

**Interviewee:** Robert “Bob” Cornelius (BC)

**Interviewer:** Tom Martin (TM)

**Subject:** Working as a Park Ranger at Phantom Ranch in the Grand Canyon in the early 1970’s

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TM: Today is September 27, 2018. This is a Grand Canyon Oral History Interview with Robert “Bob” Cornelius. My name is Tom Martin and this is Part 8 of an ongoing interview series with Bob. Bob and I were talking before this interview started about a list of names that he had found. Bob, can you tell me about that list of names?

BC: Yes, it was a document that I had in my personnel records. I was told by somebody at Grand Canyon, namely Ed Carlson, he said, “Keep everything. You might need it someday.” I did when I applied for my law enforcement retirement. I had almost every record that had ever... Things like travel authorizations, pay slips and other documents. One of them was this one here which I have kept. I haven’t kept a lot of the others. It was written November 14, 1971. Grand Canyon was changing the Regional Office that it was going to report to. It was going to change from the Southwest Region to the Western Region. This list of names is everybody that worked at the Canyon for the Park Service, both permanent and seasonal employees. It shows their old position number, the new position number. But the main thing is it shows their names on here. There’s about a hundred plus names. I noticed when I was looking at it here earlier that a lot of the names are kind of grouped a little bit in what they did. Like the guys that were in the Corridor Unit: Ed Carlson, myself, a guy named Ray Rosales, Victor Watahomigie. That was our little cadre of people that was in the Corridor Unit there and at Phantom Ranch and Indian Gardens. There’s also a group of guys that were a trail crew and they spent a lot of time in the Canyon. Jack Watson was the trail foreman. Ralph Wass, W-A-S-S, he was the farrier and also packer. Flor/Florenzio Estrada, he was a packer and a trail crewman. Of course, they all worked on the trails when the work had to be done.

TM: Okay.

BC: Fred Carter had been at the Canyon for many, many years.

TM: I’m sorry, who was that name?

BC: Fred Carter.

TM: Fred Carter, okay.

BC: Fred Carter, Junior was his name. I think, Sam Clevenger, I think, was part of the group and Stan Stockton/Stamley Stockton. These guys were also supplemented at times by other people. For example, the transcanyon waterline washed out and about this time it was re-opening. One of the things that happened when the waterline washed out, or when the flood came I should say, is that the septic system at Phantom Ranch also needed to be replaced. It was damaged and a couple guys were down on

that. Jimmy Knight, Roscoe Doer, Howard Lapp. These guys came down in the middle of summer I remember. They would get up at four in the morning and go up and work on this digging, because you were digging right in rocks and boulders. A nasty job.

To get on to horses and stuff, I mentioned maybe earlier, in an earlier conversation actually, earlier interview, that I didn't know a lot about horses when I was offered the job to go down into the canyon. As a kid I had ridden horses of some neighbors. They had a Shetland pony and a little Quarter Horse. My dad was always interested in me riding. He also had a half-sister in the Walnut Creek area where I grew up that had some horses and we'd go over there. One time I took care of a friend's horses over a weekend when they went away. They had an Arabian and a colt. They showed me how to lead the colt and the mare around without getting hurt [chuckle], moving them from stall to corral and stuff like that. So I had a little bit of experience, but when it came time to go down June of 1970, down to Phantom Ranch, I was... Ed Carlson, who was the Corridor Unit Manager at that time, had me go see Jack Watson. Jack, who was a trail foreman, he went over how he wanted me to saddle the horses and take care of them and kind of had a quick little training session that, of course, went on for an hour or so. Then I was set to go, basically. One of the things I asked him when we were at the corral was how they got the names for the mules and horses. They had these little brass plaques and each one had a name on it. So if a mule died or was put out to pasture, they would just take his tack and use it on the incoming animal and they had a ready-made name.

TM: Already there.

BC: I guess once in a while they probably came up with something unique, but they kind of kept the same names going apparently. What we did as far as saddling the horse and stuff, they had a hairpad that was a large, sort of like a blanket they would put next to the horse's coat after you brushed them and stuff like that. Then on top of that you'd put your saddle blanket and then the saddle would go on. Then we'd have a belly strap that you would cinch the saddle down with. And if it was a mule, you would have to supplement things with a britchen that went around the back of the animal. It was a big strap that kept the saddle from slipping forward because mules don't have withers or shoulders. If you don't do that, then you end up on the mule's neck and not where you're supposed to be positioned.

TM: Hey Bob, the hairpad, saddle blanket, saddle, going on a horse, is that normal for horses everywhere or was there extra padding in there for some reason?

BC: Yeah, it was extra padding. The hairpad was extra padding. Maybe over time they had had saddle sores and stuff like that so they found that this was maybe a cure-all for that. I'm not sure.

TM: Okay.

BC: When I had personal horses here, I just used a saddle blanket. That's all I would use and not the hairpad.

TM: Right, because that's a lot of steep angle, up and down, which can drive the saddle into the horse.

BC: Yeah.

TM: So a hairpad would help to eliminate that or reduce that to a certain extent.

BC: Yeah, I'm guessing that's what it was. I just did what I was told, you know [laughter].

TM: Okay. Okay. Sure.

BC: And then sometimes they'd have a strap around the front of the animal, too. I think particularly when they put a sawbuck on them. A sawbuck being a sort of a saddle but it's designed... It has two crosspieces on front and back that you could hang things on. They'd hang the packs and they would tie to that when you're doing packing on an animal. So that was a little different setup than the saddle.

TM: Were the horses used as pack animals as well or just the mules?

BC: They would use them as pack animals to break them into the canyon. In fact, I recall one time I was going up to the Bright Angel Trail and I was a ways below Indian Gardens. It was kind of a hot steamy day and I was sort of tired and sort of about half asleep in the saddle and I felt the horse go up instead of being on the flat trail. I thought, "What's going on?" I woke up and we were sitting in a borrow pit where they went in and dug materials out. That horse knew that that was there and he was going to go in there and rest [laughter]. So he had been used as a pack animal to break him in and that's what they would... Fred Harvey did the same thing. I think they would use mules to get them used to the canyon and pack with them and then if they were of good enough temperament, then they might become saddle mules. We used them... Pretty much everything that the Park Service had could also be ridden. There were a few exceptions. There were a few mules that were pretty wild and they didn't ride them. But basically everything that packed could also be ridden.

The way the corrals were setup in those days is there were two corrals out at Yaki Point. One was for the Park Service and one was for the concession, Fred Harvey at that time. Then on the South Rim Village you had the big corral for the Fred Harvey mules and this real big barn they had there. Actually right across the road from that was what was called Shirley Hall. Shirley Hall was the dormitory for the Fred Harvey cowboys if they chose to live there. I always thought it was funny, I thought Shirley Hall was kind of a sissy name for a bunch of tough wranglers. I always say they painted it... It was painted charcoal, kind of charcoal black, so they kind of toughened it up with a paint job [chuckle]. It looked a little more appropriate for a bunch of cowboys. Also there was the Park Service corral. It's still up there, I went by there this last summer. It's up just near the residential area for the Park Service people. I guess it would be south and southeast of the old South Rim District Office there.

TM: Yep.

BC: Each of the corrals had some kind of little, like a barn, where they'd have feed and also either a tack room or tack was on the walls someplace, so you could go in and get the equipment that you needed to saddle. I always used basically the same equipment each time for my horse because each horse/each mule has different size, different dimensions, so you want appropriate stuff so you don't have to make adjustments to the saddle and gear and whatnot.

Then riding the horse into the canyon, especially the first time, I was assigned a horse named Hammer. Hammer was an old...probably the most gentle of the three horses that we used. I did pack stuff down. I had saddle bags on the back of the saddle and I put as much food and stuff in as I could. I tried to balance it out on each side. I remember I took off from the corral there at the village and the trail went in back of the old Babbitt's store and post office and then went across past the Fred Harvey corral, and up to the trail, across railroad tracks to the trailhead of the Bright Angel Trail. That was pretty easy. Then

when I started down into the canyon, when you're sitting up on the horse or the mule and you're looking at cliffs and you've never ridden in that environment before, it's pretty intimidating. I remember the first time the horse stopped. He just stopped right on the edge and my boot was hanging out into space. It seemed like this wasn't a very good idea, you know. The thing I tell people now that want to go on the mule ride down to Phantom Ranch is be sure that before you take that on that you go and ride a little bit, because you find out there's muscles that stretch when you're in the saddle and especially going down, down, down. When I got down to Phantom after that first ride, boy, I could hardly walk the next day. It was just horrible. I remember I thought of riding...I actually did, I went and got the horse and rode him back up to Phantom Ranch to say "hi" to the concession people and everything because I just could hardly walk.

It was brutal. There was another guy down there, a seasonal named Ron Lucas, well he left on his days off. We were together one day and then he left the next the day. I think I talked about having to go down the river the following day and pick up this body of a hiker that had swam the river and ended up down at Turquoise Rapid. We hauled him in the boat down to Shinumo Rapid. I then, after that recovery, went up to the South Rim and I walked back down. I think the walk probably loosened me up a little bit.

I got through the rest of the week somehow. After riding for a while I got so it was basically second nature. I not only enjoyed it, it was relaxing and you ended up being a little bit more refreshed then you might be if you had to hike say 10 miles or something like that.

In the last interview I did mention that there were advantages and disadvantages to having a horse. Advantage is if you run into somebody that is, let's say they're dehydrated/have heat exhaustion or something, you can get them on the horse and take them someplace where they can get into a cool environment. Or if they're injured, you can move them as long as they can ride the horse. I even had a guy one time... This happened several times surprisingly, is people would go down on the beaches, take off their shoes and socks, or boots and socks, and be laying on the beach and the river level there in the canyon sometimes would come up really fast and take their boots away. First time, I took the horse down and got this guy, put him on the horse and brought him back to Phantom Ranch cause he didn't have any shoes. The second time it happened, I just walked down there with a pair of tennis shoes that I had [laughing] and gave them to him and he walked back to the ranch.

The disadvantage to the horse was that if you wanted to do like a backcountry patrol off of the trails, off of the Bright Angel or Kaibab system, you'd go a ways but you didn't want to leave your horse by the side of the trail there for a long, long period of time. You'd be worried that the horse could injure somebody, could kick somebody as they tried to walk by or someone could let the horse go. Any number of things could of happened. We did have some instances where people did things to get even with something they didn't like with the concession or with the Park Service. They might try to hurt the animals over in the corral.

In one case, somebody threw some firecrackers in the corral, the Fred Harvey corral there, and it spooked one of the mules. The mule ran into the...probably the feed trough, broke his leg. I had to go up and shoot the mule the next day because he had a broken leg. That sort of thing is pretty sad. Overall I don't remember with our Park animals anybody ever doing anything to them. Another couple times the...

TM: Hey Bob?

BC: Yeah.

TM: What did you do with a dead mule in the corral? I mean that just sounds horrid.

BC: Well, you had to... This particular incident was kind of funny. They had let the mule out of the corral and he was just kind of grazing out there in front of the corral because he couldn't go anywhere, or not very far, because he had this broken leg. I went down and I dug this enormous hole, actually before I shot the mule. I had dug a big hole down just east of the little junction of the South Kaibab Trail where the spur goes off to the Silver Bridge. In that area down there, there's kind of a flat area. I worked for several hours. I dug this gigantic hole and then I went up and I think I shot the mule. They sent these two Fred Harvey wranglers down and I remember the first thing they said is, "Why didn't you shoot the mule closer to the hole?" [chuckle], cause it was about a quarter mile away. I said, "I'm sorry. I just didn't think about it." This one Harvey cowboy, he takes a lariat and he puts it around the neck of this dead mule and he tries to pull the mule toward the...in the direction of the hole and his mule just went crazy. He saw that dead mule there and his eyes got real big.

TM: Oh, yeah.

BC: Boy, he almost launched the cowboy into the cobbles there. This went on, they had another mule, they tried the other mule and it wouldn't work. So the Fred Harvey wrangler says to me, he says, "Do you have a mule [chuckle] down in the corral you think will be able to pull this mule?" I said, "Well, we got old Jack." Jack was an old...actually a World War II Army mule.

Still had the Army brands on him. He must have been 30 years old. I mean, he was an old mule. So I went... He was kind of the pet, Jack Watson's pet mule. I mean he really liked this mule. So we went down, we got Jack, and we saddled Jack up. I loaned him to the Fred Harvey wrangler. We took him up to where the dead mule was and he acted like just another day at the office. He pulled his mule down to this big hole and then we covered him up.

The second time this happened, that I had to shoot a mule, it was I think one of the riding mules. It had just broken down. I'm not quite sure what was wrong with it but the mule couldn't go anywhere, it was almost dead. He was on the other side of the river on the River Trail, just the other side of the tunnel there. So I shot this mule and then they sent a couple of Fred Harvey wranglers down. When they showed up at Phantom Ranch it was late, late in the afternoon and they were drunk as skunks so it didn't look like they were going to get much done that afternoon. I showed them where the mule was or they knew where it was, obviously, he was laying in the trail. So the next day they get up and they go over there and they try to drag the mule down... There's a little beach just downstream from the South Kaibab Bridge there and the tunnel. They tried to drag him down to the beach so they could dig a hole. Well, as they were dragging him down there the mule got hooked up on a mesquite tree...

TM: Oh, gee.

BC: ...and got wrapped around this mesquite tree. So they just took rocks and covered him up with rocks. It was really a problem because [chuckle] the stench from that mule just permeated the whole canyon around the bridge there for the whole summer. I remember my horse, we'd start across the Kaibab Bridge and he'd smell that dead mule and he'd tried to turn around on the bridge. I'd have to dismount and walk him across the bridge and then when we'd go past it, he would jump and carry-on.

He didn't like that smell at all. So that's what you did with a dead mule. I guess you could have cut it up, I suppose, into smaller pieces, but we just would dig a big hole.

TM: Was there any thought about sling loading the mule out to the rim?

BC: Probably cost, you know. Everybody's always trying to cut corners. Helicopter use, it was always expensive so we did the simplest thing there.

TM: Yeah, yeah. Okay.

BC: One other thing, we were talking about the value of the horse. I guess one thing is just public relations. Everybody that would see you on the trail on your horse would want to talk to you and want to pet the horse and all that. So it was a good ice breaker, if nothing else, to be able to talk to people cause everybody loves horses basically. I did have one incident with my horse Chuck. He was a little black Quarter Horse. Well, I had a lot of incidents with him, but one in particular that I remember was... It was really hot and I decided I was going to ride the horse out early, early in the morning. I got up about 4:00, I went down to the corral and I brought the horse up to the ranger station. I used to keep my saddle and everything in the ranger station because it was so dusty in the tack room down there that you'd get the stuff out and it was just covered in filth, so I would keep it in the ranger station. So I brought him up and I hooked him to the hitch rail in front of the little ranger station there down by the river. Then I went in and got my gear, brought it out, put that on him. When you cinch a horse up they will sometimes bloat up. They'll suck in air and then that way when the cinch strap is pulled, when they let the air out, it's not as tight on them.

So what we would do is try to kind of surprise them. You would make them... You'd cinch it up part way and then go up and grab it, pull it real tight. Or, sometimes I would cinch it up and then I'd ride him a little ways, or walk him, I'd usually walk him, and then walk back and cinch it up. Do it that way. So that's what I decided I was going to do on this particular morning. So I started leading the horse across the little footbridge across the Bright Angel Creek, made the eastward turn there on the Kaibab Trail toward the bridge, got a few hundred yards down and all of a sudden the horse ran into my back. I thought, "What's going on here?" I looked around and the saddle was starting to slip. It was about, gosh, about a quarter of the way down his side. He started bucking and I just had to let him go. I thought, "He's going to kill himself." He started bucking and he went down. He jumped off about this three-foot rock wall into the gravel there, ran down into the Bright Angel Creek. He was bucking this whole time. I saw my camera do a few loop-to-loops and end up in the rocks. The saddle ended up in the middle of Bright Angel Creek. The horse ran up the canyon and into the campground and made a couple of tours up and down the campground there. I could hear all the campers screaming. I ran up into the campground and by this time he had gone over and found some green grass. He was eating green grass so I got a big handful of grass and I went over and was able to capture him. I was embarrassed to death, of course.

TM: I bet. Gosh.

BC: I just grabbed the bridle and lead rope and just walked out of the campground as if nothing had happened [laughter]. Went back, got the saddle out of the creek, and gathered up all my other gear that had been scattered all over a half acre there and went back in and had another cup of coffee before I re-saddled him [laughter]. I never got thrown off or anything. One time I was... On the South Rim I used to ride the horse, I think I mentioned this the other day, I used to ride the horse from Yaki Point into the South Rim Village sometimes on my day off. I guess on this particular day I was actually riding back from

Yaki Point after coming out of the canyon because I remember I had my uniform on. I got into those big beautiful ponderosa pine trees there near the old visitor center and I thought, "It'd sure be fun to run this horse down through these trees." So away I went. I was really galloping along, actually running, and he sidestepped and I still remember all I could see was ground underneath me. Somehow he jumped back under me and I didn't go falling. I put the horse up at the corral and then I walked back down to the ranger station. Dick McLaren walked in, he was the Chief Ranger at that time, and he said, "Who was the ranger racing his horse through the trees there by the visitor center?" I said, "Well, that would be me." He said, "We don't do that," he said, "It's not dignified." I said, "Okay, it'll never happen again." [chuckle] Of course, it did a few times in the canyon, but not up on the South Rim where I could be seen.

TM: I'm sorry, Bob, I've got a question for you. The horse named Chuck, where do you think that name Chuck came from? I mean some of these horses like Duke and you mentioned these names for these animals. I'm thinking, do you know any of the history of the naming of these animals?

BC: Well, only Hammer. I used to call Chuck chuckwalla. [laughing]

TM: Nice.

BC: I decided he was more reptilian than horse sometimes, I think. Hammer was kind of a dapple grey, kind of white horse. They had him in the farrier's/blacksmith shop. It was located near what used to be the park warehouse, near the little jail they had there and the paint room and stuff. It's kind of out in the middle of a parking lot. They had a concrete floor. They took Hammer in there. What they would do with a horse, they had to teach to stand on 3 legs so they could shoe them. What they often do is do what's called "scotch" the leg up. They'll take a rope, hook it around like a rear leg and then pull it up and hook it onto the saddle horn so the horse is forced to hold his leg up. I guess Hammer...they just couldn't get him to stand up on three legs. He was for some reason real awkward that way so they decided to do this. They scotched him up and I guess went to lunch and left him tied up in there. When they came back, Hammer had fallen over and was laying on the floor and was banging his head on the floor trying to get up. He had a scar above, I think it was his left eye where he had banged his head there. So that's how he got his name, from hammering his head on the concrete floor.

The other two horses, Duke and Chuck, I don't know who came up with those particular names. You did ask the other day about when they stopped using horses in the Inner Canyon for routine patrols. You know, I really don't know. I'm guessing, probably when this group of horses were retired they probably made a decision. It might have been financial in nature, how much it costs to take care of a horse over a year's time at the Canyon. And then some other factors. The danger of riding them and maybe just the personnel that they were hiring. Maybe they were starting to hire people that didn't know anything about horses and didn't want to learn or something like that.

TM: That makes sense.

BC: That's a possibility. I don't know.

TM: Bob, I've got another question for you. You mentioned that the ranger station/your ranger station was on the west or south side of Bright Angel Creek and you had to cross the bridge to go off to the Black Bridge to the South Kaibab Trail.

BC: Right.

TM: That's different from where the ranger station is today.

BC: Right.

TM: I'm thinking of the buildings that are in that area. If you continue on that trail down to where the Silver Bridge is, you go to the corral. But if you back up from there, there is a residence-type building on the east side of that trail and another residence building on the west side of that trail and today there's a bathroom in there as well, kind of between these two residence buildings is a bathroom. Your ranger station, was it on the west side of that spur trail that went down to the Silver Bridge or was it on the east side?

BC: Right, it was on the west side and it was the one closest to the river. It was a little ranger station. It had a kitchen and a bedroom and then it had a toilet that was... You had to go out the back door and it had an attached toilet out there. The other building to the north, I guess you would say there, was the trail crew quarters. Or, if the seasonals, two seasonal... When I first went down there were two seasonals. One of us was in the little ranger station and one stayed over in the little bunkhouse there, the crew bunkhouse. They had a room with several beds in there and then a little kitchen and then a bathroom that was actually inside in there. There was one...I think they called it the Rock House, was on the east side of the trail there.

It had a couple of bunks in it and stuff. It was sort of like an overflow. There wasn't anything else in the building other than just a place to sleep. Then there was a small bathroom adjacent to that and it just had one stool in each side, one for women, one for men. I can guarantee you if the Phantom Ranch ranger went on a patrol, the toilet would plug up. That was a given down there. They're just really... The people from the campground were supposed to come down and use that toilet, well it's quite a little walk down there. So there were a lot of sanitary issues up in the campground as a result. Then there were long lines sometimes waiting to use the restroom. I would go over there and be a traffic policemen and let the guys go on both sides because there were usually more men than women. Once in a while things would plug up down there. There was a septic tank adjacent to that and it would get full. It was a 500- to 1,000-gallon septic tank. The first time it plugged up, I remember, seemed like we had to bust a hole in the top of it to even get into it. I don't know if it even had a clean-out place. They sent a pump down and we would have to dig a big hole out there in the gravel bar and then pump the sewage from there into the hole. Had some real bad experiences using the pump [laughter]...

TM: Yikes.

BC: ...where it got kind of got nasty. We did that two or three times while I was down there. The sanitation problem was really acute at Phantom because you had all the hikers and campers, plus all the river runners. Everybody would use that one little toilet.

TM: Wow.

BC: It was just totally inadequate for the situation. People would carry their trash out pretty well, but to deal with solid waste is really an issue. I'm glad to see they're using these composting toilets and stuff throughout the canyon now because it was an issue. I one time went up the Tip Off. The outhouse at the Tip Off filled up. I told my boss, I said, "I don't really want to dig another hole up there in the [chuckle] if



I can help it." I said, "How about if we burn it?" I got a mixture of gasoline and diesel and I soaked the... I moved the outhouse off the pit, I poured that in there and I lit that off. It was the most god awful smell.

There was this black smoke and I thought what a bad decision this was. I thought for sure somebody from Mather Point was going to be calling about the forest fire down in the canyon. The stench was terrible. I think we did have to go down, somebody did have to go down there eventually, probably the poor trail crew, and dig another pit because that was always a major issue we had.

Speaking of outhouses [chuckle], one of the things that happened was... I guess this was about '71 when they reopened the...or 1970 maybe, I don't know...they re-opened the North Kaibab trail to hikers. One of the jobs that we had was to go up and get rid of some old outhouses. There were two of them. There was one, oh, about half way up through the Narrows there, I guess, and then there was another one up near Ribbon Falls. So Fred Carter and I... He was sent down and I was supposed to assist him. The first thing we were going to do was a big rock had come down. It was about 3 or 4 feet in diameter. It had fallen down, I think, by the second bridge. Fred was supposed to blow that rock up with dynamite. We went down there and my job was to hold the horses...he had a mule, I had a horse. Fred went up and he packed a whole bunch of dynamite around this rock. Then we went back around the corner and boy, when that blew up, I'm telling you, there were rock chips all over the place.

TM: I bet.

BC: A huge roar, but we did get rid of the rock and we continued on. The first outhouse hadn't been much of a problem. We just kind of disassembled it. It was in pretty bad shape. It had graffiti all inside. I always thought, it wasn't the graffiti that surprised me, it was the fact that people had taken pencils down into the canyon to write on the walls. When we got up to Ribbon Falls, we decided to burn the outhouse down, because it was a much more substantial one. Put all this old wood, probably from the 1920s, in this pile and we lit it off. Fred decided to have his lunch. He's sitting over there munching away on this lunch. The thing turned into this inferno, I mean, because the wood was so dry. Pretty soon it starts catching other bushes on fire. It caught a mesquite tree on fire. I thought we were going to burn the whole canyon down.

I'm in this huge panic. I had a canteen of water. Well, I used my canteen on it. That didn't do much so I ran down to the creek. I thought... When I was going down to get water in my canteen, I found this bucket down there that had holes in it, I remember. I got the water out and I could get up there with about a half a bucket full by the time I got back up to the fire. I'd throw water on this fire. Of course Fred, he was only interested in eating his lunch [chuckle]. He didn't help in the least. I just knew, once again, people up at Mather Point were going to see this inferno going and somebody was going to get fired or something. We were able to... There wasn't enough vegetation around to have it race up the Bright Angel Canyon there or anything. But it did burn a few trees down. Another embarrassment in my career at the Canyon [laughter]. But we got the job done.

TM: Another Dick McLaren visit, "So there was an outhouse burned up and we lost a couple trees. That won't happen again, will it?" [laughter]

BC: That's right. That won't happen again! [laughter] So anyhow, mules and horses were exciting. One of the things that would happen would be mule wrecks. There were a number of times where there was a lot of conflict, and there probably still is, between hikers and mule riders, or packers in particular. Some of the guys that packed with the animals are not very diplomatic anyway, we found out.

TM: Well, neither are some of the hikers. Yeah, it can be a two-way street.

BC: Yeah, that's right. But it's really awful if they have a wreck and people get hurt and...

TM: Yes. Yep.

BC: ...gears thrown all over. It can be stuff going down or stuff coming up, it doesn't matter. There were a couple cases where there were physical altercations between the mule guides and uncooperative backpackers or hikers. I remember one where some guy got a blanket out and he was waving a blanket. He scared the mules and the mule guide got off and just punched him right in the mouth.

TM: Wow.

BC: We had stuff like that going on [chuckle] on occasion. Anyhow, lot of horse stories and things that went on over the years down there.

TM: Well, this is another pretty incredible interview here. As we think about wrapping this up, tell me another horse story, Bob! These are great.

BC: Well, I did have one. One time I went up to Roaring Springs and I took Duke. Each horse has a different gait. Duke was like riding a rocking horse and Chuck was like riding a jackhammer. So I took Duke up all the way to Roaring Springs and I thought, "Gee, this is great. I haven't been shaken to pieces by Chuck." I got up there and I relayed to you in the last interview that I had to climb up to the top of the springs and change chlorine bottles. That was my job on this particular day. So I tied Duke up to a tree down along the trail down below and I climbed up the mountain. As I was going up there I kept looking back down at him. He was working on the reins and pulling his head up. He was a smart horse. I got up to the top up there and I saw him. All of a sudden I saw him break free and he turns around and starts walking back toward Phantom Ranch. I thought, I'm going to be on foot here pretty quick. So I hurried up and got done and then I raced down the cliff there. I can't remember the trail situation up there anymore, but there was one trail, there were two trails it seems like. You could kind of shortcut on one and so I hit that trail and ran as hard as I could. Right as I got there at the junction of those two trails, the one he was walking slowly up and the one I was running hard on, I caught him right at the junction. It was like a little kid getting caught with his hand in the cookie jar. The horse kind of startled and looked at me and realized, "Oh, I got caught." I was so glad. I got back on him and rode him back down to Phantom Ranch.

TM: Oh, my gosh.

BC: I had a similar thing happen with Chuck. I was on the Bright Angel Trail one time. I got up, I think above the Coconino sandstone there and I thought it was getting a little chilly. So I got off the horse and I had these little gabardine coats that we wore. I had it in the saddlebags and I pulled it out. When I pulled it out, the horse startled and took off running. So now all I've got is a coat and the horse is gone in this big dust cloud. I started running after him and every time I'd get close he'd just take off again. Finally he decided it was time to [chuckle] go to the bathroom so he stopped and I was able to catch him and go the rest of the way on horseback. I chased him at least a half a mile, I'm guessing.

TM: Wow. Oh my gosh.

BC: He was on his way out [chuckle]. Another time they had a flood that washed down through Garden Creek, through Indian Gardens. It destroyed a bunch of the buildings and the corrals. It destroyed the corrals, as I recall. So they went down there and they're going to build a big retaining wall and try to keep the creek from getting over on that west side of the drainage. In the interim they didn't have a corral for the mules, so they hobbled them. They use like two leather straps together, almost like cuffs.

A cuff on each front hoof. I think they had only hobbled a couple of the mules because they figured if the lead mule didn't go anywhere, the rest would stay there. Maybe they hobbled all of them, I don't know. Anyway, I do remember that this was my first summer there that we were tasked with going out and rounding up mules between the Bright Angel Lodge and the Park corral, because they had walked all the way out of the canyon back up toward the corrals.

TM: With their hobbles on?

BC: No, they had gotten the hobbles off.

TM: Oh, okay.

BC: The one mule that they had hobbled to keep the others around, I guess had gotten free and they all took off.

TM: Got it.

BC: There were like 3 or 4 mules.

TM: Well, multi-tasked, multi-faceted, outhouse burning, mule corralling rangers at the time.

BC: A lot of my job down there obviously was maintenance. When I was talking the other day about... I told them I'm not going to change the chlorine bottles anymore. Well, one reason that I was down there was to work on the waterline. I've looked back and seen the different accounts that my job was paid for. A major amount of the funding came out of a waterline account.

TM: Oh, interesting.

BC: By refusing to do that I might have cut my own throat. They'd say, if you're not going to work on the waterline, we're not going to have you down there. It could've been that way. That was the way they funded the Inner Canyon rangers at that time is that they had justified the position because you had to work on the waterline. There were other things that we did, like pressure release valves and stuff that you would activate to get air out of the pipes. They might send you up to adjust the flow into the pipe. Of course, the guys at Indian Gardens ran the pumps that pumped the water from Indian Gardens to the South Rim.

TM: Right.

BC: So there was a lot of... Then we inspected the pipeline and stuff where it was exposed like downstream from Pipe Creek and stuff like that.

TM: Did you know a guy named Jerry Chavez?

BC: No, I don't recognize that name.

TM: Okay. All right. It's interesting because you'd mentioned yesterday about the three railroad timbers that were kind of perched precariously with these giant chlorine bottles on them. Yeah, your funding for your position came from waterline maintenance, but when you raised a safety concern, suddenly your job was in jeopardy. I just find that interesting.

BC: Just from my viewpoint. I don't know if it really ever was but I certainly thought about that before I made the decision that I wasn't going to go up there and put my life in danger anymore.

TM: Yeah. It's a fair call what you did there. I was thinking about that. Well, Bob Cornelius, thank you so much again for a wonderful interview. This will then conclude Part 8, September 27, 2018 interview with Bob Cornelius. Bob, if you could hold the line for a minute.