

BIOGRAPHICAL SUMMARY: Walter Brown “Terry” Quisenberry Jr

Terry Quisenberry Jr. was born in Honolulu, Hawai‘i at Kapiolani Hospital in 1949. As a young doctor who specialized in communicable diseases, his father moved from Missouri to Honolulu in 1947. Terry attended school in Hawai‘i and began volunteering with at Haleakalā in the late 1970s. He eventually became the first volunteer coordinator for resources management at the park.



Walter Brown “Terry” Quisenberry Jr., April 2021

INTERVIEW INDEX: Walter Brown “Terry” Quisenberry Jr

BIOGRAPHICAL INFORMATION [00:00:00 – 00:05:13]

Birthplace; parents; move to Hawai‘i

INTRODUCTION TO THE PARK [00:05:14 - 00:10:47]

First trip to Haleakalā

EDUCATIONAL PROGRAMS [00:10:48 - 00:14:31]

Volunteer groups; outreach

FENCING [00:14:31 - 00:40:19]

Fence maintenance; brushing; fence design

LAND ACQUISITION [00:40:19 - 00:49:31]

Waikamoi preserve; Haleakalā land holdings

PARK FEATURES [00:49:31 – 01:06:38]

Key sections; favorite areas; protected places

EAST MAUI WATERSHED [01:06:38 - 01:12:25]

Development and establishment of Maui watersheds

PETROGLYPHS AND PICTOGRAPHS [01:12:25 - 01:20:11]

Petroglyphs in the park; Nu‘u and Ka‘apahu land holdings

RESOURCE MANAGEMENT AND RECREATIONAL ACTIVITIES [01:20:11 - 01:25:06]

Relationship between resource management and recreational management

VOLUNTEERING [01:25:07 - 01:40:53]

Programs; tenure as a volunteer coordinator

REFLECTIONS [01:40:53 - 02:11:37]

Special moments; contributions; future directions

ORAL HISTORY INTERVIEW
with
Terry Quisenberry (TQ)
April 17, 2021
Via Zoom
Interviewed by Alana Kanahale (AK)

AK: So I think to start off, would you mind giving me your full name and where you grew up?

TQ: My name is Walter Brown Quisenberry Jr. I was born in Honolulu, Hawai'i at Kapiolani Hospital in 1949. And I see father's ancestors, mother's ancestors, did you want to [ask about that]?

AK: Yes, if your family has any connection?

TQ: We don't have a connection. We are not Hawaiian. My wife's family is Hawaiian. But my father came in 1947 shortly after World War II to help an outbreak of sexually transmitted diseases. He was a young doctor that had been drafted during the war and moved around several different hospitals. He'd become an expert in communicable diseases, and so the job opened up here in Honolulu. And so he came out and liked it and stayed. And so then I was born a couple of years later. And that was how we came to Hawai'i. He was from Missouri. The name is English. Maybe going back to German, but that would be a long, long time ago. We're basically Irish, Scots, Cherokee, very small bit of Cherokee.

My mother's family were Mormons from Utah. My grandfather had moved to Los Angeles where they lived and married my grandmother, who was Scots, mostly Scots. So that's my background.

I went to a Mānoa school, we lived in Mānoa and went to another school and several other schools and I eventually graduated from Roosevelt High School. I've lived mostly in Hawai'i. I had two years of high school in upstate New York, strangely enough, and that was interesting seeing winter and the whole change there. And I went to a semester of college in Oakland, California, and came back and went to UH So does that cover it?

AK: Thank you. Yeah, that covers it. Thank you. And would you mind maybe talking a little bit about your first trip to Maui or your first trip to Haleakalā?

TQ: Well, the first, first trip to Haleakalā I don't remember much of because I was a very small child. I do remember a long, long drive with a friend of ours and going up and seeing the place and being very impressed and I remember the road being a lot more winding than it is now.

And then we moved to Maui in 1975 from Honolulu. And my first trip into the crater was 1978 with some friends who had gotten a cabin, three cabins in a row. We got the grand

slam. We got Kapalaoa, Palikū and Hōlua. So it was a wonderful thing and we were young and vigorous and so it wasn't too hard. And so that was my first trip to Haleakalā and I was so impressed and I was just so kind of in love with the place.

My wife had gotten me started on environmental things, Sierra Club and native plants and that type of thing, and since Haleakalā fit into that so well, I started coming up as a volunteer. And so it was in the late 1970s that I started volunteering at Haleakalā, mostly in weed control, we were doing a lot of pine tree eradication, which is basically pulling them out of the ground, chopping them down and cutting them up, just kind of getting them out from where they invaded from the Hosmer Grove side up on the north boundary. And that was something you could do---it was a day trip type of volunteer project, and so I started doing that.

I was working with Ron Nagata at the time. He was also a volunteer at the time. And as the program, the resources management program had evolved there, Ron was hired as the main person and he started everything going. There's been a lot of volunteer trips and there were places to house the volunteers that would come from O'ahu. And so they'd come up and they'd chop down pine trees, mostly Monterey pines, just don't stop coming, and so we would spend a lot of time and clear. Just take them out of different areas. And at the same time learning the native plants, learning the ecosystem and the way that they fit it into the ecosystem. So it was a great educational thing.

And eventually, once Ron was on board, he said, "Okay, now you've been organizing volunteers for a while, so why don't we give you a job doing this?"

And so I was the first volunteer coordinator for resources management and we'd worked in a lot of other things to, you know, we helped maintenance too, flying presto logs into the into the crater was one of the jobs that we did. And Ron, I'm pretty sure, was the one that innovated first using the helicopter to get things done because it had been done on horseback up until that point and putting kiawe logs in saddlebags and taking a train of horses down there to supply the cabins and firewoods was pretty tedious when the helicopter could pick them all up and drop them off in front as long as well as a person to load them all into the back, and that was a great improvement to the thing that they had up until that point. So we helped out with that. And whatever other things they had going on.

Mostly the volunteers worked in the front country, which is the area you can drive to from the crater summit down along the edge of the crater to the boundary down to Hosmer Grove. And you know, anything from rolling rocks off the road to walking through areas and hunting out the pine trees and some of the other weeds that were there, the Scottish thistle. And we've had a number of different weeds show up that are quite terrible; it will take over things. As well we had an influx of rabbits, at one point somebody dropped off a whole bunch of rabbits. And so that was a major focus there for awhile, was getting all the rabbits out of it initially.

AK: Initially, where were the volunteers coming from, where they coordinated groups, or were they just community members?

TQ: We had community members a lot from the Maui Sierra Club. We had a few other groups—Boy Scouts, wanting to come up and get merit badges. We had individuals that were just interested and wanted to come up just because they like being there. And there were also groups from Honolulu that originally they'd been the high school hikers, like Lauren Gayle, many years ago, and then they'd grown up to be adults. And so then they would come up with the group and stay in the cabins and do different types of work there.

Also, I mean, a lot of what's happening with ecosystem restoration is weed control. And so they come in and they'd pull Scottish thistles and they pulled fire bush and that sort of thing and take out whatever the problem was at the time, you know, and even I don't remember too many plantings, but they did go in and I would also volunteer to take volunteers in and we'd just do cabined maintenance, we'd scrub the walls, we'd paint, we did whatever needed to be done, even trail maintenance. That was usually maintenance job. And they did a great job on the trails. But we would do that and then monitor things like the vespula wasp that was coming in. That was something that had to be watched and things like the water, the water coming into the water tanks off of the roofs, it wasn't always that clean and so we would have to be sure that it was okay to drink and for people to use. So there's a number of things that were needed that volunteers were good, good for.

AK: Were most of the volunteers there for day trips or was it kind of an extended...

TQ: Most of what I did was day trips. I would organize other trips, and sometimes we'd even have groups on the mainland that would write to the National Park and say, you know, what can we do? We'd like to stay in the cabin and we're happy to do some work. And so then they'd organize that and maybe, maybe not have a staff member. I think usually there was a staff member. In fact, there always was that would go with them and show them what to do. We'd see that whatever materials they needed would be flown in because it was like pretty much weekly helicopter operations that we would have them from and then move things around, take things out, take out trash, drop supplies off for fencing or whatever—it was pretty frequent. And Ron organized most of that and it was a godsend. You don't want to be carrying a roll of barbed wire, let alone a roll of hogwire there; it's just too heavy. People would get hurt trying to carry them. So we couldn't have done the fencing without helicopters.

AK: And the fencing was not typically for volunteers, that was done mainly by staff? Fence Maintenance and the building of fences?

TQ: Well, it was RM staff. They had their own fence crew for a while, and then they realized that we've got many, many miles of fence to build and we can't hire enough people to do this. And it's pretty much skilled work. This isn't something that just anybody can do. And so, they ended up getting fencing contractors to actually do the initial fencing. And then once that was done, then they had a crew that they could take care of problems. You

know, if there was a landslide or break in the fence or some vandalism or whatever, they'd send their crew out and then they'll take care of.

But it was over thirty miles of fence and some of it in treacherous places that you wouldn't want to go and building a fence in that is pretty nasty, sometimes. Wet, cold, in the wind and the rain, and you got to do it five days in a row.

So, then they pretty much got the fence in and the fence that they were building was four-foot high hogwire with a strand of barbed wire, maybe two strands of barbed wire, at the top, and that was to control goats and pigs. And then eventually they realized they found a bat hanging from one of the barbed wire. They said, oh, we can't do this. So, they took down all the barbed wire and just left it, left it without. And that was, again, miles and miles and miles of just clipping the barbed wire and either rolling it up or just finding some way to deal with it. But to protect the bats, the Hawaiian bats.

And so that was the initial fencing and it was basically the surveyed boundary of the National Park. First it was conceptualization, then it was survey, then it was an archeological assessment making sure that nothing was going to get undone, an archeological factor that was up there. And so then they would move the materials into place with the helicopter and then the crew would come along and put it all in. Of course, they had to measure so that they know where to put everything and what to put where, and going out there and doing.

And the actual fencing was pretty hard. I mean, this is not a lot of mechanization. Mainly, it was when you were in solid rock. . . . Here, I have a few props here. When you're in solid, right, they had a rock drill. This is I don't know if you can see this. This is the bit of the rock drill. You can see it's got a puka right through the center. This was a gas powered drill that this thing rotated and then the exhaust from the engine would blow right through the center of the bit. You see the puka there? It would blow through that and that would blow all the chips out of the hole. Theoretically it worked. But these are cantankerous, not much fun to use heavy machines and the bits would get stuck in the ground and if the rock was shattered, it would pinch and then it would stop the bit. And you couldn't pound a post in or drill a post in. You'd like either soft terrain or you wanted very solid. And so eventually they use that and then they also had a thing called it a core bit or a core bit drill, and I have one of those too. And this is what the bit looks like. You can see it just cuts right around this edge. This is a diamond. And it had to be. Can you see it? There it is.

AK: I can see it now. Thank you.

TQ: Yeah. And you see, it's got these teeth. These are these are diamond impregnated steel. And so this rotates around and it'll cut right down into the ground as deep as you want to put your post in. And then, the thing with that is, you're only cutting the outside of the hole, so then you got this in the center of the hole and you need to snap that off and then you can slip your post in. So we had them for two different sizes, we had them for corners and brace posts and then the posts that were in line with the fence were smaller

and so than that was this bit. And these are stone cores that were taken out of the holes. Do you follow?

AK: I do, thank you. The visuals help a lot.

TQ: Yeah. And so that that was how you would get through the solid rock. And there was a lot of innovation as you make a fence. And so you have to kind of dream up how you're going to make this work. And even to the point of if you drop your post in one of those holes and the tension on the wire is up, you have to find a way to glue them in there so that they don't pop out. . .

AK: That makes sense.

TQ: . . .while they're floating around in the air. So anyway, that was one of the things that we came up with and the thing with the core bit is that you had to have this thing running, and this was a different engine, it was not the same. The first one I showed you was a Swedish make and it was called pionjar. And those are really good. But I had a hard time keeping them running. They would go and then they'd die, and then they'd go, and then they'd die. And then so this other one was a much better one on a on a lighter frame, but the second one needed water. And so you had to have one of those military backpacks with the hydration system from Iraq and—sorry, phone (phone rings)

AK: No problem, if you need to answer it, that's okay.

TQ: No. You had to have a gallon of water for each hole that you drilled with the core drum. And so you would be holding there the thing with the engine running and you turn on the water and made sure it was running down, and then you start your hole and you'd had to have a mixture of enough of everything because these diamond bits will burn up if they don't have water to keep them cold. And so you had to have that going too. And then you go on to the next hole and the next whole and the next whole. And that was how you work your way down the mountain.

AK: And those were suitable throughout the terrain at all elevations.

TQ: Yeah, well, most of the time you could pound them. But you pounded them by hand and so your pounder was maybe 30 pounds and it's just a piece of pipe that fits over the post and with the stopper on the end. So, you just banging in, hearing protection, of course, just bang it. And you would find ways to make it go because drilling wasn't that much fun and so drilling was your last resort, but it had to be done in many places. Sometimes you have to drill ten or twenty of them in a row. So, it's kind of tiring.

AK: Yeah, it sounds like it. Could you talk a little bit more about sort of the planning process behind the fence building and then the final design? I know you mentioned it had barbed wire and I imagine you had to take into consideration the pigs and the bird flight path and so on.

TQ: Yeah, well, it took a lot of research and development as to what was going to work to keep the goats under control because we were trying to keep goats and pigs under control, keep them from coming in, that we had a reservoir of animals that would continue to come in. The Park had had a hunting program for many, many years. And it was basically just, you know, slowing down the flow of the animals coming in from all directions. And so, the fencing was to just to control the population inside. And so they went through a series of different types of fences, they tried barbed wire, the goats went right through it. Pigs hardly noticed that it was there. And then they tried electric wire and that was about the same. It just didn't do anything. So then they got onto the hog wire, which is a mesh. It's six-inch squares. And then as it gets closer to the ground, it gets down to two by six-inch squares. So that it's graduated, and so you shouldn't be getting anything coming through there and that will also adjust to the terrain as you have been, and hills and valleys and things that you have to move along. So, you can if you stretch it from a long distance, you can pull it down to each post and keep it nice and tight. And then frequently we have a strand of barbed wire at the very bottom where it wouldn't be bothering the bats, but it would be there to poke anything that wanted to squeeze underneath like a pig. And so this would be nominally four feet tall, and that was enough for goats. And, so that was, you know, they multiplied the number of miles that they had of boundary and figured out the materials they needed.

And then the superintendent at that point was Hugo Huntzinger. And he was the hero of getting the funding. He went to Washington. I don't know how many times begging for the money to get this thing going. And he was quite successful. And so I think it came in pieces. You know, Ron would be a better one to tell you how all that worked, because I was the one that was just using the materials that they got. And so but it would it would arrive. We always had material. And so then it was staffing and volunteers that would do it.

So the part of Haleakalā that you drive up to where the ranger station is and then up to the to the summit, that's known as the front country. And so we did a lot of our research and development in the front country because you could get to it. You can make a day trip and you could use volunteers and day staff. You wouldn't have to have a whole camping trip organized in order to go out and see whether or not the electric fence worked or not, that you could do it right in your backyard because there were goats right there and pigs. And so we were able to figure out what actually worked, how did we get the things built and then the National Park had its own crew that went out and worked on it. And it's tough work, and mostly intellectual type people that understood the value of the ecosystem, but not necessarily people that had had grown up with a lot of exceedingly hard work. And so they, they didn't always last that long. And there is a certain training and safety protocol that needs to be followed in order to keep yourself in a job doing that sort of thing.

So as it came down, the contractors were a better fit as far as getting each section done. So this section would be two miles and we'll provide the materials and you guys can do this. And here so we have this camping gear. We have this. You supply the crew and your own food and we'll pay you whatever the agreed upon price was. And then they'd get it

done. And there were inspectors that would go out and look at it, make sure it was all going to work, and then go on to the next section and the next section.

Some of those places are pretty awesome when you go look at where those contract fences went. It's just like there's a few places that you hang on to the fence to climb down because there's nothing else to keep you and there's not enough traction for your feet and how they got the posts in the ground. They would be tied to the last post and then go down and drill the next one to put it in. And then they tie to that one and go down to the next and drill that and right on down the side of, you know, almost a cliff.

AK: How far are the posts apart from each other?

TQ: Usually about ten feet. Yeah, and so that was a lot of posts. And so you'd be carrying posts back and forth and trading off, drilling the posts and clipping them up, and stretching the wire and that sort of thing, rolling it all out. And most of this was done by hand, we didn't have a lot of mechanization. So the pounding was done by hand and unrolling the wire over a boulder strewn, barely walkable places, you know, did first go through and you clear yourself a path so that you could walk back and forth quickly and you could you wouldn't have to be going over boulders and rocks and that sort of thing. And that was the reason for the archeological survey to make sure you weren't disturbing anything.

And then once you had a reasonably level area to work, then you'd be able to unroll the wire and you'd be able to, you know, move your stretching gear right along—pull it up and clip it up to the fence and do all the things that you needed to do. Catch the places and water crossings, always where a challenge because the animals would just run right through when there was no water running, so you had to have something that would flap out and not just catch the water. And so there was a number of ways that people would do it. It's the first place that you go look after a big rain because you check the water crossing to be sure that nothing is washed away or that it becomes a strainer for all the debris in the water and we get big, big rains up at Haleakalā. And the ground is so denuded in some places that it all just runs right off. And that being, you know, one of the part of the ecosystem that's you're supposed to be draining into the purse, not off of the earth, and so once the plants start coming back, then they absorb more of it and things work better. But in the meantime, you want to keep from straining your all the debris out and catching it on the fence, and then you have a much bigger saile area for the to catch the water and to knock the fence over. So it's all part of. . . .

What I ended up doing once I'd get these huge conveyor belts. They're very thick and very hard, they're made out of the same thing as the belts on the engine in your car, only, they would be three feet tall and you could cut a piece of that and hang it out over the thing. And that way the water hits it, it just pushes it to the side and the water can run through and then it would flap back down when there's no water. So if you set it up right, it can work fine. So that that's one of the things that we use, but people have used, you know, metal roofing, different wings of pieces of metal that would flap and flap back down, but, you know, it's always possible that something big is going to get in there and

be right in the wrong place and hold the flap open or whatever. So they need to be checked after rough weather.

AK: And these were located throughout the entire park or were they mainly in the. . .

TQ: Well, whenever there is a waterway, you needed one. And if you're crossing the waterway otherwise, sometimes you'd find a natural barrier that you could fence right up to and then you'd have, say, a waterfall, and then you'd start the fence on the other side of the waterfall and you wouldn't have to worry. But the goats can climb really, really well. You had to watch those waterfalls and make sure that they couldn't come up the waterfall.

AK: During your tenure as the volunteer coordinator, do you remember what sections of the park were being fenced during that time or fenced off first, or maybe just the phases in the development of the fencing program?

TQ: Yeah, again, I think Ron would have a better idea of the sequence that went on, but it was a constant thing going on. And the Park crews did do some of the fencing there, they did. But then there were other sections that they were contracted out. And it was a sort of an ongoing process for several years. And I'm not sure what the time factor was on that, but I think they started--they worked their way up. We got the front country done and worked their way around the Science City, across the top—the very top—and then down Haleakalā peak down to Kaupō. And I'm sure it was a fence crew of the park that got the part across Kaupō Gap. Up Kuiki and then crossing over to the grasslands above Kīpahulu and then over Hāna mountain and all this took time.

And then eventually, in the meantime, I started working for the Nature Conservancy. But I still worked very closely with Ron as far as the fencing because we shared a boundary. And so we got talking and we realized that it would be much safer for the crew if they extended the fences down into the TNC land, and so we worked out the deal with that. And it was a much better deal. It was less wear and tear on the fence--I mean, the first thing was safety was just that if they followed the boundary, the boundary goes right down from the peak of Hāna Mountain straight across the Ko'olau gap. And was it just, not a straight shot down, but it was a very steep and it was also highly erodable. It was a debris bed on the side of a mountain that was just barely walkable. So the fence wouldn't have lasted well there. So instead, they came down on the ridge and then crossed over in Ko'olau and then back up the other side over by Halemau'u trail. And in doing that, they didn't have any crossings that you had to make with the hiking trails that are there. And they actually were able to protect maybe an additional thousand acres of land in doing so. So I thought it was a win-win for everyone. And and all through that, Ron and I worked very closely on that, and he is a prince of a man, so I just, you know, he couldn't have been more helpful.

AK: That's great. Do you mind, I'm going to share my screen to bring up a map of the fence just to get a better idea of the area? Can you see that okay?

TQ: Yes, okay. So, you see where you've got the red line by Ko'olau Gap there. That's where it veered from the real line to where the fence actually is. The one I just described. So that's the piece right there that was protected and made a lot more sense because as you can see where that green line and the red line merge over by the Waikau, the other side you. . . yeah, right there is a very treacherous, cliff. So it made much more sense to come down the edge of that and it was less prone to getting destroyed by erosion.

AK: And this is the Nature Conservancy border?

TQ: Yeah, well, actually, it's still owned by Haleakalā Ranch. But it is on a perpetual lease to the Nature Conservancy, 5,280 acres something like that. So, yeah, so they took in that piece right there and that was right about where the ecosystem changes. You can see the change in the from the point and the contour lines. And then you go down and there's green. That's right where the vegetation line changed. And it was it was actually tall forest. Over where it says Ko'olau and it was alpine shrubland up there where your cursor is.

AK: Got it. No, go ahead, sorry, so what were you going to say?

TQ: Oh, no. Just going on. Hosmer Grove—you can see there—that's actually outside of the national park boundary, that is also a deal with the Haleakalā ranch, actually, that that can be used and shown to people where Hosmer Grove is, is actually in Haleakalā Ranch.

AK: Can you talk a bit about the acquisition of Waikamoi and because I think that was that was around your tenure, right?

TQ: Yes, Waikamoi. It was the U.S. Fish and Wildlife Service at one point did an assessment of all the lands in Hawai'i and, you know, where the endangered species actually were and where the ecosystems that supported them were. And they did it with transects. They just drew a transect on the map and told their people, go follow that transect. And so they take a compass heading and head straight in through the, through the forest and, you know, try and stay on it as best they could. And so what they recognize was that that area, all the green there from the point by Hosmer where the green stops and it becomes whiteish to the other side, to the left. There you go. Right up there, from there on was actually the habitat for the po'ouli, the nukupu'u, the Maui parrot bill and several other, you know, endangered and rare birds. And the reason that they were so rare and endangered was because the main vector for, for hurting them was avian malaria, which was carried by mosquitoes. And the mosquitoes had not reached that elevation yet. They were still at 4,800 feet. And so, they said, okay, this is the hot bed. This is the great place that it has all of these things.

And so the Nature Conservancy picked up that data from the Fish and Wildlife Service and went and talked to Haleakalā ranch and they said, "You're not doing anything with this land here? Why don't you sell us a perpetual easement?"

And so the Ranch said, yeah, “Okay, good idea, there are a few things that we still want, we have a water intake there and there might be some planted trees that we want some redwoods and some pine trees that we may at some point want to harvest. But they're all up in the Hosmer grove area and they're not native anyway.”

So the Nature Conservancy went, “Yeah, okay, good idea.” And they started Waikamoi Preserve.

And at that point, the fence, there was a fence. You see the line that says Kilohana, they're back where but right by your cursor, if you follow that straight down into the forest. The other way. No, no, the other north, up north. Okay, well, that that line right there where the green stops is where the forest stops. But there had been a fence there, but probably not since the 1940s or so, and so that was my first job, was to continue that fence on down and at least get the cattle out of the forest there. So I built a hog wire fence that would keep the cattle from having access to that whole area there, which is where many of the birds are, the crested honey creeper, the Maui parrot bill. I once saw a nukupu'u there and many others, were right there, right there that close to the road.

And so I was I was able to build that fence and at least get the cattle out. There are still plenty of pigs and their goats were further up. More on by Waikau and Kalapawili. And they were all the way across the whole south slope there. So, yeah, there there were goats there and pigs. And if you go across the crater there. That the whole side on the south side, down below, outside, yeah, all that is goats, all that, the whole length of it both ways. It was the limiting factor in keeping the critter's out to to ,have the fences in, and that was the whole fencing project, was to protect the crater itself, the entire ecosystem there.

AK: What is the vegetation of Waikamoi? I know it's hard to tell on this map but about what elevation is that at, do you know?

TQ: I think it goes from about four to six thousand feet and it's largely 'ōhi'a forest, 'ōhi'a dominant. And a lot of other things that a number of. . . I'm thinking deschampsias and things that are pretty much unique in their own way to that section. And so they're completely worthy of protection. And it's a reasonably intact ecosystem there. There's still a canopy forest and pretty good water retention and the birds and everything else seems to thrive there.

AK: And you mentioned that you put in a hog wire fence, so the fencing design was a little bit different for the Waikamoi fence?

TQ: Well, the Waikamoi one, the hog wire was pretty much what was standard. And there's different grades of it, so we had to figure out which grades were the best ones and there there's some differences in it, and you don't always get it exactly right, but at least you got your post in the ground and you can replace the wire if you have to, and it's keeping the cows out. And that was---I mean, it's a surprising difference as you walk out there, because you can see where the fence was, because the grass goes on and on and on and

on and then, boom, next forest and there's, you know, within 50 feet, you've got a completely different ecosystem.

And it was once explained to me that there's a fire in the 1880s that actually burned across the forest up high, and it went on for a month or so, and all they could do is watch it because there was no way to fight it. And so they just waited until it got to the forest where it would burn out. And even now, when you're out there working on the side here where it says Kilohana, you still find charcoal out there. Yeah. It's still out there in the, just in the ground. It doesn't seem to break down very quickly.

So that was pretty much where the fire stopped, was right along there, and then the ranch would just build a fence right where the thing had stopped plants and grass, and then they had new terrain for their cattle. And that was pretty much the standard practice in those days, and, you know, they were doing it with the best of their knowledge that it wasn't anything. You know, we spend a lot of time these days undoing what seemed like a good idea a hundred or two hundred years ago, letting cattle go in the forest and put placing a kapu on them and letting goats go, because then the poor mariners would have something to eat when they finally got they washed ashore and after a shipwreck or whatever, because they knew how to eat a goat, but they didn't know how to eat a *tako* or whatever else, you know. And so. And anyway. So back to fencing, yeah.

(Laughter)

AK: Could you talk about maybe some of the key sections of the park? I know we mentioned Waikamoi and the crater and Kīpahulu and maybe some of your favorite areas in the park as well.

TQ: Well, you know, all the places are favorites. I like the front country just because it's easy to walk around and I feel very comfortable there. But it's like. . . . You know, it's an unforgiving terrain if it starts to rain and get cold and the wind blows, it's nowhere near as nice as when the sun is shining. But I just feel like when I'm walking around in those areas up there, I can just lay down and take a nap and feel like I'm just home. But it can still be very cold and it can still be very forbidding as well.

I love Kaupō Gap. I love Ko'olau Gap; I spent a lot of time there. Kuiki is a beautiful place right above there, yeah. All the cabins are fun, and every time you go in there, you see new things, you know, you look around and it's like, "h, I haven't seen the sun hitting that place like that. Wow, look at that." You know, and it's just there's always something really beautiful and new---it's, there's nothing gets old there.

And, you know, through all of this, you know, I came upon this being my wife, being an environmentalist and sort of teaching me about environmental stuff, and I was a hunter. I like to hunt. And part of the deal here was we were controlling goats. We didn't want the goats there. We didn't want the pigs there. So that made it a little more interesting as we were working on that.

AK: Were you able to hunt goats during your time there?

TQ: Yeah, whenever needed.

AK: Where was that?

TQ: Yeah. And I actually, you know, through the National Park, they had a hunting program for people there to hunt within the crater and actually the places that they hunted, they also hunted Waikau and coming out of Kaupō Gap, they would be hunting there. And there were places that were forbidden to hunt, inside the crater just for safety reasons. But Kalapawili ridge, the Hāna Mountain there, was a wonderful place to hunt goats and a lot of people came in on horseback to do that. And so I had I had a lot to do with just allowing people to hunt in those places and trying to get them to go hunt and telling them, you know, this is a program this is something that's been there since the 1920s to get these things out of here. This is not a program that we're trying to maintain these things. This is a program where we would like you to shoot every single one you have a chance to shoot and take them home and turn them into sausage or whatever. And so that worked fine. And then eventually once the National Park was contained, then it was time to take them all out and the hunting program ceased. And that was just the way it was. There are still animals on the outside and people still hunt them.

But what happened was that deer were brought to the island and the deer in the last twenty years or so have shown themselves and our little four-foot fences aren't necessarily big enough for them. They don't really like to jump fences. And so in most intensive purposes, the four-foot fence works for them, but you can't really depend on it. And so once the deer were an issue, we started making six-foot fences, which they have a much harder time getting over. And I've built several miles of the six foot hog wire fence and I have had no reports of deer getting over. So even though they're perfectly capable of jumping up, they don't because they would rather go under a fence, or they'll even push their way through it if they if they have the time and the fence and wire move. And so, they've actually come up with a different design of the wire called tight lock that you can't slide the wires back and forth.

So anyway, that's been the latest thing in the last twenty years of dealing with the deer, because the deer were actually brought here in the 1960s by the Department of Land and Natural Resources. And one of the reasons given was as a resource for hunters, but also there are better animal to hunt. There's more meat on one deer than there is on three goats and as well as they're supposed to stay in the lower elevations. And for the most part, they do, but not completely. We still found them up to about 8,000 feet at Haleakalā; they like the drier side. They want to be on the south or the west side. They're not so much in the in the wet places. And maybe I should say yet because they're still moving around and, you know, they're just showing up everywhere. So that's kind of a new consideration that the National Park has, is that their fences are possibly, you know, somewhat obsolete.

But that being said, that the last job I had was just outside of the National Park, by the way, if you go to, let's see, the left side of the screen by Kilohana. And where it says

front, I believe, is eighty-five hundred foot elevation. So from there, that's Haleakalā ranch land outside the Park boundary. And it goes all the way down from there, they actually own further up, but from there I built a fence outside of the six feet hardwire going all the way down to the highway. There was another two miles of fence there. So, coming right from go to the left with your cursor outside the Park right there, it starts about there and it goes downhill. Yeah, that will mark the other down more to the west.

AK: Sorry, let me unmute myself.

TQ: Okay, the top of the thing is north, right? And the left side will be west. Okay, so it goes down there and right where the turn is to Kilohana there's a fence there that goes down to the highway and that's one mile from there down. And so the next fence is from that switchback, the upper switchback, where it says makai to Kalahaku. Okay, as you leave the Park, the fence starts there and it goes down two miles toward the top of the screen. And then it goes right over to the boundary of the land that the State has just bought from the Von Tempski family—or actually from a man named Mr. Zwanstra. And they bought that and that will be State Park eventually. It's a big piece there and there's some great natural features.

So that was two miles of six-foot wire to keep the deer out that the National pPark doesn't have to build. And then it also comes all the way across just about to where Hosmer shows the turn up there. And so if you go off to the left with your cursor, that dark line is the road, I believe, so it's just right above the road and it continues on to where the other fence comes down. And so that piece is called Pu'u Pahu Reserve for Haleakalā Ranch that they did on their own. Being environmentalists, they decided that they wanted to be good stewards of the land and that it was something that they were ready to give up that grazing land in order to do the right thing. And so, they had the fence built. And I did a good portion of that. And it also doubled up on where the most likely place the deer we're going to come through the fence. So it did the National Park a lot of good there.

AK: Interesting. Thank you for sharing all of that.

TQ: Oh, yeah, it's been my life.

AK: I'm not super familiar with this platform, but I think if you hover your mouse over your screen, you might be able to see the cursor.

TQ: Can you see it?

AK: I can't see it yet. But there should be a little bar that pops up that says annotate towards the top of the Zoom screen, it should be a gray bar, might say share, pause share, view options.

TQ: There it is. Yep, got it. Okay, can you see me now?

AK: Let's see. Can you click somewhere on the screen?

TQ: Well, okay, if I click okay by Hosmer, the word Hosmer.

AK: Yeah, I can see that.

TQ: So did you see just the click or can you see the cursor now?

AK: I could just see the click there but you might also see there's other options if you want to put it in color or something. You don't have to, the click is fine.

TQ: Here, let me try a mouse. Let's see what this does. I'm wiggling it around here, can you see that?

AK: No.

TQ: Well, I know, and then I'm not the best person on technology.

AK: I'm not super familiar with this platform either. But I think if you just click, I'll be able to see, okay.

TQ: Alright. So, what else have we got to that? Where are we in the questions?

(Laughter)

AK: So right now we're on the features and resources of the park section, so what are some natural resources or resources that are unique to the park or critical to protect?

TQ: The ecosystem itself is about as unique as any in Hawai'i or in the world. There are as many rare and endangered things and unique things—mostly on the north side here on the upper part of the screen where the green is. Most of that up there is very rough and there's all kinds of great things in there, the plants and the ecosystem and so much of the birds are right there in that green forest. And that in itself, despite the fact that its watershed, and despite the fact that maybe we're going to need those trees and plants and animals for whatever in the future, they may have some property on a practical basis that may just save our lives.

I'm sure you've heard the story about Hawaiian cotton having that resistant gene that was able to save the cotton industry by crossbreeding with the cotton plants that had gotten a bad disease and that the Hawaiian cotton was the only thing that was resistant to it and was able to save the cotton industry.

Anyway, so, you know, we've got these things, you never know if you're going to have the cure of cancer coming through one of these things and it put itself there on its own, you know, this is what deserves to be there. This is not something that's been imposed on this ecosystem. This is an ecosystem that fits completely into this niche and it should be protected and taken care of.

And so that's my feeling why all this stuff needs to be there, not to mention the fact that it's beautiful and that you've got all these dependent pieces that need each other. It might be one small insect is the pollinator for something else that you want, and if that pollinator goes away, then the plant goes away. And if the plant goes away, you no longer have whatever properties or whatever is there, and that plant may feed something else that you want more of, or it may impart something to the soil that if it goes than the rest of it's going to be weakened or unusable.

Just on the basis of water, the Hawaiian ecosystem is like a sponge, it sucks the water, right? And then it comes out and we don't have a pipe going off to the Colorado River to supply us with fresh water. We've got to go to our artesian wells. And this is what feeds the artesian wells. And so that, you know, again, on a selfish basis, this is what we need.

AK: Could you talk a little bit about the East Maui watershed and sort of how that impacted the park and maybe the conceptualization of that?

TQ: Yes, I would love to.

AK: Oh, great.

TQ: Yeah, because when I was working for the Nature Conservancy, you can see the lines right below Ko'olau Gap, you see the property line---go north a little bit. Up a little more, up a little more like that line right there. That's the property line of the Nature Conservancy right there, you see it comes to a point on Hāna Mountain there by Kalapawili. If you go to the right of your cursor, you can see where it joins up with the National Park boundary by where it says grasslands, okay, where that line runs into there, that's the end of the TNC lands. And that goes right out to the grazing land of Haleakalā ranch.

And so, when I started in on the Nature Conservancy, they said, "We want you to fence that boundary."

And I was like, "But we're not getting the job done, the job is we need to protect this entire ecosystem because that's where everything lives."

And they were like, "Well, how are we going to do that?"

And I said, "Well you've got to talk to all the landowners. You got to get all of them on board. You have me by myself. I'm never going to be able to do all that by myself that's tough terrain and that's not even going to get the job done. We need to get everybody in there. We need the State of Hawai'i. We need Alexander and Baldwin, which is drawing the water off of everything and owns a good piece of it. We need the National Park because that's a continuation of their ecosystem that they're watching. These are all the same birds that are flying right into Kīpahulu Valley. And all this wet forest needs to be protected."

And so eventually they got talking about, you know, they started the East Maui watershed and that was through me saying, “Why are we going to fence off that little point of land there? It's not going to get the job done.”

So I was really happy to see that the watershed partnership got done and all the people stepped right up, got to work. And as it turned out, even one of my sons worked on the fencing in the Hāna rain forest there. So we had two generations working on it. And that's the whole green area up there, that's the habitat that needs to be protected, not just that little sliver that the TNC has control of. And luckily, everyone agreed that they needed to get in on that.

And so once that had shown to be a good thing—and it's amazing how well these different agencies work with each other. I just wouldn't have thought that it was going to be that good, that East Maui Irrigation, the State of Hawai'i, National Park, Nature Conservancy, Haleakalā Ranch, all just said, “Yeah, okay, good. Let's do it.” And they came up with the money and there it was. They got to work.

AK: So it was federal, state and private ownership all coming together to protect these resources?

TQ: And all of them realizing what they needed to do. And so once that was going, then they looked at all the other ecosystems that are being worked on and they said, you know, we need to do that again. And so they've got a West Maui Watershed Partnership and they've got other ones going on because there's a bunch of other things that are out there, ecosystems, that are being protected, the Pu'u Kukui Watershed, which I spent some time working with them as well, with Randy Bartlett and Scott Midale back when it was still Maui Pine. And it's still a viable eco-system going on there and the State of Hawai'i is doing a lot of work over in West Maui. So, it's wonderful to see these things taking place because I never would have dreamed it back when I got started on all this, we were like, let's take care of the front country and then maybe we can move on somewhere else. And as it turned out, it's been much bigger than I'd ever anticipated. So I'm very happy with that.

AK: Yeah, that's great to hear. Before I put the map away, is there anything else you want to talk about that's on here, fences or places of important connections?

TQ: Well, you know, one of the things I wanted to say that, you know, that the more I've roamed around some of these places up here, I find that there's almost---I don't think there's anywhere that the Hawaiians haven't gone, that they haven't been to and actually have an effect on. I mean, there's a heiau on the top of Haleakalā peak. They knew all about where Pohaku Palaha is, where you can see right where it says “Grasslands,” that's the piko of this island, of this part of the island, that's Pohaku Palaha. And so you can see the points of the ahupua'a and up there. And I mean, you get up there and you look down and you go, that's a long way to walk barefoot, to go with a ti leaf cape and to actually know the place and be able to point off in this direction and know it goes right exactly

this way. And this one goes right exactly over there. And that's your place, that's your place, and that's your place. You guys get along. And I've been constantly surprised, you know, when you get up to a place and you think, "Okay, finally I'm the first guy to ever be here," and you look around and there an alignment of rocks or there's something where you go, "Okay, I'm not the first one here and I never will be." So, it's quite wonderful to know.

And there were times that we'd be out in the middle of nowhere—and I wasn't there for this one—but just above where it says Kalapawili, one of the gulches there, I got a radio call and the guy goes, hey, there's pictographs here and I went, what? And he said there's pictographs there, they're not petroglyphs, they're pictographs. Somebody has, you know, and this is not anybody else, this is Hawaiian stuff, and they found a dry spot and done some pictographs, and they were home, enough to be up there and to be able to find it again.

There was a story about, you know, trails and stuff here that are kind of interesting and Ko'olau Gap, there was a story that there was a trail right about where the "U" is on Ko'olau, the second one. Right at the edge of the gap there that went on down to Ke'anae that there was a trail there, which has, of course, been lost. I've only talked to one person that that actually said, "I used to use that trail," or "My father did." But they don't need to use it anymore, and so it's just gone, you know, and some of the trails that the Hawaiians would come up, they would worship or they would come collect things if they needed. They just come straight up the mountain. They didn't go where the road is. If they were in Kaupō, they'd walk straight up the hill, if they were in Ke'anae, they would walk straight up the hill and they'd find their way back.

And even now, I remember at one point I was working up in the grasslands and I'd been dropped off by helicopter and I was there all day long working by myself and the clouds were blowing in and out, sometimes you could see and sometimes you couldn't. And I looked down in the clouds and it looked like a figure. You know, you talk about the ghosts and things up here. What's going on? And then there's more than one. There's a whole bunch of them, and this old man comes walking up to him and he goes, "Alright now. That's Kīpahulu Valley over there, right?"

I go, "Yeah." Because it was right on the edge of Kīpahulu Valley looking down into it.

And he goes, "And that's Pohaku Palaha right over there, right?"

I went, "Yeah, who are you?"

And he wasn't finished, he was swinging a machete around and he goes, "okay," and he was pointing with the machete—he wasn't being threatening or anything—and he goes, "So, then let's say Hōlua Cabin would be off in this direction, right?"

"Yeah, that's exactly right."

Okay, he reaches in his pocket, pulls out a compass and he goes, “This thing works, I'm amazed.”

And he just walked up from Nahiku, and he had a whole bunch of kids with him. And the kids were terrified, not one of them said a word, they just looked at me like what is Uncle got us into? And Uncle was perfectly, rubber boots, he was perfectly at home. And he said, “Okay, my brother's over at Hōlua, and we need to get there before dark. Let's go, boys.”

And his name was Lawrence Oliviera. And he was a legend for having been there from way back in the CCC days when they built the cabins and everything else. It was the only time I ever met him, but I was just so astounded, you know, I sort of stood there with my mouth open for the next 20 minutes or so, just kind of going, “Wow, did I just make that up or was that real?” So he walked across the ridge there and down the side and across over to the cabin to take the kids to go see his brother. Pretty amazing.

AK: That is amazing.

TQ: So, I mean, things like that would happen once in a while where people would be able to just know their way. Anyway, fun with fencing.

AK: Were you ever in the park during a major weather storm? I know it can get pretty rough.

TQ: I've been up there in some pretty ugly weather. Yeah, I missed the storm of 1980. I stayed home for that one, but, you know, I've been up there in some pretty ugly weather, it can be really, really ugly. Cold and windy, 100 mile an hour winds and sideways rain. Nasty.

AK: Anything else with the map that you'd like to share, or we can keep it up the whole time, if you'd like.

TQ: Well, just one of the questions that you had was the newer lands that park is acquired.

AK: Yeah, Nu‘u and others.

TQ: Yeah, Nu‘u and Ka‘apahu and then they got some pieces of Kīpahulu at one point when the Nature Conservancy had picked up some stuff. And I think they ended up with some of that. They bought a bunch of pieces of property and they cleared title on it and gave some of it to the National Park, which was added to the Kīpahulu section of the park. But the pieces that they've recently acquired are pretty much not open to the public at this point, and I don't know when they will be. But they're good pieces, you know. I've hiked both of them, pretty a lot. Not so much Ka‘apahu, but Nu‘u I've walked that quite a bit.

AK: And Nu‘u is kind of this blue line area, is that right?

TQ: I think so, yeah. I think that's about right, I think it goes a little further down to though. I'm not sure. I think that looks about right, yeah but I think it does go down further but

maybe not. Yeah, because you can see the ahupua‘a goes right to the ocean, and I've hunted goats there quite a bit.

AK: When people are hunting goats, is it mainly by rifle?

TQ: Yeah, rifles and bow and arrow.

AK: Kind of shifting gears a little bit, but when you were there, did you notice any contention or tension between the resource management side and the recreational uses of the of the Park? I know you mentioned with helicopters and now they're limiting sunrise visitors, did those areas ever overlap?

TQ: Well, that was more of the superintendent's kuleana. And there was some friction with the goat control that there were hunters that didn't like the idea. And they didn't like the idea of the fencing and they didn't want to stop hunting inside the National Park. There was a lot of that, both in the national park and with the Nature Conservancy time that I spent there was that there was a lot of people that didn't want to see control of the animals.

As far as recreational, I think the only tension that might have been there would be, you know, don't destroy the ecosystem because this is why the Park is here, which is kind of a no brainer, right? So that's the only thing that I can recall, unless you've got something specific.

AK: No, no, and I think that was kind of the main question for that section anyway.

TQ: Well, yeah, and of course, you know, you've got overuse of certain parts of the resource and, you know, like Seven Pools and the front country of Haleakalā and people going down Sliding Sands and that sort of thing, you know, whether or not they're going to obey the rules. And, you know, throwing trash and cutting trails and causing erosion and taking things, you know, picking Silver Sword because they've never seen one before or something like that. But, you know, just your normal human interactions.

AK: Yeah, and I think switching gears a little bit, I know we're going to kind of wrap up soon. I want to be mindful of your time. Going back a little bit to the educational outreach and volunteer programs that you were coordinating, I'm wondering how the programs and activities changed over time that you've noticed and maybe what were some of the the volunteering activities that you were involved in? I know you mentioned weeding management.

TQ: Weeding, fence construction, pretty much whatever they needed, you know, whatever was needed by the National Park. And sometimes they'd sort of custom make work projects for, say, the Sierra Club wanted to go in the crater, and so they'd say, OK, well, it just happens that we need Palikū painted. So we'll fly some paint in, if you guys will paint it and then you guys can have, you know, two days to go paint it and then the rest of the time it is up to you or whatever, you know. And so they would do that sort of thing.

AK: Were the volunteers for this self-volunteers or did you guys recruit volunteers?

TQ: Mostly self-volunteers. A lot of it was Sierra Club or it was hiking groups from O'ahu who would want to come and and put together a group. Sometimes it was groups from Maui that would just say, okay, we've got ten people, we want to come up and do something, can you find some work for us and not make us sleep in tents? And so then they kind of go, okay, let's think about this and come up with, you know, that type of deal. I don't know if they're still doing it that way, but it was beneficial to both sides and it was a good thing as far as I was concerned.

It's gotten a lot more people and more need of management as far as how things are managed. Of course, with the Coronavirus and the rest of it, everything's kind of gone on hold, but lots and lots of people, you know, the bike tours, the bike tours have been, you know, a thorn in everyone's side for a long time. I mean, I shouldn't put it like that. It's been something to adjust to. And I think they finally---initially they were going from the very top and coming down through the Park, and there were enough injuries that they decided that, no, you can drive to the top, you can drive to the outside of the park, and then you get on your bikes at about 6,000 feet and then you ride down the bikes in there. And the bike's not in the park. It's not.

So that's been something that we've all had a lot of dialog about, because they can be really slow, they can block the road and you don't want to hurt them. You don't want to come across one that just drove off the road on their bike and hurt themselves. And it's a long way to send an ambulance, you know, and it's hard enough to drive up and down that road and not have people sitting on a turn and a bike waiting to take a picture of a cow or something like that, because they, sometimes, I think they just kind of put their brain on vacation when they come up and do things, you know, and it's things that they wouldn't do at home and they do them here. So, you know, it's just human beings being who they are.

AK: Yeah, exactly.

TQ: Are we going to go for a little more could we just take a little break?

AK: Yeah, yeah, absolutely. We can take a break and we can talk another day.

TQ: I'll talk as long as you want.

AK: Yeah, we just have a few more questions.

TQ: If we could just have five minutes. Oh, absolutely. Get a drink of water.

AK: Sure.

TQ: Okay, so should we do that now.

AK: Yeah, that sounds great. Okay, great.

TQ: Okay. Okay. All right, thank you.

AK: Thank you. I'm almost done. We're on the very last section.

TQ: Well, like I said, I'll go as long as you want, so alright.

AK: So I think maybe to kind of start wrapping it up a little bit. How do you feel your relationship with the Park has changed over time, before you started working there, as a volunteer, and then as a volunteer resource coordinator and your time with the fences.

TQ: How has it changed? Well, it changed from a volunteer to an employee. And then as an employee, then when I worked for the conservancy, of course, I was a cooperater with Ron and with the National Park. And so we would talk over things and they actually let me use one of their radios, so that I was in contact with them since I had no radio and there were no cell phones in those days. And so then for emergencies, I was able to get out and be able to talk to them. And so that was a real godsend because, you know, I mean, I would go to places that I would show my wife on the map in the morning and I'd say, "This is where I'm going to go today. So remember that in case I don't come home, that's where to send the people." And that's serious. That that was all all we had, really. And so it was wonderful that they let me use one of the radios. And but again, these are kind of primitive radios. These were line of sight. If you were down in a hole, you couldn't get out. You had to climb up to someplace high enough that you could you know, you were in a straight line with their their station that would allow you to talk to them. So, that was good. They gave me the keys to their gates so that I could get into the places I needed to get into and. Maybe I shouldn't be saying that, but I gave them back, and we had a great relationship going.

Ron would talk to me about the fence routes, where to go. If there was something that our land shared in common, then we would talk about that. The law enforcement warned me at one point they go, "You know, we've been seeing the same car in Hosmer's Grove and I think he's got something growing out there in your land. So you might just be cautious."

And so then I would like, "Okay, great."

And then green harvest would fly and then he wouldn't be parking there anymore after they took everything. I mean, those guys, you never knew what to expect from those guys. And so it was nice that we could work together on that sort of thing, you know.

And in fact, when I was out there alone, I had a big, nasty dog that came with me that would back me up (laughs) and he knew how to circle around behind people if I was talking to him just to see if they were bad it made them nervous and so there were some times, yeah.

But I worked I worked well with them, in fact, even to the current superintendent, we know each other and we're able to talk to each other and she was very helpful. This is Natalie Gates. When I was doing the fencing for Haleakalā Ranch, because I had to get to it through the National Park, and so she saw to it that I was able to park in the National Park and that their law enforcement wouldn't be upset with me doing that and that I could carry a weapon when I went up there. So that was okay to, which was also part of my job, if there were goats or pigs or whatever needed to be scared away. So I've had a good relationship with them.

They do change personnel a lot. And so you sort of have to keep keep track of who is doing what. And so sometimes they don't always remember to tell each other that, you know, especially in law enforcement, that there's this guy that goes in parks over here, so you don't have to worry about him. He's not a terrorist. And and so there's time that you have to go in there and you don't really even know when that personnel changes take place. So you need to kind of keep up to date with that, but they've been good to me.

And at one point, I invented a thing called a one-way gate for pigs, and that was you fence off a big area and you have pigs inside. They got to go somewhere, and so I made this gate with the idea that as they came to this breach in the fence, they would walk through, but they couldn't come back in. And so they would get themselves out of the place and you didn't have to spend hours and hours trampling everything down that you're trying to protect, trying to chase them away or shoot them or whatever. And so they helped me with the research and development on that, as far as baiting it, making sure it worked, that sort of thing.

AK: Were those used throughout most of the park?

TQ: They were used for a while and Pu'u Kukui Watershed brought several of them. And, you know, it's it was one of those specialty items that you don't get a lot of use or exposure; the numbers are low but they went in and they were made of fiberglass and it was a chute that they would just walk into the chute and they'd have no traction. They'd slide to the bottom of it and be outside. And then if they tried to run back up, they'd just burn rubber and they couldn't go through. And so it took some R&D to get that to be accepted and they were to some degree, but it was kind of like people eventually stopped having to fence pigs in, and so there are kind of no longer needed. I'm not making them anymore but the National Park helped me with that. They helped me, you know, put together my thing, and so that was just an example of them being helpful and good about things. And again, Ron Nagata has been the center of a lot of this now that he's the one that knew every figure and he would remember everything and he would stay at work late, late, late and get there early, early, early. He's dedicated.

AK: Yeah, we're intending to interview him as well.

TQ: Yeah, good.

AK: I was just going to kind of add to what you were saying and, you know, I think you maybe touched on this a little bit earlier, but were there certain areas in the park that you felt closest to or were there any plants or animals that were particularly special to you? I know you mentioned a few different types of birds. . .

TQ: Well, the birds are always just the most gorgeous thing that you can come across. You know, you've got the i'iw's that are just so beautifully crimson and you've got the crested honey creeper and then the, I never saw a po'ouli, but I saw plenty of parrot bills and just the entire ecosystem, it was just so wonderful.

And some of the, plants, the cyanias, and the more unusual plants and where they would grow, you know. You'd find things on the side of a cliff, the only time you could really see them would be hovering thirty feet away in a helicopter. And you look at them, and, just got, I wish the goats hadn't eaten all the rest.

But, you know, as far as places that I loved in the crater, every one of them, you know, everything there; it's hard to pick out one place that was my happy place. Pretty much all of it and again, it can be a very harsh mother too. When the crater is not in a good mood, you don't want to be there, like when you're cold and wet and miserable and your pack just took on 10 pounds because it's got so wet and, you know, you still have a long way to go. Bu there's other times, like I said, that you can just lay down on the grass and take a nap, you know, and it's just wonderful.

And, you know, seeing the ecosystem, seeing things improve, it's been really beneficial to me just being able to climb up on top of a fence and take a picture right down the fence and the outside is all ground down and eaten up and washing away, and the inside is coming back. And the plants are showing up. They haven't been planted there, the seeds were just there and things like the sandalwoods, the favorite, favorite, favorite tree of the goats to eat, they'd eat the bark off of it, they'd eat the twigs, every little sprout that come out of it, they just gobble it up. And now it's growing right down on the ground and the goats aren't eating it. And the māmane and the silver geraniums and the, you know, the pilo and everything else, that are pretty much gone when the goats are able to get to them.

And it's so interesting, when I was walking to the job of the Haleakalā Ranch job, I had about, I don't know, a third of a mile that I would walk through the National Park, and there were more birds, there was more life, and then you'd cross over to the national park or to the ranch, and there was some pukeawe and there were some dead māmane trees and not much else until you found them. And a lot of times they would be so eroded out at the base of the trees that the trees had fallen. And, you know, it was just like especially the sandalwoods, because they like soil and they would be sitting there and you'd see just all these this cluster of roots going down. And I was like, well, I'd like to build up around it, but then that'll give the goats something to stand on. So I had to just leave them.

But, you know, you'd find archeological sites and you'd find things where, uh, the Cowboys had come up back when it was cowboy days and building stone walls and using the natural barriers as part of their walls and just keeping in mind that these guys had to

come up on a horse. They'd be on the horse a long, long time just to get to where they were and there were some places where the the old fences, you'd find an old fence and there'd be. . . . One of the old timers many years ago was telling me how they had sent him up there with a coil of wire and a boring tool, not even a brace and bit, it was a stick that had a drill in the center of it and an axe. And they'd say, okay, now you cut down this tree over here and you split it into four and that's your four posts and you drill five holes in the post once it's in the ground. And then that would be where you put the wire, you put the wire through the holes in the post and that's your fence, and you go do that for the next week, for the next three weeks, or the next three months. And the same guys coming up, building stone walls, and the stone walls would be rocks bigger than me and they'd roll them into place and that would be the basis, the heart of the wall. And then they would build the wall up and that would keep the animals back. But in many places, the erosion would be so extreme that it would fill right up to the top of the wall. The soil would just back up right at the wall, so you'd more of a ramp coming off than anything, at least by now. Cool stuff.

AK: Yeah, that's very interesting. Could you maybe talk a little bit about maybe two or three special moments that you've had in the park and then maybe as a sort of a secondary question, what do you feel were some of your most important contributions to the park during your your time there?

TQ: Special moments. . . . There have been so many. Making it to the top of the hill and looking down and seeing everything in every direction, you know, you can look into the crater and you can see everything there, like I'm thinking of Kalapiwili Ridge up there where you're looking down into Ko'olau Gap. You can see over it, Keanae, you can see Hāna airport, you can see all the way down the gap to Honomanu Valley and all the way over to Kahului. And I'm just like, I'm on top of the world. This is so awesome.

And just, you know, other chicken skin times where you'd find things and you just go, wow this guy came up here with tī leaf shoes, and he slept in this cave. And he came up here for what reason, you know, and then you find an ulu maika, and you go and he was playing! This wasn't all business. And it's made from the rock that's there, you know, because the rock is like it's hardened pyroclastic flow of the geology where it's got little particles of stuff in it. And you don't see rock like that anywhere else. And so it had to be made up there and you'd find these things that were like, he took the time or she took the time to make this thing up here. They came all the way up here.

And then finding camp sites like very, very old campsites and looking at them and going, okay. They'd always be close to water, they'd align the rocks, and they'd be along a place that you could find again. And finding these campsites and going so, was this coming up to go talk to Akua or was this a sandalwood camp because this is where the trees were? You know, just wondering where in Hawaiian history this fits, and who was who it was, and how they made it all happen, and this would be far from everything else where, again, you start thinking that maybe nobody else had been there and then you find a campsite, or you find an ulu maika or something like that, you know. And so it's just this sense of wonderment.

You'd be walking one of the places on this ridge, I found just this one ridge went up there and it's like you just get this sort of chicken skin feeling and there's a series of very small ahu, maybe three feet tall and maybe even started with a rock that was already there. But maybe ten of them on top of this one ridge, and you're going, oh, wow, what's this mean? This is, you know, I hope I'm not violating anything, but then you look around and you can see everything. And, you know, there is one place that I found and I kept looking around and this was like jagged rocks all over the place and then there's a round one, and they go, well, that's a sling stone. Who's been throwing sling stones up here? And then you go on a little further and there's another one; what were they doing here? Can you hunt goats with a sling or what went on? And you know, you read some of the old accounts and it's like they'll be talking about a war and saying, yeah, they fought and fought and then they ended it up on Haleakalā and you go, wow, that high? They chased each other that far? It's not the only time I've found sling stones there were other ones in the Park, this is more outside the Park. But you know, you just kind of wonder about it.

There was a place in Kaupō where, of course, when the invaders came from the Big Island, Kaupō would be one of the first places they'd stop because it's the closest stop in Nu'u and the first place where you could pull in your canoes. And there's one spot where it was a long steep grade and then a flat spot at the top, and so I'm out there walking around on the grid and I'm finding sling stones, and somebody climbed up to the top and had their ammunition. And as the invaders came, they stood up there and tried to pick them off as they were coming up because they, you know, they're protecting their homeland.

So anyway, just the history of the things and the natural history and just my sense of admiration for all the things that have gone on up there. Not that I really admire a war, but just that power and the ability of people to go so far and not just once, you know. I would sometimes find caves that were obviously habitated up in the cold zone and with a wall built up on one side just to keep it a little bit warmer. So what are they doing here? And, you know, finding some clues as to what they were doing, but this wasn't all the way to the top, this was just on the side. And I'd like to know what went on here. This is this is so awesome.

And just FYI, there's a wall that goes across Haleakalā Ranch, it's about three miles long and it's a stone wall built with these big stones, so I asked the ranch guys, "You know anything about that wall?"

"Well, we know it's there."

"Do you know why it was built there?"

"No, not really."

There's no straight lines and it was going across the grade, so it's not marking an ahupua'a and so it's like is that for cattle ranching? You know, because it stopped on one

gulch and then across the gulch, it didn't continue. So it probably had something to do with the cattle ranching, but that's not land that you'd really want to be riding a horse or chasing a cow through because it's you know, you can break your leg or and, and too far to go to. So, anyway those are some of my favorite moments.

AK: Yeah, that's quite fascinating. And, whenever you're ready, the next question was what you feel are some of your biggest contributions to the park?

TQ: Well, I built a lot of fence. And I like to feel that I have spent my career sort of undoing, well, my last job description was ecosystem restoration specialist. That's what they called me at Haleakalā Ranch, so I thought, okay, I'll take that. And you're basically looking at a piece of land and saying what needs to be changed here in order for this ecosystem to work. And it's certain plants have to be removed. Pretty much animals need to be taken away. Some research to actually know what's still there. They don't really completely know the habitat, they're following the 'u'au, it's the bird that nests at the higher elevations and they do it in a hole, and so the hole always smells like squid because they feed in the ocean and they come all the way up to eight, nine, ten thousand feet. And yeah, the petrel, I think that's what it is. And of course, because they live in a hole in the ground, they're prey to mongoose and cats. And it was one of the. . . they talk about the bird catchers, the Hawaiian bird catchers, that was one of the birds that everyone loved to eat. They would get the young ones and so they would go up and they would get the birds out of there and they were all the way down to the ocean. They weren't just, you know, this is a remnant population that's still living up to Haleakalā. And so, I sort of keep my eyes open for those, and I know the national park does their best to control mongoose and rats and cats just so that the 'u'au can be taken care of.

And, you know, the contribution is that I'm trying to undo the sins of the fathers, perhaps, you know. Those that did what they did with the best of intentions. You know, whoever they were, you know, and like I said, it doesn't always turn out to be the way you thought it should be. And so things have to be undone sometimes. And so that's kind of a lot of what I've done in my life is trying to make things right. So, that's pretty much, you know, the best contribution I can say that I've done up there.

Building fences, I got Waikamoi reserve on its feet; they had nothing, they just had a map and they put me on salary and said, get to work and here's a plan for you except we just cut your budget and we were going to have two people and now we're just have one. And so I was like, okay, do the best I can and I established a trail system. I established a relationship with the national park. I built over a mile of fence for them. I got their volunteer program going. I got the cattle out of the forest. So, I feel pretty good about that.

And other than that, I helped with Pu'u Kukui Watershed, so they had a problem with pigs, and so they called a friend of mine and I and they said, first of all, we want to figure out how high up the mountain the pigs have gotten and then we want to build a fence there and keep them from going any higher. And so start on this ridge here, because it's a

series of ridges and valleys coming off of Pu'u Kukui, this is on the west side over where Kapalua and are you familiar with Maui at all?

AK: Yeah, I am.

TQ: Okay, so it's these big flat ridges. And so we would first of all find where the upper extent of the pigs and then we would find natural barriers on the top of the plateaus. And we would build the fence from one barrier to the next. And the valleys took care of themselves, but this is the ridges that we were covering. And, so they flew us up there and paid us to do it, and we built the fence right across and it was like you had to brush out a whole fence line and build the fence and hope that it worked.

And you'd find some interesting things when you do that. There were places where you knew stuff had been planted, you know, that Hawaiians would have a makai residence and a mauka residence, and sometimes the mauka was for if, there was a war, you could run away from the war or you could, at least maybe just go there in the summer or whatever. But we'd find a few of those, you know, that still had bananas, sweet potatoes and all this stuff just kind of waiting. Kalo sitting there. You know, just growing because these are nice, wet, lush places, and so they'd have their their own place to come back to whenever they needed to retreat during famine time or whatever. And so those places would show up and then there are other odds and ends that we came across that we're just like, can you believe this?

AK: I'm sure. Are there any sort of future directions you'd like to see the park going or any issues in particular that are important to you?

TQ: Well, I think they've got their hands full now with just so many people. You know that tourism has gotten to the point where there's so, so many people coming. And how to handle them, how to let them have the experience, let them understand what this is all about and why it's important and why we make such a fuss about ecosystems and about habitat and, you know, who cares about this little butterfly or who cares about this tiny little birdie that you can't even eat? You know, it's like we care because this is all more important, you know. And so to be able to get that message across and to be able to have people to show appreciation for it all. I think that's their big thing now.

But they've got people that have to maintain those thirtymiles plus of fences that they've got to get out there and, you know, find where they are. And, you know, if the goats get in, they've got to go get the goats and make them go away and they have a whole crew that takes care of that, and they have they have their ways and they have to do fence checks, they have to replace pieces of fence that, you know, maybe rusted out or, you know, it has to be redone. And these guys are capable of maintaining it. But it was just making thirty-three miles of fence in a few years, that's an awful lot of fence and especially in the rough terrain that they were in. If you can drive a tractor then it'll go a lot quicker, but there's virtually none of that that you use tractor. You know, this this is really rough stuff. So, I think they've got their maintenance together.

Financially, they used to get their appropriations every year and then they started charging admission, and the whole idea of charging admission didn't get them any more money. If, you know, they didn't get to keep it. They were just charging admission and then they were still asking for an appropriation. And the money that they collect goes to all the details that works for collecting the people that work in the booth, and all the paperwork and everything else that goes with it. That pays for itself. But the rest of the money, as I understand it, goes into the general fund and then they still have to ask for money to run the Park. And so, it's not easy money and but they've got more people to deal with. They've got things like the bike tours, you know, suddenly their EMTs are much more busy than they were to begin with because of that. And, you know, with security threats, you've got to go through the National Park to get to all the Star Wars stuff that's up there. And, you know, we don't really even know what those guys are doing up there completely, you know, a lot of it is getting more knowledge, and I believe it was Haleakalā that found that that crazy thing in space that was coming toward the earth. I forget I was trying to remember the name of it this morning, but they found it. They were the ones that checked. Do you remember the name of it?

AK: No, I don't remember.

TQ: The name meant explorer or traveler or something. It just completely blew the whole stargazing population away and they were the ones that found it so. . . . but still their law enforcement have to— what got me started on this was—they have to protect those people up there if there's, you know, terrorists or whatever that find out that there's something there that they want to blow up. The first line of defense is law enforcement at Haleakalā. And it's a long, long way for the Maui police to come on up there and try and do something. So, and I'm not suggesting that there's anything nefarious or weird going on up there, but I just don't know what's going on up there. But it could very well be something that someone would want to sabotage. So, the National Park, you know, are a little bit touchy when you go up there, at least the law enforcement is. But, you know, it could just be that they need to be on the watch all the time.

Other than that, you know, it's just overuse of the resources, what has to be carefully watched and Kīpahulu more so since so many tourists drive through the Hāna Road and they stop in there and they hike up to the Seven Pools and that sort of thing and there's a lot of need to just stay in control. Don't let the ecosystem fall apart. And take care of what needs to be dealt with over there.

AK: Wow, it's been wonderful listening to you.

TQ: The motor mouth started.

AK: No, that's great. Are there any final thoughts? I don't have any more questions but anything else you'd like to share?

TQ: I'm flattered that you wanted me to be here, so I appreciate that very much. And it adds extra value to the work I've done in my life. So thank you very much.

AK: Thank you. We appreciate all of your mana‘o and knowledge and ‘ike about your connections with Haleakalā, and your time there. And I'll go ahead, following this interview, it'll probably take me about a week or two, I'll transcribe it and I can either email it to you or I can mail it to you, whichever if you prefer, hard copy or digital.

TQ: Hard copy is probably easier for me. And you got my address?

AK: I don't, but, you know, let me email you to get your address.

TQ: You can email it to me. That'll be fine. I'll print it.

AK: Yeah, or I can email you. I just don't know if you want to say what your home address is on here since this is recorded. But I can email you and you can write me what your address is. Okay, that would be great. Cool. It was such a pleasure talking to you and I know we went over two hours but it didn't feel like it.

TQ: It's fun remembering all those things. Well, good luck with this, and I'd like to do what you're doing. I'd like to do some oral histories with some friends of mine. So, I'll call you back and pick your brain at some point.

AK: Please do. Well, take care and have a wonderful rest of your day and weekend, and I'll be in touch soon.

TQ: Okay, well, thank you, Alana.

AK: Thank you. I appreciate it, I really appreciate it.

TQ: Well, you have a great day.

AK: You too. Aloha.