Nevada Test Site Oral History Project
University of Nevada, Las Vegas

Interview with Kenneth Giles

February 10, 2005
Las Vegas, Nevada

Interview Conducted By
Suzanne Becker

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Suzanne Becker: *So if you want to begin by telling us a little bit about your background, who you are, where you came from, your history of coming out to Vegas, and then ending up involved with the EPA [Environmental Protection Agency] and the [Nevada] test site.*

Ken Giles: I really got started in this when I was in the Navy. I was a hospital corpsman and I was stationed at the Naval Radiological Defense Laboratory in San Francisco. And got out of the service and worked at Loveless Foundation in Albuquerque for a while. I met a guy there name of Ronald Ingle who was a veterinarian and had a Ph.D. in radiology. And he was in the Air Force. He trained me for a year as a veterinary X-ray technician. When he got out of the Air Force, he came out to Nevada and joined the U.S. Public Health Service, which had the farm on the Nevada Test Site.

Right. Now what years were you in the Navy?

Nineteen fifty-eight to nineteen sixty-two. Anyway, he needed some technicians, so he brought me and another guy out from Albuquerque to work up at the farm. They hired four dairymen and one beef herd manager, and then there was two or three technicians that we had up there because we were doing experiments and things on the beef cattle and on the dairy animals at the farm on the Nevada Test Site.

What year did you arrive out here for that?

I came out here in July of 1964. And the farm at that time was down at Well 3, which is about five miles north of the CP [control point]. We were down there for two or three years, and then

they built a new facility up in Area 15, about a couple of miles north of Sedan crater. And so we were up there for a while. I was with them until that facility closed [EPA Farm].

We did all kinds of experiments on dairy cows where they wanted to see what was happening with iodine 131 in the animals, because if a cloud would leave the test site and go over a dairy, then the milk cows would pick up iodine 131 and it would possibly get into children, into the thyroids and stuff. So we did a lot of experiments with exposing animals to iodine and counting their thyroids to see what was there, and then sampling milk and the feces and urine from the animals. Later on, we got into work where we were doing plutonium and americium and that kind of stuff, and doing metabolism studies on large animals. To my knowledge, that was about the only facility that was doing that type of work with large animals, especially with more than one large animal. A university in California was doing some, but they were only using one animal, where we were using four and five animals at a time.

Right. There was an actual simulated farm-like situation set up and a herd of cattle—

Yes, we had probably thirty to thirty-five registered Holstein milk cows that we milked twice a day, seven days a week. And we had a hundred-head beef herd that ran out in Area 18, and we rounded those up twice a year and took samples from them. Those cattle were descendents of animals that had lived on the test site since the atmospheric days. I think the first herd was in 1957. And so we kept that herd going. Reynolds Electric[Reynolds Electrical and Engineering Company, REECo] had it originally, and then the Public Health Service took it over from them. So we were monitoring them.

We also had a wildlife sampling project on the test site where we were taking deer and small animals and that stuff—

That lived out at the test site?

Yes. And sampling them for radionuclides, and we would take histopathology samples to make **[00:05:00]** sure there was no damage, or to see if there was any damage caused by the testing.

What types of things did you find?

Well, we never really found anything that we could say was harmful to the animals up there. I took four deer a year on the test site and, like I say, we counted the tissues, we checked them for radionuclides, and we did the path[ology] analysis on them. You would find some cancer-I in the Hereford cows once in a while, but if you have Hereford cows that [are] out in the bright sunlight back in Nebraska, you'll get—

The same thing.

Yes, about the same percentage of cancer-I as we did on the test site. And the only thing we ever found in our dairy cows was the isotopes that we actually injected them with or fed them. We did some simulated studies where we had about fifteen acres of alfalfa that we grew. And we simulated a rainout situation, where if a device had gone off and the fallout fell on alfalfa fields in a rainout situation, we sprayed the iodine and some other isotopes, I forget what they were, on this alfalfa and actually cut it like the dairymen and the farmers would, and fed it to dairy cows to see what come out in the milk and the other end. We did that on several different occasions.

And you monitored, I would imagine, this over a period of time?

Yes, you would follow it until you couldn't find it anymore. And then during the later part of the Plowshare program, we actually put cows out on the mesa in Area 19 and 20, in stanchions. When the device would go off, we had them positioned downwind so that the cloud would actually go over the animals. Then we would take them in and check to see what type of isotopes came out in the milk and the urine and the feces.

Any differences in those herds?

Well, they were never exposed to enough radioactivity to make the animals sick or anything. We could detect the radioactivity in them, and in some instances, because it was in the wintertime, we had blankets on the cattle to keep them warm because it was freezing cold up there. And we were able to see where the blankets were, they had enough fallout on them where the black hair was to make some of that turn gray. You could see on some of them the pattern where the blanket was. But those cows stayed in the milking string for years and—

And never—

Yes, nothing bad ever happened to them. The biological monitors were a very good method of detecting radionuclides. At one time when the Russians and the Chinese were still testing, we found iodine 131 in the thyroid of a deer on the test site and we couldn't explain it, where it had came from. Nothing had happened on the test site to explain that. So Dr. [Donald D.] Smith, who was my boss at that time, contacted DOE [Department of Energy] and they said well, yeah, the Chinese had a shot that wasn't announced and it had leaked. But we were able to pick it up on our deer. And then about a week later, there was a little article back in the obituary section in the paper, where they had had a test. And then we were also able to pick up some stuff from Chernobyl that came over here.

That's a pretty significant traveling distance.

Yes. But you know the biological samplers, if it's there, they'll pick it up and you can find it.

Right. Interesting.

But we were never able to show any harmful effects on the deer or the small animals or anything that we sampled on the test site. And I—

OK. So when the Chinese or the Russians did a test, the equipment was able to pick it up here.

[00:10:00] Yes. EPA at that time had what they called standby air samplers in all the western states. When Chernobyl happened, we activated the standby network system. You could see it move in through Washington and Oregon and in down this way, and we were able to pick it up in the snow and the rainwater on Mount Charleston. Just minute amounts; just enough to say that something was there and to identify where it came from.

So it was a pretty good distance.

Not enough to hurt anything but enough to say that it was there.

Now similar things, I would imagine, would have happened here, too, when we did—

Yes. If we had a test that vented, why, you could pick it up. One of the first things I was involved with in ’64 or ’65, they had a shot on the test site that vented and it went up over Alamo and Hiko. Well, there was dairies there. We went up and covered the hay out as far as Lund, which is almost to Ely, and then sampled the milk from those dairies. And what they did at that time was diverted the milk from being a Grade A product to where it would get immediately into the food source. They diverted that into cheese making because that would take a lot of time and iodine 131 has a seven-and-a-half-day half-life. Well, by the time it would ever be on the market, everything would have decayed out of it. And—

And if there was any danger of—

No. But those were things that we were involved in at that time.

Interesting. And so I guess I have two questions. One, I was just wondering when you got out here in 1964, what your perceptions of the test site were, and had you been familiar with the test site prior, or what was going on?

Well, quite frankly, I had no knowledge of the test site before. Like I said, I had worked at the Naval Radiological Defense Lab in San Francisco and they had their own projects going on. But

I'm like a lot of people were; I didn't know testing was still going on. We did some surveys at one time, some milk cow surveys, where we went around all over Nevada and part of California and part of Utah and Idaho, looking for family milk cows and dairies and this kind of stuff. And once you got out of the immediate area around the test site, it was, `Testing? You guys are still doing that stuff? We thought that ended back in the fifties.` So a lot of people, with the underground stuff, if they weren't reading a newspaper every day they weren't even aware it was still going on. And I was kind of that way when I came here in '64. I didn't know what they were doing.

So were you pretty amazed to see this very huge chunk of land devoted to it?

Yes, it was quite an experience for me to learn about what was happening and then to be actually involved in it. In those days you could go out and when they had the Plowshare shots, you could be within a mile or two of them as long as you were upwind from them. You could just go in and stand around and watch them. So we'd put out our experiments and then we'd go stand around and watch them. It was really neat.

One of the other things that I did that was probably one of the most fulfilling and rewarding jobs that I had while I worked on the test site was we had—like I say, we were sampling the wildlife on the test site, the deer. Well, we didn't know whether the deer were actually getting off the test site or not, whether they could be eaten by people off the test site. My boss at that time was a wildlife biologist. He'd been with the State of Nevada as a fish and game agent and then came to work for EPA. So we got a project going where we captured deer live on the test site and put radio transmitters and collars on them. And for seven years, I **[00:15:00]** captured deer on the test site and put radios on them, tracked them, took their pictures and followed them all around. And that was one of the more rewarding things. I've got a couple of

little papers that are down in the [Atomic Testing] museum where we published. But that was a lot of fun. It was a lot of hard work but it was a sense of accomplishment, too.

That sounds really neat. And I bet you traveled all over the test site to do that.

Oh, I knew the test site. People would come in with pictures and I could tell them right where the picture was taken. And the guys in Operations and stuff, they were good. A lot of times areas would be locked up, and I'd have to go and get keys or get Security to let you in and—

So you needed, I would imagine, clearance for this.

Oh yeah. And a couple of us with the EPA and Wackenhut Security and the Sheriff's Department were about the only ones who were allowed to carry guns on the test site. I carried a gun. For thirty-five years I carried guns on the test site all the time. And cameras. Had cameras and field glasses.

Right. I would imagine none of that's allowed on the test site.

No, it's not unless you have—you had to have a permit and had to have a reason for doing it.

What kind of a clearance do you have to go through for that, or what's the process?

Just a Q-clearance.

Q-clearance? OK.

Yes, just a regular Q-clearance, and then you have to apply for a camera permit or a gun [permit]. You have to have a reason. They just don't give them to you for the fun of it, or everybody'd have one. But it was interesting to do that, and you'd meet new guards that weren't aware of it and they'd get all excited until you could explain what you were doing and calm them down. That deer migration study was, like I say, one of the most interesting jobs I had had up there. I got to do things—I had flight orders, and at that time they used the Huey helicopters that were based at Indian Springs, and I could go down and just make a phone call; I could go down

and get on them and fly around the test site with the security sweep, because in the wintertime I couldn't get to the areas where my deer were going to. So they would let me slide one of the doors open and sit there like this, you know, outside with my radio antenna and headphones on and look for my deer.

Wow, that is interesting! That must've really been neat.

It was neat.

Now how much time did you spend up there? It sounds like you, particularly with tracking the deer, you would probably be up there quite a bit.

I spent like three days and two nights a week, pretty much for seven years up there. And then I wasn't one of the regular milkers or one of the dairymen at the farm, but I would fill in for them. When we first started, I wasn't married, and so when they needed holidays or days off, why, I would fill in. Because that was a seven-day-a-week operation.

Yes, I bet. All day. Early.

You had to be there to milk at six in the morning, six to five, seven days a week; 365 days a year, those cows had to be milked.

So after you got married, is that when you cut back on spending time up there or—?

No, I still spent about the same amount of time up there. It's just that I didn't fill in quite so much on the holidays and stuff for the other guys as I did. But you still had to help out and take your turn. Somebody would get sick or injured, you know, we had a couple of guys get injured, so you had to fill in.

You mentioned earlier that currently you're still in touch with some of the ranchers. Was that also something that you did out there, talk to the folks in the surrounding community?

Yes. We had veterinarians on our staff. At one time we had, I think, five veterinarians on staff at EPA, one wildlife biologist, two zoologists and a half-a-dozen radiobiologists and chemists. But one of the things that DOE wanted us to do was to provide some veterinary service to the ranchers. If they had claims, some of the ranchers say, Well, **[00:20:00]** our cows are being exposed. Well, you'd go out and you'd look at the cows. And we would buy cows from the ranchers. Twice a year we sampled six animals from our own herd on the test site. We also went around with the University of Nevada to two different locations and sampled herds *off* the test site. And then after we quit doing that, we would just go out, and the ranchers that ran all around the test site, adjacent to the test site, I would go out and I would buy six cows and bring them onto the test site. We would kill them and take samples from them. And we did that for several years. So the ranchers knew us, and they knew what we were doing. We'd always give them a report that showed that there was nothing in their animals. They were safe to eat and they were healthy.

But then testing was also going on at this time. I had to fill in as a radiation monitor also. When there would be a test, EPA would field a whole bunch of people who would go out and you would do D-minus-2 information (Day-minus-2), where you would find out where everybody was going to be out to about 150 miles away from the CP, and the hunters and sheepherders and ranchers. We had an area that you worked in so that you knew the people in there. And we would go out two days before the shot and talk to these people and let them know what was happening if we could, if it was an announced shot. Sometimes you couldn't tell them anything but they knew what you were out there for.

So just by virtue of you being there, they knew that something was happening.

Yes. And then there were regular offsite monitors that did air sampling and water sampling, that were in contact with the people. Well, when the farm closed and they shut down the deer studies and all that biological stuff on the test site went away, why then I transferred in to offsite and I became one of those offsite monitors that worked in the offsite area. At one time, there were two of us. Don James was the other one. And I don't know whether you're familiar with the offsite area or not.

A little bit.

Do you know where Rachel is?

No, I don't.

OK. Well, say this is the test site. North of the test site, there is a mountain range called the Grant Range that kind of goes north and south. Well, at one time I was responsible for everything on the east side of the Grant Range in Nevada clear to the Idaho border, which included Utah, clear back around to Las Vegas. Jamesie [Donald James] was responsible for everything over here, part of California, all of Nevada, and back into Las Vegas.

So you guys had some big territory.

Yes. Oh yeah. If you didn't put a thousand or twelve hundred miles a week on your truck, it was a slow week. And I had four monitors that worked for me. We did everything out there. We maintained all the equipment, we changed all the TLDs [thermoluminescent dosimeters], we collected all the milk and water samples, which was done monthly, we maintained all the equipment, we did all the public relations work. If it had to be done, we did it. I don't know whether you know her or not but Vickie Nieman that works over in DOE?

No, I don't.

At that time, she was one of the monitors that worked with me. But anyway, she's over at DOE now. She went on and got her degree and went on to bigger and better things. But we did everything out there. And then Three Mile Island happened. And Jamesie [Don James] was in the first clench of monitors that went to Three Mile Island, and then I relieved him six weeks later and I was there for six weeks.

What was that like?

[00:25:00] It was kind of neat, in a way, because we were the guys in the white hats, you know. The state, everybody was telling all these different stories, and people were so happy to see us because, like I say, we were the guys in the white hats. I had farm ladies come out almost in tears when we'd have equipment running at their property, come out and they would offer to do your laundry for you, all this kind of stuff, just because they were so happy to have somebody there that they could believe was telling them the truth about what was happening.

Right. So much chaos going on at that time.

Yes. Everybody was basically telling the truth but the state had their version of it, DOE had a version and the utilities had a version. They were all basically telling the same story but in a little different way, and these people didn't know who to believe. Well, then EPA came in and, like I say, we were the guys in the white hats, and so it was kind of neat. It was a very interesting experience. It was a lot of hard work but it was fun, too, because it was different than what we'd been doing. And one of the reasons that we went there was because we were just about the only agency in the government that had the equipment and the manpower to do that.

How long were you there?

I was there for six weeks the first time, and then I went back a couple of months later for another month. But EPA and some of the labs back east, just EPA all told, was there for ten years or better. Sampling.

And so when you were out there, that's primarily what you were doing. You guys were sampling and out in the communities?

Yes, we were there during the venting. When they vented the reactor building, they vented the tritium out of it. We had tritium samplers and we were going and taking samples. They had a map made up with grids and distance, sector lines and stuff on it, and they would call you on the radio and say, `Move to 6B,` or something. And you'd pack up all your stuff and move over here, set up your sample, because that's the way the wind was blowing. They wanted to send me in the plume all the time so we could get these samples. So we were always moving around. But we were off the reactor. The reactor was kind of on an island and they had their own radiological people that did stuff on their own facility. So we did all the monitoring and stuff off the facility.

OK. So more offsite.

Yes.

Now since you've been involved in this for so long and worked so closely with it, I'm just wondering what your thoughts about exposure are, and have you ever been worried about that for yourself?

No, because we always wore either film badges or TLDs, and we always had survey instruments with us when we were doing stuff.

So you were always able to monitor what was going on at the moment?

Yes. And I never felt like I was ever in any danger or anyplace where I was going to get hurt. We did a lot of stuff on the test site with animals. They had some places on the test site where they

had old failsafe shots in the old days, where they would simulate an airplane crash that had a nuclear weapon on board and scatter plutonium and americium and a variety of isotopes out on the ground. And we had these fistulated steers, animals that had a window in their side where you could unscrew the lid and you could reach into the stomach and take samples out of them. We had four of those and we would take those out and let them graze in these contaminated areas and then take samples out of them

Now how did that work? They just had little windows in them and you could see what was—?

Well, it was a round plastic thing. I gave some of them to the museum down here. There may be some down there for you to look at when you walk through the museum. What you would do is on ruminant animals like cows, on the left side right by the hipbone, the rumen, which is the **[00:30:00]** large first stomach, and the skin are right together. So what you would do is cut a patch out of the skin, sew it and the stomach together, and let that heal up. And then you would cut a patch out of the stomach so that you could look right into the stomach. And that would heal up. Then you put something in it. We had plastic plugs made that fit in there and you could just unscrew the lid, like unscrewing a big jar, and reach in and take the samples of the grass. You or I could go out here in the desert and pick vegetation, but it wouldn't be the same stuff that cows would eat. And at different times of the year, they all eat different types of grass and shrubs and stuff. We had a guy that could identify the percentage and the species of the grass they were eating. So we would take these things out. You had to clean everything out of them first because they'd been eating hay in the corral. Virtually, you just rinse the stomach out—

And they let you do this?

Sure. I mean you weren't hurting them any. And then you'd take them out and you'd let them graze for a couple of days, then bring them in and unscrew the lid and take a sample out.

How many windows per cow?

Just one.

Into the stomach?

Yes, into the first stomach.

Wow, that's really interesting!

And we used to take these things around to fairs and stuff, too, to show what we were doing, you know. And one of the guys that I worked with had been a 4-H leader, so he'd take Big Sam—we called him Big Sam—whichever one was on display was called Big Sam because that's what all the literature said, was Big Sam. We'd bathe this steer, and the things got to be like twelve hundred pounds. I mean they were humongous. Eventually they got so big, you couldn't work them because you couldn't get your arm in far enough to reach the bottom of the stomach. But he'd bathe them and he'd bleach their head and he'd back-comb their tail and fuzz it all out. They'd be just like a show animal.

And one lady asked me, she said, `Well, that's the cruelest thing I've ever seen,` she says, `that's just mean.`

And I says, `You're wearing pierced earrings, I see.`

She says, `Yeah.`

I said, `It's the same idea. You make a hole in the ear and it heals up. And this plug is just something that he wears. You can take it out and it'll grow shut.` And I said, `It's the same idea as pierced earrings. It's just instead of a little bitty hole, it's a great big hole, but,` I says, `we have to keep something in it or it'll grow shut.`

How big were the holes? You might've said that but I don't—

Well, they come in different sizes, depending on how big the animal was. But, oh, it's probably six or eight inches around. And then there were small ones that were about that big [indicating size] that you could do on goats. And they're called rumen cannulas, and I gave a couple of them to the museum down here so—

They're called what?

Rumen cannulas.

So you did the same thing with the goats, let them graze?

Well, we kept the goats in a corral, and they were fed stuff that we wanted to give them. It didn't work out real well with the goats because the skin and the stomach wasn't strong enough to carry this plastic plug. It wound up being on the bottom, you know, and so it didn't work out real well. But it worked out fine with cows. And most of your universities that have agricultural programs have these animals and they used them for nutritional studies and things. Years ago, I seen a picture of one in *National Geographic*. So they aren't uncommon. The first four we got, we got from the University of Nevada up in Reno. And then when they closed the farm, we gave the ones we had back to the university. But they were too big to work by then. I mean you had to have animals small enough that you could clean them out. You know it's kind of a messy, smelly job—wet grass and stuff—you had to reach in by hand **[00:35:00]** or use a little dipper and actually clean everything out. You would get down to the bottom and there'd be sand and rocks and stuff in there that they'd eaten. You had to clean all that out before you could put them out to let them sample.

Did you find anything with those, what they were grazing on?

Well, what we wanted to see was what type of vegetation was picking up the plutonium in these contaminated areas. And so we would go out and we would get the vegetation that the cows had

picked. Then they would identify it, and then somebody would actually go out and gather a whole bunch of this vegetation, and then count it and analyze it.

Now do certain types of vegetation hold more, I guess, radiation or—?

Yes. In the wintertime there's kind of a leafy plant. It's called winterfat, and I don't know what the real name for it is, but it has little bitty hairs on it, almost microscopic. Well, that stuff will pick up the resuspended dust and particles, and that's what we found more in than anything. It was because of the little hairs [that] stuff would get caught in that.

Makes sense. Yes, I guess I'd never thought about that, that maybe some vegetation would either be more prone to absorbing it or hold it in like that.

Yes. And one time we used to take vegetation samples, or garden samples from people that had gardens that lived in Alamo and Rachel and close in to the test site. We found some stuff in some broccoli one time that some people in Rachel were growing. It has all kinds of neat places for things to get trapped in, and it was just from resuspension from the old atmosphere days, with dust blowing.

So you mention now that one of the things you do is still work with ranchers in the surrounding areas. What do you do with them now, or what is your connection?

After Three Mile Island, for public relations they came out with these community monitoring stations. And the EPA put them in all around the test site, over into California, into Death Valley, and up through Utah as far away as Salt Lake City. And they had air samplers and radiation detection equipment. Then as a community monitoring thing, we had somebody in the community that changed the samples and was a point of contact. If anybody had any questions, their phone number was there and they could contact them. In order to get the data back in here, EPA and Desert Research Institute [DRI] and Los Alamos [National Laboratory] and the

University of Utah put in a telemetry transmitter, a data logger. It would gather the data every four hours and ship it up to the satellite, and then we would pick it up off an Earth station back in Los Alamos. Then it would come over the phone lines back to EPA. DRI has that program now. Over the years I've got to working in that, repairing that and doing this kind of stuff, so I have five or six stations that I take care of that are primarily the ranch stations. I go out on Tuesday, change the air samplers and make sure the equipment's all working, and then go to the next one. I probably put close to eight hundred miles a week on. I go out Tuesday and spend the night either in Tonopah or in Ely, and come back on Wednesday, and then in the office on Thursday.

And so you do the monitors in those surrounding areas.

Yes.

And what's going on with those now? Anything?

Well, it's kind of just winding down monitoring from the testing days. I mean we're **[00:40:00]** not finding anything, just background radiation. But that still is good because the people out there know that we're not finding anything; that nothing is coming off the test site, migrating off the test site that they're being exposed to. We take water samples once a year from the wells, from the municipalities, and some local residents that are in close. Just a monitoring thing so we can say, well, there's nothing here.

And do they believe you?

Pretty much.

Sounds like you've built up a relationship with some of the folks over the years.

Yes. Yes, that was one thing that EPA was really good about, the relationship we had with the ranchers. I don't know whether you've talked to Chuck Costa or not.

His name is very, very familiar.

He's with Los Alamos now, but he was my boss for years, and he wanted us out there interacting with the people, knowing them and knowing their family. We'd run errands for them. When I spent the night in Ely, I would come down to a sheep ranch that the Uhaldes have that's probably eighty miles from Ely out in the boonies, and I'd always call Helen and say, I'm going down to the ranch. Do you need groceries taken down or does Gracian need parts for something? And a lot of times, why, her and one of her daughters would come running over to the motel in the morning with a whole bunch of groceries and say, Take these down to Gracian, or, Here's parts for his truck, he's broke down. Well, we were going anyway, so it was a good PR thing and it helped them and helped us.

So you were in a sense sort of like a PR link.

Yes. Oh yeah. We did a lot of that.

Did it seem to you that the folks, the ranchers, I guess, specifically that you were working with, that they were informed? Or did it seem like there was perhaps a miscommunication or lack of communication?

They pretty much knew what was going on. A lot of them either had worked on the test site at one time or another, or they had family members that worked up there.

So they were informed.

And then we used to take people on [what] we called offsite tours, where we would get a large bus and we would take people into the test site. They would go through the tunnels and they'd spend a night up there and go to the bowling alley and the Steakhouse. We'd do that two or three times a year.

As sort of a good[will] gesture so that they could see what was going on?

Yes, it was a thing—yeah. When I used to train monitors, one of the things I had trouble getting across to a lot of the young guys, especially ones that came in from back East,, they thought,

well, these guys living out here in the boonies, they may not be quite up to speed. And I'd have to keep emphasizing to them, You know, when these people ask you a question, I said, nine times out of ten, they already know what the answer is. They just want to see what you're going to tell them. And I said, If you don't know the answer, don't make something up. Just tell them you don't know, that you'll find out, or you'll get somebody to come up and explain it to them. But I says, Don't start making stuff up to impress these people because, I says, nine times out of ten, they already know what the answer is. They just want to see whether you're going to be truthful with them or not. And there's some resentment now among the people out there because of Yucca Mountain, for the railroad that's going in. Going through, it disturbs a lot of their property and they're not real happy about it.

Did you find any, aside from the broccoli, did you ever come across any families or ranches that had maybe been affected by the testing, maybe their children or their crops or their herds?

Well, there are people that have lived out there, like the Uhaldes—

And what's their last name?

Uhaldes. U-H-A-L-D-E. They're Basque sheepherders.

Oh, interesting.

And a couple of them have had claims against the government for some cancer and for some **[00:45:00]** things that have happened to them, but I don't know that you can relate it to the testing. If you take my family history, just about all the males in the Giles family have died of some kind of cancer, and none of it had anything to do with the test site. My granddad was a farmer, always in the dust and chemicals for farming, and my dad smoked. So it's pretty hard to say, but when you get to be fifty or sixty years old and you come down with thing. But anyway, there's been no—the people that live close to the test site have not been nearly as outspoken, I

guess, as the Downwinders that are over in Utah. In fact, there's a lot of the people that live adjacent to the test site [who] thought it was a mistake to stop testing. They thought that maybe it could be cut back, but to stop it completely, they thought that was a mistake. So they were supportive of it in a lot of ways, and I think a lot of that was because of the relationship that EPA had with them. Because when we went out there, we didn't tell them anything that wasn't the truth. Or if we had to tell them something, at least in my case, always put a disclaimer in that this is the best information I have today. It doesn't mean that tomorrow, [the] DOE's not going to change their mind and something is going to change. But we didn't go out and make a bunch of promises that we couldn't keep. And people would accept if you'd say no, I can't do this. But if you went out there and made a promise to somebody you're going to do something, then they expected you to do it. So that was when EPA was always pretty much up front with the ranchers and the miners and stuff that we dealt with out there.

So you started in 1964 out there. What year did the farm cease?

I don't know the exact year. It was in the mid-eighties. [EPA Farm closed in 1981]

And you are still with the EPA and have always been.

Yes.

And it sounds like you come from a farming background.

Yes, I was raised on a farm in Nebraska. So I knew which end of the cow to milk and I knew how to do all that kind of stuff.

So it was a pretty good fit.

Yes. And the dairymen and stuff that they hired up there had been farmers up in Idaho. Then we hired our beef herd manager. Our cowboy was a real cowboy from up in Tonopah. None of these

people had degrees, but they all were experts in their particular field. I mean these guys were dairymen. And this guy was a cowboy. He'd grown up as a cowboy. That's all he'd ever done.

Yes. And I think that's what's so interesting is, all these different people were part of what was going on out at the test site.

Like I said, at one time we had four or five or six veterinarians on staff, and all these other people. But we also had guys that could do the work, too.

Sure. And did you enjoy the job?

Oh yeah. It's been a very unique experience. Like working at the farm, there'll never be another place like it again. Never. I mean you couldn't do that today, the things we did. It was a very unique experience.

And you can't do it today because the circumstances aren't there?

Well, the circumstances—I don't know, just times have changed. Anything you try to do with an animal now, PETA's [People for the Ethical Treatment of Animals] down your throat.

Yes, did you guys ever have any type of issues with animals' rights activists?

No. No.

[00:50:00] *Do you remember any of the protests that went on out there?*

Well, the protesters were stopped at the main gate. They couldn't get onto the test site. So we didn't have any problem with that, and we weren't doing anything that at that time wasn't state-of-the-art. We were doing the best there was at that time. And we had veterinarians. It wasn't like a bunch of untrained people up there. We had veterinarians, biologists and chemists. It was something that needed to be done. You needed to know where this radiation went and how much of it came out, and there were just only certain ways you could do that. But whether you could ever do that again today or not, I don't know. Be a lot tougher. Just doing things like the deer

migration study, I captured 160 deer and I probably only had help on ten of those. The rest of them I did by myself.

And what did that involve?

Oh, we built a trap. We water-trapped them. And then I would go out with a capture gun, dart the animals and put them to sleep and put radios and ear tags on them, and follow them around.

And by "water-trap," it was what? I'm not familiar with that.

Well, we'd build a circular corral, it was too high for them to jump over, with openings in it, and we'd put water in it. There was water there seven days a week. They could come and go to drink whenever they wanted to.

So that that's how they would—that's what lured them in.

And then the [Department of] Fish and Game had these frames with netting on them that were traps so that the ends were open. When I wanted to trap, I would just slide one of these frames into the opening, and the deer would go in and trip a trip wire, and the ends would fall down and he'd be caught in this little cage. And I'd give them a shot with a drug with a capture gun, put them to sleep for an hour and put the radios and ear tags on them, take their pictures, and turn them loose. But to do that now, I mean Bechtel [Nevada] wouldn't let you do it. Just to drive around the test site, you've got to have two people in the truck. Well, doing something like that in the middle of the night up there by yourself, they'd never allow you to do anything like that anymore.

Right. And that's what you did.

Yes. I'd go up during the day and take my directional radio receiver and locate the deer that I had marked the week before and the ones that I had maybe a year before. I had some radios that run for over three years. I'd find all my deer that had the radios on and then I'd set the traps. I'd go

into Area 12 and sleep for a couple of hours and have supper about five o'clock, and then go out and maybe work all night long. You have to work on the schedule when the deer are available, you know.

Right. Yes, they don't have a nine-to-five job.

Yes. And I had two or three of my radio-tagged deer killed by lions and I had the lion in my trap sites on two or three different times. He'd tear the traps up and be gone.

You must've seen a lot of wildlife in your time out there.

Oh yes.

And at some point, there was a herd of wild horses there?

There's still horses on the test site.

Did you ever monitor them at all?

No. They were kind of a hands-off situation because of the wild horse people and the BLM [Bureau of Land Management]. Once in a while, somebody would run into one with a truck and it'd have to be put to sleep. We'd get some samples then from it or something like that, but we didn't do anything with them. We just left them alone. But we took coyotes and rabbits and that kind of stuff and monitored all that.

And so overall you found that, relatively speaking, what, there was no—?

Really no harmful effects to the animals up there.

Then in terms of translating those findings to the general public—?

[00:55:00] Well, the deer that we would kill, say, up in Area 19 and 20 probably didn't have any more radiation in them than the ones that you would kill if you were up in Ely or someplace. It was mostly just the environmental levels. I mean you could find strontium in them and you could find potassium and that kind of stuff. Potassium's a naturally-occurring isotope. If you don't find

that, something's wrong with your analysis system. But if you take samples anywhere, because of worldwide fallout you'll find strontium and some plutonium and that kind of stuff. So you would find about the same levels in them that you'd find—fact is, DOE told us one time that we should go downwind from the test site, so we went down to Searchlight and bought some cows. And we sampled them and had the results. Well, they had two or three times the amount of uranium in it than anything we'd ever found on the test site, and it was because there was almost mining-quality uranium in the hills down there wherever the cows were running. So they were just picking up what was there naturally.

Right. So there are folks out there in those areas and downwind and surrounding the test site that say, `But we are seeing generational birth defects in our kids, in our kids' kids`*, who will swear that it's perhaps from the fallout or being by the test site. How do you respond to that, or to them?*

Well, I haven't had too much of that, quite frankly. People have sicknesses and problems. But a lot of the people that are in close to the test site don't really blame it on the test site. I mean there's one family that we deal with out there, have a station on their property, and one brother died from cancer and another one died from a heart attack, you know. So I don't know. Both of them were in their seventies and eighties, so they just kind of feel like that's kind of natural. Their sons now are probably my age and they're running the ranch. They're both in good health, and their daughters are around and they're in good health. [Their] mother [is] still living there and their grandmother lived to be in her nineties, lived through all the testing, and so—

Good hardy living.

Yes, we don't have the problem with the people in close to the test site, I don't believe, as like you do the Downwinders in Utah. And I think the people in close probably were exposed to more

than the Downwinders during the atmospheric days. But I don't know whether it's because a lot of them have worked or are working either on the Tonopah Test Range or on the test site and have some knowledge of it, or just because of the relationship we've had with them over the years. We've had a lot more personal contact with these people than, say, some of the people in Utah. And that's one of the things here that I think DRI is trying to do; the reason they hired Lynn [Karr] and I. We knew all these people and they wanted to keep some continuity in that personal contact.

Which makes sense. It's almost like you—I don't want to say "clients" but you guys have been working together for so long.

Well, yeah. This one family, one of the sisters died and we went to the funeral. One of the brothers died, we would go to Tonopah and go to the funeral because they're friends. We've known these people for forty years.

That's significant.

And EPA used to have a lady that was a monitor that was stationed in Tonopah, and **[01:00:00]** there was a guy there, he's a justice of the peace now, has been for ten years, and he used to run a filling station. I saw him in a restaurant the other day and he says, `Where's Polly?` He says, `I haven't seen Polly for a long time.` And I says, `It's been ten years since you seen Polly.` He says, `Yeah, it has.` He still wanted to know what she was doing, you know.

Yes, so you definitely are part of the community.

Yes. And I used to go around—the deer study's kind of old now but when it was still fresh, I had a, oh, about a forty-five-minute presentation and I'd go to Elks Club meetings and all these kind

of things, and show pictures of the deer on the test site. So people could see what these animals looked like and what we were doing. We used to do a lot of that stuff.

It's very interesting. It's just an interesting part of the history of the test site that I don't think a lot of people are really aware of.

Well, it's been very interesting. I don't have a degree in anything. I'm just a high school dropout. I finished high school in the Navy. But I have a ton of two-week courses and one-week courses and I probably have the equivalent to having a master's degree just in two-and-three-day classes and experience and two-week classes in various technical subjects and on-the-job training. Working at the test site gave me an opportunity to do things I would've never been allowed to do anywhere else. Like the deer study. When we went to the Fish and Game to ask about that, they laughed at me and says, `We have people with wildlife degrees we wouldn't trust with a study like that.` Well, it made me so mad, I was going to do it if it killed me, and that first summer just about did. But in two years they were sending people to ride with me to find out how I was doing it.

What years were you doing the study? You may have mentioned before and I—

This was in the seventies, '74 to '83, something like that.

OK. Well, I think that there's definitely something to be said for hands-on, practical, you're-out-there-doing-it kind of experience. I don't think that that can ever be replaced by classroom.

I did things a little different than what the Fish and Game did. They would trap during the wintertime when the snow was that deep [indicating depth]. Well, I couldn't get *to* the places where the deer were going on the test site in the wintertime when the snow was that deep, so I had to find a way to catch them in the summertime. And like I say, in a couple of years, when I proved that I could do it and it was working and I could show them pictures, then they were

sending people with me to find out, well, how's he doing that? Well, I'd pick this guy's brain for all the information I could get from him, and we'd exchange information. They would ride around with me for two or three days, and a couple of months later they'd send somebody else. So it worked out.

Definitely sounds like some good opportunities.

Yes, but like I say, the riding in the helicopters and working with the deer and working with the animals at the farm, I'd have never been allowed to do that. Nobody would, anyplace, except on the test site.

Did you ever think you were going to end up doing that?

No, I had no clue. Just kind of fell into it. When I went to work up there in '64, everybody says `You're a fool for going to work up there because testing's going to be over in a couple of years.` And I said `So what?` I was looking for a job when I found this one. I didn't have a family or nothing. It didn't matter to me. I could put everything I owned in the back of my '60 Chevy and go down the road.

How old were you when you started out there?

Twenty-four.

So that was a good job to have for that time.

Yes. But working with the animals was a unique opportunity and, like I say, I don't think it'll ever be duplicated again.

That is its own part of history and part of time, and a very unique part of our history. **[01:05:00]**

Well, I certainly thank you for taking the time to talk to me about this.

Well, no problem. I hope there's something you can use, and like I say, get a hold of Jamesie if you can because he started there before I did and he had a break in service where he went to work for Rocky Flats [Colorado] for four or five years. So he's got some experience there. And

then he came back as an offsite monitor. He worked all the time as an offsite monitor but, like I say, he helped train Bruce Church and a whole bunch of people that are big shots in DOE.

Yes, I will give him a call. Like I said, we're sort of laying things out for the upcoming month, but I would definitely like to get in touch, so thank you.

Is there anything that we didn't talk about that you feel is pertinent or important to the interview?

No, that's pretty much it. I'll probably think of something.

That's always how it goes.

Yes, but that pretty much covers the high spots on what I did up there.

OK. All right.

Like I say, it was really interesting. It's been a real good ride.

Sounds like it. Do you ever get out there anymore?

I haven't been on the test site now for four or five years. My job here doesn't require me to go up. I still have a Q-clearance but I can't find an excuse to let them let me go back up there. I tried to talk them into starting the animal investigation program up again but nobody seems to be interested in that.

Maybe at some point in the future.

Oh, by then I'll be too old. But it was interesting to do and be responsible for. One time after all these veterinarians , biologists and all the wildlife people left, why, I was the only one left and I was still doing the sampling of the deer on the test site. Our last veterinarian had retired from the Public Health Service, but he was on contract, so I would go out and buy cattle from the ranchers a couple of times a year and bring them onto the test site. Then he would come up for a couple of days and we'd spend a couple of days taking samples out of them. I'd get the analysis done and

write the reports, and he'd go home and put his feet up again. You might want to talk to him, too. His name is Dr. Donald D. Smith. He's a veterinarian.

OK. And he's local?

Yes he's here in Las Vegas. He's in the phone book. And he was the veterinarian in charge of the farm all the time up there.

Great!

He came here about a year before I did but he retired sooner than I did because he was a Public Health [Service] commissioned officer and they had to retire at thirty years. So when his thirty years was up, he had to get out. But all the time the farm was going at the test site, he was in charge of it. So, you might want to talk to him, too.

Good to know. Yes, I would like to.

If you can't find his phone number, why, give me a call. But he's in the phone book.

OK, I'll look him up in the phone book.

That's probably how you get most of your people. Say, have you talked to this guy, or have you talked to that guy?

Exactly, and it's really helpful because it makes for very interesting—people have interesting stories, and a very diverse group of folks that worked out there.

How about Jack Coogan? Have you talked to him?

I don't know. The name does not ring a bell.

It's C-O-O-G-A-N. He's in the phone book under John. John Coogan is his real name.

OK. And he worked with you also in this?

Well, he started out working on the test site during the tail end of the atmospheric testing. He worked for RADSAFE [Radiological Safety]. And then he joined Public Health Service. And

then he was our radiation safety officer for years, and then he was in charge of offsite for years, the testing.

I would definitely like to talk to him.

So if you can't find him, call me and I'll get his number for you, but he's in the phone book also.

[01:10:00] But there are two John Coogans. One's his son. They live on Tara, T-A-R-A. But he'd be an interesting person to talk to.

Well again, thank you so much. I appreciate it.

Well, if you have trouble finding those guys, just holler.

[01:10:20] End Track 2, Disc 1.

[End of interview]