whether the Indians have bypassed it since there are some other ways to get into this area. The right turn to the northwest still confuses me but we did it properly. I recognized the hogan about four miles from the highway. About a half mile beyond it, where the road seems to be veering to the northeast is where I gave up going out on 10/31/70. There is one more fork to the west and in 0.6 of a mile I would have come to the parking for Mile 21.7 Wash. On the present occasion I turned onto a dim track to the west and came to its end too far east but on the rim above the broad valley that is upper 21.7 Mile Wash. We parked just above a gentle descent to the vicinity of the deep cave, but on the return I noted that the same road we were on makes an "S" curve down to the rim on the deep wash and that we could have saved ourselves about ten minutes of walking by doing this.

My memory of the steep drops in the bed to the top of the Coconino had faded. I didn't recognize immediately the bypass for the ten foot drop. Joe was able to climb down it in the center, but I followed the ledge along the south side through a neat tunnel and used the Indian rock structure for steps to descend. Another surprise was to find water in several pockets in the limestone. It had been dry for weeks, at least in Flagstaff.

The route along the Toroweap ledge a few yards above the Coconino south from the main bed and the neat route through the Coconino still impressed both of us. We should have gone directly down to the bed in the Hermit section instead of trying to stay high along the slope which is cut by bare ravines. I suspect that Chuck Johnson and I didn't inspect the ravine just south of the main bed as carefully as we might have for a route through the Supai down to the river. Joe and I got across this ravine on a narrow ledge of shale not far above the Supai contact. This is the place where Pat had suggested that I could get down from the rim rather than in the bed of 21.7 Mile Wash. It looks very good from below and someday I would like to try this. If we would be prepared to do a rappel or two, we might get right down to the river.

In the next ravine to the south, there was a lot of talus material making for a descent route. We detoured down to inspect this. About 300 feet above the river there was a fall that Joe got down using a crack. I went along a poor ledge to the south. I got discouraged before I met the absolute end of this ledge. From the other side Joe said that he was sure we could get down if my ledge had continued far enough to the south. This would be something else to try someday.

I was sure there would be an easier way down if we went farther along the rim of the Supai. (When Joe got down the 15 foot fall, he found an impossible drop just ahead.) We were able to proceed along the Supai rim or along the talus slope above at a fairly good rate, over a mile an hour. We could see ravines through the Supai on the right bank, but the next place I thought would go through on our side, a fault ravine with talus material at the bottom was impossible near the top. Next at Mile 23.5 we came to a big ravine that offered good possibilities. If we could get down and across to the talus material on the south side, there would be a good chance of getting to the river. There was also a good possibility of getting down the broken material on the right side of the wash. While I was getting across the ravine, Joe tested the route on the north side. He made good progress and called back that it would go. I followed his lead. The key was to go along next to a small cliff, and from there down was easy. We reached the river at Mile 23.4 or 23.5. Upriver we could identify the picture of Pewe, page 22. Here we were in the sun for the first time since 8:15 a.m. when we had started into the canyon next to the cave. Joe elected to stay here and enjoy a long rest while I went downriver along the bank to see whether I could reach Stanton's Marble Pier within a time limit. I was able to cover the 1.1 miles in 55 minutes. There were beaver cut willows and tamarisks and beaver tracks in the sand. On the return I heard a splash that must have been a beaver slapping the water and diving. I took numerous pictures of the Redwall ledges upstream and down from the Marble Pier to verify that this object is in line with the rest of the Redwall along here.

Experimenting with different routes would have been interesting, but in line with getting home early, we returned by the known way. Joe had incorrectly diagnosed his slowness in coming up the Grandview Trail as due to too much lunch and he just ate some dried fruit this time. When we came to the final climb up the Hermit in 21.7 Mile Wash, Joe began to feel sick and weak. He had paced me up the other places on the return, but now I had to wait 40 minutes for numerous rest breaks in order to reach the truck.

The weather had been cool and fine all day and it was the payoff for three previous treks. We took three hours in going from the truck to Mile 23.4 at the river plus about a half an hour for our detour down the wrong canyon. If we could get down from the rim where Pat had spotted the route, we might save a half an hour.

Besides the possibilities of getting down to the river that we passed up on this trip, I got the impression that there are other breaks through the Supai to the river upriver from Mile 21.7 Wash when we were coming down the river last summer. This section of the rim of Marble Canyon still has a lot of possibilities.

Clear Creek to Indian ruins south of Deva and the Redwall west of Brahma
[November 27, 1970 to November 28, 1970]

Ever since Bob Euler had told me about finding ruins "halfway through the Supai" on the south side of Deva, I had been intending to check the area. Finding the break through the Redwall north of Brahma on 1/26/70 was a vital step toward these ruins. Since Bob had done his reconnaissance by helicopter, he didn't have much real information on the approach route.

Thanksgiving day had been bad because of a slow drizzle and I awoke to the same sort of weather on Friday. By 8:00 a.m., however, the sky was looking better and I decided to use the free three days for a serious attempt. After securing the permit, it was 10:20 a.m. by the time I got started down the South Kaibab Trail. There was no dust nor snow either, and with the cool day, I have never had better conditions. I visited a bit with a few of the unusually large number of hikers on the trail, but I still hurried. I was gratified to see that I can move as fast as ever, and I went from the south rim to Clear Creek between 10:20 a.m. and 5:00 p.m., 55 minutes less time than the same trip took last January.

Three parties of backpackers were already at Clear Creek. I visited extensively with four people from Phoenix, Bill and Jan Robertson, Dave Ganci, and Charles Rigdon. I had read three articles by Dave Ganci, two concerning climbing Zoroaster Temple and one on climbing Mount Sinyala. He and Rigdon were spending a whole day trying to find a Redwall break that would give them a key to climb Angel's Gate. The very top of Angel's Gate seems like the ultimate in bolt and hardware climbing. He and Rigdon are planning a Mount McKinley climb for next summer.

I stopped for a short visit with another group before going on in the morning, but still I got away by 7:15 a.m., the same time that I broke camp last January. This time, however, I experimented with a route up the southwest wall of the arm where the trail leaves the bed to climb through the Hakatai Shale. It could be seen from our camp near the water, but from the trail it is not at all apparent. It entails some rough scrambling but no hand and toe climbing and I saw deer hoofprints. This route is shorter in time as well as distance compared to going up the trail and over the ridge to reach the bed of the wash coming down from the Brahma Deva Saddle.

Last winter I had considered the possibility of scaling the Redwall near the upper end of this valley on the north side. If this were possible it would give a more direct approach to the Indian ruins. As I proceeded up the bed, I gave a close look at the various talus slopes and ledges. In several places one can go quite high, but there seems to be no way to get through the top cliff of the Redwall. I concluded that I couldn't bag my 97th Redwall route and turned south into the ravine I had found last January. Perhaps I noticed the obstructions more since I had my pack along this time. There are three or so where I used my hands besides the big obstruction where I found the crawlway behind the chockstone. Here I tried pushing my

pack ahead of me through the hole, but there was no chance. Only a small man can get through and he has to twist and wriggle. I tied my 50 foot rope to the pack and was able to throw it up about 15 feet to where I could go up and pull the pack up on the outside. Something that I hadn't seen before is a possible bypass for this obstruction, a hand and toe climb up the right wall behind a pinnacle. Coming down from behind the pinnacle is just as hard, but I believe it would all go all right. In going north around the end of this valley, I found it better to stay above the Redwall rim which is broken by many notches. While going up through the Supai in the main wash, I noticed a peculiar crag of white breccia. It would take a better geologist than I am to account for it.

Bob Euler had said that the ruins were about halfway from the top of the Supai to the bottom. I could see one overhang of a ledge about halfway through the formation but there were a number of promising overhangs at the base of the top Supai cliff, at the same elevation as the fine ruin below Bright Angel Point. I acted on the hunch that Euler had seen his ruins this high and left my pack while I followed the base of this cliff. I began the search just west of the projecting angle of the Supai wall midway along the south base of Deva. Within a few minutes I found a slowly dripping spring. At this dry season one would have to place a broad plastic sheet to catch all the drops to get a useful amount of water. To the east there were several inconspicuous ruins, mostly storage bins. At one place a shoulder high wall still stands. At least one roof beam still leans against the wall and a fragment of an inch thick dark rock slab reminds one of the shaped door stones at the ruin below Bright Angel Point. These ruins are strung out for several hundred yards and the last low wall isn't far from the promontory where one can turn the corner and see Obi Point. I felt sure I had seen all the ruins that Euler had discovered from the helicopter. I'll have to ask him whether he landed and studied the area.

After eating I was ready to go on at 1:00 p.m. I had been startled to see human shoe prints in the sandy places below the Redwall until I remembered that Jan Jensen had come over to Clear Creek from Bright Angel Creek only one week before. There seemed plenty of time to go south along the west side of Brahma and Doty's route or north along the west side of Deva and down to the North Kaibab Trail by the route used by Jensen. It would be shorter and easier to go down the way I had come up when I climbed Deva, but Doty's route might be more interesting.

From where I ate to the south end of the Brahma Deva Saddle took half an hour. I guessed that it would be an hour and a half before I would arrive at the Redwall descent at the base of the promontory leading to Sumner Point. Correction: it took a half hour to reach the south end of the saddle. Here there is a fault that makes it possible to go down through the Supai. Going south along the Redwall rim below would be more circuitous even if one could climb through the notch east of Hattan Butte. I decided to go down one level lower than the saddle and proceed along the bench trusting to my recollection that there would be another way to get down through the rest of the Supai after reaching the ridge pointing toward Hattan. This plan paid off. If I had stayed one level higher, I wouldn't have been able to descend, but from where I was it was easy to go down a simple slope to the Redwall rim. I reached this place in one hour from the vicinity of the ruins, and I thought it would take me only one and a half hours to reach the Redwall descent at the base of the Sumner ridge. The walking along the Redwall rim was far slower than I had figured. There are many little ravines to cross. Bare crumbling shale was a hazard and many blocks of all sizes had to be bypassed. When I finally arrived at the descent route, I had taken two and a half hours for this leg and it was apparent that I would just reach the Clear Creek Trail before dark. The Redwall descent

was worse than I had remembered it. I lowered my pack by the rope at one place where one must leave the middle and climb down the wall to the right. Again where one must leave the bed and go out on the broken area to the left, I found it harder than I had remembered. Getting back to the scree in the main ravine seemed at least as hard as climbing out to the broken ledges east of the bed and I used the rope to lower the pack here also. Still it took only 30 minutes from the top of the Redwall to the talus below. It was 5:40 p.m. and growing dark when I got to the trail.

The rainpools in the bedrock of the wash I had been following, just below the trail, were well filled and I could have camped and slept under the fine overhangs right next to the trail about 100 yards to the west. Rain looked likely by now but I proceeded to Phantom Ranch. The night was so dark without even starlight that I used my flashlight intermittently. I would shine it on the trail ahead and then try to walk in the dark to where I had seen it. I reached the ranch by 7:00 p.m. and had the luxury of bright illumination in the public restroom reading my Readers Digest while I ate in the shower stall.

After being on my feet for over 11 hours that day, I still felt good enough to go up the south rim in four and a half hours.

To the Colorado River at Lonetree Canyon
[December 5, 1970]

Our interest in Lonetree Canyon was aroused by Euler's finding an Indian ruin at the base of the Tapeats on the west side above the fall into the inner gorge. When Henderson, Packard, and I found the ruin, I noticed a possible descent to the river via a ravine from the east that connects with the main canyon near the river. Before I went back to check, Jim Sears worked out another route down the schist to the west of the main bed. He told me that my route was very likely impossible and urged me to try his.

We had used a whole day just to get below the Tapeats and reach the ruin, so I was prepared for a real long trip this time. Jim had been down in that area more than one day when he went down to the river. I brought food for two meals and fully expected to use a flashlight on the way back up the South Kaibab Trail. After visiting at the Ranger Station, I finally started down the trail at 8:15 a.m. There was a little snow near the top but it wasn't enough to make walking hazardous. The day was cool with ice on puddles at the top of the Redwall. There were five deer near the top of the Kaibab Trail and I envied the ease with which they move up or down the steep slope between the switchbacks. On my return, the same number of deer were down at the rim of the Redwall.

I have never seen ripple marks in limestone, but on my return up the Redwall switchbacks, I looked up to a projecting flat rock near the top of the formation. The underside showed definite and big ripple marks. It seemed to be gray limestone, but perhaps it was limestone belonging to the bottom of the Supai.

Another anomaly that I noticed on this trip was thin beds of conglomerate between typical layers of Tapeats. I am not sure whether this conglomerate, almost like small pebbles cemented in mud, was seen on the way out of Lonetree Canyon or whether I saw it in Cremation.

Other points of interest were the mesal pit near where the Tonto Trail crosses Cremation and the window through the fin of Redwall projecting northeast from Pattie .

I got down into Lonetree a little to the south of the ruin and found a good little flow of water in the bed of the creek. Jorgen had given up looking for water in Lonetree when he found none near the lone cottonwood. I recall now that we didn't find the steady flow until we went farther down the bed well below the Tapeats contact. If it is flowing at this time of year, it must be permanent water.

Recent burro signs show that the slaughter left a few. They make their way along the very steep slope below the Tapeats east of the bed and I got some help in going over to the place I wanted to start down. I was somewhat worried by Jim Sears' opinion of the route I had picked, but I found that my fears were unwarranted. There were a few places where I had to use care in climbing around a drop in the bed of a ravine, but on the whole it was easier and surer than Jim's route. Right at the end of the bed, the river has deposited silt and then the front of the sandbank has started to break off into the river. To get a view upriver and down, at least for a short distance, I climbed out on a platform of water polished schist and ate my lunch there. One cannot go any farther upstream or down along the bank. It would be very easy to go by the mouth of Lonetree in a boat without seeing it.

Jim's route up the west wall of the lower canyon has the advantage of getting one out near the running stream quite close to the break in the west wall of the Tonto. It requires more constant vigilance and it is also steeper. I passed four of his cairns so I know that I must have chosen pretty much the same route he had.

It was an interesting day and it added one more place where the river can be reached. At the present stage the river was about a foot below the level of the crumbling sandbank. Just before I started down to reach the mouth of Lonetree Canyon, I resisted the impulse to go farther east and see whether I could reach Mile 83 Rapid. I wouldn't presume that this is possible. The walls seem to get steeper to the east. I got out by 5:35 p.m., so there was no need for night walking.

Off Shoshone Point
[December 6, 1970]

When Al Doty was climbing Lyell Butte, he studied the east side of Shoshone Point and wondered whether there might be a route down from the rim through the Kaibab and Coconino. Recently when he went to climb Pattie Butte, he checked the place and found that everything worked. It was also obvious that prehistoric Indians had developed this route since there were three or four rock piles to serve as steps, two or three places where logs had been placed, and at least one place where steps had been cut in the Coconino Sandstone. He wanted to show me the way down, so we went to Shoshone Point together about 2:40 p.m.

The road to the point is shown on the new map. There is a padlocked cable across the one lane road back from the highway, but one can move some tree limbs out of the way and drive a car around the barrier. At the point are some picnic tables and a concrete grill or two. Below the rim a few yards, we found a trail

contouring that seemed to show pick and shovel construction. We guessed that it had been built years ago for early tourists.

Al led me northeast to the rim from the car and we started down a sloping bay. The dusting of new snow made us watch our footing and I slipped once. About two thirds of the way through the Kaibab there is an eight or ten foot ledge clear across the bay. At the easiest place to descend, a barkless tree trunk has been well placed to assist the climber. On the return Al was able to get up here without touching the pole, but I got some real help from using it as a grip.

One should continue down the slope in the bay until he is through the Toroweap and then follow the bench along the top of the Coconino right out to the point. One gets down by looking for cracks between the blocks with now and then a traverse along a narrow ledge above an awesome drop to the west. Al has put up quite a series of little cairns to point out the route, but there is usually little choice or reason to take the wrong way leading to a dead end. There are several ancient rock piles built at the bottom of the longer steps down, and at one place there is a series of four Moki steps cut to assist one. At one place a small but stout forked tree trunk had been wedged into a crack and one could use it as a step.

We had brought my light 50 foot rope since Al kept warning me that there was a worse place ahead. When we turned to the east side of the point and south a few yards, Al warned me that we had now arrived at the most difficult place. He went down handily, but when I tried to reach the same holds he had used, I didn't feel that I could get my foot down far enough for safety. He came back up and held the rope since there was no logical place for us to tie it. I coiled the rope around one hand while I used natural grips for the other and got down to the safe ledge below. We left the rope where I had used it. On the return, we noticed another way to get past this angle. By using some natural steps a yard or two lower, one has some good grips and can get past this projecting angle quite easily. I came up here without using the rope, and I believe I could do this place and the rest of the route with no help.

This bad spot was about the middle of the formation, but the rest is mostly a ramp with no difficulty. The first part of the ramp goes north until it comes to the farthest north part of the route and then it angles down to the southeast. Just a bit of care is needed in finding the way off the Coconino at the very bottom.

Only a couple of yards above the very bottom, I noticed some fossil footprints in the bedrock. This was a switch since the footprints are usually found about a third of the way from the top.

The route is about the most interesting way I know to get through the Kaibab and Coconino. There are so many places in the Coconino where it seems that there is just one way through, and work done by the aborigines surely makes this one route much easier. With a little practice one should be able to go from the rim to the bottom of the Coconino in 45 minutes and thus save almost an hour compared to coming down the Kaibab Trail and over.

Route to river at Mile 21.7
[December 19, 1970]

When Ken Sleight was taking me down the river, we had camped near Mile 20 and I had thought that I had seen breaks through the Supai shortly after starting on. I figured that if one were to go upriver after reaching the Supai at Mile 21.7, he should come to a place to descend to the river. This was to be the main investigation but I also wanted a better look at the possible route down in the ravine immediately to the south of the bed of Mile 21.7 Wash.

Al Doty was over from Williams by 6:15 a.m. in spite of the prediction for more snow. We got away with a few flakes in the air, but the driving was easy on a dry pavement. We turned off at the usual place, 15 miles north of Cedar Ridge, and I felt the usual confusion in getting on the right road to Piute Cave. When I saw the road up from the steep valley to the right and saw the hogan on the left, I knew we were on the right road. I made the proper left turn and was soon at the place where I had parked with Joe Grano. This time we drove on past swinging left and then right to get down past the cave and on into the valley leading northwest.

I had the idea that it would be instructive to look over the edge of the top rim to see where there might be a break through the Supai. Two miles beyond the cave, we parked and headed for the rim. In about 15 minutes we reached the rim but we couldn't see any break through the Supai. We turned left and were soon opposite the mouth of North Canyon at Mile 20.5. It was a fine place to see what I had tried once, come out on the rim of the Supai from North Canyon and go downriver until it would be possible to descend. I saw the long exposure of bare shale that had dissuaded me from continuing, but I am sure I could have passed the place and continued. There are two or three routes through the Supai on the right side of the river even before you reach Cave Springs. I now wish I had continued and succeeded in getting down. We got back to the truck in about 40 minutes for this reconnaissance and we left the truck for the second time near Piute Cave at 9:45 a.m.

Bob Packard and Al Doty were impressed by the cave. A big owl flew from one perch to another while we watched. As usual we got down to the bed of the wash near the cave. Bob and Al were properly impressed by the vertical walls through the Kaibab and Toroweap. They liked the slight problems at the drops in the bed and they saw the places where Indians had fixed rock piles for steps. They were both impressed with my route across the nearly vertical slope just south of the big drop in the Coconino. Bob felt quite a bit of trepidation at crossing this place a second time in the afternoon. I also enjoyed showing them my route through the Coconino. Bob did this without noticing it very well so that he had a bit of trouble finding it on the return.

On our way upriver at the Supai rim we couldn't decide what is the best level for the easiest walking. It seems surest to go rather high out of the Supai ledges. It is harder and slower walking than the corresponding route south of 21.7 Mile Wash. We reached the point opposite the mouth of North Canyon in something over a half hour. There didn't seem to be any hope of getting down at all close so we turned back in order to have time for a careful inspection of the ravine immediately south of Mile 21.7 Wash. Al hadn't been feeling well, perhaps from only three hours of sleep and not eating a good breakfast. He said that the skyline was moving around in front of his eyes. We ate some lunch on a point commanding a fine view downriver, and Al began to feel better. At first he thought he ought to start out after lunch, but he decided to watch Bob and me in our effort to get down the ravine to the river.

Two ways that I had considered worth investigation were the somewhat broken cliff at the end of the promontory separating 21.7 Mile Wash from its twin to the south and also the bed of this ravine. Bob thought we ought to try the bed first. We got down to some white strata in the sandstone, but then the bed dropped with no bypass. In the meantime, Al had gone out to the point to watch us and also to check the possibility of getting down there. By the time Bob and I knew we were stopped, Al was shouting up to us from a place about halfway through the hard part.

Al had built some cairns to mark his route, but he also waited for us on a projection about halfway through the hard spot. His route goes out near the end of the cape and then goes down on the south side. There seem to be several places where one would be stopped completely except for one way to proceed. The way is to get down first to the west and then more to the east. There were several places where I turned around and faced in for the best grips, and there was one crack not far up from where Al was waiting that really gave me some pause. Al came up and directed me where I could put my feet. A little farther down was a saddle leading to a sharp little knoll. Al showed us a steep route down to the saddle, exposed but with good steps. He had guessed that there might be two routes to choose from, one going east into the bed and the other down a chute to the west. Fearing a drop in the bed, we chose the latter. About halfway down it to the last simple slope to the river, there was a severe drop with chockstones cutting off any possibility of going down further in the chute. We tried walking to the east at one level but were soon stopped. Al tried the next and last possible detour to the east and found that it did lead to the bed below all real obstructions. Getting off this ledge required care, but I would tackle it alone. There was simple boulder hopping from here to the river.

Well above the river there was a lot of driftwood that showed the old flood stage to be something like 50 or 60 feet above the present level of the water. Rivermen seemed to have set fire to quite a pile in two places, to judge by the deep ashes. At one of these old fireplaces, a Supai boulder, perhaps eight feet in diameter, had had its surface defoliated by the heat. The remaining surface was a mottled yellow and pink, the most peculiar colored rock I have ever seen.

From where we ate lunch on the Supai rim north of 21.7 Mile Wash, I could barely see the Gendarme on the right bank of the river. From map study in Pewe, I concluded that it is at the bend in the river at Mile 23.

Bob came up the Supai route handily, well ahead of Al and me. I had gone downriver to photograph 22 Mile Rapid. Al again gave me a bit of advice as to the placement of my feet at the hardest crack. If I wanted to bring a pack down this way, I would want to lower it on a rope at a place or two, but now I wouldn't mind doing it alone. We got to the top of the Supai in about 30 minutes from the river and then went from there to the truck in 80 minutes. Bob and Al went high on the slope while I got down to the bed as soon as I could without sacrificing a lot of altitude. At first I was far below them, but eventually they came to some nasty deep ravines that I had encountered with Joe. I got to the Coconino climb well in front of Bob, and Al had knocked himself out to reach it almost the same time that I did.

There had been a few snowflakes in the air for much of the day, but when we started home in the truck, all distant landmarks were gone because of the snow. I made one slight false turn in getting out to the

highway, but we did the seven miles of poor road in 25 minutes. The last 25 miles into Flagstaff were very slow because of the icy pavement.

Thanks to Al, we had succeeded in getting down to the river by a route that matches the route off Shoshone Point for difficulty. In fact, I would find it easier to go off Shoshone Point alone than to get down at Mile 21.8 through the Supai, and the others seemed to think my three inch ledges above the 100 foot drop of the Coconino were as thrilling as anything we had been through this day.

Visbak Tapeats route and Kolb picture of the skeleton
[January 16, 1971]

Jorgen had found a short way up to the Tonto through the Tapeats cliff on the west side of the small bay immediately west of Horn Creek. After studying his picture and rereading his letter, I wanted to try this. As an after thought, I decided to carry the Kolb picture of the skeleton and check my impression that it was near the ravine on the south side of the river leading down to where I had camped on 12/19/66 when my only project had been to check the trail that Doc's old USGS map had shown.

After a short visit with Ernie Kunzl while getting my permit, I started down the Bright Angel Trail at 8:45 a.m. My shoes didn't grip well on the packed snow, so I had to take it easy. Still I overtook a couple from Sweden and we had a good visit for the rest of the way to Indian Gardens. I went on from there at a faster pace at 10:30 a.m.

The new sign at the fork of the Plateau Point Trail and the Tonto Trail says it is 12.5 miles to the Hermit Trail. It had been a bit over four years since I had been this way, and the detour to head Horn seemed longer than I had remembered it to be. I noted that the break through the Tapeats between Plateau Point and Horn is closer to the former. The trail is in good shape and I could hurry along with very little care about stumbling. When I got past Horn, I went down to the rim of the next bay and immediately recognized Jorgen's route. I also noted a possible route south of his which goes up a slot pointing south toward Hopi Point. As I was skirting the rim along this bay I came to a clearly constructed cairn at the head of the south pointing slot and there was no cairn above Jorgen's route. Remembering Jorgen's remark about going to the north of a chimney along a ledge, I started down to the north of where I might have chosen by my own guess. Very soon I came to difficulties which were certainly not his simple walk up. I retreated and started down behind a big block and soon saw what Jorgen had meant by the chimney. He had simply walked a few yards around a block to avoid a vertical crack. It was a very interesting route and one that should not scare anyone who is reasonably careful. On the return I passed by this good way up and went down and south along the base of the Tapeats for about 75 yards to the slot. There were numerous difficult and exposed holds and I had to go horizontally along a couple of ledges to find the route which still seemed quite challenging to me. It surprised me that anyone would build a cairn to mark this route when there was a safer way down just a few yards away.

In 1966 I had recognized a vestige of a trail along the base of the Tapeats, but this time I couldn't honestly say I was conscious of being on a trail much of the time. The route was well marked by deer and bighorn droppings as I had noted before. When I came to the head of the ravine that leads directly down to the bench which is a bit upstream and across from the mouth of 91 Mile Canyon, the one Emery Kolb and

John Ivens used as part of a cross canyon route, I could recognize features in the picture of the skeleton. I wasn't sure whether I should descend the ravine or go farther west as I had when I was trying to follow the map of the trail.

At first I fixed my attention on some recognizable blocks lying in a slide on the other side of the river and also on the amount of sand that shows in the picture at the mouth of 91 Mile Canyon. I could also try to match the view of a small crag on the south side of the river and west of my ravine. These didn't give me much of a fix and I continued down to the water to get a refill for the canteen. Only then I noted a feature of the skyline that was much more useful, a tower standing about halfway between me and a deep curve in the Supai. When I got the tip of the tower in the right perspective, I was about one third of the way from the river to the rim of the inner gorge and I was out of the bed of the ravine to the east. I thought I had the spot once, but the small features in the foreground below the skeleton didn't match. About ten yards to the southwest, I found a similar mound where I could recognize at least one foreground rock as being the same after 64 years. As usual the 35 mm shot didn't picture the entire scene shown in the Kolb view. When I tried to get overlapping pictures covering the field, I found that I was at the end of the roll. Still, I had several previous pictures identifying the general area.

Right bank, Diamond to Mile 204

[January 21, 1971 to January 27, 1971]

I met Jorgen Visbak at Seligman where he had arrived by the early train a few minutes before me. After his breakfast, we drove down Peach Springs Wash where we found the road relocated and broadened. We stopped on the terrace near the junction of Peach Springs Wash and Diamond Creek and took pictures of the skyline to match Doc's prints of the old Farlee Hotel. Jorgen remembered perfectly where to stand. The river was clear and about the lowest that either of us has ever seen it. It was obvious that we could cross without carrying the kayak to the quiet water above the riffle. We left the boat behind some tamarisks near a river party campsite. The route to and along the Tonto has been covered by other logs, say 4/26/69.

We had lunch just before we were opposite the basalt remnant at Mile 222. The day was warm and windless, and this continued through the entire week. During the middle of the day, there was no need for jackets nor even for shirts. The two springs near Mile 221.5 seemed to be running less than I had seen them before, but there was some water in a pocket near the trail where I hadn't remembered seeing it. On the whole, however, this seemed to be a dry time of year.

We got down into Mile 220 Canyon and had a rest before tackling the climb up and down and up to cross Trail Canyon. There had been many breaks in the Tapeats offering routes to the river south of Mile 220 Canyon, but when we had gone a mile north of Trail Canyon, this did not seem to persist. We were both quite ready to stop for the night when we saw a good bench about Mile 216.5 with a sporty descent on the south and an easy ascent on the other side of the side gulch. This was just a nice place on some grass behind a sand dune, but there was plenty of frost on my bag in the morning.

We had passed a double mesquite pit about Mile 217 next to the trail and immediately below the route we had used to get up through the Redwall to the Snyder Mine last April. Just north of the wash that leads up

to the natural arch before you can see through it, we went over a ridge and beyond the line of sight. Three Springs Canyon across the river was easy to identify and I speculated that one should be able to go up it and turn north into the Granite Creek drainage and so proceed to the rim. Mile 215 Canyon seems shorter and less impressive. The burro trail was rather straight and clear all the way from Mile 219 to Mile 214 (horse trail here to Snyder Mine) where the Tapeats ledge practically disappears. On the way upriver we generally followed the beach with much boulder hopping between the sandbars. On the return we went higher and generally found a fine trail that made progress easier on the average. At lunch time we were opposite Pumpkin Spring. From careful map reading we put this at Mile 212.9. The day was so balmy that we took a cold dip in the river before eating and we took a sun bath while we ate.

At the very low stage of the river, many boulder bars and islands were showing. Rocks protruded even in quiet water where boaters might not have the warning of a white wave when the level is higher. Fall Canyon Rapid, well below the mouth of Fall Canyon, had many rocks showing and the best tongue seemed to lead right toward a rock. In our study of this rapid we concluded that the big rocks rolled down from a short wash on the east side and the basalt remnant on the right bank further stops the river here. The picture of Bessie Hyde at their last camp was consulted constantly along here, but we were unable to locate it. On the return we went down and studied a certain cove not far above the rapid, but the white designs in the polished black rock didn't fit. This picture is a puzzle since there are few places where the basalt comes right down into the water.

To get a complete idea of this country we should have gone up Fall Canyon as far as possible, but we had other things to do. On the return we were able to find the trail most of the way from here to Mile 209. It is in the boulder strewn talus. We reached Mile 209 Canyon about 4:30 p.m. and I was good for some more exploring but Jorgen hadn't done any walking since Thanksgiving and chose to stay at our campsite near the river and a little south of the wash. He had come down through Mile 209 Canyon with Bill and Homer when they were starting their float trip two years ago. I decided to walk up the bed to look at the water pockets that they had seen then. When I was about 25 minutes away from the river, I turned up an interesting looking chute that led to the base of the final cliff at the top of the ridge. I had intended to turn back at 5:00 but the spirit of discovery led me on. At the top of the chute I first tried turning east but that seemed more hazardous than going west. Even here I had to use some good grips and pull myself up almost vertically a few times. The way to the top of the ridge seemed about as risky as what I had already done, but by now the time element was really pressing. A chute to the southwest seemed easier so I decided to descend there and go around to pick up my jacket and canteen which I had put down on a prominent rock before attempting the stiff climb. All this took a lot of time and it was nearly dark when I found Jorgen and the campsite at the river about 6:30 p.m.

On one of the float trips, Jorgen had tried walking upstream from the mouth of Mile 209 Canyon and he knew that we had to go up behind a basalt remnant. The burros had left a clear trail so there was no problem. On the return we overshot our ascent route because the best burro trail goes a little farther up the side canyon before descending. There are some cairns along the trail south of 209 Mile Canyon, but we had missed them. We were quite thrilled when Jorgen noticed a clear retaining wall to support the trail across a small ravine before the trail comes down near the beach as it approaches Indian Canyon at Mile 206.7. It was the first absolute proof that someone besides the burros had worked to produce a trail along

here. We camped just downriver from the mouth of Indian Canyon exactly where Jorgen and his friends had stopped on one of the floats.

It was still before 11:00 a.m. so we put our lunches in my nearly empty Kelty and started to climb the right slope at Mile 206.9, downriver from the mouth of Indian Canyon. We could see that we could go quite high and the rim seemed broken with notches. We were amazed at the height of the burro traces here, but eventually we got beyond them. The notch we had hoped to walk through was across an abyss. There was a horizontal shelf leading around the corner so we proceeded along this unique possibility. Around this corner we went up to the left until a very exposed and rotten looking spur would be the only route forward. I have done climbs that bad, but I preferred looking at other possibilities before proceeding. We got down to the level of the first ledge and followed a second around the next corner. Now we could see two sure ways of finishing the climb, up a narrow ravine to the left, or down the same and up behind the big knob that was our hope from clear down along the river. I did the former and Jorgen did the other and we would have tied in getting out to the west if I hadn't stopped to build a small cairn. We walked on parallel to Indian Canyon.

We had decided to turn back at 3:00 p.m. and just before this hour we examined the possibility of a descent through a tributary. We went down about 100 feet in one ravine and went over a saddle into another, but there was still no chance without using a rope. There were some caves along here, but the one I checked didn't even show smoke on the ceiling. We did see a water hole in the bed of Indian Canyon. I went out on the rim at one place and saw what I took to be an insurmountable fall in the bed of Indian Canyon. We returned to our campsite using essentially the same route except that we went a bit farther toward the bed of Indian Canyon near the bottom. The burro trail seemed better established here. We had seen bighorn tracks near the very top of our climb. We felt greatly rewarded by our discovery of another way to the plateau.

On Sunday we took our lunches only and started up Indian Canyon. At the first barrier fall we had to backtrack to a rather concealed break in the cliff on the right side of the canyon facing down. I could imagine deer or bighorn sheep using this route, but it was pretty amazing to note burro tracks apparently leading to the same break where we were pulling up with our hands. There was another dry fall which we bypassed on the east side of the canyon and then we came to the high twin falls, one in the main canyon and the other in a tributary from the west. We followed a burro trail going up the left side along a steep bench. After rising about 100 feet and getting around a corner, we left the burro trail and doubled back above the falls. There was just enough of a ledge to allow us to get into the narrow slot of the main canyon above the high fall. After a few scrambles past pools in the limestone and minor drops, we came to an open corridor which looked encouraging. After a hundred yards of this, we entered another narrows and soon came to the end of the line, a couple of overhanging chockstones with no adequate holds for a bypass. Perhaps a daredevil could have gone by here, but I didn't even want to watch Jorgen try it. We went back and checked the burro trail and found that it ended only a few yards farther than we had used it.

It was before 3:00 p.m. when we got to camp at the mouth of Indian Canyon so we started upriver with the hope of seeing 205 Mile Rapid. There was some trail but as we approached the rapid we stayed rather low and had to climb along some crags without a trail to get a good look at the rapid. The story Jay Hunt had told me about getting trapped in an eddy against the west wall fitted perfectly so I am convinced that

he knew what he was talking about having to deflate the boat and climb the cliff rather than risk another upset.

It was now about 3:30 and we had decided to turn back at four. Jorgen chose to stay and play around near this impressive rapid, but I wanted to climb up to have a look ahead at the mouth of Spring Canyon and also at the rim of the Redwall. I had some sort of impression that Jack Nelson had talked about a horse trail that came down in this area. After I had gone quite high I was rewarded with the find of a distinct cairn, the first one we had seen on this side of the Colorado. The trail became better as I went north and I could also look up and see a nearly sure way through the Redwall. In fact there was another farther on. I could have made fast time down to the mouth of Spring Canyon on this fine section of trail, but I turned back at 4:00 and was able to look ahead and see that Jorgen wasn't too far ahead in returning to camp.

He was just as thrilled as I was about the new and better possibility of a route to the rim so we made an early start on Monday to check it out. We selected a route up to a blank wall near the top where we could turn north and reach the break in the rim. There were signs that burros come this high to graze. Jorgen and I separated slightly near the base of the wall and I had the thrill of finding what was clearly a man made but disintegrating trail. Very soon we began seeing a succession of cairns so that we knew we at last had found the old horse trail off the rim down to the river. We went up the Supai parallel to Spring Canyon and had some fine views into its depths. Ledge by ledge we went to the top of the Supai about 2500 feet above the river and ate our lunches. There was one more cairn which indicated that the trail went south of the knoll we climbed. It seems to stay on the high ground between Indian Canyon and Spring Canyon and probably goes around into Price Canyon south of Price Point (it used to go up just south of Price Point) before getting to the very top. The pockets on the bare Supai rocks were all dry, but we could see a trace of snow in the shade of Price Point on the talus going to the plateau. I had only a two quart canteen along so I wasn't prepared to go to the top with the possibility of having to make a dry camp, and even if we were sure of snow water, we knew it would be a cold place to sleep. We went down and moved our camp to Mile 209 Monday evening.

On Tuesday we moved south to Trail Canyon and on Wednesday we had no trouble getting back to the kayak. In getting down the Tapeats we tried a slight variation, going down the usual break facing the river just through the top cliff and then contouring around into the side canyon to the chute that I had used before. I believe I like this system the best of all.

In descending the talus from the Redwall rim on Monday, I found a bighorn ram's horn. Another observation new to me was to see that the burros bite off the tips of catclaw and mesquite apparently to improve their trails through this noxious bush.

Havatagvitch Canyon
[February 6, 1971]

The weather had been dry for quite a time and I figured that the dirt road west of Grand Canyon Village would be in good shape. After thinking about the rappel site Doty and I had examined, I had resolved to go back and use it in spite of the fact that it would be the longest rappel I had taken on to date. At a recent Sierra Club meeting, I met John Ritchey, a Ph.D. in chemistry, and Eric Karlstrom, an anthropology

student, both enthusiastic outdoorsmen, and I invited them to go with me. Al Doty likewise accepted my invitation. Four girls from the hiking club also took up my offer to show them the Moqui Trail and rode in the camper.

We got quite an early start since I had a bridge party commitment for the evening. The foot travel got under way about 9:20 a.m. from Chikapanagi Tank. I had taken the back road from Moqui Camp to Rowe's Well and the Topocoba Hilltop Road was in better shape than in the past.

We followed the route down to the rappel site as on 5/9/70 without spending any time to look at the overhung rappel in the bed of the wash. I had been having a bit of arthritic pain in my left knee for over a week, and with the sort of companions I had invited, I found that I was the slowest of the four men. Doty was the fastest and he was getting his two ropes ready when the rest reached the scalp in the Coconino where it is possible to walk down the slope through about half the thickness of the formation. This time we anchored a rope to the big rock which is lying on the slope and led the rope around the little juniper tree so that it will be supported farther north. Then we tied my 120 foot goldline so that we could begin the rappel farther down. It is possible to walk down over the rounded and steepened rim several yards. Eric and John wanted to keep everything very safe so we used the third rope, Al's 150 foot goldline, for a belay rope. When Eric tied himself to the juniper with the rope twice around his middle, we found that the 150 foot just did reach far enough. Al had three brake bars and a web strap diaper sling that was better than my gear, so we used his.

The rappel was about 100 feet down, but there were several places where one could stand on projections and there was no place where one lost contact with the wall, if one put out his feet. Al went down first without incident and then I had an enjoyable trip down. I had overcome my irrational qualms about a rappel just because it was farther down than I had done before. Of course we made sure that the rope reached the bottom before we started. Actually there was a ledge about 15 feet above the bottom from which it is possible to do a careful climb down. John didn't come down with us because he was afraid of a weakness in one hand. He belayed Eric but he kept on feeding slack rope so fast that most of the belay rope was beneath Eric. I was sure this belay was unnecessary, so no one remonstrated.

By this time it was 11:00 a.m. and we were a little behind the desired schedule. However, we went to the south and had a good look at the overhung fall from below. Al and Eric spotted an outside chance for a bypass, but when we looked at it some more, even Al decided that there was not a prayer here. Then we went around into the long arm south of Bear Fall Point. Eric and I checked a possible spring while Al went up a place where a talus goes quite high on the Coconino. This is just south of the 5600 printed on the Supai Quad map. We found that at this very dry season the spring has only a moist place in the Hermit Shale. A horse trail comes up here though, so there is a good chance that at some seasons there is water.

Al was already at the top of the Coconino when we got to the top of the talus. The hardest move of the route is at the bottom. One has to go up about four feet and get on the bare rock slope with no hand holds. One braces with the hands on the edge and uses a toe hold below the edge. One needs to study the bare slope above and use the little rough spots in going on up. Al got up the last part using pigeonholes in the face of the sandstone, but Eric and I detoured to the west and walked up.

From below we had seen that there would be a way through the Toroweap and Kaibab if we could go southeast along a ledge at the top of the Coconino. After eating at noon, we proceeded along a striking bare shelf. It soon came to a corner and gave out, but just before this we could easily walk up to a clay slope above the bottom of the Toroweap. With a couple more scrambles up or down to the best level, we passed the tributary just west of the word Fall in the name Bear Fall Point on the map. Here we could scramble up the slope to the base of the Kaibab rim cliff. Around the corner to the north, it was a walk up to the top.

In view of the time element, I probably should have insisted that Doty go back and Jumar up the rope with the equipment that we had not tied to the end of the rope, since we were so sure that at least he would go back that way. However, we were all interested in seeing how we could best get across the canyon back to the truck. When we came to the side canyon that comes between the words Fall and Point on the map, we saw that we could get down at least to the top of the Toroweap cliff. In fact we found a horse trail going down here. This wash ended in a fall, but we were able to go southeast and get down a gypsum clay slope and follow a dim trail along the top of the Coconino which led to the top of the Kaibab. It was only a short way from there to the truck.

I went on to the truck to tell the others why we were going to be delayed a bit and Eric and Al went down to retrieve the ropes and other gear. They used the route down from near the point a bit east of the rappel site. John Ritchey and I went along the rim to the west and enjoyed a good view through my binoculars of the rappel and Jumar ascent by Al. It seems to take more time to coil ropes and arrange the gear than it should, but then Al and Eric surprised us with how quickly they got back to the truck once they started. They came up the way we had gone down in the morning.

The day had been the pay off for the previous three trips to the area. I had been there twice by myself, the first time to follow the rims and look for a possible route, and second to locate the rappel site which had seemed like a walk down from above. The next was with the Dotys when we had brought the ropes but I had chickened at the long rappel. I had looked straight at the route where we succeeded this time without a rope, but from the rim across the canyon, we all agreed that we wouldn't have given much for our chance of succeeding. I believe I thought the Coconino too steep and also I would have figured that there was no ledge on which to move over to the route through the Toroweap. We were glad to find that my informant, Earl Paya, had been right. There were no signs, such as cairns or Moki steps cut in the rock, that this had ever been used by Indians, but this must have been the route he knew about. Al built a fragile cairn above the tricky place at the top of the talus where one gets onto the bare rock.

Mount Wodo

[February 13, 1971]

Mount Wodo had caught my eye for a number of years, rising alone above the Esplanade on a pedestal of Hermit Shale. From a distance one can see that there is a good ramp through all but the bottom 40 feet of the Coconino on the southeast side, but it didn't appear obvious how one should get up to it. George Billingsley recently had flown by in a chopper and he insisted that a ravine on the northeast side could be climbed. With this encouragement I decided to go after it. Bob Packard and Scott Holzhauser were originally going with me, but when the time came, only John Ritchey and Mark Price could make it.

We left Flagstaff early and had our permit ready to head out along the Topocoba Road by 7:40 a.m. I knew that this road is in relatively good shape as far as we had used it last week, but it got progressively worse after that. Beyond the turnoff to Great Thumb Mesa it was worse than I have ever seen it. The hood of the pickup truck is so high that I couldn't see the road very well on some sharp turns and humps in the track. I stopped once for a closer inspection of a place where the edge of the road was washing out. The worst part was getting back up the steep grade close to the end where big rocks are showing. It seemed much worse on the return than when I was easing the truck down over them. I probably should have had my passengers in the back to give more traction. At the very end I didn't recognize the turn around and I drove so far that I had to back up some.

As we started along the trail, we noticed that there is a fine shelter under an overhang below on the north side of the ravine. Charcoal shows that it has been used. We also marveled at the road construction down near the bed of this ravine. The Topocoba Trail down the Coconino hasn't changed too much during the years since they stopped bringing the mail down this way. We saw a fresh beer can or two. The day was fine and cool and we were well down in the Supai very quickly. We could see that it would be difficult to climb the wall to the north, but I was confident that there was a better place farther west. I recognized it and we left the bed about where I had on 3/26/64. There is some old constructed trail here. We crossed Putesoi Canyon lower than I had before and proceeded to the top of the Hermit at the east end of Wodo. This trip took about two and a quarter hours from the car. George had said that his ravine is on the northeast side of the mountain, so we walked around there first. In about 50 yards we came to it, but the lower 25 feet baffled us. Possibly Al Doty could have done it, but it seemed that one would need to wedge an elbow in a crack. Then 15 feet up the crack becomes worse. Anyway, we three were more interested in finding a better way. We went around to the south side where anyone can see a fine ramp up the Coconino if the lowest 40 feet could be climbed. About a third of the way along the south side we found a curving crack wide enough for a possible chimney climb, but we proceeded all the way on around the whole mountain just to be sure we weren't overlooking any other possibilities. It was this crack or nothing.

Ritchey finished lunch first and went up to try the crack. He took a quarter inch goldline rope up with him and then pulled up his pack containing his photo equipment and some water. The crack varies in width but it has some bumps along the walls. It was a struggle for us because we had to change position several times. However, it is not as hard as the key place on Lyell. This was the hardest place on the entire route. We found two or three other places where it seems that only one route is possible. We moved up and to the east along the Coconino ramp and then started up the east ridge through the Toroweap. From below there was no sure way through the summit block to be seen, but when we got to it, we found a crack facing east on the south side. Mark was ahead at this time, so he was the first person on top of Wodo. We built the first summit cairn and left small cairns at a couple of places along the route down. A lone juniper is a good marker of the crucial way through the bottom of the Coconino. On our way back we stayed on the Esplanade until we encountered the canyon east of where we had left the bed of Lee Canyon. There were route finding problems to get down it. We also saw an immature bighorn ram on the Supai rim from the bed of Lee.

Supai in one day

[February 27, 1971]

George Billingsley told me that it had snowed less west of here a week ago than around Flagstaff, so I had the idea that the snow would be all gone from the rim of Havasu Canyon. This led me to think that doing Watahomigi Point would be in order. John Ritchey, who had agreed to go with me, called at the last minute but I went anyway. In fact when I woke up a little after four a.m., I got up and was off by 4:30. When I reached the turnoff from the main Supai road, the track was snowed in, by only three inches of hard snow, but I was a little afraid of mud from a thaw and I was also worried about the rock climb down from the point. It might be impossibly hazardous from the snow.

It had been a long time since I had gone down the Hualapai Hilltop Trail to Supai, so I decided to see it again. There are distinct changes. The road going along the right side of the canyon has been widened and smoothed. The parking lot has been extended and furnished with a Forest Service type comfort station. There is also a new building just below the road a little to the west of the parking where horses can be left in the shade of a roof. There is a water supply from a big tank, and I suppose the house can be used as living quarters. Some group, presumably the Forest Service, has supervised the improvement of the trail down as far as the bottom of the Coconino and a little beyond so that it is now smoother and wider than the Bright Angel Trail. Down in the bed of the wash, it is just as it always has been since the days of Garces and Ives, except that there is more trash. It seems that people have discarded whole sacks of cans and bottles along the way. In a few years I suppose there will be a big enough flood to take care of this mess. Speaking of Garces and Ives reminds me that I watched for any place that ever would have needed a ladder. There is one rather steep place where big boulders are piled so that the trail for horses must detour, but a man can get down rather easily in the bed. Horse Trail Canyon seems more likely for the Ives route unless we should call the story made up from the whole cloth (no, very bottom of Hualapai Creek).

The day was fine and clear but cold. Down in the open valley, I saw a number of bluebirds and there were more squirrels around than I have noticed in other parts of the Grand Canyon. The Indians have a fine new tractor and they are also using quite a bit of bottled gas now. I met one man going up with a string of pack horses to get refilled containers and the same man recognized me as I was going out. Another Indian by the name of Montoya told me that if I expected to go out the same day I would never make it. Actually I was paying the \$2.00 fee just two hours after I had left the truck and got down below Havasu Falls before 11:00 a.m.

My main project in coming down was to find the route by which one can get up the cliff on the east side of Havasu Falls. Jim Sears and some others have told me it is possible, and then I found a passage in G. W. James describing the route. I should have carried the book with me. I thought it would be easier to locate from below, so I waded across the creek and approached the base of the travertine cliff. There were two places where someone has cut steps in the soft rock. First I went up near the solid limestone to a shallow cave in the travertine, but I could see no way to proceed. Next I went up nearer the pool where a couple of steel rods were driven into the travertine. The way is nearly vertical and I had to use caution, but when I reached a more complicated system of joining caves about halfway up the cliff, I couldn't see any way to proceed. I did take the time to go up Carbonate Canyon, something that I hadn't done since 1946. I was stopped at the big pothole.

Jay Hunt and Mrs. Hunt were away but on the way out I met the Birds, friends of the Hunts. Mr. Bird said that Jay has done the climb I wanted to do. I also talked to a young Indian and he told me that I need a flashlight to do it since quite a stretch is through a dark cave. Perhaps if I had started at the top I would have found the right way down. I ate lunch near Havasu Falls and walked out in just under four hours. It was my first one day trip to Supai, but I had spent less than eight hours on foot, surely not too hard a day.

Long Canyon Boynton Canyon loop
[March 6, 1971]

John Ritchey and Harlen Johnson went with me down to Dry Creek and we parked at the fork of the road just west of the creek crossing. It was cold and windy as we left the truck at 7:35 a.m. but the day was clear and it warmed up until we could eat our lunch in comfort in only light jackets.

The graded dirt roads were in excellent shape even where the roadbed crosses the creek. If there is ever a runoff or a storm, they will have to renew the bed where it crosses the creek. We found a road turning into Long Canyon, but it ended near an auto graveyard. This bit of contrast with nature is new since I was last here about three years ago.

We had quite a loop ahead of us so I didn't stop to show my friends any of the side attractions such as the ruin up behind the Three Towers in the north side alcove or the minor ruins farther northwest including the bootlegger's caves. They were properly impressed with the vegetation along the dry streambed and especially the background of red and white cliffs. I had been up to the edge of the plateau on 2/4/61, but now I had forgotten the right stream channels to follow. We tried a fork to the left when the pitch began to steepen, but we were soon stopped by a fall and from what we saw later, we could have gone up a narrow and steep ravine to the top. However, we turned over to another bed, the main arm and proceeded upwards. There were a few places where one uses the hands that might discourage a non climbing girl. Near the top we investigated a fork to the left that led to a narrow crack. It led to a short perpendicular pitch where one would have to use vegetation holds. We chose to go back and go on up the direct arm where the going was fairly straight forward. On the rim we had to fight manzanita and other brush, but we soon got into the tall pines where the walking was easy.

The rim views were grand. We could pick out Bell Rock and Courthouse Butte, Lee Mountain, and Capitol Butte was outstanding. John kept thinking about the differences between this scenery and that in the Smokies. Through the woods we soon found a good Forest Service Trail. It had frequent rain deflector logs and they had used a shovel to even it up even where the walking was fine under the trees. This part of Secret Mountain is very narrow and the prevailing drainage right back from the rim of Long Canyon was into Secret Canyon on the other side. From one place we could see the snowy summit of the San Francisco Peaks. We ate our lunch at a sunny place on the rim overlooking the northern arm of Boynton Canyon.

We stayed pretty much on the trail until I decided that we had gone north far enough. I took a look down into Hartley Canyon to make sure we were above the Boynton Hartley Pass. It looked steep and far down to the pass, but as an encouraging sign that we had come to the right place, we found two large cairns.

After breaking through the thick brush to reach them, we found a meager deer trail leading down. I came to one slot that I thought might be our route up last year, but I thought better of that and went a bit farther west before starting down. At the top of a chute we had to crawl behind a little tree that had been washed down here and wedged in place. I couldn't remember this feature from a year ago, so this may have been put here by a fairly recent storm. The rest of the way to the pass was familiar. The view down Boynton was great and we saw the contrast between the open straight U shaped valley of Boynton and the narrow bent valley of Long Canyon. The walk down Boynton was easy and fast with some trail evident much of the way. We met quite a few people here.

It was still early when we reached the well known ruins in lower Boynton north of the open meadow. Ritchey called our attention to a small artificial basin low on the wall behind the lower ruin. I noticed a loop hole built through the wall that is directed right toward the trail approach. We then went west along the ledge to the crawlway through the fin of rock. There is another bit of a ruin along here. The hole through the fin is so low that Ritchey had to pass his pack through before coming through himself. We had no trouble going up the next hundred feet mostly to the west, but along the base of a bare cliff, we had to look harder to get started up the next pitch. John found a place where someone had propped an inadequate dead tree between a juniper and the bare rock. We tested it a bit and went looking for a better place. Farther east we found a walk up with a pile of stones at the base.

At the foot of the big vertical cliff we had to go east to look for the impressive overhang that was visible from below. It seemed farther than I had thought and I was becoming uncertain whether we were at the right level. Eventually, however, we came around a corner and saw a good sized ruin up high in the hollow. At first sight I thought I couldn't hack the climb up to it. After some study, John and I saw that the best route was directly below in the obvious place. There were a few little half inch ledges in the red sandstone and we were able to use them to get up the first eight feet. After that the going is easier but one should watch for sand on the sloping rock. The cave was bigger than we had thought and there were several rooms. The clay was still in place to hold the stones of the wall, and one doorway was well preserved. The ledge to the east beyond the shelter of the cave didn't continue far but we could see another poorly preserved ruin at the same level. The approach would be easy if we should go down and continue east at the foot of the cliff.

On our way along here we came to a peculiar little alcove with a seep spring in it. If the weather was wetter while the Indians were occupying this area, they could have used it for their water supply. After going up to inspect this other ruin, we tried continuing east along the base of the main cliff. This proved to be impossible and we went back the same way we had come. From below we could see what Katie Lee had meant. If we had gone down to a lower ledge we could have followed it into the bushy ravine that certainly offers one an alternate access route to these upper ruins.

On the walk back to the truck we were offered a ride by a rancher in his pickup and accepted it. He took us about a mile and we later realized that I would have been about 15 minutes late in reaching home than I had intended if he hadn't helped us. All in all, this is a fine loop trip. One could spend more time looking into side canyons and checking out other climbing possibilities. John thought we should be able to climb up the cliff to the south at the Hartley Boynton Pass, but I thought this would require technical aids. I am

rather sure that there are other ways to get to the top of Secret Mountain from Long Canyon and possibly Boynton.

Fossil Bay

[March 27, 1971]

John Ritchey and I left for the south rim about 5:00 a.m. We found that after several years of keeping the District Ranger's Office open 24 hours a day, they no longer do so. We proceeded on our trip off the rim of Fossil Bay without a permit. As we knew already, the Topocoba Road is in good shape as far as the fork going to Great Thumb Mesa, although 25 miles an hour is about the maximum safe speed. The road up to the mesa is a little worse each time I see it, but I knew that last week a Jeep, a pickup, and a VW had made it. I was careful to clear the tree limbs when the truck would be tilted by the slopes in the wash and I took the worst spots in the lowest range of the gears. As I have done before, I didn't see one turn in time and went a few yards past it. This is in the bedrock just to the west of the place where one first gets a view from the rim at the head of Forster Canyon. I parked about a mile north of the fork where the main road goes to Manakacha Point, or it was about five miles from the Topocoba Road. It was only a few minutes walk to the bad place in the road where one has to drive up sharply through a limestone ledge. A walk of a few minutes more takes one past a fireplace to a still wilder drive over bare tilted rocks down to the north. The Jeep road is no longer defined at all north of a place about six miles from the Topocoba Road.

The most recent occasion when I had been off the rim into Fossil Bay was 7/25/66, and my recollection of the place was not fresh and clear. I took John out to the rim several times before we got close to the right place. When we were really close, I almost led him south when we should have gone north higher, and then we went along to the north before going down just before reaching a steep ravine. On the return we went up to the rim directly above the ridge just south of this ravine. Down below the loose scree slopes, I was able to lead Ritchey directly to the break in the Toroweap. I was somewhat surprised to note that it took us a half hour to go from the rim to the Toroweap break. I am rather sure I have done this sort of thing faster in other years while alone. I am not as sure footed as I used to be.

My memory of the location of the deep rain pocket was clear. We ate an early lunch by it and I refilled one two quart canteen which was two thirds empty by then. The water was down about four inches below the lip, but it was still about three feet deep. One of the smaller pockets still had a little water, but this water was green and had more wrigglers in it than the deep pothole. We found water in one more pothole, in the wash which heads near the letter k in National Park on the Kanab Point Quad. The water was about four inches deep and should not be trusted. It was higher than our route to the south from our lunch stop.

Our route south along the Esplanade was about where the plateau levels, but progress is slow because of the black brush and the necessity to climb down and up at each tributary of Fossil Creek. About 2:00 p.m., when we were where the word Fossil is printed on the Kanab Point Quad, the sky looked more and more threatening. John was worried about the clay we needed to cross on the return if there would be a hard rain and I worried about getting the truck stuck at places in the road. We both thought it best to return while we could. We took a higher route across the Esplanade but this was a mistake. The ravines were just as deep and were more frequent. It took us two hours instead of the one and a half to get back to

the vicinity of the big pothole. Going up through the Hermit Shale and on to the top took us over one and a half hours. We got back to the truck as it was getting really dark, about 7:35.

About the only positive gain from this trip, in addition to the pleasure of being in the canyon with a few birds singing and some flowers blooming, was the observation of a break through the Toroweap and Coconino at the middle of three arms of the Fossil tributary about three fourths of a mile north of the BM 6234 on the map. We couldn't see a way through the top Kaibab cliff, but it would surely be shorter if it exists, assuming we wanted to get down to the river at Mile 123.7, the present goal.

Coronado Butte
[April 4, 1971]

Friday and Saturday were taken for the math meeting at Tempe, but during this fine cool weather, I wanted to do something interesting in the canyon, so Coronado seemed appropriate. Jim Sears and Warren Tausch came to our house at 8:00 a.m. and we met Donald Davis and his friends, Ed Price and John Wehrman, at the Visitors Center where we made out the permit. We parked just a bit east of the place to leave the highway for the top of the Hance Trail, where the shoulder is level for good parking. There are two places where there are car tracks through the trees to the trailhead. They go on either side of a bare hole in the clay where the road constructors may have dug and scooped up clay. We had no trouble finding the trailhead. The trail looks much the same as ever. There are more cairns than there used to be, but the trail is no easier to find and follow than before. To avoid dropping lower than the top of the saddle requires some bushwhacking along the base of the Coconino crags.

There is an outcrop of Coconino below the saddle, but this is very near the bottom of the formation. Walking up through the sandstone toward Coronado is a bit like a scramble since the slope is steep, but there are no real climbing difficulties. Along here I was leading and Jim was next. Warren saw something move near Jim's foot and called our attention to a little rattlesnake about 18 inches long. Neither of us had seen it although we must have stopped within inches of it. On the way down here later in the day, I pointed out a slab of the Coconino with fossil footprints. They were about three fourths of an inch in diameter, nothing spectacular, but they form more evidence for the widespread occurrence of these footprints.

We know that we should go along the east side of the butte to find a ravine leading up. I chose not to follow a high ledge while the other five strayed up there only to find it ending at a cliff. Thus, I got well ahead of the others and sat down to eat lunch while they were coming along. I passed by one ravine that seemed to go up to a cut through the butte because I was fairly sure that the higher tower was to the north. There were a couple of ravines that had vertical walls at their heads, but quite far to the north I found one that might go. We all got together here and proceeded up after eating. There were enough difficult places to make it interesting, and we had to do a bit of jogging right and left to find the way to the level of an impressive vertical crack between two huge blocks. Here we could scramble up to the scree filled bottom until we could look down on the other side. All five of my associates chimneyed up the next 15 feet, but I was carrying a rope and asked Donald to fasten it above while I got some assistance from it in going up here. After some more routine route finding, we were up and could read the notes left by Doty, Wehrman,

and Jensen. This route to the top seemed to be a little easier than the way up O'Neil. I believe I could have managed the chimney if I had tried very hard.

I climbed down about 40 feet on the southeast side of the summit and proceeded to the top of the next tower south of the highest one. This involved some acrobatics as strenuous as anything else I had done in reaching the top. The former climbers had built a small cairn on it too. It looked quite a bit harder to reach the top of the lowest tower still farther south and I didn't try it.

All of us but Jim and Warren went back down the way we had come up and I used the rope for a body rappel at the chimney. We had to get back to our lunch stop area where we had put down various belongings. Jim and Warren were fairly sure that Jan's way to the top consisted of going down a ravine to the east just south of the main summit. It was easy to get down 80 or 100 feet, but there it dropped vertically in a sheer wall. They found that one can proceed along a ledge to the south around a corner and enter another dirt filled ravine that gets one clear down to the base of the butte. Warren convinced me that this was the ravine I had come up so many years ago because he noticed the same tree trunk leaning against the south wall of the saddle. I had thought that I would have to shinny up this dead tree to reach the summit, not knowing that the highest point was to the north so that I could use the ledge.

Watahomigi Point and old trail by Havasu Falls
[April 8, 1971]

After seeing the area from the air, George Billingsley last fall found the route up to Watahomigi Point. He showed it to several members of the hiking club, and more recently Jay Hunt and Allyn Cureton have been over it. It was high on my list of projects.

On the way this morning, I saw three antelope near Grand Canyon Caverns and five more along the Supai Road. Other observations were a few paintbrushes and pentstemons but the flowers are not numerous after such a dry winter and spring. I also saw a few birds including a really big hawk.

One leaves the Supai Road about 47 miles from the highway, a couple of miles north of the turnoff to the modern house. It is about 18 miles to the new generator station and over two more to the end of the primitive road leading to a surveyor's marker. One should stay on the high ground and walk northwest to the point. The first descent is gentle through a grassy dip and is well marked with cairns, built by Billingsley and Hunt. I wasted a bit of time looking down the break to the east but soon decided that the right way was down the scree filled ravine to the west.

At the top of the Toroweap, there is a very sketchy trail going both ways. Jim Sears had said something about needing to go to the left, but I thought he might have meant the part I had already done. I followed the bighorns to the east around below the point and looked rather carefully for a way down. It wasn't here so I doubled back to the southwest at the same level. At one place I got down the top Toroweap ledge by some careful climbing, but there was no way to clear the lower part. I retreated and continued the search to the south. Just as I was getting discouraged and beginning to wonder what I might do with the day if I were baffled here, I found a cairn above a place to get down the top Toroweap ledge. Below this there is a

bighorn trail going to the northeast and it leads to a place where a ravine goes through the lower Toroweap ledge. There was another cairn to mark this break.

The bighorn trail continued to the northeast below this break and leads to the very interesting narrow ledge for getting around the projecting corner. There are a few handholds where the shelf is only a foot wide, so it didn't cause me as much worry as the climb down the top Toroweap section. The trail goes on at this level at the foot of the cliff and you come to the pass at the top of the Coconino. The descent through the lowest 15 feet of Toroweap at this pass is marked with another cairn, but one can walk down from the pass to the west where the entire slope is covered by slide rock. I went to the bottom of the Coconino here just to log another Coconino descent. It is a good way to get to the Redwall rim of Beaver Canyon. One should go along the Esplanade to a break near the point where Havasu and Beaver come together.

I had no further problems. On the east side below the pass, I found a sketchy trail with hiking shoe marks. They seemed fresher than those made by Cureton and Hunt. I had come up the Supai from Havasu Falls years ago, but I didn't recognize the place immediately. I was helped to the right place by some boys who had just topped out. It is about midway between Havasu and Navaho Falls, and there are a lot of cairns around. The route down here has seen so much use by now that it is practically a trail. At first I thought I would cross the creek above Havasu Falls and go down the travertine climb from above. After eating lunch beside the stream, I decided to go below where I knew the creek crossing, and especially since I would need to refill the canteen at Fern Spring before going back up, I had no trouble. You go out either of two windows and there are good steps cut in the travertine up to a short tunnel. Contrary to what the Indian told me, no flashlight is needed. You come out at a small cemetery with the graves well decorated with artificial flowers.

On the return I needed 45 minutes to reach the rim of the Esplanade, an hour from there to the pass at the top of the Coconino, and 40 minutes to the top of the plateau.

Scouting the way to the river at Mile 123.7
[April 12, 1971]

With six days of spring vacation, I had spent one going down from Watahomigi Point at Supai, three on Lake Powell with Roma, and I wanted to use the last two in going from the rim of Great Thumb Mesa to the river at Mile 123.7. Donald Davis was available so we joined forces. The plan didn't work out, but we found something better than what I had figured on doing, going off the rim at the upper end of Fossil Bay and using the entire day to go back along the Esplanade and getting down through the Supai and Redwall.

I got on the road by 5:00 a.m. and arrived at the meeting place with Donald on schedule at 5:30. Donald had slept there where the road from Moqui Lodge meets the Topocoba Road. It was 7:10 when we were organized to leave his campsite. Even this late in the season, it had been cold enough to freeze water in one of his canteens. An unusual feature of the drive was seeing so many deer, seven before I met Donald and eight along the Topocoba Road. A delay occurred when I tried to drive off the Topocoba Road up toward Great Thumb Mesa. I had had a rear bumper put on the truck just since my trip with John Ritchey. Something made the difference and we got hung up on rocks only 50 yards from the fork. It was touch

and go whether I would be able to go either forward or backward. With Donald's guidance, I got the truck loose and backed up to the fork where we left it. Before we walked on, I suspected that one front tire was going flat.

Without the five mile boost from the pickup and with the other delays, it was apparent that we could not hope to reach the river by the route I had chosen. We decided to put our hopes on finding a shorter route, especially since Ritchey and I had seen a way to get through the Coconino. Where the Jeep road comes to the rim north of Enfilade Point, Donald and I first went north along the rim since I knew that the Coconino break was in that direction. We couldn't find a way through the Kaibab just as Ritchey and I had noticed. Finally we doubled back to the south where we could see a couple of breaks in the rim cliffs. It was noon before we started down so we enjoyed the fine view and ate lunch on the rim. If one were trying to establish the identity of the finest view in the whole canyon, this vista to the east would be a strong contender.

The place we went down is about a quarter mile south of where the road reaches the rim after passing Enfilade Point. There are some neat passages among big rocks right near the rim and then you walk down consolidated slide material through the north facing ravine. It is easy to get down to the loose gypsum bearing clay just above the Toroweap Formation. Here one can follow the bighorn sheep trail very easily in places and in other places the footholds are extremely meager. The rock is relatively soft and one's admiration is aroused for the sheep who nimbly cross these four inch crumbly bits of trail with never a thought for the 300 foot fall that might occur at any time. Donald and I backed away several times and painstakingly pawed our way up the 45 degree or steeper slope to get around a few of the worst parts of the sheep trail.

After almost two hours of this, we were above the Coconino break, but there was no way to get down through the Toroweap. We could see sheep trails from below converging to the one place where the climb down appeared to be almost possible. After we had gone beyond the easy part of the Coconino without any luck, Donald returned to this place in the Toroweap and tried it. He got down about halfway but the last eight or ten feet defeated him. It was quite difficult for him to get back and he felt a bit of panic for a minute or two. On the return to the packs, I tried going up to the base of the solid Kaibab cliff, but the footing was worse than along the sheep trail below. My left foot began hurting probably where a nerve gets exposed as the bones spread apart. Donald got ahead of me and observed a likely place for a Coconino passage not too far from a possible route through the Toroweap that both of us had seen. It is directly below the place we had left the rim.

When Donald started down through the Toroweap, he immediately found something of interest, a rock pile built up as a step. There is a fine overhang to the left and he soon reported some charcoal. Very shortly he shouted that he had found some pictographs. They are done in charcoal on the low ceiling of the overhang at the far end. The way through almost all the Toroweap is simple, but Donald knew that he should go to the northwest along the intermediate slope to reach his Coconino break, a scree filled ravine. My foot was still hurting so I went down to where I could look ahead and waited. He reported that there was a little difficulty in finding a way through the lower Toroweap, but a way was there. He figures that he could see about 99% of the Coconino route, but there was no time to check it out. It was 6:00 p.m. when we were eating on the rim. We didn't walk back to catch the road at the closest place but headed to

the southwest through the junipers mostly following a horse trail. We came to the dead end spur and followed it to the main road just before it reaches the Manakacha Point fork. It was after eight when we reached the pickup and then we had to change a front tire before we could start back.

We hadn't seen any bighorn sheep but there was plenty of fresh signs. We had found a way through the Kaibab and Toroweap with signs of Indian use and this is the much more direct approach to the Supai and Redwall breaks I have been interested in. It was discouraging for me to wind up with a very painful foot, but we had had a profitable day by virtue of what Donald had found during our last hour below the rim. Donald plans to go back there immediately while I stay at home and nurse my sore foot and badly blistered lower lip. We really seem to be closing in on the rim to river route at Mile 123.7.

Route to the Colorado River at Mile 123.7

[April 24, 1971]

When I heard from Walin Burro, through R. C. Euler, that the Supais used to go down to farm the delta of Fossil Creek, I became interested in seeing how they could get there short of going down the Bass Trail and turning west, surely a tedious route. This was about 1960. At the end of April, 1960, I had found the break in the rim, the Toroweap, and the Coconino Formations that gives access to the upper end of Fossil Bay. Not much later, we were going down to the Redwall rim on the northeast side of the main gorge. In 1965, I started to follow the Redwall rim around to Specter Chasm where there are some indications of a Redwall break. Stumbling and breaking a rib ended this ambition. In November of 1960, I got through the Supai to the Redwall rim on the southwest side of Fossil, but I couldn't get down the Redwall. In June, 1961, I had gone to the mouth of Fossil along the Tonto and then the river bluffs from the Bass Trail, and on this occasion I had noticed a possible route through the Redwall and I conceived the idea of trying to connect it with the known route through the Supai. This walking the talus above the Redwall rim would be slow, so I was pleased when I observed from the rim north of Enfilade Point that there seemed to be a much more direct route down the Supai, on the north side of the first big notch in the inner gorge south of the mouth of Fossil. Aerial reconnaissance seemed to verify these possibilities.

When Donald Davis and I started with the thought of using the known route down to the Esplanade at the upper end of Fossil, we soon realized that there wouldn't be time to get down to the Supai and walk clear back to the route through the lower formations. As told in the log for 4/12/71, we wasted time trying to find a good way to connect with a break in the Coconino that I had seen with John Ritchey on 3/27/71. We found a break in the Kaibab rim a long way to the south and then had to admit that there was no way short of using a rope to get through the Toroweap. On the way back, Donald kept near the rim of the Toroweap and he noticed a break in the Coconino much closer to the Kaibab break. He also found a neat way through the upper Toroweap directly beneath the Kaibab route with signs that the Indians had been this way. He also found a break in the lower Toroweap ledge to reach the Coconino break. The next day he went back and got down the Coconino and looked down the Supai route. He also found two water pockets, the first smaller one in the ravine from the Coconino break where it drops into the Supai bedrock and the other at the same elevation about two ravines to the northeast. The latter is in the ravine that drains the north side of a little knoll topped by white material. He also found some ruins under overhangs in the vicinity and worked rock chips near the top of the Supai descent.

I had made three attempts to get up the route from the river. One ended when I broke my heel the day before Easter, 1968. During our Thanksgiving Vacation, 1968, I was back with Foran, Visbak, Mooz, and Ellis. We had time to look at the route from below, but that was all. During the same vacation, 1969, I was back by myself. I got up through the shale and part of the Redwall and then lost my nerve. Now I wanted to take advantage of all these frustrating experiences and succeed at last.

I had to wait until 8:00 a.m. to get a permit and thus I didn't start walking away from the pickup at the junction of the Topocoba Road and the Great Thumb Mesa Road until 9:45 a.m. It took me one and a half hours to get to the Kaibab break, about a half mile north of Enfilade Point. I ate an early lunch and left the rim at noon.

Donald had built a fine cairn to mark the way through the top of the Toroweap and this route to the overhang with a bit of charcoal and the pictographs at the far end is simple. I had to take great care along parts of the sheep trail down and north to the Coconino break. Another of Donald's cairns marks the best place to get through the bottom of the Toroweap and the Coconino. It is simple except at the very bottom for only a couple of yards. The trail takes one to the right down a sloping ridge to the Supai bedrock. When you cross to the left side of the wash, you can see the little water pocket. It seems to be permanent since it is full of mosquito larvae. When one contours to the left around the bare bedrock ledges, he is rather sure to see the other water pocket in the wash on the north side of the white knoll. This is bigger and also has wrigglers in it. In a shallow depression northeast of this waterhole there is an extra large mesquite pit. I used water from this hole both going and returning, but I didn't scout the area and thus missed seeing Donald's ruins. I got from the rim to the Supai descent in one and three quarters hours without hurrying, especially along the four inch wide sheep trail in the crumbly gypsum bank.

At the base of the promontory formed the right rim above the mouth of Fossil Gorge, an earth movement has crushed the Supai rock on the south side and thus has made it possible to walk down here. It is likewise simple to walk on along the Redwall rim around the head of the gorge immediately to the south but the walking is slow and dangerous thereafter. On the return I found a good water pocket in this narrow Redwall gorge down about 50 feet and about 50 yards east of the place to head it. One gets down from the north side. There are several other pockets above this one but they were all dry. The good one is out of sight from either rim. From the south rim one can see several cave openings in the north wall but I didn't bother to check them. One is round and big enough to stand in. It has some sand and gravel on its floor, perhaps left by a super flood coming down the main bed.

Quite likely one could climb down from the Redwall rim to a sloping apron just south of this first ravine, and thus get down to the shale. However, from my aerial views and from direct observation from the river level, I knew that one can't get down the rest of the way. Because of the precarious footing from here south to the fault ravine, I needed an hour to go from the foot of the Supai descent to the break in the Redwall just south of the second bay. About where the Redwall slot gets narrow, there is a big chockstone. The left wall is rough and broken by small ledges with good holds and I went down about 20 feet almost vertically without my pack, canteen, and camera. There is a smaller chockstone where one must climb down backwards. Just before I came to the big drop in this ravine, I could follow a sheep trail along a safe ledge to the left and scramble down a chute. With ordinary care I could work my way over to where I had stood in 1959. I had intended to go back and bring my gear down to the river, but now that I

had already covered every bit of the route, I decided to head back and camp by water. It was 5:30 p.m. when I reached the Redwall ravine south of the Supai route so I decided to look for water and succeeded as related above. It was a windy night and I was glad not to be sleeping on the sand by the river.

In the morning I walked more than halfway up the Supai before eating. I built a small cairn at the head of the Supai route and then headed for the break in the Coconino staying somewhat higher than I had been the day before. I saw Donald's footprints for part of the way. One other difference occurred above the Coconino. I thought I was following Donald's route up the lowest Toroweap ledge, but the place seemed harder than I had remembered it. I had to put my canteen and camera in my pack and push them up ahead of me. When I had finished this short climb, I looked around and noted that I had come up about 25 feet north of where I had gone down by Donald's cairn.

More spring flowers were in bloom than before, paintbrush and particularly Mariposa lilies on the Esplanade. Canyon wrens were singing, and I saw one little snake about as big around as my little finger and fully 18 inches long. The weather was cool but I had plenty to keep me warm in bed. It was a fine trip.

Capitol Butte and the Indian ruin on the ledge
[May 1, 1971]

John Ritchey and I both wanted a short day and he was agreeable to any project that I wanted. First we started toward Secret Canyon, but then I got the idea that it would be fun to climb Capitol Butte again after nineteen years. We started the way Boyd Moore and I had, along the south side over to the east, but we didn't go clear around the buttress before starting up. At one place we found the only safe way and then we were up and over into the ravine Boyd and I had used. There is a well defined deer trail through much of this. At several places we had to pull up with our hands and we needed to go up and then to the right a couple of times. High up, this ravine ends at a notch behind a little tower. From there on, the slope is gentle but somewhat brushy. On the return we saw a small cairn at this notch.

The view from the top of Capitol is outstanding. John saw for the first time what a broad basin Dry Creek runs through and how scenic it is in every direction. There is a rock pile on the highest point supporting a piece of sheeting on a stick. A fireplace beside the summit block indicates that someone has spent a night on top.

We started to go down the same way we had ascended and then changed our minds to head toward the west. It was easier to get across to the head of the ravine going down to the Dry Creek road here than Boyd and I had found it on the west side of the top. Several agaves were sending up the big stalk for their one season of flowering and death. Cacti were in bloom and when we started down the long ravine to the west Ritchey stopped to photograph a yellow flower. We liked this route better than where we had come up because of the little trail and for the rich vegetation. There were copious white flowers on a certain shrub all the way down.

It took an hour and forty minutes to get from the car to the top. I noticed that the entire trip took from 8:30 a.m. to 12:30 p.m.

I drove across the valley so that John could get a picture of Capitol from the west and then we returned to the valley north of Knife Edge Ridge. I took John up the wash to the dry fall (higher than I had remembered) and showed him the ruin at the base of the cliff on the south side. Then I took him around the corner to look at the cleft where I had been unable to go up about 1949, or I thought I couldn't. Several years later, after I had seen two college boys do it, I had been able to climb it, and I wanted to see whether I still could. It was a struggle for me. At a couple of places I had to chimney up and it is uncomfortably wide. At another place, I thought I would have to wait for a boost from John, but then I tried getting a grip over a fin and made it alone. There were several places where I didn't feel secure and I would say that this is about at the limit of what I can now do.

There was no problem in going from there to the ruin on the ledge above and to the north. We enjoyed the view and looked over the names in charcoal. I couldn't find the one dating to 1901. Then we went down and I tried to find the ramp where the Indians had pecked toe holds in the rock. I started looking too far to the west and missed it. Instead we found another place that I feel sure I had never used before. We found steps cut in the rock here too. Then I went back east along the base of the cliff and found the ones I was looking for. This time I built a small cairn at the top, fairly close to the dry fall. We saw a long slender snake while we were going up Capitol. Roaming this region gives me a peculiar feeling. It revives the memories from 20 years ago. At my age looking forward a like number of years is a sobering thought.

Redwall descent between Pinal and Lipan

[May 8, 1971 to May 9, 1971]

Jim Sears had noticed the possibility of going down the draw between Lipan and Pinal Points when he was out on the promontory north of 75 Mile Canyon. When they tried this descent, they found the lowest 60 feet of the Coconino impossible without a rope. They came back and rappelled here and then found a most interesting way to get down through the Redwall. Jim wanted to study the area geologically and also show me his discovery.

I had already invited Eric Karlstrom to go with me to Phantom Canyon for this weekend, but he readily agreed to switch to this project. Jim had never approached this Redwall descent from the Tanner Trail. We all agreed that the trail down to the saddle separating Tanner Canyon from 75 Mile Canyon would be preferable to the route requiring a rappel. Jim, Jan Jensen, and Ellen Tibbetts went down the Tanner Friday evening and slept on the flat but exposed place on the Redwall rim. They had rain during the night and their tube tent didn't keep the water from coming in underneath. Eric and I left Flagstaff on Saturday morning in some rain and snow and passed two cars that had gone into the ditch. After getting our permit, we were starting down the Tanner Trail at 9:05 a.m. The day continued a bit wet with light showers.

The Redwall rim starting below the east end of the saddle separating Tanner and 75 Mile Canyons wasn't too hard to follow and one could do about one and a half miles an hour. When we came near the head of the Redwall in the Lipan Pinal gorge, we found a fine big cairn with a note in it. It told us to go past one more ravine and start down the talus on the other side. There were some other directions, but the most important was that we could see the entire route from the promontory where we found the note. We went

out to the end and yelled. Our shouts were answered by the three who were already down the hardest part of the Redwall.

This route is east of the main part of the Redwall gorge in this bay. Sears had built a cairn on a point near the bottom of the talus, and we might have seen that we were supposed to go west of this point and down, but from where we were it looked better to go down to the east and cross below. When we did this, we found a nasty little drop with no very good holds and even Eric was hesitant about descending here. In the meantime, Jim had climbed back up to direct us in person. He told us that they had come down this way the first time they were here, but the other side of the point was easier. We backed up and came down the ravine he recommended. It seemed awfully steep and I had to move very slowly and accept some direction about footholds from Eric. Then Jim led us down the rest of the way. It is pretty amazing that there is always a way down this very steep wall. The lowest 15 feet is the worst and we lowered our packs on a rope. Ellen and I held on the rope too and chimneyed down, but from below I saw that it is possible to find hand and toe holds here too, but one must hang by the fingers to find the next step for his feet.

This brought us down to a great landslide section where erosion has left a ridge of clay and boulders between two ravines. Jim pointed out some fossil footprints on a big slab of Coconino. They were mostly badly blurred, but they were about the size of my palm and had claw marks like the good one I found in the Coconino at Mile 19.

We had the word from Billingsley's aerial observation that there should be a break in the Tapeats on the left side if we would walk far enough, and of course I knew where we could get down if we went to the place that I had ascended in January, 1959. At a place south of the word Mile in Seventy five Mile Canyon on the 1962 map we could get down. It was a sporty place although the rock was pretty broken. When we were down we could see a walk down through the Tapeats east of the Pinal Lipan gorge. It would have been closer to walk in that direction after getting down the Redwall and the side hill walking couldn't have been worse. Walking the bed was easy although at one place I didn't trust my ability to climb down and followed a deer trail bypass. Eric could do the bed. There is another place to get through the Tapeats farther west but still on the east side of the tributary meeting the main channel where the map begins the name Seventy five Mile Canyon. Eric and I got to the river at 3:30 p.m., six and a half hours after we had left the highway. Jim and his friends stayed up the canyon working over the geology.

By this time the rain had stopped and I read a magazine in the sun while Eric explored down the beach. He came back in a half hour with the news that there is a good overhang for shelter about three minutes walk west from the mouth of the creek and there are some Indian ruins outlined here. The ground beneath the overhang is smooth and it makes a fine campsite. Down the beach still further on the sand there are some modern looking walls made of driftwood and rocks that may have been put up by river people to support tarps on a rainy night. We all had a fine sleep at the overhang.

By 6:30 a.m., Eric and I were ready to start the climb out while the other three were going up Papago Canyon from the river to study the geology. We left the bed at the first place where one can easily walk out and climbed the somewhat loose material to the west. It seemed like a long haul to the top of the Tapeats and when we got there, I noticed that we had been on the way from camp for an hour and 40 minutes.

As we walked across the flat between 75 Mile and Papago, we were a lot higher than the bed of Papago. Instead of going down into the bed immediately and walking up the bed, we tried staying high and even working our way higher. This was a mistake because there are many gulches to cross. Finally we came to an extra big one and then went down to the bed of the east arm of Papago Canyon. The rest of our way out has been treated in other logs. I had a harder time than I expected because my left foot was hurting and I had to remove the shoe at rather frequent intervals. This time through I noticed a log wedged into the crack at one of the harder places in the Coconino, which probably means that the Indians used this route. We finally got to the rim at 1:15 p.m. My foot began to hurt again as we walked the highway, so Eric took the key and went for the truck.

Flowers were blooming, cliff rose and other shrubs as well as one wild rose in the bed of Papago Canyon below the Redwall. We heard some birds sing and a hummingbird buzzed by when we were starting up the Coconino. We saw droppings and tracks of both deer and bighorn sheep.

There is a natural window through the fin of the Redwall just under where we stood to shout down to the other three. It must be about 20 feet by 20 feet.

The Sears Redwall route is considerably more difficult than the route I had found west of and below Papago Point, but I seemed to find the Coconino of my route rather hard. I had also forgotten the details and at one place I got into a short deadend while Eric took the right route.

Across and back at Toroweap
[June 2, 1971]

After dinner beside the road on Tuesday evening, I reached John Riffey's home and spent the evening visiting with him and his friends, Art and Erna Delareualle. They told me about a rugged trip they had several years ago. They got a rubber boat and supplies down to the river at Whitmore intending to go all the way to Lake Mead. Upstream, winds put them so far off schedule that they gave up the idea at Parashant and walked out after caching their boat. Del had been a military flier and then had worked for mining companies and knew the area well from the air. They went to the mine above the junction of Parashant and Andrus and found some water in a barrel, but they didn't get any more until they arrived at Slim Warring's ranch. This took parts of three days and they considered themselves lucky to have survived.

John told me of a boat party who evidently were not authorized to proceed. They had just succeeded in getting all their equipment down the Lava Trail on Monday and Tuesday. John had seen their take off from the rim through binoculars. One of the six small rubber boats had run Vulcan (Lava) Rapids right side up, but the people in it seemed shaken by their ride. The party had lined another along the left bank and then had carried the other four overland. They had resisted John's suggestion to skip the Lava Trail and put in at Whitmore, but for the following two days they were doing all right as John could see when he flew. Two days later, after getting into the water, they were down about at Mile 217.

After a rather chilly night on the ground beside the truck, I drove on down the road toward the head of the trail. In 1957, I had walked around Toroweap Lake since it had some water and lots of mud, but this time I drove most of the way to the road end. Most of the road was in good shape but some sharp chunks of lava worried me. I wasn't just borrowing trouble either because by the following morning one front tire was flat, apparently ruptured.

I hadn't remembered all the details of this trail but there are enough cairns to show the way. Right at the top there is an ambiguity with some cairns directing one over a five foot vertical drop on the left side of the ravine, the way I had come up in 1957. But on my return this time, I followed other cairns up on the west side of the ravine, the way I had started down 14 years ago. The latter is easier. The route uses some short switchbacks and drifts a bit to the east. When one is two thirds of the way to the river, the trail cuts slightly to the west into a steep ravine. About 75 yards down this ravine one encounters the only real difficulty of the entire route. You have to hold on and kick around beneath a chockstone to find footholds. I was interested in seeing how well I would do on this route compared to my performance in 1957 at age 50. Just as I suspected I had become a lot slower. This time I got to the river in an hour and 35 minutes compared to my hour and ten minutes 14 years ago. Coming out after a good strenuous hike on the other side took me two hours and 17 minutes compared to my time of one hour and 20 minutes the first time. John Riffey made me feel that I am not all washed up however by telling me that his best time was two hours down and four back up.

I had brought my Kelty down with overnight supplies but I just took the food in a small pack across the river, along with an empty canteen. Hitherto I have crossed the Colorado on a substantial GI air mattress, but this time I had a skinny plastic one. Balancing was a bit more difficult, but the river was very calm and I went up far enough so that I landed still in smooth water. The level was almost two feet higher in the morning than it was in the afternoon. I had the mattress deflated and cached just two hours after I had left the north rim.

This point of departure was on the eastern edge of the delta of Prospect Canyon and I followed a trail up over the sand and boulders. It led to a drum full of fuel for some boater. Most of this deep deposit of rubble forms a straight wall next to the bed of Prospect Canyon and I considered going back to the river to get into the bed. I was able to go on up, however, and find a way down. The bed is routine walking with about three small falls where a bypass is fairly obvious. The geology is most interesting with the variety of colors in the slide material. The spots of lava clinging to the steep wall are also dramatic.

I was fairly sure where Jorgen and the others had come down a talus into the bed, but their whole route had appeared rather precarious and slow. I preferred a closer look at the way Blake and Kolb had gone up at the end of the canyon. Blake had complained that the slide material was very loose and dangerous, but from a distance it didn't look so bad. Most of it showed vegetation taking hold. The top of the slide was out of sight around a bend, but I went up with no unusual difficulty. One just steps on the larger rocks and occasionally loose material lets a foot slide some inches. I would rather traverse this end of the gorge than move along the narrow benches with hundreds of feet of sheer wall below on the river side. Around the corner near the top, the rim was split and there were at least two ways to get out on top. My way needed some hand and toe climbing but it was safe. Yellow clay and pebbles on top of the lava seemed just as hard, and then I was out in the open of Prospect Valley east of the junction of two washes, the western

one being the main draw through the valley. It had taken two and a half hours from where I had deflated the air mattress. I am sure I prefer this way to Jorgen's route. Blake and Kolb came down a different way, but from what I could see, they must have done something just as dangerous in getting back to the river.

It was still only 11:00 a.m. so I walked south for 20 minutes. There is still quite a cliff of Supai rock to the east. From the north side of the canyon it is obvious that there has been a great fault through here but it is east of the line of the canyon. Why a canyon would form parallel to the fault but not along it is a mystery. Just a few hundred yards to the east of Prospect Canyon the Redwall rim is as high as the top of the Supai to the west of Prospect. The flow of lava and cinders makes the actual transition harder to see.

After eating an early lunch where I could see a series of connected breaks in the rim of the ultimate high plateau above Prospect Valley, I went back down the same way I had come up. From the rim of the valley back to the air mattress took an hour and 50 minutes. Of course if a number of men were coming down the way I did, there would be trouble with rolling rocks. I dislodged one that I could hear for several minutes before it finally stopped. I would still claim that this is the safest and easiest way down to the river from the south. In fact the way down by the well used Lava Trail on the north side of the river is just as difficult. I had started from the road end on the north side at 6:30 a.m. and was out in open valley among horse trails on the south side of the river at 11:00 a.m. This is the natural prehistoric Indian route, the easiest and quickest way to get from rim to rim without trail construction between upper Marble Canyon down to Lake Mead.

I felt my previous labors when I was going back up the route on the north side and it took me two hours and 17 minutes, quite a contrast to my one hour and 20 minutes of 1957 when I was only 50 and had only gone down beside Vulcan for a view. Of course if one were to count the time required to go from the high rim of the Kaibab to the Kaibab on the other side, the crossing would be more arduous and time consuming, but it seems only fair to count it from the fair road on the north to the end of the Jeep road on the south.

A word of warning to anyone using the road approach to the head of the Lava Trail: the grade isn't bad and the turn around is adequate, but beyond the dam of Toroweap Lake, there are sharp little blocks of lava in the road and I had a flat tire by morning, presumably from a casing break. Low pressure car tires are not safe here.

Blake's account reminds me that I found the spring in Prospect Canyon. It is only about 20 minutes from the river just below the contact of the Redwall and the Bright Angel Shale.

On the descent, I sought out the finer slide material and came down rather like marking time while whole sections of the debris were moving along with me.

John Riffey tells me that a geologist working for a mining company had come down Prospect Canyon to the river. This man, Kofford, had approached by Jeep from the south.