

Harvey Butchart's Hiking Log

DETAILED HIKING LOGS (March 13, 1983 - January 25, 1986)

From Burnt Canyon south of Twin Point

[March 13, 1983 to March 18, 1983]

I had big plans for a hike south of Twin Point from Burnt Canyon to Surprise involving seven days of hiking. Jorgen couldn't start on the 13th and stay that long, and I thought I should stay in Sun City for the beginning of the spring tennis tournament on the 12th. We compromised on a five day hike, and it was a good thing too. I was weaker than ever and my right hip was bothering me especially on our last day.

I left home towing the boat about 7:10 on Sunday morning and had the boat in the water before Jorgen joined me about 1:40. Right at the start of the trip away from the ramp, he was most helpful. I couldn't get the gas to flow from the tank to the motor and Jorgen found that I hadn't pushed the hose connection far enough. We had a quiet ride through the lower canyon, but the driftwood was a little worse than usual. The lake is higher than either of us had ever seen it, possibly at the 1208 level where Forrester said they would hold it. We could have reached the mouth of Burnt Canyon in plenty of time, but I preferred staying at Quartermaster where there are two little caves big enough to protect one sleeper each from rain. I was as anxious for the warmth provided by an overhang as protection from the rain. Since Sun City had been balmy for a week, I assumed that spring was here and I carried my summer weight sleeping bag instead of my roomy down one. Not according to plan, however, was the omission of my waterproof nylon tent fly that can either be a ground cloth or a tent. I simply got careless in packing. I was a little chilly only a few feet above lake level.

It is less than a mile from Quartermaster to Burnt Canyon and we soon found a place east of the shack on the promontory where at the present lake level we could lift the boat out of water and let it rest on a gentle slope of mud. The boat, motor, and a number of Jorgen's things were in plain sight. We were trusting to the honesty of anyone coming down the river. No wind and waves could bang the boat on rocks this time. The bumping it got during my Pearce Ferry trip had made it leak again. We bailed about every hour.

Jorgen had never been up Burnt Canyon and he was pleasantly surprised to see that the walking past the tamarisk jungle of the delta is easy along a faint trail. We carried water from the little stream that shows above ground for a half mile above the delta. Most of the footing in Burnt Canyon is easy compared to that in Surprise. Another contrast with Surprise which is only a few miles away by straight line is that in Burnt Canyon the lake level is only about 50 feet below the top of the Tapeats. I set a pace slower than Jorgen's, but we got to the junction of the two arms in about the usual time, two and a half hours.

During the rest of the walk up to Burnt Canyon Spring, our time was lengthened by stops for lunch and sitting under overhangs twice to keep out of the rain. We noted one of the windows I had marked on my map, and we also found cow tracks much more prevalent than bighorn sheep tracks. In fact we encountered several cows on the way in and five of them looked us over when we were almost back to the boat on Friday. We wondered whether any rancher considers it profitable to come after these cows and

send them to market. I know that the Indians have a yearly roundup in similar country in National and Mohawk Canyons, but the drive isn't as long as from the river to the Shivwits Plateau.

This year has been wetter than normal and we weren't surprised to find water in the bed below the final fork below the two springs. What did shock me was to find that the concrete basin that held a pool 18 inches deep just last May is now filled with gravel and rocks put there by a flood or a slide from above. We slept on dry ground under overhangs on the west side of the fall downstream from the spring. I used the roomy place I have slept before. Jorgen had just enough dry ground for a bed, but on Thursday night he worked to smooth a place about a hundred yards upstream. It had a lower ceiling and rain couldn't blow in. There was also some convenient running water in the bed here. There was a little gentle rain for short intervals both nights that we slept there.

On Tuesday we walked upstream past the cement basin, now useless, and out of the inner canyon on the old trail. The Sanup Plateau is a succession of hills and dales for miles and the walking was rather slow and laborious especially for me. It takes a lot of effort for a man of my age to keep going for hours over this area. As we approached the bay east of the headland 6045, Jorgen followed a high route while I went low. He had to wait for me about 20 minutes where the drainage from this bay drops over the Supai cliff. We were both impressed by the nearly vertical drop for hundreds of feet of the Supai rims in this whole area. Typically there is a slope of talus at the foot of the top cliff and then a lower cliff that is just as persistent. I had thought that there should be a trail down to Red Rock Spring since this is so in both arms of Burnt Canyon (in the upper Supai) and trails go to Twin Spring and Amos Spring, but when we came to the canyon containing Red Rock Spring, we could see that it is just a seep on the side of the cliff, absolutely inaccessible. We had already walked about as far in that day as I cared to, and all we were sure of was a little water in bedrock pockets where washes went over the rim. We had hoped to get under overhangs down near Red Rock Springs, but that was impossible. While we were considering camping out in the open at the last bit of water, Jorgen went out on a promontory to look down into the south reaching canyon just west of the elevation mark 4418. The ridge he followed west is shown about a half inch south of the north edge of the Devil's Slide Rapid Quad. We were fairly sure that we could see water in the wash south of the ridge. Jorgen came back and asked me whether I would like to camp down there, about 450 feet below. He had found a nearly unique way through the upper massive cliff. It was here because volcanic activity had split the rock forming a dike of lava. I was timid about climbing down, but Jorgen went first without his pack and reported that there was no exposure and that care in avoiding loose rocks was all it took. When I went down, I saw that it was much simpler than the Redwall route Mel Simons and I pioneered in Clear Creek. We found a little running water, but this can't be relied on at all seasons. Even 450 feet below the rim I had a hard time sleeping warm and I kept a fire going all night. The second night here I slept just as well without a fire.

Wednesday was the only day of our five when the sun shown all day and the stars came out in a cloudless sky in the evening. We needed 20 minutes to climb to the plateau, and then we found a faint cowpath going south the way we wanted to head. Our ambition was to get as far towards the corral and spring shown on the Devils Slide Rapid map south of Twin Point. Neither of us thought that we could get there and back in one day, but when we hit a very distinct cowpath just east of the knoll 4912, we began to have hopes of success. When we came to the edge of the juniper covered area where the corral is supposed to be, we found no corral. Farther along where the trail starts down into the wash, we found a piece of rope

and a rusty bucket hanging in a tree. We encountered several groups of cows with a bull or two. I saw one take alarm about 30 yards away and break a six inch dead tree limb and toss it several feet with a flick of its shoulder. The trail down the wash to the upper spring is obviously manmade, but no trail at all seems to go down to the lower spring which is featured near the confluence of the trail wash and the other arm to the south. We left the manmade trail just before it went down to the upper spring and Jorgen found us a way to scramble down to the lower spring. It is only up the south arm and a few yards. These springs could have been found from a plane since a lot of willows grow near them. I would guess, though, that they were known to the early ranchers and prospectors before the time of planes. I suppose ranchers come after some of these cows once a year or so using some trail into Burnt Canyon from the rim farther north than the spring where we camped (trail off Twin Point on east side near the end). (John Green has connected a route from the spring down to the bed of Surprise Canyon using the route north of the pinnacle promontory.) We saw no trail branching into Twin Spring Canyon, but cows may come across from upper Twin Spring Canyon so infrequently that no trail is formed. We looked at the Supai below the lower spring. There seems to be a rather roundabout route on down to the Redwall, but it seems to me now that there would be more future in trying to reach the bed of Twin Spring Canyon by going north on the east side of Twin Point on the Sanup Plateau.

We got back to our packs via the dike ravine with time to relax before supper. I went to sleep without a worry under a perfect starry sky, but when I looked out at 1:00 a.m., no stars showed. By two there were raindrops coming down. Jorgen got into his tube tent and slept on. With no more protection than a poncho, I thought that the smart thing for me was to sit up with the poncho covering me and the pack. I tried looking for an overhang with my dim flashlight, but had no success. In the morning I found a good one not too far up on the south slope. When it didn't seem to rain much, and I found that I was getting thoroughly chilled, I got back into my bed with the poncho spread over me, but I got very little sleep that night after 1:00 a.m.

The weather on Thursday was very odd. There was some pellet snow and new snow showed up near the rim of the Shivwits Plateau. There were also some light rain showers and a little sun. We started early and I found a fine little overhang cave at the foot of the cliff just west of the dike ravine. If I had carried water up here the night before, I would have had an unworried rest. When we got to the slope below the promontory called Red (6045), we stayed lower and seemed to cover the distance rather well. There was a complication near the end, but Jorgen found us a walk down from the top of a small cliff. Last year I had done something short but risky here, and in the trip away from Burnt Canyon Spring this time, we had gone past by climbing higher. We located the trail by two trees on either side and got back to camp earlier than ever. In the afternoon I was afraid that I would barely survive the night, but I actually felt too warm at first. It rained gently several times and we were glad to have the nice overhangs.

On Friday we got away early and walked with our ponchos on for a large part of the forenoon. It rained hard enough to wet the knees and feet, but we were in a hurry and didn't stop for shelter. We reached the junction of the two arms in about three hours for me and 15 minutes less for Jorgen who had started later. I waited eight minutes for him to join me. After lunch and 45 minutes beyond the confluence, we made good time down to the boat without meeting any more rain.

The boat was just as we had left it, but someone had broken the rather old rope and left the piece that was not needed for tying around the stout bush I had used in mooring the boat. The only rough part of the trip was across the lake to the ramp.

Indian Gardens with Dennis Mihiel
[June 15, 1983 to June 16, 1983]

We met Edie Mihiel and the three children at Sedona Tuesday morning and then spent a lot of time playing in the water at Red Rock Crossing. Floods have now made it impossible to drive a car across, and there seems to be no movement to restore the cattle guard type of submerged bridge that used to be there. After hiking for over an hour in the west fork of Oak Creek (where I was the only one to pick up ivy poisoning), we drove to the South Rim where the Mihiels gave Roma and me a room for two nights at the Motor Lodge near the cafeteria.

On Wednesday 14 year old Dennis wanted his mother to let him go down the Bright Angel Trail to the river and back in one day. I didn't feel that I could count on my hip to hold out that long, and I also felt that my stamina might not be up to that much exertion anymore. Edie overruled Dennis on that request, but she agreed that he could go to Indian Gardens with me if I thought I could do that much. From what I could do after my hip got bad, in the White Tank Mountains and on Mount Rogers, I figured that I could do that much and get back out from 8:00 a.m. to about 1:30 p.m. Mrs. Mihiel and the two younger children, Mike and Erika, went down as far as the 1.5 mile water station. Dennis and I made quite good time, down to the gardens in one hour and 50 minutes, and I considered letting us go out to Plateau Point and back before we started up. However, when I considered my 1:30 suggested return, I decided that we had better start back soon after 10:00.

Dennis seemed to be going strong up the trail too. I told him that I could go only so fast and that if he found the pace too slow, he could go on. He had his own water but if he wanted lunch on the way out, he should wait for me to reach him before tearing on for the top. He did go on at a good clip and then would wait until I came up. I didn't hurry, so I could go on without a rest. When we got to the three mile water station, Dennis suggested lunch although it was only 11:30. If I had known what was coming, I should have made him rest a half hour before eating and an hour after before going on. He didn't eat his full share of our sandwiches, but I had no worry about his digestion. Then when we were over a mile farther, I came up with him resting. We had just been talking to a ranger, Stolgen I believe, who had given us a drink of something like Gatorade. Now Dennis announced that he was feeling sick and in about ten minutes showed what he meant by throwing up. We walked on with long rest periods after about 100 yard advances, and Dennis was throwing up the water that he tried to drink. When we were 1.1 miles from the top, I decided that I should go on and tell the mother what was up. On the way out I met Mike coming down to see what was going on and he turned around to go out with me.

On top after 2:30, Mike went to tell his mother the bad news at the hotel room and I joined Roma at the Bright Angel Lodge where we had agreed to meet. Mike stayed with Erika who was getting her nap and Edie went down the trail to encourage Dennis to try harder. She reached him just as Ranger Stolgen had come along. The ranger said it was standard for him to check a sick person before ordering a mule, and he

said that Dennis could go out with no more than the free assistance he would supply with the support of his shoulder. Dennis made it out after 5:00 p.m.

I was gratified to see that I could come up the last mile without a rest, albeit at a slow pace. Starting at 4:45 Thursday morning, I took a rim walk to Powell Memorial and back and spent 135 minutes seeing the sunrise and the morning haze clear away. I got out on some observation points where I had never taken the time to stand.

Lake Powell

[June 21, 1983 to June 23, 1983]

Chuck Crandell had gotten acquainted with me by coming over from Sun City West to talk hiking and I was glad to invite him on a projected trip to Lake Powell. I had decided against any big time ambitions on the North Rim this summer, but I thought I would enjoy a five day trip to Powell. Chuck had never been on the lake, so he was very happy to accept.

Chuck is an electrical engineer and knew what to do with outboard motors better than I, although I have done a lot more boating than he. He saw how to take the hood off the motor and get it back on and also where the spark plug is. When I told him that I was having difficulty starting the motor, he got into the motor and read off the specifications to get a spare plug at the marine store in Page. He had no trouble fastening the hood down right, which I hadn't succeeded in doing, but he forgot to replace the wire to the spark plug. When I had more trouble starting the motor, he thought of the wire. With it back, we were able to do without replacing the plug for this trip.

The Wahweap arm was rather rough and the ranger had said that it would likely get windier so we settled for going north in the Wahweap arm and then going behind some islands into the Lone Rock Creek Arm. A group with three runabouts had found a campsite at a very protected place, but we were able to find our own site with the chance to lift the boat up on the sand and have some level sand to sleep on. We did hike a short distance to the northwest and could have gone on clear to the Warm Creek Road if we had wanted to. It was a good stop with no mosquitoes and only some clouds of gnats in the morning. We had to go back south for miles before we could go through to Warm Creek staying north of Castle Rock. The lake was up to 3704 feet above sea level, about four feet higher than it had ever been. Many fine campsites were now submerged including the place we liked so well on the east side of Warm Creek. I went over and looked at it. There were lots of places to stop against the sandy mud, but the clean rocks we stood on to go swimming were no more. I think I recognized the tip of the haystack rock where we used to stop.

We had quite a lot of duffel in the boat and it didn't seem to go as fast as I thought it should. We couldn't keep up with one houseboat, but on the whole we seemed to move along at the houseboat speed. It was quite early when we came to Dangling Rope Canyon, but I was worried about getting caught in the afternoon wind in such a small boat. We found a fairly good site in the short west arm of Dangling Rope Canyon. We could see a sort of truck working on the flat across the harbor and after lunch we went out on foot to go around there to see what was going on. It took a lot longer to head that arm than I had guessed, and I finally decided that we should do our investigating by boat. We went around into the main branch of Dangling Rope Canyon and arrived at the new position of the Rainbow Marina which was moved here

last March. They were busy now constructing a sewage treatment system on the flat west of the marina. They could get the bulldozers here by water.

Chuck found a big piece of plywood that had been part of the deck of the floating platform and he propped it up for shade from the sun. After we had seen the marina, we considered going to Rainbow Bridge and back to our camp that day, Wednesday, but I was worried about the afternoon wind. We went to our camp and I lay in the shade reading Time while Chuck took quite a hike to the west and up a talus through the lower cliff. Instead of getting stronger, the wind died down and we saw that we could have gone to Rainbow that day.

After a night marred by a very few mosquitoes and a couple of mice, we got an early start for Rainbow Bridge. One can proceed to near the end without encountering the order to slow down to wakeless speed, so it is now easier to get there without passing the marina. You stop and tie to the pier about the same place as for the past few years, but you have to walk on a floating catwalk for 200 yards before you land within 50 yards of the bridge. As expected, the water reaches the rim and then some of the inner gorge beneath the bridge. This high water has pretty well ruined the spooky narrows where we used to take our company. I should have gone into Driftwood Canyon on our way back, but I got the bug to get home Thursday night and we didn't take time for anything very interesting. When we were up near Rainbow Bridge, I detoured into the pocket to the east where we used to get the boat under a trickling waterfall. The lip of the fall is now only about 10 feet above the water level, and at this dry season there was no water flowing. It took about five hours to go from the mouth of Aztec Canyon to Wahweap with the 7.5 hp motor. We got home before dark.

There were several new sets of initials carved in the rock near the Zane Grey inscription, but someone has scrubbed nearly all of the John Wetherill name.

Lake Powell

[October 22, 1983 to October 29, 1983]

Jorgen came over Friday evening and we had a little visit before we took off for Lake Powell Saturday morning. At noon at the turnoff to Wapatki we ate lunch from our supplies. As we were ready to leave the marina, we got a little flak from a young ranger who informed me that the letters of the boat registration should be bigger and that Arizona law says that we should have a fire extinguisher even in an open fishing boat. We thanked him for telling us about the weather and knew that it would be fairly good for a couple of days.

I had put in a new spark plug and noted that the boat started quite easily. The best technique seems to be to try the starter clear out for the first pull on the rope and then set it halfway in for the real start. Then it helps to put it in gear and give it more gas rather quickly. Then you can push the choke clear in and get up speed.

The water level was still high, 12 feet below the highest mark. Thus, we could cut corners that we couldn't cut before. They have installed a few buoys to mark hazards, but mostly one trusts to luck not to hit partially submerged ledges. When we had run for about one and a half hours, we decided to camp on a

beach in a cove on the south side of the channel, northwest of Tower Butte. I thought we would have time for a hike over to the base, but we soon saw that it was farther than it had seemed to me and we stopped when we could get a fairly good view for a picture.

There was still little wind on Sunday and we kept the motor humming steadily past the Rainbow turnout and on up the channel to Emmerton Arch Canyon. When the water had been considerably lower, I had gone into a little grotto at the end of the canyon and had looked up at a 20 foot wall. I thought that now I might boat right over the lip of the fall and enter a gentle open valley. I had a little difficulty recognizing the mouth of the cove, but I got my bearings from noting Hidden Passage on the other side (right bank) of the lake. We were able to boat over the top of the cliff that had stopped me so many years ago but very soon we came to a split filled with water too deep to wade, and I realized that I had been wrong in thinking that this would be an easy way to get out on top of the slickrock country. Also, the way that I had climbed to the arch on the south side was more difficult now since one would have to get out of the boat onto steep rock that was now covered with light green slime where the high water had receded. We didn't waste time here but went on up towards the mouth of the San Juan and turned into Reflection Canyon (Cottonwood Gulch of the USGS map). The neat ruin with the T shaped door was clear under. We knew that we needed to take the east arm to reach the place we had been in May of 82. Like most of the side canyons, Reflection has begun to silt up where floods in the side streams are checked by the quiet water of the lake. I was pleasantly surprised to see how easy it is to reach the end in a stream as broad as Reflection. The motor was checked by soft mud before there was any danger of hitting a rock, and there was no driftwood in our way either. We soon found a good campsite on a terrace where it was easy to get wood for a campfire and good water from the little stream. We learned about an Indian ruin about a half mile farther up the canyon on the left side, facing downstream. The young informant was Ron Evans. He said that his girlfriend and he had tried to walk out to the Hole in the Rock Road, but they failed in that ambition. They also had not seen the pictograph that I had found and then lost when Jorgen and I were down to the water in 82. Jorgen and I walked up and found the ruin in 15 or 20 minutes. It is just north of a gulch that forces one up on the sloping bedrock. After we looked at the low walls, we decided to go on far enough to see the way out of the valley bottom to the top of the slickrock country. Just as I remembered that it would be nice to see the pictographs I had seen years ago, Jorgen looked up and back and spotted them on the wall only yards from the ruin. They are so well done and neat that Jorgen wondered whether they are authentically ancient.

An overcast sky that night had me worried about rain, but it remained dry and was clear in the morning. A brisk north wind was blowing as we went south on the lake to the mouth of Mystery Canyon (Anasazi to Dock Marston). Fortunately, the waves were going our way or we would have gotten wet with the splashes. The name Mystery was given by Norman Nevills from the unexplained steps carved halfway up the sloping cliff to bypass a fall, but now the name fits because the maze of channels is hard to chart and remember. There are at least two islands, one quite large. We followed the system of going into any channel which was not obviously a dead end to the farthest east first. The first one we tried soon ended. The next went on a long way. We met a bigger boat coming out shortly before the channel narrowed until we were sure that only a small fishing boat could get through. Finally, Jorgen pushed and pulled driftwood out of our way so that we could advance 30 more feet. Then we came to a slot only one and a half feet wide but about 150 feet high up to the top of the landscape. The water was still far too deep to touch bottom with an oar and rather cold to allow much swimming, so we backed away with still more

shoving of driftwood. The next channel to the south was also a long one. This had the end of the lake water at an intriguing V shaped gate in the rock where we could just wedge the bow of the boat into the notch and barely get ashore without sliding off the steep rock into deep water. There was a neat open valley walled by unscalable cliffs about 200 yards long by 50 wide. It had drowned cottonwoods and live junipers on the slopes above where the water had been, and clean sand for sleeping. People's tracks preceded us here as elsewhere, but no campfire ashes were present. We brought our stuff ashore for a good camp here.

There was still plenty of time to explore more of Mystery Canyon. I was looking for the places that Dock and I used to try coming down to the bed on our helicopter exploration on August 30, 1959. From aerial pictures and then from the helicopter, Dock had seen two promising routes from the slickrock surface to the bed of Mystery Canyon, going down from the east side. On August 29, we spent the time, after coming from Wahweap by helicopter, going down the more northerly one, only to be stopped by a 40 foot cliff at the very bottom. On the next day, we succeeded in getting down the other possible route and at the hardest place we came to some Moki steps. I was now puzzled that from the boat neither of these routes looked promising. At least we couldn't see where I had come down on either of the two days. It is harder to get out of a boat onto the slickrock slope than it is to start at a good dry platform with no algae making the rock slippery. Still, we should have spent more time looking for the way. I didn't recognize the place where George Beck had stepped out of our boat and had climbed up a ravine when Lake Powell was already well back into Mystery Canyon and water had filled in around an island. Jorgen and I found a ravine fairly close to the main lake where we could moor the boat and go up on the east side. At the end of a short incline of broken rocks was a little pocket of sand and scrubby bushes. While Jorgen went fairly high to the northeast, I followed some footprints to the southeast and then up a ridge to the west to the top of a fairly high knoll. Jorgen couldn't make it out on top of the really high country to the east while I had a good view of the knolls next to the water. He went around all the channels of Mystery Canyon by boat and then back to our unique campsite, the only place left in the entire area where an open valley with trees is accessible by boat. Jorgen tried to get up the dry bed beyond our little valley. He had to bypass a narrow slot filled with water by going up on the sloping rock to the east, but he was soon stopped again, this time for good. We had wood for a fire that had been killed by high water and bare sand to sleep on.

Tuesday was spent going out of Mystery Canyon and south to the Oak Canyon bay. The lake was far rougher, but we didn't have to buck the waves and not much water splashed aboard. Near the mouth of Oak Canyon where I walked across blackbrush country in 1968 and boated past islands later, we now had the main lake. I found the entrance to Dougi Cove readily, and before I had gone far into it, I called Jorgen's attention to a small natural bridge that Stan Jones had seen. There is now a good enough place to get out of a boat and walk a few yards to it. It is about five or six feet in diameter and we could photograph it with sky showing. As we cruised along a wide channel, I saw the steps cut in the rock before I expected them. We could boat quite far beyond the former campsites. We selected a place on the southwest side of the channel before we got to the end of the water and then took a hike up the valley. Walking in here is popular enough now to have formed a trail on the terraces above the little creek. Many trees had been felled by beavers, but I didn't see any very fresh cuttings and I didn't spot the beaver dam that I had seen in 1968. The trail crosses the creek a few times and then ends at the base of a spectacular cliff on the south. There is still an extension of this glen around to the west, but the difficulty of getting across below the dropoff and up through the brush on the rough country dissuaded us from the effort of

going farther. I saw poison ivy in flaming red fall color from our trail end. After lunch, Jorgen and I moored the boat below the cut steps on the right side of the water. There was a gentle slope and a platform where we could place a gas can for an anchor, but the slickrock slope above and to the sides was precariously steep. I recalled that I had formerly not been faced with this hazard, and then I realized that I had come up a more gentle slope about 20 yards to the right. The catch was that there was no good way to tie the boat and even getting out onto the slime covered rock was tricky. Since I was not walking well because of my bad hip, I urged Jorgen to go alone and see the interesting country on top. I let him out of the boat at the right place and he was soon up to the Navaho cut steps and on beyond. I spent my time waiting for him to return by mooring at a campsite directly across from the steps. There were well developed trails over the sandy knolls and up the talus going high on the cliff behind. I even came to some running spring water. We had filled our canteens in the forenoon so I didn't need to pick up any. Jorgen returned on the announced time, 2:30, and we realized that there was quite a bit of time to kill.

To do something for the rest of the day, we took the boat across to Twilight Canyon through some moderately rough water, but the distance is not great. I wasn't thinking of walking beyond the lake water up Twilight Canyon, so I didn't use full throttle speed. Later, I wished that I had saved a little time, because we decided to go up the bed and see whether we could reach one of the places where we could get out on top to our old campsite of 1982 when we came down from the road on Fifty Mile Bench. It seemed farther than we had supposed, and Jorgen was confused in his search for a west side canyon that he figured was quite close to the water of the lake. We passed one, but it was rather far north, away from the lake. We also noted a neat grotto on that side and two or three likely looking places to climb out on that side too. Just as my deadline of 4:30 arrived, we came to a place that looked good for part of the way to the top. Since I couldn't move as fast as Jorgen and there was some question about reaching our campsite before dark, I started back while Jorgen went on. He found that it was indeed the right place where he had come down last year and then he went on a little farther and reached our old campsite up on the plateau under a little overhang. He overtook me before we had reached the boat and then we used full power and arrived at our camp in Dougi Cove just before it became too dark for ease in landing. The bad feature of this camp was that a houseboat had moored only a stone throw across the water and that party played country and western records loudly. Fortunately, they didn't keep up much after 9:00 p.m.

I thought that a good way to spend Wednesday would be to go up Oak Canyon. The open lake was quite rough and now we were bucking the waves and quite a lot of water splashed aboard. Oak Canyon still has some impressively narrow corridors with deep water below high walls. The spooky narrows in Mystery Canyon are not all submerged either. The best one in Oak Canyon was just before we came to the end of the line. There was no driftwood in our way and the silt has covered the rocks that used to be a hazard to the propeller. This morning was under a domed ceiling at a bend in the creek. Only 50 yards away was a neat sand terrace, good enough for two beds, and there was some wood for a campfire too.

About 10:00 a.m. we were ready to walk up the bed. The goal was to reach the Rainbow Trail around the north side of Navaho Mountain, but with my game leg, it became apparent that this might be too much for me. We passed several rainpools and then we found the creek running an increasing amount of water as we went south. About an hour's walk from our camp, the canyon opened quite a bit and we often used sandy trails through the brush above the creek. There was some old cow and horse manure. Hiker footprints were seen for quite a distance above the lake, and then as we got closer to the Rainbow Trail,

there were a few boot prints that I thought were made by a Navaho shepherd. After a rather long lunch break, we walked on and noted a big open canyon coming in from the east with a tall cairn at the junction. It was steeper than the bed we were in so we continued up the main canyon. At 2:00 p.m. I decided that I had better turn back, but Jorgen went on and came to the beautiful area where the main trail crosses the creek. He caught up with me quite easily.

On the way back I cut across a sharp bend where the creek drops rapidly. There is a distinct trail here going around the end of a projecting ledge that forms a good shelter for a couple of beds. Upstream from here, south of the tributary valley from the east, I followed the trail down to the cairn at the junction and saw a bed outlined by rocks.

On the way upstream I had been watching for the place where I knew there is a way up the slickrock slope over into the sheep pasture south of Dougi Cove. I had seen a couple of places where there might be steps cut, but we couldn't be sure that they were artificial. A little before Jorgen overtook me, I came to a good cairn and looked up to the east. There was another cairn and higher I could make out the real steps. I may have shown this place on my Navaho Mountain Quad map farther north than it should be. It took me an hour to walk down to it from my farthest south location and it would have taken me about 80 minutes to come here from the Rainbow Trail in my recent partially crippled state. It took me two and a half hours to go from this cut step trail to the lake. This 5:15 arrival gave us plenty of time for the evening chores, but I was really tired. I didn't sleep as well as I might have here because rocks fell into the water or on dry land. I wondered whether we had moored the boat in a safe place.

We decided to spend Thursday near Rainbow Bridge. There was no problem going down the lake with the waves from behind. We rather intended to camp in the area, and I boated up the fork to the west called Aztec Canyon. For high sides and separate pinnacles, this one is perhaps the best. We went to the end of the water, but we found that the best campsites are close to the mouth where it joins Bridge Canyon. I had decided to take some extra rest this day, but Jorgen got a lunch together and we set off together. The first point of interest was the old camp back at the end of the bay about a half mile south of the bridge. I hadn't see it for 30 years or more, and I was charmed by the surroundings and the big pools of water fed by a spring. Someone has placed a big aluminum pan under the seep so that plenty of good water is available. There are a lot of steel cots out in the open and a couple of wood shacks and floors where they had tents. Jorgen cached his extra water jars and lit out for the trail going back towards Oak Canyon. In order for us to camp at Dangling Rope Canyon, he had to meet a deadline, but he was able to get a good view of the valley where the trail crossed Oak Canyon Creek. I spent my time visiting with Russ Jenson, pilot of the tour boat and going into the short cove just north of the bridge, and reading my magazine. Russ was very obliging and talked with headquarters at Wahweap about the prospects for good weather, and then he even gave me two sack lunches that were left over.

They have recovered the bronze tablet honoring the Indian guide who brought the whites to Rainbow Bridge in 1909, and now they have a small one on the wall below it telling about the guide for the other party, Mike's Boy. He was an Indian who had seen the bridge long before 1909 and had told Nasja Begay about it and how to reach it. He died at the age of 105 not too many years ago.

Time was pressing again when we were locating a campsite in Dangling Rope Canyon and we didn't find one where wood for a campfire was available. We could scrape sand and level two places to sleep, and for once we didn't walk around exploring the area. The lake was quiet on Friday and we boated down the lake and up Rock Creek without trouble. We got into a protected cove right close to the end of the water and were ready to hike again by 10:30. We had noticed on the Southeastern Utah tourist map that Woolsey Arch is only a few miles north of the lake in an arm of Rock Creek. That was our goal for the day. By consulting the contours of the map and remembering the height of the water, Jorgen was able to place us on the map and he could identify headlands in the rims to the east and west, so we figured that we should have a fair chance of finding the arch. Walking through the scrubby brush was not the easiest, and there were a few gulches to cross. Then we came to a big one that seemed to be right for the one that the Utah map indicated as containing the arch. We saw one place where we might be able to cross it, but Jorgen got ahead and led me east towards the head of the canyon. He found a nice spot for us to eat our lunch in the shade. After a good rest, he went ahead while I headed for camp.

On an impulse I decided to check the crossing of the crucial canyon before I left the area. I backtracked and found a place to get down to the bottom on the south side. As I was going west along the bed to the place where one could go up and cut to the north, I noted that the first place we saw from the south also works. I used my success in crossing the canyon to get on toward some overhangs that we had seen from a distance. Before I got there, I saw something that looked like a big hole through a fin of rock. I got excited since it seemed to be just beside the big gulch where the map showed Woolsey Arch. However, when I got closer I could see that the green that I had thought showed through a big hole was really caused by greenery growing on the steep slope. I went back close to the alcove holes in the cliff and took a picture before really heading for camp. I did the trip back by a slightly better route, but part of the time I was following our morning tracks.

We had a good fire for over an hour that evening and then got off early on a quiet lake and reached the marina ramp in about four and a half hours. This included a detour for a close inspection of the Warm Creek site where we used to camp. My conclusion is that it would still be a fairly good campsite. We had a late lunch in Page and a late supper when we reached home.

P.S. As we passed Driftwood Canyon, I looked for the miners steps they cut in the rock. In July with Chuck Crandell, I couldn't see them and supposed that they were submerged permanently. I couldn't see them at this time either, but when we were almost passed, Jorgen pointed to them. I had been looking too close to the mouth of Driftwood. The high water last summer had indeed put them under, but now the lowest steps were still below water, but the rest, possibly two thirds were out of water. I am glad that they are not gone forever.

Twin Spring Canyon, Toroweap, etc.
[March 26, 1984 to March 31, 1984]

Troy Eid and I met Jorgen at Ralph Behren's home in Henderson around 2:00 p.m. on Monday and soon took off for Saint George, Utah. After getting some more gas, we drove back on the freeway and left by the Bloomington exit. We could then go under the freeway and proceed to the Bloomington Hills development where we could catch the road south to Arizona. We camped just over the line. The

elevation was about the same as in Saint George, but still I was rather cold before morning. I should have brought my second sleeping bag and had the advantage of both to keep snug.

In the morning I noticed that one of the rear tires seemed soft and also about bald. It looked bad enough to warrant going back to town and getting a new tire at the OK Tire Company. So we got a rather late start. However, the gravel road driving was not too bad. Jorgen and I figured that we knew something about the road in the vicinity of Mount Dellenbaugh, but he was upset by the fact that I hadn't brought the 1:250,000 scale map. I had the new Castle Peak Quad but we couldn't be sure we knew which roads were which. We came to a fork shortly after we had seen a mountain that we were not sure was Dellenbaugh. At one place a little north of here, I turned off to the right and found the car going too far to the west. I got out and walked uphill in a clearing and became positive that the major mountain was Dellenbaugh and not Castle. We wanted to go to Oak Grove Ranch, but there were no road signs indicating which fork was right. We drove for two miles along a freshly graded road that seemed to be going to the west of Dellenbaugh, but then we thought that this might be wrong too. After going back and taking the east fork, in a short distance this degenerated to a lesser road than we had taken the first time. I figured that this is what is left of the route to Kelly Point and went back to the first, freshly graded choice. This took us to a rather new looking house in the woods with quite a complex system of fences and cattle tanks around it, and I felt fairly sure that we had reached Oak Grove Ranch. We had to go through a gate to proceed. At the next fork we decided that the right branch would take us towards Snap Point, so we tried the left. After one very minor attempt to go right into a dead end, we came to the sign for Lake Mead Recreation Area and knew that we were right where we wanted to be. I proposed that we use some of our extra time that day to go down the right drainage to Mathis Spring that is shown on the Mount Dellenbaugh Quad map. We had no difficulty recognizing the road forking down to a couple of ponds with clear water in them at the road end and knew that we were in the right valley. For a short way down this draw we could follow a cowpath. Later it was simple walking in the gently sloping bed, but where the wash swung south, the drops began. At one place Jorgen and Troy made it down handily but I preferred to go way up and around to get down a slide. I gave up and started back at the next drop in the bed. The others caught up with me as I was nearing the car, but they had had to give up also without reaching the spring.

On the way back to the Twin Springs Wash, I used four wheel drive to get up a steep and rocky place in the road. Jorgen and Troy went down to see Twin Springs while I rested. They saw everything that I had seen two years ago and also a second spring in a cave similar to the one I had seen. It is a little to the north of the one which drains into the horse trough.

With my bad hip, I didn't feel like doing an all day stint that would be required to reach water on the way to the cattle spring southeast of the end of Twin Point. Jorgen felt that they should not go off and leave me to amuse myself for several days, so we agreed to go elsewhere and do other things. We first had to get more gas at Saint George even though I had brought two extra five gallon cans. We spent the second night in the junipers well to the north of Mount Dellenbaugh. Jorgen had one of his best campfires here, but I slept rather cold as was to be expected from Jorgen's thermometer which read ten above in the morning.

We filled up with gas and then headed back over the same route, but this time we turned toward Mount Trumbull. When we got near the actual mountain, we saw a sign that said we were at the beginning of a

trail to the summit of Mount Trumbull. There was plenty of time so we set out towards what we thought was the top. Within yards I announced that there was really no trail. Instead of looking harder, we all set off up the slope through brush and cinder slides. Getting onto the summit plateau involved some good scrambling through breaks in two cliffs that Jorgen found for us. I was leading toward the north up a gentle slope when Jorgen called our attention to a much higher knoll southeast of us. We climbed it and then could see a still higher point to the northwest. It was now too late to get over there and still have plenty of time to find a campsite, so we let that climb go. In 1957, I had started up farther east than this time and had gone clear around the summit plateau including ascents of both the summit we were on and the higher point on the far side.

The top of our knoll was wooded and we got better views from cinder slopes just below the top. One thing we wished we knew more about was the optical device chained to a tree and aimed toward the snow covered San Francisco Peaks well over 100 miles away. Vistas in other directions were also superb, the Virgin Mountains and the Pine Valley Mountains in particular. Another thing that was interesting when we went down the mountain well to the east of the cliffs was that we finally ran into the trail. If we had looked at the level ground east of the sign instead of up the slope to the north, we would have recognized the trail because it is outlined with a border of rocks. When we were driving the road in this vicinity, we saw a bigger concentration of Kaibab squirrels than I have ever seen elsewhere, four in just a few minutes. There were also a few common squirrels here too. We found a fine campsite in the junipers a few hundred feet above the Tuweap Valley floor.

On Thursday we found that Mike Ebersole, the Tuweap ranger was not at the ranger residence but there was a lengthy note pinned to the door telling about the plans of some backpackers and signed by Pat O'Brian. I wondered whether he was the one I know in the Grand Canyon Natural History Association? When we left the area the next day, this note was gone, but the ranger was still missing.

We spent the usual time taking in the superb views from the rim at the end of the road and getting more photos. Troy had never been here before. Then we started in the car east along the road toward Cove Canyon. I used the four wheel drive for one bad place and then got cautious and parked very soon where I could turn the car around. We walked for over an hour to reach the trailhead for getting down to the mine which was our destination. There is a lot of camp trash and a loop in the road about a quarter mile west of the trailhead where there is another loop. While we were looking at some seats consisting of cinder blocks supporting the seat, Troy spotted a more interesting item. When we went to it, we saw that it was the shape of a beehive about nine feet tall and of about the same diameter at the bottom. It was built of rock and cemented together. It had a door at the bottom only about 18 inches high, and the inside of the structure was blackened. We concluded that it was a charcoal kiln. Only yards away was the rim where I figured the miner had a tram for bringing his ore to the top. Troy found a steel spike in the ground with a piece of wire attached, but I don't think this could have been the anchor for a real tram cable.

The trail on the Cove Canyon side of the point was not hard to locate, and most of the way down through the massive Supai cliff it was easy to follow. It goes down through a pretty slope attractively covered with vegetation. Down in the talus below the solid cliff of red sandstone, it levels off toward the south. It went down much lower than I remembered from my trip in June of 1971. Then we came to a place where the trail seemed to disintegrate. Jorgen led us along the same level around to the west, but finally at my

suggestion he went up to the base of the main cliff and found a good trail again. When we got around to the place above a big yellow ridge of shale, the trail ended. My 1971 log says that it continues at the very base of the massive Supai cliff. We could see a fine big cairn or monument below us at the Yellow Slide, but we could see no safe way to get to it. We tried the footing forward across the shale slope where we were, but it seemed like suicide to continue there. Jorgen got into an awkward situation when he was trying to return from his farthest west position. I should have followed my hunch and gone up to the base of the main cliff, but it didn't look much easier and safer there. We gave up trying to get to the mine although I thought I could see the trail beyond here about a quarter mile away. I also felt confused about what I had done in 1971 to get down to the river. I have reviewed my log and see that I had gone down to the Yellow Slide and had used both sides of this blunt ridge before being able to get clear down. That my nerve and agility have degenerated in the past 13 years is borne out by the fact that in 1971 it took only two hours and 20 minutes to go from the trailhead to the river. I wish now that we had gone up to the base of the main cliff and had tried to go ahead to the mine.

While we were walking back along the road, we saw a car much like my Jimmy in the distance going back to civilization. It was probably the O'Brian party coming back. Someone had driven a vehicle clear beyond where we had started down the trail. The map shows this piece of road ending soon. This party or some other had piled stones into a little streambed to make further four wheel driving possible only a little farther than I had gone in my Jimmy.

There was a strong wind blowing all the time by now and we went to the campsite by the comfort station for a little protection. We were able to get wood for a campfire here although this was not as easy as previously. By bedtime it looked like rain and in the night some fell. Then by morning it was snowing and about an inch whitened the ground. We gave up any idea of going down the Lava Trail on a day as cold and wet as that and drove away from the area. The snow had melted as it fell on the bare road and there was no problem with traction after so little moisture. Even though no ranger was at Tuweap, we could get water from a faucet outside the house.

We spent more time at Pipe Springs and saw it better than I ever had before. A young woman, Lucy Cox, interrupted her job of baking cookies on a wood range to conduct us through the building. It finally occurred to me this time that the Dr. Whitmore who was killed by the Indians must have been the man for whom Whitmore Wash is named. I also for the first time realized that the Mormons raised dairy cattle here and took the butter and cheese to Saint George.

We decided to have at least one pleasantly warm campsite before finishing our trip, so we drove to Overton. We took our time at the Lost City Museum and I saw it better than on other occasions. I learned that it was not lost because of the level of Lake Mead water, at least not more than one tenth of the ruins were submerged. It could be called lost because it was abandoned and no one realized that dwellings for 12,000 people were scattered along the valley for 30 miles.

Then we went to the Valley of Fire State Park and looked at most of the attractions Friday afternoon. We saw Atlatl Rock with its petroglyphs, some of which are cut so high that we wondered how the artist could have supported himself while doing the work. We noted the old way up the rock in contrast to the new steel stairs. We saw the two campgrounds in scenic locations among the red outcrops but we thought

\$4 a night a little high for no running water. Anyway Jorgen wanted a camp with no other people around. We drove out of the park to the west for several miles and concluded that it didn't seem like such a good place either. We finally drove down the single track unpaved road toward the lake across from the road going into the park. It was a fine evening and we were surprised to find enough wood for a campfire. The evening was clear and pleasant and I really slept warm that night.

On Saturday we visited the cabins built by the CCC boys and walked a little way north to see an interesting valley in that direction. If one wanted to follow all possible routes through these fantastic rocks, he could spend a lot of time at this one park. We took the little trail to the Elephant and saw that they stop you 200 yards away from the oddity although the road goes right by it. They don't want traffic to stop there where there is little parking space. After a good visit at the Visitor's Center, we drove north and took the nature trail down Petroglyph Canyon. At first we thought that the petroglyphs were few, but especially Troy spotted many that were not pointed out by the signposts. I carried the trail guide sheet and picked up two or three more names of plants that I may not remember long, and then we came to the end of the trail at Mouse Tank, the water pocket used by a renegade Indian who was a solitary outlaw for years. The pit that is obvious from the trail end was dry. Jorgen and Troy jumped down on the sandy bottom and looked at the next pocket just above an impossible 40 foot dry fall. To Jorgen's surprise, there was water here.

We wanted some sort of longer hike that was still within my reduced capability, so we went to the beginning of the road to the White Domes. The day was still bright and sunny and I went with only a light shirt. The reason they have closed that road is that a wash has cut into one side leaving about two thirds of the original road that can be driven. Cars could still get by, but I didn't mind being forced to walk the three and a half miles each way. The road curves around near the end and you look at the west faces of the White Domes. The south one seems more like a slender tower. The area is well worth a visit since the exposed rock is entirely different from the broken red formation of the main part of the park. It consists of cross bedded sandstone of various shades including a great deal of buff colored rock. It reminded me of the landscape near the Hole in the Rock.

Western Grand Canyon

[May 5, 1984 to May 8, 1984]

Tony Williams met me at Pearce Ferry about 4:00 p.m. I had come from the history meeting at Kingman a couple of hours early and had the boat in the water ready to go. The weather was rather windy Saturday and Sunday and I was just a bit afraid of the waves. That was a reason for stopping rather early to camp at the first rather undesirable place. At the present rather high stage of the lake, in the last few miles of the Grand Canyon, mud terraces are mostly submerged. I found a small nearly level bit of silt while Tony slept on quite an incline.

On the way to our camp, even before we came opposite Rampart Cave and Columbine Falls, I stopped and moored the boat where Bain had told me there are petroglyphs on some brown boulders. This is at Mile 276 on the right. Just as before, I had trouble finding any but finally located one boulder with markings northwest of the very green patch of brush, and also a couple of mescal pits.

Each evening Tony and I had long conversations as freely as Jorgen would have when he has the inspiration of a campfire. The weather was nearly perfect. I had been too warm in my winter sleeping bag at the trailer court in Kingman, but when I used it unzipped for the three nights in the canyon by the water, it was comfortable. There were no rodents to bother our food and only for the last camp were the bugs a bother.

On Sunday morning, we stopped so Tony could go up to see the Bat Cave. We moored west of the cave so that Tony could go up a break in the ledges. He found that there is a better way where visitors have established a steep path closer to the cave. However, he found the horizontal part of the trail and followed it easily. He went into the cave farther than the catwalks extend and also climbed to the top of the tower. He also noticed some live bats, an observation that I had missed when I was there with Jay Hunt. While he was doing this for about 105 minutes, I was going up the canyon at Mile 266.5. In order not to worry Tony, I turned around at the end of an hour. I had gone up perhaps 1000 feet above the lake and had done one good bypass for a place where the bed is jammed by oversized boulders, but I think I could have gone on a long way, perhaps for another hour before the Redwall would stop me.

Our next stop and second campsite was at the mouth of Mile 265 Canyon on the left. This is the lower end of the Billingsley Davis route from the rim down between the Bat Cave Tram and Quartermaster Canyon. We started up about 1:00 p.m. and when we got to the bed after the difficult side hill walking along the left of the lagoon, Tony left me to go farther at his own faster rate. I took Donald's tip this time and went right up the Muav narrows, although a place or two were a bit hard for me in my present weakened condition. I soon reached my former highest point and went on for another 40 minutes until 3:20. I was afraid that I would be too tired if I went much further, and I was about exhausted when I got to our camp at 5:15. Tony went on up to the place where Davis couldn't see how a bighorn sheep could pass. He thought he might have been able to climb the wall perhaps using a crack at one side that is too small for chimney climbing. He says the rock here is quite different and from the sample he brought down (a heavy dark greenish rock) I suspect it is an igneous intrusion. He played around until he could come down in the shade and admired some yellow columbines in bloom and a humming bird on its nest.

When we were landing and carrying our duffel up to a flat place on the knoll, I was buzzed by a little rattlesnake in a rock pile. On Tony's hike up the canyon he encountered another. We agreed that Mile 265 Canyon is most scenic and worth anyone's attention. Now I would like to come down from above with someone who could belay me or let me go down the hard place by a rappel. Tony carried an altimeter and knew that he reached a place 2200 feet above the lake. From the map he reckoned that he had about 1500 feet still to go to get out on top.

Our next interest was Quartermaster Canyon. Tony wanted to see the area north of the spring where someone had irrigation ditches that have become fossilized by travertine. I was fairly sure that the former trail from the camp on the east side of the lagoon would be cut by the high water, so we stopped and camped at the cove just west of the mouth of Quartermaster. I remembered that Beck did this many years ago and I could see that we could climb up on the Tonto and get into the bed at the top of the falls. Tony went ahead with the idea that he might reach the trail end that goes up the Redwall on the east side of the main arm while I only hoped to get into Jeff Canyon farther than I had previously. The spring water was flowing noisily near the base of the big fall, but during the present dry season, no water from the real

Quartermaster Spring was reaching the streambed beyond the massive green jungle. I wasted time trying to break through this dense tangle and had to backtrack. I did get to the general area where I had seen the petrified ditches, but I didn't range around well enough to locate them again. When I came around the upper part of the jungle and then penetrated where the two largest trees are growing, I found a good little brook and filled my canteen. Then when I got through back into the open dry streambed, I found another spring, considerably smaller, flowing along just a few yards into the maze. I found where burros had made a path and got to that water too. Incidentally, I came upon two live burros northeast of the big spring and there are more burro signs all the way up the valley. I got a half a mile into Jeff Canyon and turned back around 2:00 p.m. I felt rather weak and hot and took several rests when I could find any shade.

On Tuesday morning we went on and stopped to see the shack on the little promontory at the mouth of Burnt Canyon. The roof has been torn off completely but the ramada is untouched. Tony found one of his knees turning weak and I had developed a bad raw place on one heel, so we decided not to try any real hiking in Surprise Canyon. However, we continued upstream to see the sights and camp for a night in the mouth of Surprise. Tony had not picked out the right object to recognize as Triumphal Arch and he was gratified when I put him right on this point.

Three things went wrong with the motor on this trip. First the prop hit a submerged log and cut the sheer pin. I disconnected the gasoline line for us to lift the motor into the boat, and I had all the right equipment to replace the sheer pin, not a long job with this 7.5 hp motor. Then when we tried putting the gas line back, neither of us could make it lock in place. I pointed out the gas tank in the top of the motor and Tony thought of the way we could get the gas from the six gallon can into this tank. We could remove the fitting at the end of the hose and use the bulb to squirt gas into the small tank. That worked, but when we were past Reference Point Canyon the motor suddenly quit and we couldn't twist the throttle. Something had locked. We tried turning the prop, which we could do, and pull the starting cord too, but nothing unlocked the gears until Tony lifted the motor into the boat and rolled it over. He tried the throttle and found that it had become unlocked. When we found that it would start and run as before, I opted for going back to the cars before we would have more trouble. The current is quite strong and we found that our down lake speed was about twice what we could do going up. We took one more constructive detour. We stopped so that Tony could go up and see the Muav caves. They were hard to recognize at the time we were there and I had to pass them and then go back until I made out the openings. Tony got to see several things that he had missed on his other river trips. This jaunt for me was saved from being a fiasco by my continued appreciation of the remarkable scenery of this section of the Grand Canyon.

We got back to Pearce Ferry with no further motor problems and the surface of the lake was as smooth as I have ever see it. With Tony's efficient help, we got ready and left in a very smooth operations. I was home by 10:15 after a good supper at the Bingo Truck Stop.

Western Grand Canyon

[November 1, 1984 to November 5, 1984]

Tony Williams met me at Pearce Ferry and we took off in the little fishing boat about 4:20 p.m. I had been rather uncertain about the 7.5 hp motor because of some malfunction last May, but this time the only

trouble I had was due to pilot error. One time the fuel tank vent joggled itself closed and this shut off the flow of gas enough to stop the motor. I got it started again and only later discovered the reason. One should unscrew the vent screw until it resists further opening. When it was slow to start, I found that I hadn't turned the throttle to the position for starting. The lake was nearly always very calm and the level was down enough to leave the driftwood on the banks. Still the water was high enough to cover the island on the line from the launching ramp to the end of the Grand Canyon.

When we had been going for 70 minutes we looked for a place to camp. Attracted by the gravel next to the water in a small cove at Mile 271, we turned in. Tony thought he was stepping down on firm gravel, but he found that his foot went down into soft mud. A foot farther in the bed was firm. We found spaces for two beds on coarse sand and plenty of wood for a small campfire. We were not the first to use this place.

On Friday it took three hours and 30 minutes to reach the mouth of Surprise Canyon. Years ago I spotted a window in a high promontory and this time I saw it again, a little below the skyline in a steep ridge west of the one where the Bat Cave Tram was located. I kept the Belknap River Guide in front of me and knew my position on the river at all times. For about all the way coming back, Tony kept his topo maps handy and we identified everything. He convinced me that the grotto in the travertine is at Mile 269 and not at 267.7 as I had been told.

At the present high water I had thought that it would be easy to get to the walkable bed of Surprise, but only 20 yards back from the river, there was a solid bank of silt showing a few inches above water. Tony tried walking on it, but he soon sank in too far for safety. I knew about the possibility of going up on the Tonto a quarter mile upriver and getting down into the bed, but I remembered that as being a lot of effort with packs. Instead we moved downriver to Lost Creek. The bar at its mouth is the whitest and cleanest sand I know about in this part of the lake. We decided to camp here. However, when we tried to go by water to where we could walk the bed inland, the tamarisks stopped us just before we could reach the right place. Perhaps one could get through on an air mattress or by swimming. We also tried, without much determination, to walk up the slope on the west side of the tributary, but when we saw how high one would need to go, clear to the top of the Tapeats, we let that go and tried climbing to the top of the Tapeats across the river. Here the climbing was harder and I let Tony go on by himself while I stayed by the boat and read. He got to look down to the bed of Surprise, but when he saw how far upstream he would need to go before he could get down into the bed, he returned. I should have taken him east above the mouth of Surprise and he would have been down into the bed with the same effort.

For Saturday's activity, we headed the boat down the lake with the idea of going up Snap Canyon. I had a feeling that we wouldn't get to the interesting part of Snap, so when we saw a nice looking landing in the canyon on the south side just west of Cave Canyon and Columbine Falls, we turned into it. We could pull the boat up on a soft beach and still have a clean rock ledge nearby. There was lots of firewood. We spent two hours visiting Rampart Cave while going up the wrong talus for a good part of that time. Rockslides have obliterated a crucial part of the trail, and we couldn't see where the cave is from our approach. Tony found a place where someone had used a hacksaw and cut a bar. With his agility he could get through and he explored the cave rather completely with a flashlight. I tried going through the break in the grill, but it seemed like too much of a contortion. We got back to the boat in time for a late lunch and then we set out

to see the bed of our canyon. With just a little climbing at a few minor barriers in the bed, we got to a fork where the two beds go east and west at a much steeper angle. Since we didn't want to do camp chores in the dark, we came down.

I had brought an extra five gallons of boat gas in addition to what was in the full six gallon tank, but we had over a gallon left when we got to the launching ramp on Sunday. We dropped the boat and trailer at Frenchy's and drove up to the Bat Cave Tram in the Jimmy and ate lunch with that marvelous view. Tony showed me a wrecked car far below the west side of the neck leading to the tram installation.

After lunch we drove back to where a spur loop goes from the main tram road east along the rim of the canyon called the Billingsley Davis Route. Where the road starts to veer away from the rim to rejoin the main tram road, we stopped. The view down into the Mile 265 Canyon was breathtaking but not so reassuring. The upper part of the bed where Billingsley had gone down seemed awfully steep and narrow. His bypass to the east seemed long and tedious. Together we walked the rim to where it was easy to start down. Tony spotted a fossil flush with the worn surface rock that seemed to be a chain of overlapping rings. It was about nine inches long and he thought it might be a nautiloid.

This depression in the rim leads down into the wrong canyon, east of the B D descent, but we could get into the right one with only a few steps to the west. The Supai has weathered into white clay in this saddle. Down a few yards where the climbing is getting tricky, Tony saw a most impressive bighorn ram about a quarter mile away. Its white rump contrasted with the unusually dark coat, and the horns were magnificent. I felt shaky and let Tony go on without me here while I watched the ram. It stood and gazed at us for a time and then loped easily away to the northwest along the bench about halfway through the Supai. Tony got to the Redwall, but he figured that there wasn't enough time to go farther. When he was almost back to the car, he encountered the same bighorn that we had seen below. It had come up another break in the rim and was probably headed for water in cattle tanks to the west. (Camped at Quartermaster Viewpoint.)

On Monday we talked about doing some more hiking in the New Water Spring area, but the gas tank gage seemed to be dropping rather fast, and I preferred to get to Frenchy's and take no chances of having to carry gas to the car. A man working at Diamond Bar Ranch told us that there are a number of springs close to the house there but that Meadview gets water from several wells about 600 feet deep. I got home about 4:30. It had been a good camping trip with quiet water on the lake and a fine moon most of the night. The walls and towers by moonlight seem out of this world.

Mile 265 and Tincanebitts

[December 30, 1984 to January 3, 1985]

Alan and Jane Doty came on the 29th and we had a dinner and evening of Trivial Pursuit with them before heading for Pearce Ferry on Sunday morning. The 18 foot boat is heavy behind the Jimmy and we didn't reach the launching ramp until 2:45 where Jorgen had been waiting for about an hour. I was a bit worried about getting the car in too deep before the big boat would float free, but it was all right. We were soon planing along at 30 mph and found a place to tie up at the mouth of Mile 265 Canyon with plenty of light for camping. We enjoyed campfires both nights that we stayed there.

On Monday we started toward the bed of the lower canyon along the west side on a rough route over gullies and then noticed that the walking would be a lot easier on the east side. We moved the boat over there and started again. We began our hike before nine and I thought that there would be plenty of time to either reach the rim or at least reach the bypass for the Redwall drop. Alan and Jorgen let me set the pace and this was much slower than they could have gone. Furthermore, at about five places above where I had been before, Alan got out his rope to help me up. Jorgen was able to climb all of these places without using the rope, and Alan made them look easy although he had a bad cold which his exertions were not improving. Finally, after we had eaten lunch, we came to the exposure of the diabase dike. The dark green rock of the dike had parallel and nearly vertical sides, but the dike material was not straight. Early movements had deformed it subsequent to the formation of the dike. Jorgen and Alan went up the break just east of the diabase rather handily, but near the top I was glad to use the rope as a hand line.

We had been in fog when we got above the lower third of the canyon and about here we could see blue sky through the mist above us. The rim especially on the west side seemed amazingly far away and almost directly overhead. About 200 yards beyond the lower of two diabase outcrops, we came to another climb that Jorgen was able to handle. I was afraid that I couldn't manage it with my bad hip and I tried using the rope as a hand line and then with the Jumars that I had brought. Jumaring was awkward because of the overhang. We seemed to be nearing the place where we should leave the main bed and take the long bypass to the east, but in view of the time, about 1:25, Jorgen and Alan turned back to help me down. In spite of these places that were hard for me, we found some fresh bighorn or deer droppings below the worst climbs.

When we started on the next morning, the boat behaved in a peculiar manner. It didn't go fast enough to plane but the bow stood up very steeply. We had a lot of trouble with mud bars right across the whole river in the vicinity of Tincanebitts. Between the mud and the malfunction of the prop, we decided to give up the idea of getting beyond Surprise. We had thought something of coddling my hip by hiking in Spencer instead of going climbing in Surprise. We turned back and tried to get into Tincanebitts. The mud kept us away from the shore upriver from the mouth, but when we tried getting to the shore west of the mouth, we found that the water was deep enough to allow the boat clear into the lagoon which was much deeper than the bar across the mouth. We tied up with only a short walk left along the east side to the streambed.

Jorgen and Alan, at my urging, went without me to try to reach the Sanup Plateau by the dike route in the east arm where Bruce Braley and I had been able to get up much more easily than we would have at Mile 265. I was content to walk a little over two hours while the others were gone from about 10 to 4:15. The reason they came back that soon was that chockstones stopped them and they were unable to get to the top. In fact they didn't reach the Supai. They said they really tried and that they had done some climbing that was worse than anything we tried in 265 Mile Canyon. Evidently, big chockstones have fallen down in this narrow slot ravine just since Bruce and I were there on January 5, 1976.

After spending the night at Tincanebitts, we took our time in going west to the canyon just west of Cave Canyon where Tony Williams and I had camped. It was a good place with lots of wood, but we tied next to a rock ledge at water level and in getting out and in, we bumped the boat against the rock and chipped

the fiberglass hull. Jorgen led us on a short hike up east of the bed to the third bench just below a tower and then out to a fine viewpoint. We took pictures in all directions, especially of the snow covered Virgin Range. There was a fair burro or sheep trail from here around into Cave Canyon. Jorgen led Alan down a talus slope to the lower level near the creek and then they got back up to the trail farther north. I elected to return to the boat but before I got there I discovered that I had lost the boat ignition key. I felt pretty bad about the prospect of walking to Pearce Ferry and paying someone for a tow, but Jorgen and Alan cooperated in working out the way to get the switch shorted so that we could run the motor on Thursday without a key. We had an easy trip on calm water to the beach on Thursday. I used four wheel drive to get the boat out of the water and we had lunch together at the Meadview overlook.

About the most exciting discovery of the entire trip occurred as we were approaching Columbine Falls about a third of the way from the right shore to the left shore. Alan looked up at the right time and saw the sky through a fine arch or window. It is about 1000 feet above the lake across from Columbine Falls and a little east of the falls. I don't think one can see the sky through it while facing east. It would be hard to climb to it.

Pearce Canyon

[February 25, 1985 to March 3, 1985]

Since Jorgen Visbak couldn't go until Monday, I started early that day towing the light fishing boat. With the light load I needed to get gas only twice after leaving home, at the Bingo station east of Kingman both times. I was at Pearce Ferry in time to eat lunch and get the boat in the water before Jorgen arrived at the scheduled time of 1:00 p.m.

In launching the boat without help, I should have attached the painter to the trailer rather than to something on shore. The rope wasn't long enough and it broke as I was backing the boat into deep enough water. When the boat floated loose, it might have gone out into deep water except that the rope caught on some part of the car and was pulled up to shore when I drove out of the water, a crisis avoided by luck. The motor was a little hard to start, but we got it going and were over at the deep cove just west of the big dark rock promontory ready to go on over into Pearce Canyon just before 2:00 p.m. Jorgen had been up this route over to the bed of Pearce Canyon much more recently than I had and he remembered that the right way is to go up the hill just north of the cove and follow the ridge where there is a burro trail. I got started 10 minutes before Jorgen and after walking a few yards to the north of the bed of the wash, I came on a good burro trail that parallels the bed and curves around from west to north and then northeast below the correct ridge route. After a while Jorgen was looking down on me from the top of the ridge. I came to a fork and went up to join him. We stayed together until we were almost to the saddle where one can look down on the bed of Pearce Canyon. I was so slow and out of shape that we could see that I wouldn't make our proposed campsite with water at the end of the north fork before dark. Jorgen went ahead so that he could reach the water hole up the north arm and get back to the campsite before dark. I had supposed that I could get there between two and seven, but it didn't turn out that way. I began by resting five minutes out of each half hour, but long before I got there I was walking ten minutes and resting five. By the time I could shout and be heard by Jorgen it was nearing 9:00 p.m. He came down from his place along the bypass of the lowest fall in the north arm to guide me with a light to his fire. I had a comfortable night with more than enough cover to keep warm. We saw no burros or bighorn sheep, but signs of both were

very apparent. They seem able to live in the same area. Sheep tracks and scat were common up on the Sanup Plateau where there are about 30 cows in the Fort Garrett Area.

I left camp somewhat ahead of Jorgen but he overtook me in less than a mile and we stayed together to the place where tributaries formed along a fault come in from both sides. We went up the north one and Jorgen stayed with me almost up to the saddle on top. Then he went ahead with the idea that he could scout for water before I arrived at the campsite, the overhang in the last north side tributary with the ruined trail going down to the place that has been used by ranchers. Two years ago John Green had told me about this place and I had seen it myself. I had seen only about two gallons of water in only one rain pool in the bedrock. Jorgen found several pools higher in the draw, one of them being about a foot and a half deep and most likely permanent. I was greatly relieved, but I had such a struggle in getting here that I gave up the plan to do a long hike along the plateau to reach the next water at the head of Tincanebitts where Green found water development a long way down from Joe Spring. With a heavy pack I had to rest a lot and my feet seemed to bruise even with thick soled shoes.

On our third day Jorgen set out for Snap Point and I headed across the Plateau for the head of what we call Bat Cave Canyon, the one ending just west of Bat Cave. Jorgen carried the map I had marked after my climb to Snap Point two years ago and he made out all right. He didn't have as much snow to mess with as I had had, but the ground was plenty muddy and he was glad to walk on the thin slabs of lava. He also had a little trouble recognizing the Jeep road to the top, but he got back to base in good time, well before 5:00 p.m.

I followed the dim rancher's road going generally west and south. I cut away from the road to see the cattle tank. It had plenty of good clear water, a pool about 20 feet by 15 feet and perhaps 10 inches deep. I saw the Fort Garrett ruin before I was clear past. I half intended to turn left if I saw a branch road in that direction, but on the way south I missed it. On the way back I saw it going a short way but it is badly eroded. The better road I was on turned due south after it had passed two ends of a side canyon that just show on the Bat Cave Quad and then I angled to the southeast. Before long I came to a well established cowpath and followed it down the lowest part of the valley. It ended at a dry water pocket above the lip of a big fall. Cows would have to go down a steep path to get to this presently empty pool, but one could see where the rancher had built a rock wall in the hope that it would prevent the water pocket from filling with sand. The view down the canyon from here was striking, especially the slot in the Redwall. There was no way to climb down. I needed about two hours and 45 minutes to get there and three to get back with plenty of water left in my two quart canteen. On our fourth day, Jorgen and I walked together for nearly two hours until he left to go where I had been and I veered to the west in hope of reaching the rim of 269 Mile Canyon. However, he crossed the valley above the Bat Cave Canyon and went along the rim beyond to try to see where he had been recently with two friends coming up from the lake. He saw that they had stopped a long way down from the upper end. I soon saw that I would take too long to reach the rim and look down another canyon so I crossed the plateau to stand on the rim of Bat Cave Canyon across from where Jorgen was. Without seeing me he talked to himself rather loudly and I shouted back. We could hear each other but we didn't connect visually. I took rest breaks, but again I got back before he did from his longer trip.

Our fifty day was an easy one. It took me an hour and 45 minutes to go from the overhang camp to the saddle between the north arm and the ascent tributary while Jorgen needed only one hour. We stayed together while we went down the fault valley and took just over one hour to the bed of Pearce. It took us less than an hour to go down to the confluence of the north and main arms where we camped on the terrace on the south side.

Jorgen took me up to the permanent water pocket in the north arm. At least it is two feet deep. He also pointed out two nautiloid fossils in the water worn rock of the bed just above a small fall that needs to be bypassed on the north side. It would take a sharp or trained eye to spot these lines in the rock that seem to be marks of a pointed cylinder. They are at least 100 yards above the lowest fall, the one that needs to be bypassed by going around a tower on the south side of the fall. I am fairly sure I climbed up the rock next to the fall on the south side once, but I wouldn't recommend this. The climb past the permanent pool is one needing gripping shoe soles on the south side or one might go across the pool with feet on one side and hands on the other, arching the back.

On our sixth day I again started a little ahead of Jorgen but he caught up in short order. Just before we reached the place where the north side wall recedes, he pointed out the cave on the north side where Ed Herrman found a curved stick about 15 inches long that was carved with a diamond design. Jorgen said the floor is as steep as the rest of the slope and the cave is no good for sleeping. About ten minutes farther, also on the north side at the foot of the cliff about 150 feet up, Jorgen showed me his pride and joy, a cave with a fine smooth floor and lots of pictographs on one wall. It is a fine overhang with big rocks across the face as protection from the weather. They are far too big to be anything but natural. The rock on the east side of the door is a real landmark, a canine tooth eight feet high.

As we walked down the bed of Pearce the wind got worse and worse. We had to brace and look away while sand stung our faces during the gusts. Incidentally, the waterpockets in the bedrock upcanyon from the mouth of the main south side tributary are no more. They seem to have been filled in with gravel and sand. In due time we left the bed and went up to a small cave in some travertine near the ridge where one can start down a burro trail to the lake. This cave protected us from the wind while we ate an early lunch. We knew that we couldn't cross the water to the car until the wind subsided, so we got out our reading. I became impatient to get on down before Jorgen and we knew that he could go faster, so I started down. I had left the trail in the valley and had followed Jorgen up the right chain of ridges only five days before, but still I took a wrong choice and came down a chain of ridges to the north of the trail in the valley. When my ridge gave out before it reached the lake I could see that I needed to use the valley trail for the rest of the way.

When I came around the last curve and could see the boat, Jorgen was already there. He had come down the right chain of ridges and had found quite a bit of water in the stern. We had pulled the boat almost out of the water up the rather steep bank, but at this angle waves could come aboard at the lower end which was still in the lake. He bailed out the water and then tried to pull the boat farther up. While he was doing this, a gust of wind turned the boat upside down and almost hurt him. The motor was upside down in the water and the gas tank, still connected to the motor, was in the lake when I arrived. We got the gas tank on land and righted the boat, but of course we lost a few minor items in the lake, and we had to row instead of using the motor on Sunday morning.

The moon shone some of the night, but at other times we were catching a light rain from the snow that put new white on all the mountains. Jorgen had his tent and I was all right under my tarp. It didn't drop enough to wet anything. Jorgen was able to row us to the ramp, against some moderate wind, in three hours and 20 minutes. He refused two offers of a tow near the end of the trip. I got home in time for dinner.

Helicopter to 209 Mile Canyon and Kiels at Mead
[July 22, 1985 to July 23, 1985]

George Billingsley had been promising me a helicopter trip into the canyon where he was investigating old river channels in the surface of the Redwall, and finally conditions were right for it. The agreement was that I would be at the Thornton Lookout by 3:00 p.m. Without hurrying to leave, I was at Grand Canyon Caverns by noon where I had lunch. I was glad to see that the old 66 still has enough traffic to keep them from going bankrupt. The coffee shop seemed to have enough trade. I was also appreciative of the fact that they have paved the Supai road past Frazier Wells. I should ask someone how far the pavement goes, perhaps to the end. The two miles of clay and gravel from the pavement to the lookout was not muddy although there had been quite a bit of rain recently. Afternoon and evening thunder showers had been predicted, but the weather was fine through the time I was out.

I was ready for the chopper to arrive by two but I had to wait until nearly 4:30. The geologists had been working that day somewhere else. There were three in the machine, the pilot Dana Morris, the women supervisor from Denver, Karen Wenrick, and George Billingsley. There were seats for five and a luggage compartment behind.

Very soon after we took off we passed over the Help Youth Camp. There were about three buildings and even a swimming pool, but that seemed to be empty. Just a few miles south of the road past the lookout to the camp and beyond, I could see the side road from Frazier Wells to Prospect Valley and I recalled vividly my two trips out that way. In short order we were across Prospect Valley and flying over Granite Park Canyon. It seemed more deep and mysterious from the air than down on the ground.

On looking from Price Point, I had gotten the idea that there is an easier way to get down to Granite Park by the river than to follow the bed of the creek. Now I think that the land to the north of the creek is so cut up that this is not a good idea. One can probably save some miles of walking at the upper end by using a four wheel drive down the road onto the Esplanade or perhaps park at the rim of the promontory north of the upper valley and get down from there to get into the creekbed.

I was also interested in the apparent possibility of getting off the rim north of here and going up on Hurricane Mesa (Dr. Tommy Mountain). Late July might be a good time of year to try this since we found plenty of water in the rain pools near where the pilot landed us on the south side of 209 Mile Canyon. George had spotted this place from aerial photos as being one of the riverbeds cut into the surface of the Redwall when the Redwall formed the surface of the land. It was a broad U shaped depression several hundred yards wide by 250 feet deep. There is a modern ravine cut in the bottom, but

the main depression shows on the other side of 209 Mile Canyon to the same extent as on the south side where we camped. The Surprise Formation fills it in.

I tried to get down the ravine to the bed of the main canyon which was only about 150 feet lower than our old river bottom. Accepting a slight chance that I would have trouble climbing back, I got past two barriers but when I was in plain sight of the main canyon bed, I was stopped by a sheer drop of only about 15 feet. With a rappel rope I could have been down. I wandered around the vicinity to get my exercise and then we had a good night marred only by more bugs than any of us has coped with in the Grand Canyon previously. I could have had another short hike from 5:30 to 6:30, but I didn't want to be gone when the others woke up. It had been agreed that we would return to the lookout rather early. On the way back, George had the pilot park down at Pumpkin Spring to see whether it is entirely under water at this stage of the river, about 40,000 cfs. It was under and the water was thick with the Little Colorado mud.

I started for Pearce Ferry about 8:30 a.m. and broke the trip for coffee at the turnoff from 66 to Meadview by the Hackberry Road. The men running the motel assured me that the dirt road was in good shape, and I found that it was. I could drive from 45 to 50 mph and I hardly noticed the place where the road crosses Hackberry Wash. I got to Pearce Ferry by noon and killed time watching two boating parties load onto their vans. The Kiels didn't expect me early so they didn't show until about 6:00 p.m. I got in a lot of reading and swimming during my long wait.

The Kiels had me as their guest for a really fine meal and then we visited for four hours before bedtime about 11. Dave brought the detailed maps of their route through the Lake Powell country and I was really impressed. For one thing, I want to repeat their route up from Dangling Rope Canyon to the bench below the Kaiparowits. The thing that really amazed me was to see how light Bec Kiel is, about 110 pounds, and to think that she can carry a pack weighing more than half her weight. They said that she often started with a pack weighing more than 60 pounds.

On the way home early Wednesday morning, I not only used the Hackberry Road to 66 but I went over the dirt road from there to the Kingman Wickenburg road. It goes through some rough country and there were a lot of washes where I had to slow way down.

Pearce to Tincanebitts

[November 2, 1985 to November 5, 1985]

After a short but early sleep, I got up early and left home at 4:30 a.m. With no one to consult or meet, I cruised right along. The Jimmy was giving me better gas mileage than it ever has, more than 15 mpg. The recent tuneup at Sands must have been a good one. I stopped for gas at the Bingo Truck Stop just short of Kingman and again at Overton and Saint George. I left the freeway at Bloomington Hills about 12:30 and proceeded without a hitch to the turnoff with a sign for Salt House Wash and Snap Canyon. I thought I knew this road from driving it only a month ago, but I didn't recognize the fork that goes along Snap Draw more directly to the descent ravine. Without John Green beside me I even missed the turnoff to Tincanebitts Tank where we had been so recently. I felt confused when I came to a place where the road branches five ways. The left track led to a fancy white metal gate, next a track much like the start to Tincanebitts Tank as I remembered it, the route straight ahead similar to what I had been driving, and a 90

degree turn to the right that appeared to be less well used but which had a small sign saying Snap Canyon 2. After going ahead a short distance, I decided that the sign should be honored and drove north. The road seemed more used than at first, and I came to the main road that soon headed down the canyon grade.

This single track down the canyon or ravine was a fine place to be using four wheel drive. I suppose one might come back up with two wheel drive, but I would hate to have to. For long stretches the bed seemed to consist of large but broken fragments of the local rock crushed by some machine and pushed around with a road grader. Quite often the hood of the Jimmy obscured the view of the immediate track ahead and I had to proceed on faith that no sharp rock was standing up. I was relieved to get down 1000 feet or so to where the road straightened out along the valley heading north. A big metal tank filled to the brim and a line shack gave me my location on the map and a little farther I came to the branch where the road ahead had the sign saying Pigeon Canyon 8. Here the Jeep trail to Fort Garrett branches off. I had Jorgen's opinion that I could drive it in the Jimmy, but his letter contained the warning that "you know how I am about such things." After about three miles during which I had to use the lowest gear of the 4x4 drive to cross small wash beds, I decided that 5:45 was late enough to arrive if I wanted to cook by daylight.

I started the last nine miles to Fort Garrett by car headlights on Sunday morning. It got to be real day before I came to the most nerve stretching places in the road. There were places where one had to pass big rocks close to the wheel marks in the wash beds and sharp curves where one might have to get out and look for the route ahead. A field of Russian thistles seemed to obscure the track for a few yards. There were two places where I was rather alarmed by the way the vehicle had to lean as the track went along a hillside.

About five miles short of Fort Garrett, there is another huge metal tank to hold the water collected by a big plastic sheet rain catchment. I believe this watering station for cows is too recent for the map. I think it is not far from the most amazing viewpoint of the whole canyon country, down the arm of Snap Canyon that heads in block 5 of the map. The nearly vertical drop is amazing and the line of sight is clear to the broad white bed of the main Snap Canyon. I can see why Jorgen and Ed Herrman liked the hike up Snap Canyon. I wish I had stopped for a better view and a picture. The Jeep track is close to the edge.

I kept the Jimmy in four wheel drive for 30 miles, from the top of the road starting down Snap Canyon to Fort Garrett and back using the lowest gear more than second. I noticed that my average speed along the Jeep track was 6 mph, and I don't think I would go this way again. Once on the return I killed the motor by running into a gravel bank in the bed of a wash that seemed about half as high as the diameter of the wheel. I had to back away and hit it harder to get over. I would agree with a BLM man I talked to on the way out. It is no country to be in by yourself, especially without a radio that can reach help. One of the worst places was right at the end, the steep grade with loose rocks down to the level of Fort Garrett.

There used to be a continuation across the major wash at Fort Garrett, but floods have moved rocks in the bed and there is now no tire track showing beyond as there once was. George Billingsley was out here years ago in his two wheel drive truck, amazing. I found a place and turned the car around just a few yards from the ruin. Incidentally, I have the idea that this structure was never finished. Green said that he had heard that the fireplace shows smoke stains, so I looked. There is just a little black from a fire whose

ashes are still in place, not even covering the whole space. It appears to be from a camper rather than from the occupant of a finished cabin.

I got here in time to shoulder my pack and start walking at 8:15. I knew from a former hike, and from the map that I could swing wide and stay on the more level walking, but this seemed to be a lot longer. I elected to go up through the black brush directly toward Fort Garrett Point. Some of the walking was easier, on grass stubble, and eventually I came to gulches where I would have to go down deep or scramble up high to a terrace just below a peculiar band of white shale in between ordinary red shale and the main part in the great cliff above. I used the same route on the return on Monday and this time I noticed something I had missed, a little patch of manzanita. I began to wonder whether it would be hard to get down again on the east side of Fort Garrett Point, but there was a way all right. I had lunch rather early before I came out on the flat leading to the head of Dry Canyon Gorge.

The only part of the whole walk that requires more than normal care for the footing is a 20 yard stretch along a steep bank between a small cliff above and a several hundred feet drop to the bed of Dry Canyon below. Before reaching the head of Dry Canyon Gorge, I got help from a cowpath and this persisted most of the way to the head of Tincanebitts Canyon. On the way Sunday I missed a lot of the trail by going too directly up through the black brush. I came down to the grassy flats well before I got to Tincanebitts. On Monday I noticed something that John Green had told me about, a shelter cave with a ruined mescal pit in front. I would locate it at the southwestern corner of block 18 of the Tincanebitts Quad.

As I approached the head of Tincanebitts Canyon in the rim of the Sanup Plateau, I began to think seriously about water. I still had about two quarts in my gallon canteen, and I had been telling myself that if there was none in the water pocket we had used a month ago, I could go on up to Joe Spring. I had noticed that there was still one rather deep pothole that has water near the overhang campsite north of Fort Garrett, and I desperately hoped that there would still be some at our campsite seven minutes walk down the bed of Tincanebitts. By four when I arrived I was really bushed. There was no water in the little holes near the head and when I looked down into our former good source, I could see only a place where some dead leaves looked wet. I went down and was able to dig the muddy gravel and sand away and get a pool with over a quart of water. After the mud settled, I used my cup and nearly filled my canteen. I figured I had plenty for dinner and breakfast and to walk back to the car. Still it wasn't enough to see me through another day in the area, the day when I would walk down to the head of the dike ravine where I had come up from the lake to the Sanup in the east arm of Tincanebitts. I was tired and my hip seemed a bit the worse from my trip so that I wasn't too sad about giving up the achievement of my 108th route from rim to river. Besides, the route is no longer possible according to the experience of Doty who gave up trying to climb around a chockstone in the ravine.

My route back was nearly the same as the one I used coming, except that when I got down from the terrace southwest of Fort Garrett Point, I headed for the open flats where I could use a cowpath instead of going through the blackbrush directly to the car. Between being tired from the previous day and from finding that this detour was not efficient, my time on the return was about one and a half hours longer than it was on Sunday. I had only about two good drinks left in the canteen when I got to Fort Garrett. Again it was about 4:00 p.m. when I arrived, but I had started at 6:45 a.m.

The 12 mile drive back over the Jeep trail was routine, adrenaline producing and nerve stretching almost all the way. I looked to see how the tires were holding air several times, but I should have looked right before I got on the steep grade up Snap Canyon to the top of the Shivwits. When I got to the top I got out to release the hub locks for two wheel driving and found that the tire I got new about five weeks ago was completely flat. I don't know how long I had been running with it that way since four wheel low is so powerful. Then I found that I am not strong enough to loosen the lugs to change the tire. My wrench is the crossbar type and rather short handled. What saved me was to find a loose juniper root complex that I could place so as to support the end of the wrench bar opposite the one that fit the nuts. Then by jumping on the end of the handle as hard as I could I succeeded in loosening the nuts. At the tire company in Saint George, they found that the trouble was caused by a piece of wood that had gone through the center of the tire. I had driven on it until the tire was ruined, so I used my credit card for another new tire. What with the long struggle to change the tire and my having to wait my turn at the tire company, I didn't get away from Saint George until around noon, but still I got home about 9:00 p.m. after eating an early dinner at the Bingo Truck Stop. In spite of the tire trouble and the near crisis about water, I had had another good trip and had patched in another segment of the long way from Lee's Ferry to the mouth of Pearce Canyon.

Tincanebitts, Twin Creek, and Dellenbaugh
[September 27, 1985 to October 5, 1985]

The first day was for visiting in Flagstaff and getting John Green at Tusayan. Very soon after I stopped at the math department to say hello to the old guard, I bumped into Dick Hart who was spending a couple of weeks in Flagstaff. They are renting out their Sedona house but are trying to sell it. We played a number of fast games of chess and Dick came out ahead. I also had a short visit with Scott Baxter at the Dalton Bookstore while he was at work. He is about the only one who has ever carried part of my load in the sense that he gave me a good deal of the water he carried up from the Snyder Mine.

At the Alpineer Store I dropped off my box of hiking logs for Bruce Grubbs and Stewart Aitchison to consult for their proposed guide to Arizona hikes. When I pulled into the McDonalds parking at Tusayan, John Green was ready to go. He had a plastic five gallon jug of water which I thought unnecessary since I had a three gallon jug along. Later I regretted this decision since we ran short when we camped at the head of Twin Springs Canyon.

I had replaced one of the rear tires with a new one days before this trip and I didn't worry about the other rear tire until we had a quick flat, almost a blowout, along the road south to Williams. I should have looked around for a regular tire store, but I gave my business to the Exxon station near the freeway. He would take credit card payment, but we had to wait a long time for him to finish with another man, and then he had to drive somewhere to pick up a suitable tire, and then after this substantial delay, I was charged \$33 more than I would have had to pay at Eddie's Tire Shop where I stopped for gas on the return. One thing about stopping at the Exxon station was that John met a women clerking at the convenience store whom he had known at the North Rim, Donna Strange. They had a good visit.

After this delay, it seemed nicer to go to Denny's for dinner. It turned out that neither of us had quite enough food along to stay out as long as Jorgen wanted to so this restaurant meal was a good thing. We drove until about ten and turned onto a side road north of Kingman to sleep.

The agreement was to pick up Jorgen at the Behren's home around noon so John and I felt that we could kill some time at Hoover Dam. We would have taken the 45 minute tour except that the first one came at 9:00 a.m. and this would mean a wait for almost an hour and then too much time for finding the right address in Henderson. We settled for a slide and talk show at nine that takes only 15 minutes. The general idea was to impress the public with the terrific difficulties that were overcome in building the dam and the great advantages that are now obtained from the dam: irrigation, flood protection, and power. It was well done.

I had come away from Sun City and left Jorgen's instructions about reaching the right house at home. At a fast food place we found the right address, but I went looking for it at the wrong housing development. Then we called the phone number and were answered by Jorgen himself. He told me about coming off the highway east on Magic Way and then turning right on Burgundy to Red Sand Court. The Behren's family was away, but we ate our own stuff at their house before leaving for Saint George. Jorgen and John both know a lot more about the country south and east of the Virgin River than I do, and I got interested in driving down Grand Gulch and seeing the country. We fooled around in Saint George trying to find a gas station that would undercut the others, but they all sold regular for the same price. We left town with a full tank and 15 gallons in jerry cans. Mostly for experience we left town by the old way to the Arizona Strip. We had time enough to get well beyond the fork leading to Mount Trumbull and find a good campsite with plenty of juniper wood for a campfire. It was fairly high there and I was glad to use my summer down bag inside the regular big one. I slept on the floor of the Jimmy except for the two nights that I spend down in the Supai gorge of Tincanebitts. The other two seemed to keep warm enough on the ground.

Usually we would break camp about 8:15 and on Sunday we found the way we were guided by John along Salt House Wash road to the turnoff to Tincanebitts Tank. I believe that the sign at the beginning of the Salt House Wash road said only eight miles to Snap Draw. The road to Tincanebitts Tank was not in very good shape and Green saw that I took a few places in 4x4 driving. The cattle tanks mostly had water in them and there was some in Tincanebitts Tank.

One interesting break in our drive Sunday morning was a visit with Buster Esplin at the Wildcat Ranch. He was there by himself when we arrived, but a friend named Hagen came along before we left. He didn't have the current facts about the pipelines down from Tincanebitts and Joe Springs, but he confirmed that there had been such developments. He also figured that we could drive to the head of the Amos Spring Trail if we wanted to. I wish now that I had asked him the basis for Bob Dye's report that a bulldozer had been able to go down an arm of Twin Creek Canyon to the Sanup Plateau. It surely didn't seem possible when we walked down the right one, the one taking off from the south spur of the side road going east about one fifth of a mile south of the start down to Twin Springs. The bulldozer operator would have to fill in a drop of at least eight feet now before getting over one drop in the bed. John Green wanted to see a route that he hadn't done before, so he separated from Jorgen and me about 10:45 when we were ready to go down Tincanebitts Canyon. The map shows the main arm of Tincanebitts not coming from the cattle tank. After about a mile along the draw from the tank, we passed the mouth of the arm that is supposed to be the main one, but this wash didn't seem to be as impressive as the one we were in. About here the canyon turns mostly south. If I had studied the map carefully, I would have seen the little circle that

locates Tincanebitts Spring, but I didn't and thought that the spring is on the east side of the main canyon. I could have taken the short scramble up the side ravine. It would have been interesting to see the piping and to find the Jeep road that was formed to bring in equipment and to cover the pipeline. Jorgen and I walked quite a distance down the bed of the wash before we noticed that there was a rough roadbed just to the west.

When we got onto the road, we found the plastic hose exposed in a few places. John had told us that if there was water flowing the hose would be cool. Instead it was warm in the sun, and there were some side ravines where the hose was cut by flash floods. The ranchers have been told by the Park Service that they will have to get their cows off the Sanup, so naturally they are not working to keep up the pipelines. We came to one big metal tank that had been taking water from Tincanebitts Spring, and it was bone dry. We soon came to more pipeline that seemed to be coming from Joe Spring, and eventually we were sure that it was dry too. I considered walking on clear to Burnt Spring Canyon or back to the car, but the more practical idea occurred to Jorgen and me of going up to Joe Spring to camp by water. We turned back to do that when we met John coming down from Joe Spring. He had succeeded in getting down from the rim somewhere near Tincanebitts Point and then had walked back up to Joe Spring, and he was now coming down to join us. He seemed to think that there was still a chance to find water in the tank at the end of the Joe Spring pipeline, and he talked us into going down. He hurried on to find water or come back to tell us to go to the spring. The metal tank wasn't as close as he had thought, and before we got to it, John was back to meet us. His news was that the tank was dry but that he had found several water pockets in Tincanebitts Gorge before a big barrier drop. There were several little ones very near the top of the bedrock and then a better one accessible but down a few yards below the lip of a big fall. We camped here for two nights. There had been some rain recently, and I wouldn't bet my life on these pockets being permanent. The best one is deep enough to fill a canteen by immersion. It had a few mosquito wrigglers in it, and a mosquito bothered me a little the first night and a mouse woke me up some the second night.

On Monday night I took a walk east to climb the ridge of Red Point where I had been before, coming from Burnt Canyon. For the first ten minutes I struggled through the black brush without a trail, but when I headed for a notch in a low ridge, I came on a well established cowpath that was a big help. When I reached the end of the side canyon where the map puts the letter a in the word Lake, John and Jorgen caught up with me. They turned south to visit the head of the dike ravine where Bruce Braley and I had come to the top of the Sanup from the river and then they went east to look into Burnt Canyon. I went to the top of the Red Point Ridge. When I returned to the place where I should turn south to complete a route from the rim to the river, I was feeling that my hip might give out and besides my two quart canteen wouldn't be enough. I went back to camp and loafed with a magazine. Jorgen and John got back fairly early too. I would have walked to the head of the dike ravine the next day but I had come from the car without enough bread. I realized too late that my three loaves for this trip were 16 ounce loaves instead of the usual 24 ounce loaves. I walked up to the car on Thursday.

On the way out I observed the window that John had previously noticed in Tincanebitts Point far below the top. He was not totally sure that it was a window rather than a cave. I am just about sure that it is a window through a fin that hooks away from the main wall to the north. I could see some sunlit wall through the window. It is a good one, perhaps about 100 feet tall by 80 feet wide and oval. While we were coming down on Sunday I had observed the end of the Jeep road that John says comes from the rim down

the canyon at the north end of Burnt Canyon Point. They brought the equipment down here when they put in the Tincanebitts and Joe Spring pipelines. I followed the road that goes almost up to Tincanebitts Spring. In my present poor condition for walking, I took nearly five hours for the descent and almost seven for the way out.

On Tuesday after I had left camp, John and Jorgen decided to walk to Fort Garrett. They found that hike not too long for one day for hikers in good shape. They found the cattle tank north of Fort Garrett dry, but there was still some water in the pockets near the overhang campsite. On Wednesday they considered going up to the top and walking the Jeep road back to the car, but they decided that it would be more interesting to follow the road. There is a tank and a spring near the road up Snap Draw, but they said that there is a fairly sure source of water along that road within a couple of miles from the overhang camp. They had a long walk along the roads but came to Tincanebitts Tank with plenty of day left. We decided to move on and find a more exciting place to camp.

My own walk on that Wednesday was quite modest. I started toward the south and southwest to try to reach Tincanebitts Point, but the way seemed rather uphill and down and I decided to settle for a good view into Dry Canyon and points west. It would have been the right time to carry the compass I had in the car. If it had clouded over the way it did the two previous days, I might have had a problem getting back to the car. In fact it rained a little where we were walking on Monday and there was a display of lightning and a very dark cloud to the north. When I went out on Tuesday, I found new rain pockets in the Coconino, and there was enough new rain to make me take out my rain sheet for shelter. However, on Wednesday and later there was no threat of rain.

When I came out on the rim of Dry Canyon, I got my bearings on the map, but when I went north through the woods and then came to the rim again, I couldn't make the map fit very well. To go back to the car, I headed northeast and was gratified to run into a cowpath that led to Tincanebitts Tank. The next goal was to see the arm of Twin Creek Canyon that Bob Dye had told me about. It is at the end of the south spur of the short road leaving the main Twin Point Road one fifth mile southwest of the Twin Springs Draw. We saw this turnoff on our way south to camp at the fine overlook where the main road reaches the west rim of the promontory. This viewpoint is truly outstanding. The promontory the surveyors call Red is to the northwest. At sunrise the next morning, I noted some complicated geology. There is an offset fault in some yellow rock above the main Toroweap cliff and some pretty pink rock nearby. The Kaibab rim seemed to be bent in a curve down toward a valley cutting nearly to the bottom of the Kaibab, but this bend might be natural erosion. Jorgen and I could see where we had walked from Burnt Canyon Spring around Twin Point to Neilson Spring, the name Buster Esplin applied to what I have called Pack Trail Spring.

On Thursday we drove north to the spur roads going to the washes tributary to Twin Creek Canyon. I missed the turnoff going north but found it when returning from the north. Incidentally, the worst rocky place in the Twin Point Road needs 4x4 driving. The turn onto the south branch of this short spur was not really clear, but we found it and were glad to park where we could turn around before the very end of this road. It was only 100 yards or so until we were in the bed of the wash. It was agreed that John and Jorgen should do a loop trip down Twin Creek Canyon and up Twin Spring arm while I would go at my own rate and turn back when I thought I had gone as far as I could on my two quarts of water. I got down to the

junction with the bigger source of Twin Creek Canyon in 35 minutes and on the return needed only about 40, surprisingly short a stretch for going from the upper Kaibab to below the very thick Toroweap. This part of the way was steep enough with some real drops that needed bypasses and I couldn't understand how Bob Dye had believed that a bulldozer could get down here. I turned around where the arm from Mathis Spring came in. I didn't get out of the bed and really look for the pipeline down from Mathis Spring, and the others didn't see this either. After starting about 9:15, I returned to the car rather tired about 2:45. The others picked up water at Twin Springs and returned about 3:10.

I went down to the springs starting about 3:15 and returned around 5:30. The old road and the trail up to the springs has deteriorated since I was there before. One doesn't go below the Toroweap, but it took me distinctly longer than the first part of the Twin Creek trip. This time I was careful to find more than one spring. At first I was going to get better water by dipping the canteen in the pool inside the cave, but then in the dim light I saw that cows had crapped in that water. I took water from the horse trough and I found that it is water from the upper spring that would be hard for the cows to reach. There seemed to be no good trail to this upper source, but when I broke through the brush to find it, I first overshot and found a third and highest spring, not giving much water and with only a short cave. Then I used a scanty trail against the cliff and got down to the middle spring, the twin for the lower one.

Back in the forest at Tincanebitts Tank, I had ice on the windshield by morning, and it was cold enough to use my inner sleeping bag at Twin Springs Draw. In the morning, John set out to climb Mount Dellenbaugh by going along the Park Boundary Road while Jorgen and I drove around to find the Jeep road to the top. We had to go quite far north to Oak Grove Ranch to find the Kelly Point road, and then we turned off toward the mountain before we came to the sign that tells how to reach the Ranger Station and the road to the top. When we backed up and found the right turnoff and reached the station, no one was around and I goofed again in trying to identify the right Jeep trail. Jorgen walked ahead when he was sure that it was the right road and I went back to the station to bring the car. I judged the road too rough for my tires before I reached Jorgen. When I started up on foot, Jorgen waited for me. We ran into John when we still had about 45 minutes of walking to reach the summit. He had found some inscriptions on the basalt at the summit, but not the supposed signature of W. Dunn with an arrow pointing toward a distant spring. We considered this story that appeared in the Arizona History Quarterly a hoax. A man who was trying to save his life by reaching Saint George wouldn't take the time to climb this 1000 foot landmark.

Jorgen and I ate lunch at the summit and then drove to an overlook of Quail Canyon where we could see the lights of Saint George at night. It was a pleasant place for a final camp with lots of wood for a good campfire. We had plenty of gas in the morning to go onto the freeway and not stop until we had come to Mesquite. It is a sort of casino boom town, well strung out along the main business I 15 route. We left the freeway to go through Overton and then passed by Valley of Fire to stop and eat lunch at Roger Spring. This is a real beauty spot in the desert with a flow of water like upper Oak Creek, and the pool has been fixed for wading and swimming for children. After letting Jorgen out about 12:30, John and I had a short stop at the Lake Mead Visitor's Center and then went on to Tusayan by 6:00 p.m. I got to Sun City about 11:00 p.m. rather encouraged by the residue of my walking ability and hoping to do some more, by myself so that I won't have others feeling sorry for me.

Pearce Ferry to Surprise

[January 24, 1986 to January 25, 1986]

The plan was to go up Surprise and try to climb through the Redwall to the spring that Esplin calls Nielson. I left home early and hitched the boat on behind the Jimmy on the way. It was only 6:30 when I got away from the trailer campground. I got gas at the Bingo Truck Stop and then drove around a little in Meadview to locate Mary MacBee. The minister's wife told me how to find the house, but no one was at home. I learned the next day from Shannon Peters that she was out hiking to a mine.

An obliging man at the launching ramp helped me get the boat off the trailer. He stood on the bumper and pushed the boat off while holding the rope. I had very little trouble getting the motor started. As I got near Columbine Falls, I checked to see whether or not I could see Rampart Cave (I could) and also the big window through the fin on the north side of the lake. After all the times I had been by, it took Alan Doty to spot it for us last year. I knew I should be over near the north shore, but for a while I thought I had lost it. When I was across from Muav caves, I finally saw it well, but I didn't decide whether it would be possible to climb up to it.

I went on up the lake without incident except that before I got to the grotto, perhaps near Mile 271, I ran aground out in the middle. The trouble was that I hadn't noticed that a mud bar projected from the north bank and when I turned to go to the south, I found the water only a foot deep. Only the prop hit bottom and I rowed away. The other incident was that the motor stopped. I soon remembered what had gone wrong once before and noticed that the air vent in the gas tank plug had joggled shut. When I opened it and turned till it stuck open, there was no problem again.

When I got to Surprise Canyon I found the mouth changed again. The break in the white sandbar was at the upriver end. A winding channel went through a lot of fresh silt and I could row and pole the boat to within 50 yards of where one needed only to wade in the slowing stream to start hiking. It was late enough by then and I spread out the ground cloth and bed on rather damp mud and got supper over with. By 11:00 p.m. when I looked around by the full moon, I could see that the water level was definitely lower and I moved the boat a few yards to the side of a deep pool against the cliff. When I woke again at 2:30, I worried that I might get locked in 150 yards from the main lake. I loaded my stuff into the boat and headed out. Within 40 yards I came to where there was only a narrow stream flowing about a foot deep and three feet wide. I had to get out and pull the boat through with my bare feet sinking into the mud. After another pool for paddling and a channel for wading and pulling, I reached the deep pool that connected with the main lake. About 75 minutes after I began this operation, I was bedded down again on the white sand. My only trouble in trying to get to sleep at 3:45 was that my feet didn't warm up. On the way back I considered going up Reference Point Canyon to check Billingsley's idea that one can walk out at the upper end, but I didn't feel up to it. When I got back to Doty's window, I had the urge to try to climb up where I could get a better picture. One can go up the ravine directly across from Columbine Falls and turn west. The window, about 900 feet above the lake, is hidden around a corner until one is very close. At one place one uses little steps in the bedrock, but most of the way is over steep rather loose talus. The arch is tall and narrow, perhaps 80 feet by an average 20 feet wide with wider openings at the top and bottom like a dumbbell. I could go a few yards beyond the point directly beneath the thin ceiling of the arch and get a fine view in both directions. To show the arch on film I had to take the top half separately

from the bottom half. The biggest thrill of the trip was to see two bighorn ewes about 20 yards north of the arch on the west side. They posed on blocks sticking out from the rough wall and watched me while I got their picture. Then they sprang up the craggy slope out of sight.

When I approached the ramp, Shannon Peters, a volunteer ranger for the NPS, came down to welcome me and invite me to partake of some food that the Pearce Ferry regulars were having for a picnic get together. I had eaten a hearty lunch rather late after getting down from the arch, but I managed to enjoy some fish, potato salad, and other goodies. Shannon and some of the others were familiar with the arch I had reached. One said he called it the Needle's Eye. It seemed to be news to more than half of the group.

I had another big dinner at the Bingo station and got home about 10:30. It was a nice scenic boat trip even though the only new experience was to reach the Needle's Eye. I considered that more exciting than the Triumphal Arch and it seems to be less well known.