The Oral History of Tom Emanuel

March 23, 2017

Interview conducted by John Cornely with Tyler Rogers

Las Cruces, New Mexico

Oral History Cover Sheet

Name: Tom Emanuel

Date of Interview: March 23, 2017

Location of Interview: Las Cruces, New Mexico

Interviewer: John Cornely with Tyler Rogers

Approximate years worked for Fish and Wildlife Service: 3 years (1950's)

Offices and Field Stations Worked, Positions Held: San Andres National Wildlife Refuge

Most Important Projects: Grading roads, running trap lines

Colleagues and Mentors: Cecil Kennedy, Art Halloran

Most Important Issues:

Brief Summary of Interview: Mr. Emanuel discusses early life, being in the military, and why he moved to New Mexico. Mr. Emanuel would work on the San Andres National Wildlife Refuge for three years and would still be associated with the refuge after leaving the Service through the White Sands Missile Range. Mr. Emanuel talks about the various duties he performed during his time with the Service, working on the White Sands Missile Range, and working as a Range Rider after he retired from White Sands. He also shares several stories that include Cecil Kennedy, a skunk, and eating mountain lion meat.

JOHN: This is John Cornely with the U.S. Fish and Wildlife Service Heritage Committee in a continuation of our oral history project. I have the pleasure this morning of some spending some time with Tom Emanuel, who worked for a time at San Andres National Wildlife Refuge outside of Las Cruces, New Mexico. It's the 23rd of March 2017 and we're in Tom's house in Las Cruces. We have Tyler Rogers from the refuge here sitting in with us this morning. And so, with that Tom, I would like you to just start off and tell us a little bit about your life and your career, as it were careers.

TOM: Well to begin with I was born December the 19th, 1926 in Bentonville, Arkansas, and was raised primarily in Arkansas. Entered the Navy when I was 17 in World War II, was assigned to a Seabee Navy Construction Battalion on Okinawa. And after the war was over, was transferred to the fleet to a minesweeper and went with the task force to clear the Bikini Atoll for the atomic bomb project there. Returned home after I was discharged, and I entered the University of Arkansas on the GI Bill and spent one year there and wasted the rest of it taking flying lessons, which I still have my private license and I haven't flown a plane in well over 50 years. And wound up in New Mexico because, well to back track, after I got home and went to the University for a year I got in the National Guard and was sent to Korea in 1951 and spent a year there on the front end of an artillery battalion, 155 tractor drawn artillery. And when I got out of that, I was working odd jobs around Rogers, Arkansas where I was primarily raised there and on my grandmother's farm in a little town called Cave Springs. And I had a friend that remained in the military when we got back from Korea, because he got a battlefield commission while we were over there. And he was stationed in New Mexico, and he talked me into coming out here, and I worked for a short time there on post.

JOHN: And where was the post?

TOM: White Sands.

JOHN: White Sands, okay, so that was your first introduction to White Sands?

TOM: Yes.

JOHN: Okay.

TOM: And then I worked in town, I had no relatives here or any other connection, and I wound up driving a gasoline tanker for an organization here in town for a year. And I was searching for something else, so I went to Albuquerque and checked with the Fish and Wildlife Service there. And they had an opening at Las Cruces on the San Andres Refuge that I applied for.

JOHN: Okay, about what year was that?

TOM: That was in 1953. And I worked there for three years until my oldest reached the age where he had to go into school. And I was living in quarters at the Jornada Experimental Range, 23 miles out of town, which that made it an impossible situation.

JOHN: Right.

TOM: So, I resigned from there and went to White Sands and worked there.

JOHN: So let me ask you a little bit about, back up. Obviously, your time with the Seabee's and so on gave you a lot of training that you used later on, but can you tell us a little bit about what kinds of equipment, when you were in the Seabee's, that you were operating and what some of the things were that did.

TOM: Yeah, I started out, we were building an airstrip on the peninsula for fighter planes, building a fighter strip, the taxi ways, [unintelligible@7:53], maintenance pads, and so forth. And I was driving a dump truck hauling coral, and we wiped out a small mountain which was nothing, but coral covered with a small amount of earth. And I went from that to [unintelligible@8:30] on Northwest 25 Power Shovel that as soon as I got to where I was proficient in running it, the operator let me run it the biggest part of the time and I would switch off with the guy that was driving a D8 pushing coral, D8 Caterpillar bulldozer. So, he was pushing coral down from the upper level down to where the shovel was working, and I was loading trucks.

JOHN: So, tell us about the shovel, what was it like? Was it like what we used to call a steam shovel kind of a thing?

TOM: It was the old style shovel that was a forerunner, I guess it was replaced by backhoes, what they use now-a-days. But it worked on an arm that went through a basic arm and had a bucket on the end of it. And this arm worked backed and forth and then you'd swing around and release the trap door on the bottom of the bucket that loaded the coral in the trucks.

JOHN: Okay.

TOM: It took about two buckets full to fill the dump truck.

JOHN: So, it was a pretty good size bucket?

TOM: Yeah, it was a good size power shovel, and I ran it and the bulldozer both. We'd take turns so both of us could get experience on both machines. And then after the war was over, we spent some time building roads instead of building good coral foundation roads. And that's when I got transferred back to the fleet.

JOHN: And tell us a little bit about, it's interesting to me that a Seabee is on a minesweeper.

TOM: Well, I went from Farragut, Idaho, where I went through boot training, and was sent to San Francisco where I became a replacement in the 20th Seabee Battalion, which had returned from a tour in the South Seas down in the Guadalcanal area. And had a number of guys that had contacted a variety of tropical diseases, mostly malaria, but a few other things as well and we were the replacements in that battalion. So, working that and we got the experience of running heavy equipment and driving dump trucks, well any kind of trucks that had to be driven. And it was a good experience and I always loved operating equipment since then, but I wouldn't want to make a lively hood of it.

JOHN: So, when, I assume that when you went to work for the refuge, you had to do some heavy equipment operation. Why don't you tell us something about that? Especially, after talking to Mr. Johnson yesterday, I know a little bit more about the refuge and that there were some roads, that some of which needed to be [unintelligible@13:27] and some maintenance that needed to be done. Tell us some of the things you did out there.

TOM: Well, we [unintelligible@13:43] to a little D4 bulldozer, small size, and an old Adams leaning wheel pull grater that the Forest Service had used it, that they pulled with horses.

JOHN: Oh really.

TOM: And we modified the thing to where it had a tongue that you could pull behind a cab, D4 cab. And we had a ball hitch on the back of the grader that the refuge had a Jeep truck that I carried diesel fuel and the grease guns, and they would go and service the caterpillar every morning when I was using it grating roads and then we'd pull the pickup behind the road grader.

JOHN: So, I remember my grandfather having somebody grade his driveway at the farm with one of those pull type graders; I had forgotten about that until you mentioned it. And I don't remember, I wasn't very old at the time, but they pulled it with a tractor. Did you just set that thing up or did somebody actually have to ride on the grader?

TOM: No, it had these two wheels that you used to adjust the blade with. And we used the straps off of a pair of pole climbers to, once we got the blades set to keep it where we wanted it. Of course, every time you came to cattle guard or anything, you had to go back and undo the straps, and raise the blade, and go across and reset; it was a very time consuming thing.

JOHN: Was there settings on it or markings so that you if you had raise it up to go across the cattle guard that you could put it back to where you had it or did you have to start over again?

TOM: Well just by guess and by gosh catch.

JOHN: Yep, yep.

TOM: Calculations.

JOHN: And when you were grading the road, were you pulling that pick-up behind it the whole time or did you?

TOM: Yeah.

JOHN: Okay.

TOM: Because there wasn't any backing up, you didn't back up to hit a place again with it, you might get it on the way back. We graded the roads primarily for the deer hunts every year. Prior to the deer hunts, of course we'd go out, prior to grading the roads, we would go out and work the roads with the D4 CAT and widen them in places where it was possible and cut new roads if they were required.

JOHN: And basically, if you had to build a new road, why that CAT was basically all you had to build a new road with.

TOM: And we would go out, we had a fellow in town that had some mine claims in Hillsboro, and he had a portable compressor on his truck. And he would come out and there were certain parts of the road where we'd have to dynamite to widen the roads on the way into San Nicholas Canyon mainly. And then on Goat Mountain going up there, there are two primarily areas that we had to do quite a bit of blasting on.

JOHN: So, you would use that compressor?

TOM: [Unintelligible@19:07] with the one that rode the jack hammer.

JOHN: So, you used it. Did you also have to use the jack hammer to make a hole to put the explosives in?

TOM: We drilled holes and dynamited, and then used the CAT to scrape the rubble out. And when went out to work roads prior to grading them, for the [unintelligible@19:44], we didn't go out on Monday mornings. We went out Sunday evening, so we'd be on the job and that's the way Cecil preferred to do it. And then we worked from candle to can't. And I asked him one time, I said, "Cecil, does this organization every pay any overtime?" He looked at me and said, "Your overtime is your continued employment." [Laughing] So that was typical of Cecil.

JOHN: It was a lot like still being in the military where you were just on duty. So, I'll just interject here, Tom is talking about Cecil Kennedy who was the refuge manager at the time and Tom's supervisor.

TOM: Yes, and Cecil worked just as hard—

JOHN: That's what I understand.

TOM: —as the people that worked for him. He was a good man to work for; he was a hard man to work for, but I became very good friends with him. We had our differences, and he didn't hesitate to correct me when I'd done something wrong.

JOHN: Do you have any idea of how long, when you started working there, how long he had already been there? Just rough idea.

TOM: I don't know, he worked for Halloran.

JOHN: Oh, Art—

TOM: Art Halloran.

JOHN: Okay.

TOM: To begin with as a, he was the maintenance man for refuge.

JOHN: So, Cecil was the maintenance man and Art was the manager at that time.

TOM: Right, Art was the biologist and manager.

JOHN: I know of him from time that he spent at Wichita Mountains, and I didn't realize that he had been down here as well.

TOM: He was a very knowledgeable man in a lot of ways and Art made up a bird list, I still have a copy of it that I keep in my bird book and used it on White Sands when I was staying up range, stayed in a little house about 25 miles from the north boundary of the mountain range. And I'd check off what I saw against his list; I never came within a [laughing], well just anywhere near the amount of birds that he had listed.

JOHN: So, do you know when, did he go somewhere else when Cecil then became the manager?

TOM: As far as I know Art continued to work for the Fish and Wildlife in some capacity, I don't know where, possibly as a refuge manager on a larger refuge. But Cecil worked for him during World War II and Cecil lived in a tent up at Rope Springs, up where the horse corral and everything.

JOHN: Do you know why it's called Rope Springs, where it got the name, was that a family name?

TOM: I have no idea, whatsoever, but it was a flight camp for the CCC Camp.

JOHN: Okay.

TOM: And the main CCC Camp was down at the [unintelligible@24:40] headquarters. But they did a lot of work up there and there was a good spring there. And there was a rock house there that Cecil and I spent a number of nights when we were working roads and things. We'd stay up there and we did have a telephone line that came up there, I don't know who built it or when; I imagine the CCC did.

JOHN: But there were horse corrals and that's where you kept horses and hay and other things up there.

TOM: We had, around [unintelligible@25:23] of refuge horses that were saddling pack animals. And you know a lot of horseback work in the mountainous part of the refuge. And some of it pretty hair-raising too.

JOHN: So, you had to trust your horses to ride in that country, I'm sure.

TOM: Yeah, there's a canyon that goes off on the north end, or north side of [unintelligible, name@26:07] Mountain, and there's a trail down one side of this canyon; very narrow.

JOHN: Straight down.

TOM: My greatest fear was always coming to a rattlesnake on the trail and having this horse spook and go over the edge. But since I'm still here, it never happened.

JOHN: Yep, never happened.

TOM: Anyway, we worked the roads there before the hunt, the rest of the time was spent in various type duties from everything from lifting the grates, we had a little A-frame rig where we could use the wench on the front of the power wagon to take the grates off of the cattle guards and then get in—

JOHN: Clean the stuff out of there.

TOM: Yeah, what we used to call a Mexican drag line, and clean the sand out of it. And I might add that during the period that I worked there, the first two years we had been and still were in a severe drought. And I'd have to clean out the gasoline shed where we kept the records for when we had to fill the vehicles up with gas at this little building. But the sand would blow in there so deep I'd have to shovel the sand out of the building before I

could get in there to use it. And having to run trap lines for coyotes and bobcats, we set some mountain lion traps, but I never caught a mountain lion. Saw a sign of mountain lion several times there, of course [unintelligible@28:54] goes off into Ash Canyon. And caught a number of bobcats, at the time we had to scalp them, just a process of grabbing it by one ear and cutting underneath it and cutting across and cutting off the other ear, you'd wind up with two ears with this strip of skin for proof of catch.

JOHN: Okay. Was there a bounty on them?

TOM: No.

JOHN: Just to keep track of on the record.

TOM: Yeah.

JOHN: I did research on coyotes, and it was not my intention to catch bobcats, but I did catch a couple of them. And the first one I caught, I wasn't really prepared to catch a bobcat, but I had to get him out of the trap and turn him lose. And I had aesthetics for the coyotes, but I had not worked out the formula for a bobcat, so I didn't want to overdose him or something. So, I just, I had a noose pole and I choked him until he passed out and then I ran in there and took him out of the trap and then popped it open again and he thought he was still in the trap, just sit there looking at me. And so, I kind of poked him in the nose with that pole at the time to say, hey you're free, you can go. And he leapt straight up in the air hissing and snarling, you know about shoulder high, but he was like about where your counter there is. And I don't even remember doing this, but I was on the top of the cab of my pickup just like that. And I later read, you know the old Biological Survey folks went through this country and all over the west doing trapping and plant collecting and all this kind of stuff. An old biologist, Vernon Bailey, said, and I think it's in the Biological, it's either in the Biological Survey in New Mexico or Texas. He said that "If mountain lions had the same personality as a bobcat, that humans would never have settled the west." [Laughter].

TOM: That's right, I always said the same thing, that if they were as big as mountain lions, it wouldn't be safe to be out there because they're a lot more aggressive than everything. But I had no trouble getting them out of the traps because I was obligated to dispense them because they could also kill bighorn lambs and were very adept at it.

JOHN: So, tell us about the bighorns when you were working out there, were there a pretty good number of desert bighorns in those days?

TOM: Yes, quite a few, I'm not sure there were a lot lower—

JOHN: What you realized.

TOM: —just plain see by just going horseback and such as that. Later on, I went on a lot of aerial surveys in a helicopter with the Game Department guys. We flew in one of those little bubble thing, three man helicopters. And as a result, we saw a lot more animals then we were ever able to see from the ground, but Cecil Kennedy had phenomenal eyesight. He could spot a bighorn sheep and deer, we'd be out on horseback together and he'd say, "There's a deer up there on the side of that mountain." And I'd look, and I couldn't see a deer up there. And I'd get my binoculars out and he'd worked me over one bush at a time and sure enough right there was a deer. But he could really see animals well, I was always jealous of his ability. I think it's a God given gift, because I even known old women that were the same way that they could spot animals, cows, goats, and everything else where somebody else with them couldn't even see them. But anyway, we had to do predator control work and then when the summer rains came it would wash out the fences that had been built across the canyons to keep the horses from going out onto the east side and getting in where that bunch of wild horses that were [unintelligible@35:23] over there on the east side. And those fences had to be maintained, horses had to be fed; I'd have to go up there every weekend and feed the horses if we had horses in. And even some out, we always kept two out in the horse trap outside the regular corral where they could graze. I'd go up and check on them and check on the water. And [unintelligible@36:10] springs that we had to see if they needed cleaning out.

JOHN: Okay, so they would get rocks and gravel—

TOM: Get dirt [unintelligible@36:24] and the animals themselves, they mess them up too.

JOHN: So how many wild horses were there? You say they were on the eastside mostly.

TOM: Well, there were wild horses on the upper range area of White Sands. I was involved in a couple of horse captures where we ran them, well they ran them with a helicopter. And they had run them back and forth for a mile or so with the helicopter to wear them down. And then they build a drift fence and there was a pocket on the south end of the [unintelligible@37:31], a natural pocket back in there. And the engineers built a gate there and we'd run the wild horses in there and then the engineers dug a place deep enough and shored it up on the back on the end of it where the cattle trailer could back down in there and we had a crowding shoot that came in there and we collected them; there were a lot of horses.

JOHN: They were just trying to keep the numbers somewhat reduce.

TOM: Keep the numbers down, they were in, a lot of them were inbred. At a distance they looked real good, but they were a little bit scraggly looking from inbreeding and everything.

JOHN: And they would probably compete with the deer and the bighorns.

TOM: Well, they compete more with the oryxes afterwards.

JOHN: Oh, okay.

TOM: Being grass eaters. And the Game Department would come out on surveys and none of them had a security clearance, so we'd have to go.

JOHN: You'd have to go with him.

TOM: Of course, we went with them on the refuge and then later I went with them on the White Sands. [Unintelligible@39:22] scored a trapper that we had this use of for several months a year that we transferred funds to the Fish and Wildlife Service, and they would send us one of their trappers to work on the range, and I'd have to escort him, but that's a different story. Anyway, they'd come out on the refuge and go over it and look at the browse [unintelligible@39:56] and various other shrubs, bushes that they used.

JOHN: And some of the purpose was to know how many deer could be removed and still keep a healthy population and that sort of thing.

TOM: Yeah, we'd met with him every year and set the numbers of permits for the deer hunts.

JOHN: Were there ever any permits for bighorns, did they do some bighorn [unintelligible@40:46]?

TOM: After I left the refuge, yes. I don't know, the only people that worked there later, Lowell would have that, maybe he was still working there when they had some bighorn hunts. And we went over and worked with them too on the refuge when they were having deer hunts on the refuge, we'd come over from White Sands, the range riders and I, we'd come over there and help them on patrol work. The range riders were more there for security purposes to see that no one drifted out too far on the east side and would accidentally get into White Sands property that was illegal for hunting there at that particular place.

JOHN: So after, and we can go back and talk about some more things, but did you ever see any wild turkeys on the refuge?

TOM: No. When I was on White Sands, I went with the Game Department up on Long Ridge in the Sacramento's and they used a cannon net to, they had to put feed out to draw them in for a few days before they set the cannon net.

JOHN: So, they had turkeys up there in the Sacramento's and they would take them and release them in other places.

TOM: Right. And we bought them down to White Sands and released them, primarily in the Oscura's because they're a [unintelligible@43:11]. And at that time the only turkeys in New Mexico that existed where there was a total absence of yellow pine mast was on Bosque del Apache. And we thought if they could live without them down there, maybe they can live on White Sands. And afterwards, from time to time, I'd see hen turkeys with some poults. But whether they still have them, I really don't know.

JOHN: What about javelina, did you ever see any javelina?

TOM: Yeah, well saw more evidence of them [unintelligible@44:10] and then ate the roots off of them. I went out and pre-baited traps in the Big Bend National Park to draw some javelina in to see if there's a possibly of catching some. And then the Game Department came down and built some traps and then came down with a game trailer that they have, and they had to transfer them from the traps in the game trailers; that was kind of a hairy operation.

JOHN: I bet.

TOM: I was glad it was them doing it. Well, they built their traps the same width as a sheet of plywood, and they had handles on the back of the plywood and they'd put the plywood in and start crowding them. But you didn't want to let the guy on the other end fall behind or anything because those things would dead shot right through there and then you'd be in there with them. But they'd get them all crowded up on the end and use nets to; they'd call dipping them into the trailers. Then they had a pipe frame with a net on it, they got them in their trailer, they had to crowd them to the end and then throw that thing down over them; they'd dip them out of the front one at a time and put that on them and then they had a vet from south Texas that come down there with a cattle inspector and he'd make a brucellosis test before they would let us [unintelligible@46:35].

JOHN: Interesting.

TOM: But other work on the refuge primarily was maintenance work, when the grader would hit a big rock and I'd break some part of the grader, I'd have to unhook and go back to the [unintelligible@47:05] and get the welding machine and bring it back up there [unintelligible@47:10] whatever piece it was back together and sew it up.

JOHN: So, did you have a generator or something, how did you or was it just a gas welder?

TOM: Gas operated; it was a four wheel.

JOHN: So, it was a trailer that had the tanks and everything.

TOM: Yeah, it had a 250 watt welder on it, electric welder. And we also had—

JOHN: So, it basically had the generator was part of the—

TOM: Part of [unintelligible@48:05]. Well Cecil had a Ford pickup that he drove back and forth from the office to the refuge. And then I had a Jeep pickup, a power wagon, and then we inherited a dump truck from a refuge over at Roswell. And used it quite a bit and built trailers and everything to haul stuff on behind the dump truck.

JOHN: Where was the office back in those days?

TOM: It was in the old Post Office.

JOHN: Okay.

TOM: On the second floor and we had to share an office with the guy that worked for the Jornada, he was the guy, I guess, had a degree in range management.

JOHN: So was the Jornada part of the Department of Agriculture, is that who—

TOM: Yeah.

JOHN: Probably still does.

TOM: Well at one time when the Jornada came into existence, it was part of the Forest Service. Then it became the Department of Agriculture. And the old man that was the manager of the Jornada, at the time I was there, was the same guy that took his first job with the Agriculture, and he lived in Carlsbad, New Mexico. And he rode his horse from Carlsbad to Las Cruces.

JOHN: Wow.

TOM: To take a job with the Agriculture Service.

JOHN: Take a little while to get there.

TOM: That was Mr. Fred Ayers, and he was still there when I lived out there.

JOHN: Because that's three hours by high speed transit, or by car, three or three and half hours. Of course that's the way you had to get around.

TOM: Well, you had to cross the Sacramento [unintelligible@50:59] to get there.

TYLER: Well in my mind, how in the world would you go about that.

TOM: I don't think Lowell every lived on the Jornada, but I did. I lived out there, I had quarter, I guess the old CCC built those buildings. They were all adobe buildings. And the ceiling in the house, it had a solid ceiling, and it had paper filled with that and dirt on

top of that for insulation. And on the hottest day in the summer, you can walk inside that house and it's just like walking into cave. It was really nice.

JOHN: So was there like an agreement between the Fish and Wildlife Service and the Forest Service or the Agriculture because they had the housing available but they [unintelligible@ 52:10, talking at same time].

TOM: Housing was available to us, and then they had some extra housing that they would use for their trappers. Fish and Wildlife Service would have an annual meeting, they come out then, and they had rooms that were unused the rest of the year for the most part. And we shared a well and it was the Jornada's well, but we did the maintenance on it for our drinking water and bath water and everything else. And I had to take the front loader into town every now and then, it was old Briggs and Stratton with the pump jack and take it in to get it repaired.

JOHN: So, when you lived out there, how often would you have to go to the office?

TOM: I went into the office every Friday. And let me see, I'm trying to think if it was every Friday, or I really just don't recall.

JOHN: That's fine. But you didn't have to show up every day and then go out to the refuge, you just went to work

TOM: I just went to work. And Cecil would come out occasionally from the office to gas up his truck and go over the work that they had me do, mending fences or whatever.

JOHN: Did the refuge, other than that stone house where the horse corrals and so on, were there other buildings that you used out on the refuge? I'm sure there were old buildings out there at previous time.

TOM: We had a maintenance area that was on the Jornada there, but we had some kind of agreement.

JOHN: Tom, I want you to talk about how you fixed a crack in the, was it a metal pipe?

TOM: No, it was, I guess, a concrete trough.

JOHN: And this is where the horses gathered up by the corral?

TOM: It's in the corral, horse corral.

JOHN: And it developed a leak somehow.

TOM: Yeah, it developed a crack in the concrete. And we put cement down inside the water and plastered the crack with my hands.

JOHN: While the water was in the…

TOM: While the water was in there. And I guess the water pressure helped to hold the cement in place, and it sealed it off.

JOHN: And so, there was water in there the whole time.

TOM: The whole time I was fixing it.

JOHN: So, you never had to plug it up and dry it out.

TOM: No.

JOHN: That's very interesting.

TOM: It's a pretty good size trough; it had a lot more water than the horses could drink. And every so often, I'd have to go out at least once every two weeks, if not weekly, and try to find the horses that were roaming free range, north of Rope Springs. And go out and find them and bring them in and give them some grain and put out some hay for them and check them over for places where they might have gotten a wire cut or something like that. And if there was something like that, then keep that particular horse and go up there and put medication on him.

JOHN: Did you have to show them?

TOM: Yeah, I had to learn to shoe a horse, and we just rough [unintelligible@57:37]. And we had to dress the hoof out flat, enough to hold the shoe, and then nailed the shoe in about a quarter of an inch back from the toe. And I asked Cecil about rasping it off, he said, "Don't worry about it, one trip in the rocks and that will be rasped."

JOHN: They're rasp it right off themselves.

TOM: And he told me to always turn the point about back so far, the point of the horseshoe nail, back towards the flat side because there's one side of the end of the nail to make it come out quicker to make sure that you wouldn't quick the horse by getting into the soft, tender part of the hoof. And he said, you always want to remember to do that because if you quick one, he may just paw you on the top of the hand (or possibly saying head).

JOHN: Associate that pain with what you're doing to them.

TOM: Every time you drive a nail in there, knock it down, put the hammer on it, and twist it off. Said, you never want to drive three in one side and leave them and then go in and do that.

JOHN: Okay, so you do it every single one before you go onto another one.

TOM: When you've got that horse's hoof between your legs, if he jerks it out and one of those nails are sticking out there. I had a good friend that lived up at Radium and he was shoeing a horse, and he did that, and ripped his, the main artery in his leg and he bled to death.

JOHN: Wow.

TOM: And so, he told me he had to remember to do things like that. He was a good teacher, he wanted to keep his people safe and that was back before cell phones. We didn't have radio communications in our trucks. And it was a mixed blessing, they couldn't get in touch with you but on the other hand, they couldn't bug you for something every five minutes. So, you were out there all by yourself, and everyone should have the opportunity in life sometime to work all by yourself. So, when something goes wrong, you can't turn around to someone and say, "Help me." You have to learn to use your own ingenuity to cope with whatever the situation is.

JOHN: Well, and I'm sure this is the same with you, but with me being in situations like that, you don't realize how much you learn having to fend for yourself and make repairs or whatever it is when you have no back up, you have to do it. And years later look back and say, "Wow!"

TOM: Well, it tends to make you a little independent.

JOHN: Makes you independent, makes you more safety conscious when something, you have a near miss or something and say, better not do that again.

TOM: I don't think they ever took the keys out of the truck; you never want to lock yourself out when you were up in San Nicholas Canyon, long walk. And Cecil told me about an incident, Lowell might have told you about it too. One time Cecil was riding one of the refuge horses on one of the mountains, I think it was Block Mountain, it was on the north end that he was going up on. And he had his leggings on, and he rode up to a place where he wanted to stop where it was a little more level. He just got off his horse and he didn't notice, and this old horse for some reason never saw that snake, but it was right there coiled up when he got off of the horse. And that snake struck the back wing on his leggings.

JOHN: On his chaps, yeah.

TOM: And hung his fangs in. The snake was charging back like that (making a motion), and he finally got his fangs out and got coiled back up. And Cecil reached in his legging and pulled out his .38 and put an end to that evil intent. And he said, all the time this happened, he was just as cool as a cucumber; he was just looking at that snake. He said

after he shot the snake, all a sudden he had the saddle horn because to his knees just turned to water.

JOHN: [Unintelligible] calm and cool as long as he needed to be, but then caught up with him.

TOM: When the adrenaline wore off, he had to hang onto the horn for a minute or two to get his legs back under him, but things like that do happen. And one time we were spending the night, which we did a number of times in that rock house up at Rope Springs. And there was a hole in the wall that had been cut in for a propane gas pipe that went outside, and you had to the propane bottle sitting outside the kitchen, and the hole was right above the baseboard in the kitchen; went to the gas cook stove that was there. And something kept getting in there and tearing things up and getting into things, and Cecil had a small steel trap. And he set that trap right there by the hole where whatever it was couldn't miss it and wired the end of the little chain to the propane pipe. And in the middle of the night, we heard some rattling and banging and going on, and we both jumped off our cots, and went in there and we knew what it was before we ever got there because you could smell it. [John laughing] And it was a skunk that had gotten in that trap, and he was still fighting the trap and looking at us too and we were trying to stay back where he couldn't spray us. And we had one of those old pump firing extinguishers; they've outlawed them since then because when you pump one of those on to a fire, the flames converts that liquid into phosgene gas that can kill you of course. But he went and got that thing, and he pumped that skunk with and not only, well he shot the skunk before he sprayed it, he shot it with his pistol; I'm glad he didn't hit the propane line. I think that lead bullet would have just splattered it if it had [unintelligible] steel pipe. Anyway, he pumped that skunk all over and around it and luckily the skunk, he might have tinkled a little bit, but he didn't really spray. And the next morning after we went back to bed, just left the skunk, and the next morning we got up and went back into the kitchen and there was no smell of anything left, the fluid from that fire extinguisher had killed the smell. He unwired the trap and took the skunk out. There's a few things like that happened sometimes.

JOHN: Well, tell us about after you, you said that it was time for your son, I believe, to go to school and you -were out on the Jornada, so you were too far from town for that to work out. And so, you had to resign from working at the refuge. So, tell us what you did after that for work.

TOM: Well, I went to work at White Sands in the liquid propellant branch. And I was on the acid crew, and we would get train cars loads of red fuming nitric acid. And we'd have to go out and transfer it with pressure from the train tank to a tank on a truck. And take it back to the fuel area and then transfer it into the big tank there.

JOHN: And what was that nitic acid being used for, part of the propellant?

TOM: Yeah, it's an oxidizer.

JOHN: Okay.

TOM: It provides the oxygen from the actual fuel. And in the summertime when we get those rail cars, we had to wear those, I don't know what they were, plastic of some kind, full suits with rubber boots and gloves up to here and head masks. And to keep us cool while we were working, we had coveralls, big, baggy coveralls that were made out of the same material as towels are. And they'd spray water on those, which made them weigh about 100 pounds. And you were already sweating something terrible; we didn't have many fat guys working. [Everyone laughing]. And they'd spray that to keep you cool while we were working, and it helped keep you cool alright, but it wasn't that cool in there inside that suit. And anyway, the doctor took me out of that section because one time we were disposing of some old nitric acid in a little pond of water and we dumped the acid in that pond and then we dumped big paper bags of bicarbonate soda to neutralize it, but there were still a lot of fumes coming off of that. And I breathed too many of those fumes and I had to go over and sit down in the weapons carrier to try to get my breath. And I felt like when I breathed in, the air would just go down about his far because my lungs were filling up with water. And after so long of sitting out there, I finally got to where I could breathe real good, and I went to the clinic after that, and the doctor took me out of there. And the guy in personnel was going to retire me, and I thought good Lord, I don't have enough time, I can't retire. So, I fought him about it, so he finally decided to send me to the motor pool for the time being and then the advertisement came up, they were advertising for an opening for a civilian game warden and I applied for it. And as luck would have it, I had already, on my own to try to prepare myself, I'd taken the, what is it, the federal aptitude test for college graduates, which I only had a year of college. But if you passed the test, you were eligible for a GS 7 grade as Park Ranger or [unintelligible]. And luckily this eligibility requirements for the job included passing the federal test. And I had to compete with two college graduates that also applied for the job, which they would have been more fortunate than I was because if they had gotten the job, they each had gotten a promotion because they had a diploma, which I didn't have. But anyway, I got hired as a military game warden, not military game warden, but White Sands game warden, and they gave me a Staff Sargent MP for an assistant. And I was a White Sands game warden for six years, very little enforcement work to do. Whenever we found someone, I'd let the Sargent fill it up because it had to be done on a military police form anyway. And [unintelligible] into, I forget what they call the court, but there was this court judge that come out to White Sands once a week from El Paso. And it was classified as a misdemeanor anyway. But anyway, worked at that, after six months they transferred me to post engineer as the White Sands game warden. [Unintelligible] there to the wildlife program, such as it was, because they had a

new Army regulation have on it that they would have a civilian game warden. And so, I fell there to having to help plan the, they had an interagency meeting at the Game Department every year [unintelligible] and everyone at Forest Service, and everyone else all attended to set the limits on various areas in the missile range and other areas outside as well. And I had to attend that meeting and argue with them a little bit every year because they always wanted to put more permits on there than I wanted to have. So, I'd go around and around with them a little bit, but we'd finally get a happy medium.

JOHN: So, what kind of, deer hunts?

TOM: At that time, we had three deer hunts a year, once on the San Andres for the refuge and that included parts of White Sands south of the refuge to the highway. What they call the Lena Cox area, that was the old Lena Cox Ranch. And I had to attend that meeting and when we had the San Andres hunt, then we had to hunt on the Oscura Mountains and the upper San Andres hunt that was in the Rhodes Canyon area. And that deer hunt went about as far as [unintelligible1:21:18] Gap to the north, I think it was Sulphur Canyon on the south. And that was the biggest, well actually the Oscura took in an awful lot of country too, but we had to those three different hunts. And on the military, we didn't have to do it on the refuge, but on the military, they put a requirement on us that the hunters would have to be kept in campsites. So, in a case of an emergency, the hunters could be evacuated, and we'd know where to find them, because they were all in the camp at night. And so, every year I've get a whole slew of plywood that was about this wide and that high and white board, like cardboard, and two by two stakes and put direction signs at the intersections everywhere and campsite signs indicating which ones were down this road, which ones down that road. And then I got down the road and I'd have post at other campsite, going in and then another one right at the campsite, which turned out to be a lot of work. And on the outskirts, we stayed, they had two [unintelligible@1:23:26] in the end there. We slept in the back one and the front one was the check in station and the dining area and the kitchen for the Oscura hunt. And I had to make arrangements to begin with to have an ambulance onsite and to have a wrecker onsite. So, I had to write letters to the different organizations on White Sands and the range control to make sure that there were no firing in the area because the Oscura hunting included what they called the Red Range Firing Area that was a target area for fighter planes that came out of Holloman, not Holloman, but Kirtland in Albuquerque. They'd fly down in the fighter planes and do target practice in that [unintelligible@1:24:49] area. And I had to make sure that, that wasn't going to happen. And I'd make arrangements for potable water, and I got one of these big steel wire spools that they have cable on them, and I'd set it outside the building and got a thousand gallon water tank and got engineers to put a fitting into the bottom of it and run the pipe inside the chow hall and had the water tank setting on that spool, so we'd have water pressure. And I'd have to remember to turn that thing off and drain it in cold weather after the

hunt; the cold weather would freeze it up. And I also had to make arrangements for propane to have the propane tank filled there at the hunting lodge.

JOHN: So, were the hunters cooking their own food and all that kind of stuff?

TOM: One of the guys, Frank Smith, was an employee of the Game Department as a regular warden. But they would allow him to work as cook at the camp there and all of the employees of the Game Department and the students that they hired to work the check station, and the range riders and myself, all eat in the chow hall.

JOHN: So that was for all of you guys, and the hunters were on their own basically.

TOM: Yeah, when they got to camp it was up to them, they could eat [unintelligible@1:27:33] rations or whatever, sea rations, whatever they had, whatever they brought from home. And they were on their own when they were there. But just making all these arrangements and know [unintelligible@1:27:54] different places on the range that were suppling the stuff. And then at the last minute I'd contact all of them again to make sure that they hadn't forgotten the agreement that they made. So that part of the year was—

JOHN: Pretty busy.

TOM: Yeah. And like I said we had the services of a tractor from the Fish and Wildlife Service because all the ranchers around the area accused us of having [unintelligible@1:28:32], their calves and everything else while their calves were trespassing on [unintelligible@1:28:41] range.

JOHN: So, what did you do after you were the game warden?

TOM: Well, I fell there to the same job, other than the law enforcement [unintelligible@1:29:07] was out of it. But all of the rest of it, I took the engineers with me, which was very fortunate because they had a lot more budget and I could get things there. They built me a stable down there and released horses, well a horse and a mule, pack mule for a while. They finally bought me this Appaloosa saddle horse and a mule; it was a pack mule and a riding mule both. And so, they built me a hayshed and I had a saddle shed there, and I was able to get twelve of those [unintelligible@1:30:22] water units with the inverted [unintelligible@1:30:26] on the top. Which a lot of them I'd have to call engineers and get them to haul water to them because it didn't always rain enough. And a lot of times I'd tried to put them by a natural pond that was already there, or a ranch pond that had built. So, when the pond went dry, they could fall back on the on the water unit. And they seemed to prefer nature's water better anyway, but they'd drink them dry. And I had those twelve and I had thirteen windmills that I had to keep track of and check any minor repairs like the [unintelligible@1:31:28] or something like that have

to be replaced, I could do that myself. But that was another thing about being an engineer is all I'd have to do is right a work order and they'd send a couple of guys out to redo a well, to pull it and replace the [unintelligible@1:31:55] or whatever that needed to be done and sucker rod or whatever. So, I had those done and I had a bunch of dirt tanks, some of them the CCC's had built, and they really built some good tanks. They really engineered them, because they would build a smaller tank before the big tank and when the water started running, it would get in the small tank first that would collect a good part of the silt and then the water would pour out around the edges, the little one into the big one. They really knew what they were doing. And they built some good roads up there, dirt roads, that the rock on the outside is still there and they put ditches down the bank side with culverts that went underneath so that the rainwater would go there, and those roads are still there just as good as they could be. I'd also have to put out a work order every year to have all of the dirt roads in the up range area, of course the refuge I didn't have to fool with it but have to do all the up range dirt roads that went into these various hunting areas.

JOHN: Were they doing any of oryx [unintelligible@1:34:11] in those days, were you doing that too?

TOM: Oh yeah, yeah. I was there at the first planning of the oryx. And what they did, the Game Department Game in there and they used an old existing ranch fence as much as they could, but they repaired it where it was like new and where there wasn't one, they built a brand new fire strand, BLM approved type of barb wire fence. And all this came back, these two fences came back to this spring that was in the upper end of the canyon. And the Game Department told me, "Well we can contain that because they will not jump the fence." No, absolutely not. Well, they brought the oryx in and there was a huge mesquite bush there and clear to the ground. And they bought the oryxes in horse trailers and released them right there at the spring. And the first oryx took a look at that barb wire fence and he charged that, and I think it was somewhere between the second and third strand, he dropped his head back and went there and that barb wire slid right down the top of his horns and he [unintelligible@1:36:32]. And another one took a look at that mesquite bush, and he just charged right through it and the same thing, he went through it and held his head up and that mesquite just slid down on top of his horns, and he just waded through the rest of it.

JOHN: And away they went.

TOM: They'd go anywhere they want to go. And now they've got oryx everywhere, south towards Texas, all over that ranch country.

JOHN: So, are some on the refuge too?

TYLER: Quite numerous.

TOM: If there was any way of proving it, it'd be surprised at how many ranchers have a feast of oryx meat every so often and just bury the evidence.

JOHN: They are good to eat, I know that.

TOM: That is the best, absolutely the best wildlife meat I've ever eaten, and I've eaten a little bit of everything. I've even eaten mountain lion because a young trapper at the time was staying with me, and I was staying at that little house that had been built for the guy that was filling the water trucks when they were building the highway up through the range. I was living in that house, that was all week long and this trapper was staying with me, and he caught a big ole mountain lion just west of the house there. And killed it and brought it back down there and he had to skin it and turn the head and the skull.

JOHN: He had to turn it in?

TOM: Yeah, turn it into the Game Department.

JOHN: So how did you like that? I had some one time in Arizona, and it was actually pretty good.

TOM: Well, it was very good, it had no odor about it. I went out there and got a looking at that lion after he skinned it, and he had a nice little back strap on him and tenderloin.

JOHN: Like you say, no odor, had a really mild labor. And what happened to me, I was going to school at Northern Arizona University of Flagstaff, and one of my professors brought in this piece of roast in tin foil, aluminum foil. Said, "Here I got something for you to try." And he wouldn't tell me what it was. I asked him what it was, and he said, "I'm not going to tell you," he said, "just try it." And so, I did, and it was really good. Then he told me, they had a mountain lion hunt, they probably still do in Arizona, and he had gone out and shot one and I was amazed at how good it was.

TOM: And the meat, raw is just nice and pink colored. The only objection I had to it, when you cut the tenderloin off and fry it, it has a tendency to be pretty tough. But if you cut it up in stew meat and put it in a pressure cooker, I mean you can tenderize it and it is delicious. Of course, the crew down at Rhodes Canyon Station, they had an installation down there that had engineers and telephone and maintenance and all of this there at Rhodes Canyon. When the crew down, engineers found out about having some mountain lion to eat, you can imagine all of the comments. And no telling how far their comments went from there, but that's one of the things I had to live with. But they were a good bunch of people

JOHN: So, did you retire from working at White Sands?

TOM: Yeah, well yes, I retired with; I've always thought it was grossly unfair that every poor employee that uses his sick leave just as fast as he gets it, and always has a Monday morning fever, and the person that keeps sick leave, doesn't get paid for it when they retire. They only give you that much longevity on the end of your regular time, so I wound up with thirty-two and a half years, but I left engineers.

JOHN: Okay.

TOM: I had worked all those years, had twenty years with the responsibility for the wildlife program, when I was still game warden I even the write hunting regulations for posts and things like that. But I'd work at that for twenty years, I was still a GS 7, now the job came in I think as a 6 and they raised it to a 7. And I had worked for fourteen years at the top of my grade without a promotion. And I put into civilian personnel for a promotion to GS 9. Well, they sent it down it post engineers and the civilian that was the assistant post engineer to the Colonel that was the engineer, he shot it down, everybody else passed on it; my boss, everyone else, they all passed on it and that one guy shot it down, "No I want that to stay at the position it is." Well, I just transferred back to the post marshal's office filled the opening they had as range rider and worked as range rider for the post marshal the final three years. I said, the hell with it if I can't get a promotion.

JOHN: Did you get promotion, higher grade as a range rider?

TOM: No, that was a regular 7, but the supervisor was a 9 but the range riders were 7's.

JOHN: Tell us, you've done a great job here, really appreciate all of this that you have shared with us. But again, somebody reading this transcript in the future will want to know what the heck is a range rider, so explain a little bit what those guys' job was.

TOM: Basically, their original job was removing trespass cattle. Later on, that was still one of their duties, but they also [unintelligible@1:46:26] to delivering notices in the extension of the missile range. They have an extension area that goes up almost to, I can't think of that town.

TYLER: Bingham up there maybe.

TOM: Yeah, but way past Bingham, up through all those ranches up—

TYLER: Almost San Antonio or north.

TOM: I can't think of the name of that town right now, it's on that next, well actually it's the only highway that goes east and west besides the one on the north end on the missile range; it's the next highway up and it's a long way up there. Anyway, that's an extension area, and then they had an extension area on the west side of the missile range. So, when they fired a missile, the people had signed agreements that they would get off and stay off

until the mission was over and then they could return to their homes. Any damage done, any livestock killed, anything that happened—

JOHN: So, it was kind of like a buffer zone, but it was private land.

TOM: Yeah, it was private land that they had an agreement on.

JOHN: Okay.

TOM: And the range riders fell there to delivering evacuation notices to each and every ranch. Now some of them, some of the ranchers lived in Socorro and they owned ranchers out there, but you still had to go—

JOHN: Had to go notify them.

TOM: So, they wouldn't be going out there. And it took three of us to deliver those, one on the west side, one through the central part of the, the name of it was the 'Yonder Area', they called it, White Sands called it that. And then they had one on the east side that had to deliver notices over there. And then at the last moment, if it happened to be 10 o'clock at night and they wanted to cancel it so they wouldn't have to pay those ranchers. Here we'd go, we'd be out at 2 o'clock in the morning delivering notices, going around knocking on doors or leaving them in mailboxes or whatever. And when there was snow, a foot deep up in that area, or even had to deliver them by helicopter

JOHN: Wow.

TOM: So that wound up being one of the major jobs. And we also had to patrol the area down here where the supposed cash or Spanish gold that was hidden in Hembrillo Canyon. We had to patrol that all the time running trespassers out of there.

JOHN: Treasure hunters.

TOM: Yeah, treasure hunters. If we caught anybody actually in there as far as down in the canyon; they called it Victoria Peak, but actually all it is, is a peak at the end of a long ridge that connects to another ridge that separates two canyons. And if they got that far, you'd have to pick them up and haul them into White Sands. And they'd have to agree to appear in court and so forth and so on, or I think they'd fine them fifteen dollars, some stupid amount. We'd spend five hundred dollars flying and patrolling and carrying those guys back into White Sands and then they could mail in their fine. What a boondoggle that was. But anyway, that was a large part of the job, was delivering those notices. And we'd do a certain amount of fence mending where the ranchers would tear the fence down so the cattle could get in.

JOHN: And some of that free government land back.

TOM: And we'd have to put it up and tie it all back together.

JOHN: So what year was it, after you did that for three years, what year did you retire?

TOM: I retired in September of 1984.

JOHN: And you worked at the refuge for about three years.

TOM: Right, almost exactly three years.

JOHN: Okay. And that was in mid-50's?

TOM: Yes.

JOHN: Okay. Well, you've achieved all my expectations here and hopefully Tyler's, and I'm sure Laurie will be pleased with this.

TOM: We've got to keep Laurie happy.

JOHN: Yeah, I can see where that's important.

TOM: She is a good little woman.

JOHN: So, I want to thank you for spending this time with us, really appreciate it.

TOM: I've got a lot of free time. I usually go to the gym, this is one reason I put it on Thursday, I try to go Monday, Wednesdays, and Friday. I'm not trying to do any body building, [John and Tyler laughing] I'm just trying to stay limber.

JOHN: That's right, well it's important.

TOM: Because I learned real quick it's impossible to build 90 year old muscle. [John and Tyler laughing] It just don't happen. So, I go down and work the butterfly machine and this stuff.

JOHN: Well, it's good, that's why you're 90 and still going.

TOM: Yeah, I had a triple bypass in 1988.

JOHN: They must have done a good job.

TOM: Well, I was manager of sporting goods for Walmart, I decided to go to work for Walmart because I never had an inside job before in my life except the time I spent in my office when I'd come in on Friday evening and make up my diary. Well, it wasn't actually a diary, it was activity report that I'd self-inflicted on myself. Because I wanted a record of what I'd been doing on these days, and I took that into my boss and [unintelligible@1:55:22] and gave it to him. And I had the greatest guys for bosses that

anybody ever had. They said, “I don’t know what the hell you’re doing, but as long as you keep me out of trouble [unintelligible].” Which I did. And I found out a long time ago, truth is one of the greatest things that you could use. If I fouled up, I’d go right straight to the Colonel that was the engineer chief and say, “I messed up, this is what I did but I won’t happen again.” And they were very forgiving.

JOHN: That’s great.

TOM: And I found out I saved myself a lot of grief by doing that. And it’s definitely been a good policy for life.

JOHN: Well thanks again, I think we’ll call that a wrap as my son in the TV business would say.