

Landers 1

I: Do a sound check. This is Jean Eells. Today is February 17th, 2016.

P1: This is Lloyd Crim from Iowa.

P2: I'm Jake Landers living in Texas.

I: K. That's going to work just fine, leave it up so I can see it just see just little bit.

P2: Red light

I: Yeah, see it just a little bit there. That should be all right. I'll be alright. I can stand up and see it. I will start this recorder just to see if it's going to actually work. Which it might. Red lights on that's a good sign. So the purpose of our interview today is to capture some of the history of Iowa's modern prairie restoration and protection and so our conversation might wander a little bit today because we want to capture a lot of different information about everything from the integrated roadside vegetation management program, which I will hereafter refer to as IRVM, and the living roadway trust fund, which will be referred to as LRTF and the other terms that we might use will be prairie restoration, native prairie, prairie remnant, prairie reconstruction. I think that those are some of the main terms that we might use in our discussions and so, we'll start out with finding out when you came to Iowa and some of your earliest recollections and you can just talk.

P2: Well, my first association with Iowa was when I interviewed in May of 1961. It was beautiful. I got a beautiful taste of spring in Iowa. It was in Ames, so we didn't see any prairie at that time and so I was offered the job and in January 1962 we arrived in Ames with snow on the ground from California where we had been in school. Quite a shock-- Was not that May of Iowa that we saw earlier. So I was a little bit slow at getting to the prairie. I jumped into teaching right away. My predecessor John Aikman was ailing and I was more of a graduate assistant there for a while as we got into the plant ecology courses and the dendrology course, but it was probably the first summer that I ventured into the prairie with one of John Aikman's former students and then the second summer probably, was with Sylvan Runkel. Now nobody knew prairie or woodland better than Sylvan Runkel and I really admire his tenacity and working with conservation groups so a day in the prairie with Sylvan was quite an experience. Research really didn't start for a while. I was interested in-- in establishing prairie and I said, "well what comes up after a burn" so we walked one day along the Boone railroad tracks where there was remnant prairie and there was no seedling. No seedlings. Well, what's going on? Well, of course the prairie is very very perennial and not too many plants come up from seed. So I kind

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of backed off and it's hard to recall the sequence of things, but I was pretty involved in teaching and actually developing the ecology courses and stumbling around trying to stay ahead of the students. The first really battles I had I think were with Pammel Woods and the Dutch Elm problems. We had to-- we had the-- the question over Dutch Elm disease. One of the thoughts was to remove all the disease trees including Pammel Woods so that we could save some on the campus-- the main campus. So that was a digression and the golf people wanted to expand into the Pammel Woods and I thought that was the most important teaching area out-- outdoor teaching area on campus. We could get there in fifteen minutes with students and I went through with John Aikman as his experience over many years and learned quite a lot about the composition of the Oak-Hickory and Maple-Ash wood slopes.

I: So your entry into protecting wild areas started right shortly after you came as a faculty?

P2: Oh yeah, we had a little triangle of prairie south of Ames that one of the old Agronomy professors owned. It might have been a half acre and that was the first area that I took students to. One of the remarkable things was sticking a soil probe into that little track of prairie and comparing it with the cultivated field across the road. The difference in the soil structure was amazing. So that was too small an area to really collect seed from or to, I don't know if we did any seed collecting then or not. but, the seed collecting came in with Paul Christiansen. He had been teaching in high school and was interested in an advanced degree and was interested in the prairie growing up in Northeastern Iowa on good farm land. So we kind of started a program of collecting seeds and seeing what the seedlings looked like. The Ag department had plots where now dormitories rise. I've forgotten-- maybe Ash Avenue. Research plots-- we started planting some prairie seeds in there. Big and Little Bluestem, Compass Plant and so on.

I: So that out by the towers, perhaps?

P1: Might have been I don't recall, maybe I know the Curtis Farm had some plots.

P2: The Curtis Farm was further south.

P1: Yeah. Further South.

P2: But this was where they put in two men's dorms. Maybe they are gone again by now, but I believe it was Ash Avenue plots. What we called them.

P1: (In background) They are the towers.

P2: We had about two or three years working with Paul working on those and he was able to get a ditch digger or what do you call it-- an excavated-- a trench alongside one of his plots and we sprayed the roots with white paint and then picked away the soil so they were quite visible. Of course the roots went way down out of sight. Those plots then were doomed to be covered over with pavement.

I: Now, let me back you up just a little bit. The plots then that you were looking at this was from the seedlings?

P2: yes. These were initiated on plowed corn ground. And they did well-- in the second year we had some compass plant blooming and the grasses took off. Well, they were going to put in the parking lot and the high rise dorms and so our plot there was doomed. So that's when we got into my first experience with prescribed burning. Paul had grown up on the farm and they had burned ditches so we got out there one day and it was the right wind-- according to him and set this plot ablaze. Plowed field all around a little square of maybe fifty feet and I could just see my career as a young assistant professor going up in smoke. If that jumped 150 yards and set somebody's house on fire. Well of course it had high flames-- six or so feet high but he got me started. So then in the-- we had four state prairies at that time, handled by the parks and wildlife. They didn't know anything about prairie and we decided to burn on Kalsow prairie and I got permission and the parks people helped by-- by then we were able to mow, which was a pretty good fire break and burn in April. We burned Kalsow. We burned Sheeder. I did not get on at burning at Hayden. John Ehrenreich had done a research study on prescribed burning on Kalsow-- on uh Hayden. But it was not followed up and it was a little far away for me to travel and there was no further burning on it. Quite a few- Quaking aspen came in on it and it was a wet-- wet-mesic prairie. We kept the woody plants pretty much out of Kalsow but Sheeder had a drainage that went through it that got filled up with boxelder and what have you. Let's get off of burning and get into kind of the re-restoration or what Paul was doing in re-establishment. John Aikman had a research grant from DOT for roadside plantings-- and it was pretty much inactive. It was pretty much one of those things that he had gotten maybe two thousand a year-- gave him travel funds and they did have a conference that-- so he kind of shifted me into that and in a couple of years I had applied for more because the interstates were --were becoming finished and they had rest areas and they had problems with roadside vegetation-- what to do. At the time, I think it was mostly smooth brome and crown vetch was considered one of the important plants they didn't have to mow. I hope they learned their lesson on that. So we had the little rest area in Story County and we were encouraged to develop some procedure for prairie but not such that people could see it yet. Seems like they had had-- in the rest area toward Iowa City that didn't do so well and of course what looks good to some people doesn't look good to other people and we were criticized a lot for the weeds that grew in our plots. So if I had thought at that

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time, I would have proposed single demonstration plants like one clump of Big Bluestem- labeled. One clump of Little Bluestem-- labeled at the rest areas. I was thinking the total prairie mixture and more on the roadsides. I think I had one graduate student Terry Hynard that tried transplanting into the roadsides. It didn't work. We tried it on one of the west rest areas and without water they didn't make it so that was a little bit discouraging. The county conservation boards were interested also in the roadside planting. And that's probably where I got a little bit more interest going. The first commercial planting of a mixture grasses that we call prairie was just a mixture of grasses-- was a Salisbury lab in Charles City. The Iowa Foundation-- or Farm Foundation, I forgot the name of it, had bought a grass drill that they used in planting and I inherited that grass drill. We tried several plantings on county roads and it was kind of awkward because the drill didn't work good on ditches or un-level ground. It was kind of frustrating to try to do that kind of planting. All along, Paul had tried to develop plugs, what we call plugs of prairie and I think maybe we used plugs in the famous Science 2 Prairie-- the only prairie remnant in prairie planting in the world that replaced a parking lot. That-- I'm out sequence I'm sure but..

I: It's okay. It won't hurt a bit.

P2: But uh, we had this opportunity-- this bare ground by the new Science building and whose idea it was, I don't know but the Fish and Wildlife club was very supportive and a lot of the planting was done-- seeding, plugs and it came up to a glorious weed patch. Canadian thistle in one corner that we fought for a while. Finally, when I left in '79, late August '79 it was surviving with quite a few individual plants but still a pretty good patch of weeds. We burned it. I asked the grounds department about burning and they were kind of out of the picture. Go ahead and do it-- just we don't want to be involved.

(laughter)

So we burned half of it I guess and we may have done some good but it was interesting for the students I think.

I: Let's poke around on that one just a little bit because it seems like a good time to talk a little bit more about the Science 2 Prairie. Would you have been the one that would have instigated that then or did you have a compatriot..?

P2: I don't think anybody else was really that eager.

I: Uh huh.

P2: But some things just happen you know.

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I: Yes.

P2: And whether it was you know-- Dave Troeger might have been in on that. He was pretty outspoken and certainly strong in environmental conservation. We did have a-- we had a noon lunch meeting once a week where we could discuss some environmental issues and probably it came up in that. I don't know any of the-- Milt Weller would have been there. I don't know any of the other faculty that were really too eager to get into it. Maybe, uhm, the fishing man, uh

P1: Carlander?

P2: Carlander might have been supportive.

P1: Arnold Haugen.

P2: Haugen. Yes. Haugen was one of the strong supporters of protection of natural areas that we had. Prairie, forest-- maybe more forest-- that was what he was used to but I'm sure that he was involved in some way.

I: Haugen was in the botany department wasn't he?

P1: No. Wildlife.

I: Wildlife.

P1: I did a study under him.

I: Okay, that's why I recognize him. Weller was in..

P1: He was the head of..

P2: Wildlife Management.

I: Carlander was..

P1: Fisheries, yep.

I: Fisheries. So you were really the only one coming over from botany.

P2: hum,

I: maybe. Troeger?

P2: Maybe, I know David Stansforth didn't because he thought it was quite a mess. He was quite critical of anything native. He was all for cultivated crops from fence row to fence row and weeds were his strong contribution-- in weed control, but in later years he was very supportive of our setting up some plots on the backside of Curtis Farm out of the way of public view and we had some plantings of switchgrass, Indian grass that we were able to burn with students on our ecology labs.

I: Since we are still on the campus pieces-- one of the things that I know I learned about later on was the plugs that you were able to get from Ruby Hendrickson.

P2: Oh yes!

I: Out by Stratford, which she had farmland not far from where Lloyd and I grew up, but I didn't know that some of the parts from Science 2 Prairie had come from her farm south and just slightly west of Stratford, Iowa and she had-- when I met her she had a letter from you in regards to the prairie remnant so there were apparently plugs that you were able to get from her native prairie remnant to go to Science 2.

P2: I don't know the details, there was one remnant that might be this one that was going to be plowed up and so we salvaged some material from that. In fact, I think I took a class to see it and there wasn't much of it left by the time we got there but that's probably not the same sequence.

I: It may or may not be the same one but her native prairie remnant was right in the middle of eighty acres and really, I mean it might have been a little bit wet but by all rights it's something that would have been plowed because it was well-drained enough and her grandmother I believe was the one who said you can't plow this because it has all these flowers. Then she has a picture of her own mother standing in all the prairie phlox. Just was just beautiful. The current status of it is that it is very very small, very narrow because the farmer that was farming it continued to turn around on it which dug up the wheel tracks and introduced weeds. There is still just less than an acre left. So, then she was very proud of that and that's why she had held on to your letter from that so that connects the Science 2 story.

P2: Well it seems like in the area that we visited had some mounds and they were considered to be Indian mounds and they could be burial mounds so they kind of strayed away from plowing any further than that disappeared from their visitation for some reason. It was in the same area.

I: In the Stratford area?

P2: In the Stratford area.

I: I wonder if that could be north were Fred Osbourne's place was because there were mounds there.

P2: Yeah, but it was a very small area and that was all that was left pretty much. Yeah.

I: Interesting. Melissa's still alive.

P2: Now let's see. Ann did a little study on the Science 2 Prairie-- Ann her father was head of Animal Science-- Ewing. Ann Ewing and I don't know if I ever had a copy of it, I might of seen it but I don't remember but it was kind of an accounting of what's there. This would have been probably in '74 plus or minus and it-- well I don't know it's still anywhere. She became a professor in Oklahoma if I'm not mistaken and I've lost track of her-- as I've lost track of a lot of former students. She was in the range field and I know she was struggling to get a little respect from the males running around in range management. I don't know if she retained her Ewing name or not, but I bet she did.

I: Tell me a little bit more about burning with students.

P2: Okay. I was very strong on outdoor classrooms. In plant ecology, we kind of started but it was really in the basic ecology course which I essentially had the labs and Lou Best later on had the lectures and at least one lab was involved with burning. The first time we burned was at the Ledges. The Ledges prairie was essentially all grass. We could mow and mow in little partials and have each class-- which at one time there were about six sections so that meant six groups burning and maybe one out of six got rained out or didn't get to do it. One of the first times we burned at Ledges we-- the class in the morning-- it was quite damp but we had lots of fuel and we left at 11:30 to get back to the campus and it was still smoldering a little bit but it was under control. Well, when I came back at 3:00, the park ranger said that "your fire got away." It had rekindled and had got into the edge of the woods and they were fussing because they had to put it out. Well, it would have gone out by itself, it was so wet in the woods. That was an experience of seeing a prairie area burned twice in the same day. The second class, I think all the second class did was to, uh, wander around and see if there were any burned snakes and small mammals. Let's talk about the Ames High Prairie a little bit because that was within reach of the campus and so our, uh, burning at the Ledges was diverted to Ames Prairie and I've got more to say on the Ames Prairie getting preserved but it had a north slope, a south slope and a flat upland and we would get tarps over there with a flapper and matches and burn a little patch. Once we had late snow shower

and we were planning to burn and we got up there and snow was falling on the prairie and we tried to burn and as soon as we got a fire started it would melt the snow and put the fire out. One of the teaching assistants, I think his name was Krumm..

P1: Lynn Krumm.

P2: Lynn Krumm said, "What in the world are we doing? This is nonsense." Trying to burn the prairie in the middle of snow, but it was very interesting.

I: So just because now we have such different fire protocols, what I remember burning we showed up with flappers, matches and a few rakes and a lot of good intentions and it worked pretty well and I remember paying attention to things like wind direction and some of that but for the clothing and some of that stuff cautioning the students. I think it's an interesting piece.

P1: When was that picture taken?

P2: This was probably taken--- where was it taken?

P1: Where was it taken. You were talking about the Ames High Prairie but I don't recognize anything around it.

P2: No. It was taken there.

I: And we are looking at an article from the Ames Daily Tribune, Friday June 29th, 1979.

P2: Yes. No, I'm nearly sure it was taken there now-- probably-- we had a photographer that was quite good at staging and she said something about one of the pictures somewhere has me chewing on a grass stem and she initiated the question, you know, "Is it sweet?" or something like that. Well, I stuck it in my mouth and she got a picture of it right away. But I bet that is just one of the denser areas of the prairie.

P1: It doesn't show any trees and I don't know where you could stand now and get that much prairie that high without the trees.

P2: yeah. Without the trees. That is interesting. Could have been to the north because that was corn field. Eh, I don't know.

P1: I just saw the picture and I thought well where was that taken?

P2: But I'm sure it was on Ames Prairie, Ames High. That was good because we could get over there in one of the labs and do something and get back to class and I didn't have to worry about transportation. Make students walk-- I don't know that we could do that today.

I: Bit of a hike.

P1: I remember walking up there for different classes and stuff.

P2: Well, the Ames Prairie was a remnant of a much larger unit that was Richard Pohl's favorite prairie walk and I remember asking him where would be a good place to take students to see the prairie and he said "Well, don't take the Ames Prairie, they ruined it building the stadium so I avoided going up there for a couple of years simply because it was ruined and then finally I probably wandered up there just to see what was left. We took a class to the woods nearby so just looking for other places to go with students. I found it was a pretty good patch of prairie to me it was okay, it wasn't ruined but according to Pohl_who had saw the bigger picture. It was no longer worth looking at. I said, "Well, even if part of it was worth saving" so then we kind of went into a savings mode because they were interested in more parking space for the stadium and Dick Trump was the biology teacher that I consider the most responsible and respectable protector of the Ames High prairie.

I: Biology teacher at Ames High School.

P2: Ames High School. At Ames. He was able to get me to do a prairie talk and had a nice bunch of community people. He was able to get me to take them around the prairie. One of the articles I read, he was able to get three professors and graduate students to give one on insects, one on vertebrates, and one on grasses and this was after I had gone. Maybe, no. I don't know. I don't remember, but he was able to get the community involved in Ames High prairie with a lot of wheeling and dealing with the school board. We got it and I don't, I really don't know the names it seems like it's pretty well written up in one of these stories about the sequence of getting it declared, the nature conservancy was instrumental in putting some support behind it and it became still owned by the school board but nature conservancy had management aspects and we had a little bit of trouble convincing the conservancy people that burning was a proper management procedure and I'm very pleased to see that they quickly had utilized prescribed burning in some of the prairie areas that they have acquired.

I: Let me dig into just a little bit more into protecting the Ames High Prairie. Where in your experience did that fall? Had you already been pretty conservancy and protecting prairies prior to that so working with or being on or around the protection of the Ames

High Prairie, you'd already had some experience laying ground work on that sort of thing, I just want to catch that.

P2: We had been scouting the state for prairie remnants and my approach was to convince them that it was valuable to save it and the land owner was reluctant because it was still being taxed at the rate of good farm land. That was a difficult hurdle to cross in some cases. We kind of went around that and said well let's maintain it the best we can and one of the things is prescribed burning so I remember several that I don't know - we burned at Doolittle and that's another story. Lloyd can tell that much better than I can, but I can tell a little bit of the sequence. It's kind of hard for me to separate the-- what we are thinking about in preserving Ames High prairie with the other areas in the state. For example, one of the state representatives was Bill Winkleman in the vicinity of Kalsow prairie I think south of there and he planted a little hill on his acreage. Two grasses which were available and we had-- we had a field day there for handicapped students and he wanted to give them a buggy ride to the prairie and I was supposed to talk about the prairie to the students and why it was important and this was a little bit of the original. Well, he decided that it was important to him and important to Iowa to retain some of the railroad prairie near his farm. I don't think it was attached, but he complained about the price that he had to pay, but he did purchase this strip of railroad right of way when the roads were taken up so that-- if that was in the beginning, early or late, I just don't know. It was one of the last related incidents of interest in the prairie.

I: But it involved a representative that (inaudible)---

P2: Yes and the thing I remember about him was that one morning I showed up-- we were going to go take a look at his prairie and he had a half gallon of ice cream eating for breakfast. Now, how much of it he had consumed, I don't know but he was a bachelor in the old family farm house and it was interesting. Pretty Cool. But that's the point-- the real problem with the roadsides and plating prairie is where do you get the seeds. There was several companies that would provide a general seed grown in Oklahoma or somewhere where it was cheap to grow and it had no genetic basis in Iowa, but it grew well. Maybe taller or something. So that was a problem and I don't know where the seeds came from for the original plantings and Salisbury lab or at Winkelmens. We just-- all just collected a few for little plantings but it wasn't until we harvested the seed crop on Doolittle that we began to have locally grown prairie seed. I think the date was in '76 or '77 along in there-- Carl and I approached Mr. Doolittle-- could we collect seeds and Carl had the foresight-- well could we harvest the seeds with the--

P1: Combine.

P2: Combine. Yeah, well that'd be alright. I'd pay a thousand dollars a year to make hay if you paid me a thousand dollars, you could have the seeds. Well, we kind of gulped and thought we'd try it. Well, I bought one share, Moss bought one share. Toma and

P1: Randy Moss.

P2: Yeah, Randy Moss. Yep, they bought one share, they were interested. Carl Kurtz bought a couple of shares and somebody else bought so we had six shares bought and then the director of, I'm trying to think Greene county-- but one of the conversation-- county conservation directors bought six-- bought five shares of the seed. He had quite a development. I wish I could remember his name.

I: It'll come. It'll come later.

P2: And he had, well he had peacocks and geese and up and down hills-- pretty natural prairie and he was interested in planting more. Seemed like it was south and east maybe a county or two of Des Moines and I'm thinking Greene in my mind, but--

I: Warren County I'm guessing. There was some rural-- there was some people there--

P2: This fella had his PhD. and he never published his thesis and he spoke it us at one affair-- seminars on his work in southeast Utah where it was more or less the early people using native plants and it was fascinating story-- a little bit outside of a strict botanical seminar but he told of the sandals at the bottom of the cliff dwelling. The pile of old sandals made out of yucca fibers. Said well they just threw them out the door and a big pile of junk shoes. So we didn't follow up much on that. He got the seeds and used 'em. Well, Carl Kurtz got the seed and he planted them on some of his family cropland and before you know it he was in the seed production business and found that he could make more money than he could on those hills growing corn and wasn't washing the soil away.

I: And for the purpose of the recording, Lloyd if you want to add anything to that or chime in on the story this is a good time to do a little story.

P1: I know that Story County had leased that little property and added to their management unit but Dorrell didn't like the way they took care of it. They weren't burning it or they weren't doing something so he dissolved that partnership. I knew that so I told Carl that Story County would not have it anymore and his ears perked right up and he said he was going over to talk to them then. He went over and talked to them about renting the ground. So I didn't know about the shares and everything.

P2: You think that Story County had it before we--

P1: yeah, I don't know how many years they had it but it wasn't very long-- not very many years that they had leased it for part of their unit with the Doolittle on down there and so--

P2: There was another brothers or uncles that had some wetter areas north of the original unit that we combined and of course we told them it was precious and they said, "well, how much you going to give me for it?" If it's precious it's a heck of alot more expensive than regular land, well no, we don't have the money but it is precious and it shouldn't be destroyed. So the farm service-- seems like the mans name was Bean-- I don't remember-- was very tolerant of my interest in prairie. He was of course a productive farmer and couldn't quite understand why we would fuss so much about these remnants but he listened and whether they got involved in offering something on the uncles, I don't know but-- I just didn't get in on that-- they did buy the grass drill and probably because of the Salisbury people were influential Iowa industry and probably contributed something to the Iowa Foundation and so that's the way things work.

I: We are at about an hour and I think it's appropriate to take a break.

Landers 2

P2: Prescribed burning. She'd be down next week to talk to our prescribed burning association. And she on our burn last Wednesday on the ranch. Just we will take a break sometime and we will have you look at..

I: That'd be good. We are on.

P1: So who had the original idea to combine prairie, then? Was that Carl?

P2:...Carl...

P1: Did he have a combine?

P2: He had, it was, he had accessible...equipment, so I presume that it was his but he could have borrowed it from a local and it didn't dawn on me at the time. I'm not a mechanical person. I don't-- I drove a pick-up when I was about eight, but I never drove a tractor, my mom wouldn't let me and such is that but he proposed-- I proposed harvesting it by hand he said I've got a combine and we can do that.

P1: Were you along when he tried that or did you see what happened or..

P2: No. He just-- he just came by and delivered about-- I think he had already divided it up-- about five or six bales of fluff.

P1: Yeah.

I: Yeah.

P2: Fluffy hay. And I said okay.

P1: Did you try planting any of that?

P2: No I didn't. I just-- that would have been in late 70's and I was just kicking my head above water like this (laughter) trying to get some graduate students finished and--

I: So how did you and Carl make the connection? How are you two connected?

P2: Well, like I say, Carl was a very inquisitive student. He-- I think his father was gone by that time-- pretty early and he lived with his mother on the Ol' Ranch. El Farm in St. Anthony about a half mile out of town and not a good farm, quite a steep slope for most of it and I just imagine they got by. He was-- he was very interested in photography-- but

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very interested in all fashions of wildlife and plants. What really got into prairie, I don't know. I don't know if he was in on the early burns or not.

I: Oh, I'll ask Carl, I just thought if you had a different perspective.

P2: You've got a chance to visit with Carl then, too.

P1: Maybe it was your interest in prairie was infectious.

P2: Might have been.

I: Worked for a lot of us.

P1: yeah.

P2: I think Paul Christensen was doing a lot of collecting and probably the-- he might have been along, in fact, I know he was along on one of the trips to Kalsow because I have a picture of him scrunched over taking a picture of something and I may have-- I probably gave it to him, I try to give a bunch of pictures back to people, but I remember him scrunching along probably taking a picture of butterflies or something. Anyway that was probably an introduction and you could see his mind working on how am I going to transform my corn production to something to save the soil that's filling up my pond and wither-- but he did start a little patch very early and kept adding to it and I think I made a couple of visits there and then I would go by and pick him up and we'd go up to Upper Iowa and try-- trying to relate tree rings in Cedar to tree rings in Oak. And don't spend your time working on tree rings in Cedar. They don't work. They don't work. They are too fuzzy or something. I never did get confident in-- and your rings in Cedar like in Pine or Oak. So Carl took the seed and buried 'em. So he was producing seed pretty soon of the main grasses and—

P1: I remember one of the restrictions on the early seed was that Durrel did not want them to sell seed to Story County because he was still mad about the way they took care of it so they could sell it, but Carl could take it and grow it and then sell that back to-- people did do that you know-- find it, grow it, and sell it to Story County. That was okay, but they could not buy any of the original stuff because he did not want to do that. He's--

P2: yeah. That's interesting.

P1: Yeah. He's gone now but his son is still having the land and they are-- the Iowa Natural Heritage Foundation is renting it for a pretty good penny for rent for this thing and they would like to eventually buy it but they can't get them to sell it.

P2: Are they still in the dairy business? That was taking up all of Carl's time and I remember he was complaining 'cause he didn't get to go fishing and one time he did go fishing when we had set up a meeting just to visit and he was on his way south for something for a fishing expedition. Someone was tending to his cows.

P1: I don't know, I don't think so.

P2: We burned once at the Doolittle Prairie but I don't think, it was not a class venture. It was volunteers during that time to increase the seed production. I think it was before we started collecting seed, I don't know.

I: Let's circle back to some of the DOT stuff and I'd be interested in some of the political or contextual pieces around that. It sounds like John Ackman had the relationship in the first place and you then picked that up and was able to kind of keep working with that and who else was...

P2: Okay. The key person in the DOT was Harold Dolling who was a landscape architect-- I'm pretty sure-- who was pretty responsible for the design of the roadside rest areas and the roadside picture in general. There was a field manager who did the dirty work of planting and mowing and that. And I can't remember his name and he was more interested in a mowed lawn appearance or mowed smooth brome appearance because that was less-- that was less stressful in setting up and keeping your maintenance personnel doing the right thing. I'll come back to that in a minute, but when I started working on it we were trained to determine what would interest the public in roadsides. So in-- I've got 1974 down-- no no okay. About 1970 I think, the photographer for DOT, name was Bill Burns and I would go out and take a little bit of movie footage on prairie plants. The wind blowing, things waving, and this was kind of what he was doing was documenting our research and in the back of our minds it was trying to put these together so in three years, we had done this and I remember a little bird had a nest right off of the pavement in the roadside and we were, oh that would be a good picture and as he was getting closer, the little bird flew up-- and I don't know what it was. Anyway, it was a little bird and so that was an idea of the roadsides are good for something. Pheasants or whatever so that went on and then he started getting in trouble with his supervisor. Spending all of this time, which wasn't very much, but maybe once a month well, what are you going to do with it? So he in his spare time started putting it together. Well, he got into more trouble with his time and it was-- that was three years. So then he started working and I was planting and doing

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this other stuff and he started putting it together. Well, we came to a dead stop on the film and finally, I was running out of that project and it had to be renewed and I had to give the final report and so we turned the film footage over to the ISU film production unit and at that time they were pretty well-recognized for putting together little short films in botany. John Dodd was a great proponent of single concept film that showed maybe one minute of something happening like a swarm of algae or something and--

I: Youtube videos. I mean, it's just like a Youtube video we do today which are very short and single concept. That's very interesting.

P2: So, we put together-- they put together a film called prairie roadsides. And I want you to look that up and they probably have a copy filed away back in their archives and it shows the little tilting to background music or roadsides in Iowa and the importance of native plants and so that was my project summary. Didn't impress too many people in the DOT I don't think. I took it to the RAIN society meeting that winter in Arizona. I took off six months of leave, sabbatical leave and showed it to-- and had fifteen minutes to do maybe-- and showed it to the session that I was involved in and whatever it was I said the title of my part in that session was Engineering and Prairie re-establishment or something like that. The total audience was one and he happened to be a former professor from A & M that was curious about what I had been doing. So that was very disappointing but kind of the way people were in something different. Didn't have to do with grazing so it didn't attract much attention. But we used that many times in the next year or two, probably less than I had a little sequence of slides that I called Prairie in Iowa and I tried to visit every garden club and women's group in the state that would have me and drum-up a little bit of support for prairie recognition and out of that I must tell you that I had faculty, women's club of Iowa State University out on the Boone Prairie once in that time period. These elderly, influential ladies strode through the switchgrass and big bluestem with me and that evening, I was itching like mad and that was in the summer of course. Well, the next winter I was invited to give a talk to the faculty women's club and I said, Yes, I'd be delighted and I have pictures you don't have to go in the prairie with me again so when I gave that sequence, I said I got home that night and counted one hundred chigger bites on my body and this little lady said, "I beat ya!" Oh goodness, but they were pretty nice about it.

P1: Boone Prairie. Was it the railroad...

P2: It was the railroad track. Yeah, that we just, we called that the Boone Prairie. I hope a little bit of it still exists.

P1: Oh yes. Absolutely. Yeah.

P2: We kind of got in trouble because we took a few plugs out of there without anybody's permission and whoever was-- kind of looking at it from the Boone community was not pleased and I think we smoothed it over eventually but you need to get permission to do something like that when people are involved.

P1: Well, basically they have shut off access. I remember having burned that piece before but no nobody can do anything on it. The railroads have security and stuff.

P2: I figure some lawsuits over it and stuff.

P1: So you can go out on the prairie but you don't have very long on the railroad to be out there before they are telling you to get out of there. So..

I: I think that's true across several places. It's one of the things I move back around on my research within the DOT with the right of ways and some of that stuff would be important. Especially since I was under that as being important in our early-- as a source of--

P1: Yeah.

I: Plants and stuff that you could be pretty certain was local.

P1: Native. Local.

I: Especially local. Interesting.

P2: The DOT had some pretty effective means of getting roadsides established and I remember one in which they had the water-- water-- the seeds were mixed with hays--

P1: Hy-- hydroseed

P2: Hydroseeding and I may have had a photo or two of that. That was mostly done on the county access roads rather than the main interstate. That was mostly planted before I got there. The mowing-- we finally-- we got some green land of mowing the interstate roadsides. Harold Dolling was very instrumental in that and our intention was you needed access to pull off the road without getting hit by a car changing a tire, but you didn't have to mow the whole-- to the fence, to the plowed field. So it was kind of understood that one mower width was the standard procedure and then the landscape architect design kind of got involved and they said let's just make some mowed swirlies in the roadside to make it look intentional and I don't think that lasted very long but at one time they were mowing every square foot and a couple of vehicles got stuck in a

wet area my suggestion was if you see cattails, don't go any further. It's wet. I said you need some plant identification but they were of course under quite considerable scrutiny from the farming community on allowing musk thistle and other weeds to grow in the roadside so it was-- it was-- it was-- back and forth with groups

I: Do you...

P2: That didn't want the-- didn't want the weeds in the roadside and prairie to many people was too weedy.

I: As a faculty member, I mean, you were busy teaching but did you get called in to meetings or-- for the DOT in particular. I don't know, were your communications made with just with just picking up a phone or just saw people in town or--

P2: I don't remember being called in that I should attend a meeting, but a lot of volunteer activity. I was on the Governor Rays Committee on conservation or whatever it was called a couple of years, and then--

P1: Hughes.

P2: Yeah, he--

P1: Hughes was the first--

I: He was first and then Ray.

P2: Then I was on Hughes. On the governor's committee on conservation. I think that's what it is called. We had-- we had annual meeting and discussed things and that was certainly one of the discussion points. I don't know if I ever presented anything at one of those meetings-- an assistant by the name of VerMeer was kind of running things and he wasn't too interested in the prairie.

I: Now VerMeer was on a Governor's committee on conservation? No.

P2: No he was the Governor's

I: lieutenant

P2: assistant.

I: Got it.

P2: He wanted, he did things that the Governor wanted done and so he presided over the committee.

I: I'm guessing he was under Ray?

P2: Under Ray, mhm, yep. Well, was..

I: I'm just kind of guessing on that.

P2: I didn't get in on the politics of the situation. Susan Atwell was secretary at one time and she was at Ft. Dodge landowner and donated the Diggins to the nature conservancy. I think we had a couple of work days there trying to fence it off and she could make the best stew that I've ever eaten on a cold winter day when you've been out stringing a fence or pulling up barb-wire or something. But the Diggins area where they had been coal-mining and not a very high class conservancy area but we thought it was important to her and to getting more recognition to what the conservancy could do in the state.

I: Okay. Let me just double check this one. Susan Atwell is a secretary of--

P2: Of the Governor's committee. Susan had a little bit of money and was helpful in that way--

I: This is part of that context of who was in what places to get the ear of the people that would eventually make decisions so that's that's why I'm taking a little time to record--

P2: I'm trying to think of another person and-- in Ft. Dodge, I might think of her, who invited me and Lloyd to dinner.

I: Might be Ann Smeltzer. Ann Smeltzer.

P2: Yes, Okay. And we were served royally. Do you remember that?

P1: Oh, yeah. I don't remember the meal as much but I remember her wanting to look at this beautiful prairie.

P2: Little patch of wild flowers along the-- some part of Ft. Dodge but she had money and I understood that she has done quite a bit in some phase of financial support but she was very particular in what she wanted and we just couldn't-- we just couldn't say we will accept this because it had strings attached at that time. Smeltzer. Yes.

I: I've got a follow-up story when we are done recording, I'll tell it.

P2: Mhm hum.

I: Connect that as well. So Susan Atwell and then Vermeer were both Governors folks and--

P2: Susan Atwell was independent. I mean, she was a member of the group that was elected to secretary. I don't know who was the chairman but VerMeer was the coordinator at the request of the Governor.

I: okay. So I'm just trying to kind of track which group became which group so the Governor's committee on conservation, would that have been like preserved board?

P2: Nope.

I: No, it wasn't that one and it wasn't the conservation committee.

P2: It was a volunteer-- it was a group that he has assembled I think to kind of test the public opinion on what he should be pushing. I'm sure we had a delegate or two from the Izaak Walton league, which I remember was quite strong in conservation. I'm sure there was a member too from the county conservation. Group, board, whatever.

I: Nature conservancy or--

P2: May, I may have been, I would-- might have been representing the conservancy then but it was kind of a group to assist the Governor and defining important things in Iowa.

P1: Was that kind of your charge when you got together was to say, okay what do we want?

P2: Yeah, this is what we want. This is-- and each group kind of had a different idea of like-- we were interested in-- in in in preserving natural areas. Izaak Walton league was wanting more hunting access and with fishing-- had another group so-- I don't know anything that came out of that committee that I can follow-up on.

I: So when you met with that group it was mostly that group and you would talk amongst yourselves in that particular group. There weren't any time when that group presented in front of a sub-committee at the legislature?

P2: mmmhm.

I: You don't really recall anything like that.

P2: I don't recall that.

I: So it was just mainly internal to the Governor's office.

P2: Yeah.

I: Okay. Was there any other interaction besides Winkleman with other legislatures?

P2: No. No. No I don't think so.

I: Okay.

P2: I don't think so.

I: Who do you think-- somebody had to have done the heavy lifting to get the living roadway trust of the integrated roadside vegetation management so--

P2: Let's go, Let's go to Daryl Smith.

I: And I will be catching him more, but you will pick up perspective on that.

P2: I wi- I will- Daryl decided to plant prairie on the campus and it was grass. All grass and I called it a pretty ugly prairie because it just didn't look well and it was right on campus and I'm sure he caught a lot of static over it.

I: And this was at UNI?

P2: At UNI. He was He was not a field botanist by any means, he was a plant physiologist if I'm not mistaken or in that league but we were burning prairie over the state and the mark-- the Mark family, which I think now is called a sand prairie north of Cedar Falls, decided they had a marshy area that could be burned so this was Daryl's first burn and we had a mowed boundary between that and a pasture and we spent all morning with a backfire to get it safe and then-- then we burned-- fairly wet prairie that burned pretty well. It was all under control and Daryl was ecstatic that it went well and it was his first burn. The amazing thing was the dorm-- lets see, the Blazing Star, that summer it was a solid mass of pink blooms. My photo was-- didn't turn out, but Carl Kurtz got a beautiful photo that I am sure is in his book of Iowa native plants. Pink.

Absolutely. And it's never done that again. Well, that was the start and they wrangled for some years over that patch and eventually the Mark family had a tragedy and the middle son was accused of killing the younger brother and his family and it went to a trial, it was bad and I had to back off and I'm sure Daryl backed off but eventually the area was acquired. Now I don't know Daryl could fill in some details, but I don't think you want to get into too much of that. Then I could see UNI becoming-- when I left UNI took over the prairie leadership in my opinion. There wasn't anybody left at Iowa State that took much of an interest in it so UNI took over and the academy farm was in their vicinity. We had tried to plant at the academy farm and the first one didn't work out well at all. The patch of Canadian Thistle grew better than anything and I don't know after that first year or two I don't know the sequence but it was a disappointment and finally the vote was critical in selling the land which had been under lease and I know it was a difficult thing for the academy to go through that process but that was planted with the drill that was purchased by the farm foundation.

I: So this would be the Iowa Academy of Science had a farm?

P1: It was called the Parish Farm.

P2: Parish Farm, yes. It was a gift by a lady who said it should never be sold, the profits should be given to the academy but there came a time when corn prices were low and it just wasn't putting any money into the hoppers and the academy wanted a little bit more income from it so there was conflicts there that really have nothing to do with the roadsides but it was one of the side issues that take up time and energy and eventually they tie in. One little aspect of the DOT was their scenic overlook undeveloped. In Story County they had a loop off of the road that just followed the hill side and it was dominated pretty much by little bluestem and so the sign read "Story County Scenic Overlook- undeveloped" and a lot of people ridicule that, well what do you going to develop, well that was the site of the proposed Ames Reservoir and whatever they had in mind you did see a lot of, it was a high point and so we had permission to burn and kind of a management kind of permission. You can kind of do what you want to with it. It's part of your project and so we'd have classes burn strips because we were interested in the little bluestem as part of a scenic overlook and the cedar was moving in so we were interested in controlling the cedar with fire. Well we never got it intense enough to do any damage to the bigger trees and we were burning a few Cedar two foot tall and Eastern Red Cedar is pretty easily killed if you burn something that size and scorch all the leaves. It's like one of our trees in Texas that it can be easily killed with fire and the other Cedar re-sprouts terribly so one can be controlled with burning. The other can be made angry with burning. The scenic overlook was not significant except probably in terms of the students that got a little bit of experience there. We didn't do any planting that I remember it was, we were kind of running out of funds on my grant

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from the DOT and I didn't have any-- I didn't have any interest in continuing that project. Harold Dolling was retiring and so it kind of fizzled out so-- but I think the county road, the county conservation groups, which I still admire. I think the county program was really significant in Iowa and it was locally controlled and if you could convince them an area was worth saving, they and-- useful to the community wither hunting or fishing or picnicking, it took hold. Steve Blackwell at the Story County. I did do a little bit of work with him on planting. The problem with planting on the interstate was you had this very tough smooth grass stand or in most cases bluegrass and it was just awfully hard to get anything established so with Steve at that time Round-up had just come out and Dave Stanforth being the weed man had a little bit of extra Round-up that I could use and we used a quart of Round-up which was pretty expensive in those days and we sprayed an area of bluegrass in the Story County with Round-up thinking that we could kill that, leave it there and run the drill into the dead turf of bluegrass. We did that and I left Iowa, so I didn't see the results but it was-- somethings like milkweed came right through. It had a deep roo- storage to it. I can't think of other weeds, but I'm pretty sure it got pretty weedy following that and Steve-- I had corresponded with him later on and it was not-- it was-- he did not consider it a favor because he did some more and then he was chairman of the Story County board-- of the-- oh, of the whole county and at that time he just had the park north of town.

I: Arnold-- yeah.

P2: So but then I'm pretty sure he continued with that project. That didn't get into any of the Iowa right of ways that I know of..

I: Do you want to take another short break?

P2: yep. I'm kind of out of the-- unless I review some of these sketches.

Landers 3

I: Recording number three. February 17th, 2016. Landers. Do you have a place you want to do with it or do you want me to trigger a--

P2: Well, another planting which I think was useful in education as well as some unknown consequences is a group called Harrison Associates which was a landscape architectural firm toward Nevada and we were invited to bring a class over. It was about, I would say an acre maybe of-- one of the earliest plantings in that area and we and we felt that well, we had the students over, we did a burn and they were very complimentary of our use and then that became less important as say the Ames Prairie, which was easier to get to. They were a company all over the state and whether they had an influence in other plantings, I had no idea. I suspect you could probably find that group, or a member of that group still around. Now the Hoover memorial had done a planting over a large area that was once farmland. I have no--- experience on the background on the original planting. I got involved because they realized it was not a prairie. It was a grassy planting and their concern was to get it more-- more like a prairie. Well, all we had at the time was some perennial sunflower what would it have been croatia soratius or Maximilian one of those that group is very tall in the pressing. Well, they did have, we did try some transplanting and some seeding and I had a master's student that might have been named Johnson, I've forgotten-- that did some planting in the Hoover Prairie and they had a group of of of Interns that did some planting but it was no follow-up and disappointing to everybody. I remember we had some drainage into the prairie from the adjacent--uh uh, farm that kept a little ditch running so we planted it to this sunflower and we did have a row of sunflowers going down that at one time but it didn't spread into the rest of the prairie so that was kind of, you turn it over to local people and say good luck. I didn't have much follow-up--follow-up on that. Now the Cornell College was a different situation. Paul Christiansen was one of my graduate students that went to Cornell College to teach. It was mainly a teaching college, yet he did an awful lot of observational research, I call it-- on prairie plants and did a publication on many prairie species. They did have--about-- I'd say a fourth acre planting that had been done before he got there and mostly Indian grass. Paul probably contributed as much in stimulating students as anyone perhaps besides Daryl Smith after I-- after I left. He continued to do a lot of seed collecting and his wife-- uh, could not completely agree that that was an important thing to do because you collect seeds where you find them and he might be out on a railroad track and some passerby say what is that strange man doing out in the middle of the day or whenever it happened, but I think he was effective in-- and certainly in producing publications on the prairie and with graduate students. I don't think he did anymore-- uh uh, consulting with the highway department. I don't think it was until Daryl kind of took the role at UNI that the-- that that anymore consulting was done with the highway department and that Roader's

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Digest that I used to get came out of the UNI work and that's all, that's all beyond me. Grundy County had a director of the conservation program named Sam Goodin and Sam got me up there with drill, with the Seed Drill to try a roadside planting. Well, it was rough and it didn't work, didn't work well but he said there was bluestem-- big bluestem growing in there for years to come and so he borrowed the drill and it was in the way of a shotgun blast a quail and I ask him if I could borrow it back and he said "well, it's got a flat tire. Well, how did the flat tire come? Well, I was shooting at a quail and missed the quail but hit the tire." The outcome of that story is that we used it around and it was-- it was bunged up and not in the best of condition and I asked when I was leaving in 79' that it was pretty much my piece of equipment and stored it at Curtis Farm and he said well, I said, I've got a county that is very interested in it and they would take care of it so Sam could-- then became the recipient of the grass drill that we had used around in several locations. That's about the extent of plantings that I can recall-- some might pop up but,

I: There is--Go ahead.

P1: Do you remember where the one in Nevada was, what direction from the main town?

P2: Yeah, it was off of what-- Highway 30. and It was on the South side of highway 30 and it was a little flat topped building maybe, uh-- just an unobtrusive building with a Harrison Associates sign on it and I don't know-- I have no idea whether it disappeared with the change of partners or not but one of the partners was quite active in the Ames community and

I: I haven't read through all of the DOT information yet, but does David Dahlquist's name ring a bell or not?

P2: David...

I: Dahlquist.

P2: No but another, okay. Another person that might have been influential was Doctor Duvick and he had a son-- Dan that worked a little bit with me on tree rings but he lived on the edge of Des Moines, no. In the suburb where my daughter lived, what's the name of that.

I: Clive?

P2: No before they moved to Clive. Anyway, Duvick had about a half-acre of planted prairie that he had done. He worked for Pioneer. He was a Pioneer Scientist and Pioneer had some land that they didn't want to develop completely into housing. They wanted to keep some open space so that's where I got involved with the Iowa Trust Foundation. Mark-- what what was his name..

I: Ackelson.

P2: Yeah, and how much I advised, I don't know, but they planted the area around the housing where my daughter lived by Pioneer. There was some Pioneer land and they wanted to keep some land open by their plant and it was pretty much a grass land except this in the city had a good mixture of wildflowers. One of the neighbors was a strong proponent of the prairie and I didn't think to put her name down and right now I can't think of it. She was-- uh, really kept the community-- to what that prairie was for and had regular walks with people and it was an attempt to put the prairie in the middle of the city-- that hadn't been done before and they got the mixed response from people. Some people thought it was the weird, unnecessary thing that bred mice and rats and snakes and others like-- like my friend who thought it was the proper place, good for learning for stimulating and certainly part of the outdoors. My kids-- they burned it. And I'm sure that that has been no longer allowed, but they had one or two burns, again that stimulated the grasses and got the wildflower response and it was pretty well managed by-- I guess, I guess Mark Ackelson. I don't know how the management went. The larger area outside of the main building area was pretty much retained and mowed, maybe mowed for hay but just mowed for maintaining grass instead of trees moving in. I'll get you that name before the days over. The person-- she should be interviewed in that situation.

I: Tell me a little bit more about other areas that were native areas and any efforts to preserve them. Now, as I read through some of the information that you've provided and what you have said, you gave a lot of talks to anybody that you could kind of get to listen and is there anything related to that-- other people that kind of caught fire with-- that you think were instrumental or that you might have worked together with to have conversation about preserving native prairie remnants.

P2: Well, Dorothy Barringer but she was an influential person who decided to go into the prairie seed business and south of Des Moines she had some old family property that she started. I don't know how successful it was. I imagine it was very frustrating-- getting things started. We corresponded for a couple years after I left that--

I: And she was have had some political acumen to have you know, how to navigate this because it sounds to me like you actually were involved with an connected to people

that had that political circle, whether you were directly involved or not because some body had to carry the water on this. That's the thing I think it's just fascinating. And perhaps Paul would have come in contact..

P2: Another person that would have carried the water on the national conservancy that again is interconnected was Buzz Brenton of Brenton Banks and we were trying to raise a little money for maybe a prairie pothole near Cedar Rapids. Carl Goellner, Dr. Goellner was involved on the blue spotted salamander that was pretty rare and we were trying to raise money to purchase that area for the conservancy and Buzz Brenton and I spent one day or two going to several people who had money and one of them was an elderly Maytag person and I had some photos mounted color photos that probably Carl Kurtz had made and I'm sure he made them and I would display those but that didn't settle upon as well as Buzz telling Miss Maytag, I don't know what her name was, this was important for Iowa and that they should be interested in things that made Iowa beautiful and that these were easily lost and that we needed to retain these snippets of the natural Iowa. Buzz Brenton's wife, entertained us one day-- I think it was Sylvan Runkel and I because she had an interest in birds. They lived in the middle of Des Moines near the-- near an important area where they had a bird roost that attracted a lot of interesting birds and she wanted it preserved. Well, we couldn't. We couldn't say it was the number one priority for the nature conservancy and we tried to get that into the county program and but she and Buzz kind of took hold at a time when we were trying to raise money and go with another area. I did-- a side interest-- Buzz decided to swim the English Channel and I've got his story of his attempts to swim the English Channel. Fascinating. The determination of that guy and all of the problems he went through and all of the training he didn't make it and I really respect the man and I did correspond with him a couple of times and he said it was you that got me into this. In a good sort of way, it was you that got me into this and I think he was influential in some of the transactions because I'm sure he was into supporting the Governor at that time.

I: It is timed enough we should stop again.

P2: Good deal. It's a good stopping point.

I: Good stopping point.

P2: I'm running out of pages here.

I: This was--

Landers 4

I: Starting session 4. February 17th, 2016. Landers. Four sessions, people will think that we are being cruel to you. Cruel beyond belief.

P2: Oh my.

I: Torturing you here. We were talking a little bit about some of the people that had been influential with the nature conservancy when you worked on preserving areas and I'd like to pick that up and let you run with that a little further. You had mentioned Dorothy Barringer and Buzz Brenton, both of which would have had connections to people having talked to Maytag that would have been somebody else interesting. Can you talk a little bit more about any of that nature conservancy work or things that help-- you that you feel helped preserve prairie remnants?

P2: One of the big prairie remnants was up by Lake Okoboji and again I'm not pulling up the name but a family had this huge pothole that Carl Kurtz was instrumental in photographing. It was where a big chunk of ice sat and all glacial debris around it. It was a pretty deep, impressive pothole.

P1: Hafner?

I: Hafner?

P2: Hafner, yes. Well, Hafner gave the money. The family was poor. Big family and it was not a very productive farm and I don't know if I remember their name or not but but I believe it was Anne Hafner but she came through with a gift that allowed us to purchase that. It was used by the people at Lakeside Lab continually and I don't know if the-- if if if-- if they inventoried it or not. Larry Eilers was another professor at UNI that was instrumental in the nature conservancy as he has chairman for a year or two and was again probably instrumental in providing some background for Daryl Smith to get started. Larry taught at Lakeside and was probably the one that maintained the interest in the pothole there. He took the class to the Pilot Knob State Park where the Bog was and did quite a bit of work there but that was already in the state parks system and I didn't have anything, well we did have a special student project there for the preserves board that did a little study of Pilot Knob and got some of the plans-- so the preserves board in the mid-70's started gathering information on these areas and another little tract that had a very tiny patch of prairie was Turkey River Ridge and so they sponsored a summer student to do an inventory of that and I believe his name was Greg Osland, who did it. And one summer what I would consider about an average Master's program..

I: What was his name again?

P2: Greg O-S-L-A-N-D. Greg Osland. He showed me the area which was pretty deep woods and a little strip of the ridge that extended toward the Mississippi and I'm pretty sure that every advanced ecology class that I had got on that ridge sooner or later. Do you remember it?

P1: I think I remember it, yeah.

P2: You could see the extent of the Mississippi and barge traffic and several found loose shards of pottery and I'm sure it was an Indian observation point and some charred remains and black prairie soil. The loess had accumulated and I had enough prairie in it compared to the woodland soil-- what-- which was still light brown in color from the loess on the Mississippi. Nothing compared to the loess on the Missouri which I can talk about a little bit later. Those preserve studies-- Ken Madden was the first preserves board secretary and that was a state function. Perhaps generated at the request of the Governor's committee. It would be worth checking into that but the preserves board then had little grants and I think we had one for Woodman Hollow which had a little strip of prairie. One for Pilot not far-- Turkey River Ridge. Those, I was involved in and I imagine there were a couple more. Maybe Paul Christiansen had one or two. I don't know and it was just kind of an inventory description of the area, what was working and what needed to be done. The preserve-- Ken Madden was-- had been an employee of Parks and Wildlife I think and was-- needed to be educated on the value of preserves, so that was a little bit-- but once he got started he was pretty strong on these reports and I think we did him a good job on the first description. Then maybe some people later on gave the detail inventory that was really needed. I don't remember any study of the Ledges. We got into a big controversy there on the Saylorville Dam construction and it made me sick to go back and see the level of the temporary pond and the debris that occurred on the 4-H Camp area and it was all predictable but it was modified by the people who wanted the steady level lake that they could boat on rather than a flood control reservoir. Anyway, the Loess Hills was also a site that I took the graduate course and we could camp overnight-- I don't know what the function of it was but they had a barn we could sleep in and we could climb to the top of the ridge and see that it needed some Cedar control if we wanted to maintain it open. There was a group at--- they started at-- the last year I was there they had a Ledges group too. Organized and what would be the nearest community-- I don't know-- I don't remember but I gave a little talk and I think they have had an annual meeting ever since but of the Loess Prairie. And I--

I: The Loess Hills Prairie seminar? Yeah, it might have been Larry Benne or Carol Benne that--

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P2: Yes, that's a familiar name.

I: They are going to celebrate the 40th anniversary of the Loess Hills Prairie Seminar. This year. Yeah.

P2: 40th? Wow. I've got one picture of the kids in a single line of that-- I didn't take but I call it Classroom on the Prairie and I don't know where it come from. That-- eventually got some support from this group and I understand that it's there and at Sioux City. We had a little more difficult situation there in getting the group really dedicated to doing something and it was just a matter of my being there once and that was it. Another person that needs to be mentioned that may have been involved in some of that was Ed Crocker. He was a soil conservation person out of Ft. Dodge. Not Ft. Dodge-- Storm City-- Storm Lake that was very dedicated to conservation in general and I think helped with some of the fundraising. It was just a matter of my being there once and that was it. Another person that needs to be mentioned that may have been involved in some of that is Ed Crocker. He was a soil conservation person out of Ft. Dodge. Not Ft. Dodge. Storm City-- Storm Lake that was very dedicated to conservation in general and I think helped with some of the fundraising and was quite active in the county conservation board. I remember taking my little prairie talk to Storm Lake and we had a good meeting and a good supper and I sure hated to leave in the late evening to get back to Ames, but probably had classes the next day. The community college at Storm Lake did not follow through and I don't know if there were some conflicts but the community college system had some bones to pick with Iowa State I think. The one exception I think was Upper Iowa and I gave a little talk there on tree rings. The doctor there was Coleman I think that was quite weird into lichens and he could talk for an hour on three lichens that he found in southern Canada that were found no place else in the world but he was a lichen expert and I am not a lichen expert. They are some significant alarm plant. If the lichens are in trouble, something else is in trouble.

I: Coleman was that..

P2: Coleman I believe was his name and I'm sure he's gone.

I: So the nature conservancy was, I remember, it was a pretty significant influence and you met monthly or how often did you meet? Do you remember?

P2: Well, we had a big meeting once a year, usually we met with the Iowa Academy and probably whenever crisis came up the board got together. I wish I could remember the lawyer that helped us on the big pothole at-- near Okoboji. He came in at a time we needed some experience in handling land transfers with some authority. Then he died the next year. But he was so gracious in his time and getting the contract worked out.

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You gotta be careful with what you put in writing and the family was was disappointed that we didn't name it after the family but they didn't yield on the cost of the land, so we didn't yield on naming it for the giver. I think that held. I'm not sure. The nature conservancy was just getting up steam and Galen Smith was a professor in the botany department that spent too much time and he had still not published his thesis from California and so finally after three or four years he was told that he better find him another job so he went into Wisconsin or Minnesota but he was such a dedicated person in getting the nature conservancy chapter in Iowa started and it was chartered in about 1972 or closely thereabouts.

I: Galen Smith?

P2: Galen Smith. He was in Botany at Iowa State. Yep.

I: You mentioned Ed Crocker, soil conservation. Were there other interactions with the soil conservation service that you recall or were they fairly quiet?

P2: The other interaction that I didn't mention was a planting at the National Headquarters at Ankeny. The soil conservation and water conservation association. Which is an association of anyone in the agency and farmers and ranchers. I think that they used the prairie drill to plant a couple acres of prairie or so there. The-- probably gave a little bit of status for planting prairie to county conservation boards. I don't know of any other soil conservation service person that was involved. Maybe I didn't know their affiliation but there at the headquarters, I tried to get them to burn it but that was too tricky. They said no we'll just let it be and mow it for hay or something. The person that I dealt with, whose name I don't know-- and I would suggest you check there at that office and see if they have some names that would have filtered out to the counties. I did go to south west Iowa where they were planting switchgrass for forest production. It was an extension agent that invited me and we had a meeting and I was trying to promote a few more permanent grasses. Not prairie but permanent grasses like switchgrass because it was quite productive and if you knew how to graze it, in that region there was a lot of erosion and seemed to be a good fit. Again that was a one situation meeting and I never followed up on it or I wasn't asked back so you never know whether they went-- that's one thing I kind of miss with the retirement from the extension service-- you don't get to go back and see whether the program was carried out. See what the family did.

I: While you were on faculty at Iowa State did you have a partial extension appointment..

Guest2: Okay. I can probably come back around 2.

P2: 2:00. Okay. Yeah, we will just take a break at 2:00. Thank you so much. Yes. We'll go down to-- We will go to the library in thirty minutes. You can come in or come out. Whichever you want. Oh, I'm sorry.

I: It's okay. Not a problem.

P2: P2: No.

I: Research and teaching.

P2: No. I assumed a partial extension and I think that was, that was kind of understood. The extension department published the fifth prairie proceedings and we just, we had an agreement that they would print it and mail it out for a price at that time, postage paid for five dollars. That was in probably we got that out in 1978 because it was in time for the Ohio Prairie Conference and ours was in '76. That's another bunch of influence. The first one was at Knox College in Illinois. Peter Schramm was a Zoologist and he wanted some prairie for his animals to run around in. Peter Schramm had been a graduate student in California. I didn't know him ahead of time. I may have met him there and so I got a letter from him that he was trying to organize a prairie conference. Would I be interested? So I said yes, I would gladly come and present a paper. So that first meeting there were three or four of us I remember presenting papers and 1970. Yeah. I've got it figured that that's about right. Three or four of the papers had burning in them and it was kind of, you know, and I don't know whether I should present this or not because we had intentionally burned prairie by-- this is important when you consider planting prairie that fire is a natural component of these species so that published in 1972. It was held at Madison, Wisconsin. Zimmerman. Yeah. No. Yeah, Zimmerman was the organizer. I had charge of one of the sessions and Paul Christiansen was presenting some of our studies with seedlings and this scoundrel from Illinois whose specialty was prairie cemeteries kept talking on and on and on beyond his time and I said, I said, and Paul was sitting over there like this and so I said, We've got to cut this off and give Paul a chance to say something. Well, he wasn't ready to stop talking and finally I just said we got we got to be fair about this and Paul got up and had five minutes, or you know pretty sad. You know I was treated that way at one of the meetings and I said I would never, I would never allow a program to get out of hand and it was probably after that... in charge of a program I'm never going to let it get out of hand like that. The next one was at North Knox, North Dakota. Mol Anwaddy was the program chairman and by then the number attending had grown to a couple hundred. It was kind of a long way to go from Ames and I don't know if if you went with me on that one or not but you went with me to the next one in Missouri.

P1: In Kansas.

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P2: In Kansas.

P1: Manhattan, Kansas.

P2: Okay. And so at the North Dakota meeting, I decided, well, if we are going to do it, now is the time to do it and I said I'll I'll make it happen in Ames and I don't think I could have had a better- Better arrangement with people and place and situation and at the first night Pat Gearhart came, Gaylan gathered bunches of prairie plants for table arrangements-- that just knocked me over. Yep. So what-- it took us to years to get the proceedings out. David helped on that but I was just-- felt snowed under with other things and kept putting it off until the Ohio meeting and we had to get it ready to give out at the Ohio meeting in 78.

I: So those were...

P2: Wait a minute, well, anyway.

Guest1: The therapist is here to work with you. I don't mean to interrupt.

P2: Ohhh, goodness.

Guest2: You want me to come back later?

P2: Can we reschedule?

Guest2: Yes, when would be a good time for you?

P2: Never is a good time.

Laughter

P2: Say right after lunch?

P2: I didn't have many publications. My first little one was a prairie in the-- like in the farm-- in the Farm Magazine type. I put a couple of papers in the Iowa Academy and I had intended, I had intended to put a series of publications on prairie but one of them was on I think, co-authored with Paul on the appearance of seedlings. Prairie seedlings and that might have been prairie number 2 and prairie number 1 was kind of a survey paper but then I never did get around to prairie 3 and that was one of the reasons I didn't get into the category what level that was in the university to direct PhD programs. I did not have the publication background to-- so John Dodd was the chairman. Richard

Pohl was the chairman. This or that. Who else-- anyway some of the full professors at the time and even when I was a full professor who was based on teaching, rather than on research. I did get tenure and so that gave me a lot of leeway in where I was during the day and so a lot of the time I was out scouting around or working with conservancy or one-- we did have a little bit of freedom in consulting and I remember a time or two I accepted a twenty-five or fifty dollar for telling a person this land was suitable or not for planting or something. I Yep. I knew I was going to get some therapy so we'll schedule back in here at 2:00.

I: That's just fine.

P2: Or, we can come back in here and then take a break at 2:00.

I: David Glenn Lewen.

P2: David Glenn Lewen was a professor at Iowa State. A pretty sharp person and then then he kind of took over the prairie research after I left and he didn't stay but for another two or three years and he headed east to a different environment. Where were we. Through the Prairie Conference.

I: Midwest Prairie Conferences.

P2: Yep. Another person that was an influence an influential photographer that was more influential outside the state probably than inside the state was Pat Caulfield. She was a superb photographer that grew up in Northern Iowa and said it was a boring part of her life so she left Iowa and somewhere in there she came and discovered the fascination of the prairie and started taking photos and I believe she was the evening speaker at the prairie conference in where ever it was. Manhattan or-- I think that was an odd year conference. We had to start with and we might have slipped one in because..

I: Okay, that makes sense because 74 would have-- I'm guessing 74 was the one in North Dakota

P2: Yeah.

I: And then 76 was when Ames hosted so perhaps 75 was Manhattan, Kansas or 73.

P2: Maybe the next one. Maybe there was one in 77 that we went to, I don't know.

I: 'Cause you were still a grad student then?

P1: No. I was an undergrad.

I: Undergrad.

P1: Larry Vorwerk and I rode to Manhattan, Kansas and that was a trip!

P2: We went out on the prairie. Okay. That would have been, that would have been a special prairie conference.

P1: I graduated in 74 so it would have had to of been before.

I: Yeah, 73.

P2: Yeah, okay. They were trying to work on a nature conservancy. National Prairie Park so that would have been a special one in there. Yeah, okay. And so she was quite a private person and didn't want to be seen. Oh goodness. Anyway she was taking photographs on-- I said well Kalsow Prairie at this time of year, you can just see everything. Well she went up to Kalsow and was all setting up and this farm boy came by with a stick and knocked the top off of the-- compass plant flower and she said that just made me furious. I was going to whip that whippersnapper. Uh, and I don't know if I saw the photo but it was a photo with the top of the flower stalk like this and I said, that's a pretty good photo. That shows the trouble that the prairies are in and we could capitalize on that a bit. But she gave the most beautiful talk at the conference and I was sick from something I ate and I didn't enjoy it half as much as I could of.

I: For your faculty position then in those proceedings then your role was pretty key to maintaining and publishing. When you got to Iowa State and published were most of your publications related to prairie then or other kinds of things?

I: We are out of time that we need to stop to get to the library, So.

P2: Okay.

remember on down near Des Moines that the person wanted-- it was pretty much a little blue stem understory with scattered trees and they wanted to know whether it should be preserved or something like that but I did have a bit of leeway during that-- about 75, 1975 I did get a little grant from the National Park Service to evaluate prairie areas and nat-- parks. So I went to Pipestone. I went to South Dakota. Kansas. One in Missouri and the Indiana Dunes. That was just-- pretty broadening and it wouldn't have contributed to anything in Iowa except it gave me a little broader picture of the situation in the county and of course I realize that the best tall-grass prairie was in Iowa. Just

didn't have much of it. I haven't talked about the Sheeder Prairie if I can now. It was the last prairie bought by the state and put into the state parks system as the four prairie areas were and Joe Brill was director at that time and he was a very conscientious man and realized they couldn't do much in terms of management-- in real management. They could mow and they could cut down trees but that's probably not what we really needed. So the first time I was on Sheeder might have been with Dr. Aikman but I kind of doubt it but it was acquired just about the time about the year before I came and up to that time they had been mowing it for hay and when I came it would have been the summer of probably the summer of 62'. It could have been the next year but the first time I saw it there was this old remnant position of the hay bales at the bottom of the slope and there was the most glorious stand of grass known as, by many other names-- marijuana. Taller than head high and of course it was a crop in Iowa for hemp and that was the last time I saw a strand of marijuana on the prairie though I'm pretty sure it would have been in fence rows and it was not. Didn't compete. It didn't last unless you disturb the soil so the next year it was gone. We burned Sheeder. One of the better burns. It was kind of into the, may have been into the preserves board or at least they were studying it. Ken Madden was there. Robert Kennedy. The Bob Kennedy of Iowa State Fame. Working on a Master's. Probably Mary Richards. Jack Brotherson and it was-- and we had a mowed line down the middle and we burned on the north side if I'm not mistaken backing off on the north side-- anyway we burned it and it came back a glorious mixture. Stimulated the wildflowers and the grasses. We took a tour there. A mixed tour whether it was nature conservancy-- probably been doing some tours and there was a little a little yellow orchid that I had seen once or twice before and as we was walking along I said and we have seen this orchid in other places and watch out you are stepping on it and it was right there. So it appeared after we had done something whether in the mowed strip or in the burn. I still have the report that Bob Kennedy made on that and his his study was going from the top of the hill to the bottom with small plots and watching the march of different species from top to bottom. It was a very interesting study and one of the agronomist had tracked near Ames. He did the soil profile and this this teacher who was coming back for a Master's did the plant profile. I remember her because the first summer I taught in ol' Bessy Hall the temperatures were ninety-nine or more in the classroom and she would get a tray a foot dish of ice water and she would sit there with her feet in that tray of ice water and I had to stand up and sweat in front of the class. During one of those meetings one of the girls fainted and her name was like Appenzeller. You remember things that happen and I can't recall the name of some of the important people but she passed out and we got a wet rag and she revived and I finished up what I was saying and sent 'em home or whatever. Sheeder Prairie had a real problem of tree invasion. It had a drainage that was full of box-elder and we just couldn't do anything with it. Finally, you just run out of manpower and time

but it-- what we should have done was to get a crew in there with a chainsaw and go down that and cut them down, paint the stumps so they wouldn't re-sprout and so...

(phone rings) I: Surprised it rang at all because I didn't have much for signal so sorry about that. We will keep going. So on the Sheeder thing was go out with a chainsaw and paint the stumps.

P2: We didn't do that. The fire was-- would simply not be hot enough to do any damage to the trees. That's what I've found here. You've got to have a hot fire to do any damage to woody plants. I'll get into that later. Not in this, but we'll talk about it. The problem with Sheeder was it was a little bit farther away from Ames-- a little more stark. Shallower soil. It would have been a beautiful soil study because it was in a different glacial age and I enjoyed going there with students. Especially with any of the soil majors because nearby there was a row cut that we could look at the different ages. Glacial Ages. The best field trip I ever went on was with Ken Scholtes the agronomy teacher. Wow! What he knew about that country. It was most amazing and we went up to-- in the northern route and I found out what Pahas were and Cornell College was built on a paha and we didn't-- we did get to Hayden Prairie and we had a little bit of a session but I couldn't talk too much about Hayden Prairie to the crew but I really learned a lot about Iowa. Every graduate student that I had had to take Scholtes course. that was just a required-- requirement. And he said one day, I wish you would quit sending students over here. They made the top grades in my class and Richards. Mary Richards just was just sharp and she made the top grade and he wanted soil students to be assigned but she topped the class. I admired him every much and I thought he was an excellent teacher and I never did get on his southern south-western tour. I'm really-- I'm sorry I didn't because that would have been similar.

Landers 5

I: Session Five. February 17th. Landers. I was looking in some of the articles. I was looking at some of the articles, looking at some of the articles and saw one when you were getting ready to leave.

P2: Oh, uh huh.

I: And it quotes you as having a little uh, a little patience. Plenty of patience for the makeries. Landers has been in his patience with makeries in not always the extend of people. Losing patience with an ISU administration but gives no explanation why it reads "Preservation low in its priorities" but you can see in the attitudes of so called establishment attitudes have changed over the years. Having been interviewed in newspaper articles I know sometimes they take a few liberties with what you might have said but could you talk a little bit about you did you--

P2: How I fit into that academic community? Well, I was a little bit self-conscious about the publications. That was emphasized so much. I said but I'm doing good with the students so my advancement was based on on student involvement and teaching. The-- if there were a main conflict I think it was on my criticism on the university for not taking an active part in developing the Ledges to tie in with the conservation commission and to make that part of an outdoor classroom. University of Iowa had a lake project and they had an ongoing program that perhaps wasn't as good as they made it sound to me but I thought that we needed something more. We had Pammel Woods but we had the Ledges that had different soil and rock formations and if they had some foresight I think they would have worked to get something set up and there was even talk either through the park service-- building an interpretive center and I said I know where it should be. It should be on the edge of that prairie remnant so when you go down the circular winding path to the bottom, this would be before you start the descent and didn't get much support from the deans or from from from Dr. Smith and the pathology department because it costs money and I'm sure that was a critical issue so that kind of that kind of died. The other, well, I'd say the extension aspect was kind of on my own at the 4-H Camp. What-- the 4-H State Camp or something like that and we had quite a few students come out and I worked with them on primarily identifying plants and some of the problems with conservation and we could walk down to the river and seems like my son was on an overnight there. Weren't there cabins?

I: Yes.

P2: Cabins there. Well the primitive cabins and one of the tornado warnings came up and we scrambled to get back to civilization and those wooden cabins but we could

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walk down to the river and there were a lot of things to see. We had groups of high school science teachers and maybe younger than that and sometimes they were not quite equipped to walk down muddy steep paths to the river but I took 'em and I think they-- the actual getting out of the classroom to learn things. Maybe that instilled in a few that they need to take their students out. There were several times I spent all day with the camp and I helped-- seems like Mary Richards helped write-up some of the background and I may have put some of it in that box-- I don't know but we had a-- trying to get some background material that they could read to-- that was good straight information they could tell the students without telling them that plants were like people and you had to treat them kindly and you could say plants are different. They make their own food but they are not like people and trying to relate the importance of the connection between plants and soil and we were getting into the trophic levels. I think that was beginning to get into the curriculum and that was a good place to look at the levels of nutrition or energy.

P1: I can remember you liked doing field trips and then I came into the classroom one time and you had the names and addresses of some of the administrators on board and you said if we need to get out in the field, we need to write these people letters.

P2: I didn't know I did that.

P1: You know, it wasn't for-- I mean it was on the board there. Here's the reason we can't go out on field trips. So write these people.

P2: This is, this is part of the background and I guess it's okay. We had the new science building. I said we are equipping these labs. I do an outdoor lab. How are you supporting that and so eventually we got those little mini-buses to to to-- and I know one of, let's see whoever was head of Zoology at that time was pretty hard-nosed. He didn't yield much. I convinced Dr. Smith that we really needed outdoor experience with kids and so my argument was are you paying was-- are the students paying for triple-- what do you call it-- the ejected cap-- yeah the students aren't paying. Then why are you making the students pay for their field trip? It's a lab. Should be supported. With Dr. Smith I said what are-- what is Jack Horner getting from students and micro--micro-lab. Well, nothing and I said you are spending \$750 to \$1000 per student in Dr. Horner's lab. Why can't I spend \$50 per student in Ecology? Well, we made trips to eastern Iowa and Western Iowa with the advanced Ecology which the mileage was paid for and students furnished their own meals and we stayed overnight-- pretty low budget so that was kind of the background and probably Dr. Pesik was head of the Agronomy department and we corresponded a couple of times and he said we sure miss you and I said, I wonder why. He said you were a good influence and I said, but I argued with the Agronomist all the time. You are into production agriculture but you are missing the important parts of

stability of the whole system. You are not remembering where the saw came from in all that. Walt Waldeen would listen to me in all that. What do you call them, a plant agronomist? I didn't have any trouble with Schultz there were a couple of-- Frederickson was one that I argued with. We need to increase our Ag Production by increasing fertilizer and I said, you got nitrogen running out of the hills. Anyway, that was the argument. I gave a couple of seminars that might have cut a little close on some of them. I gave the Rachel Carlson lecture. Let me tell you about the first association. We are getting way off the subject-- no?

I: You are just fine. I saw them at the door so you are just fine.

P2: Here comes a brand new associate professor from California sitting in Bessy Hall. Someone said the robins are dying and this would have been '62 spring of spring of '62 and the robins on the campus were going around going, shaking like this and you'd find one or two flat on its back. Well, that's after Dutch Elm disease hit and they said the way to control Dutch Elm disease is to control the beetle. How do you control the beetle? Well, you spray the trees with DDT and so for some reason one of the Des Moines Register reporters came and interviewed me just for factual information. This is a disaster. Are we going to control it? And I said, well we are going to do a lot of damage and the trees are going to die anyway. McNabb argued with me and said don't be so negative. Well, what you should be doing is planting new trees. Forget about the Elms and this-- the reporter quoted me saying that we are dealing with an insect that can build resistance very quickly to this chemical and that and that the insects will last longer than us or something to that effect. So there might be a clipping in there-- I don't know. On the DDT problem. Pretty soon they stopped spraying on campus almost right away. Dutch Sylvester was the Weed Specialist in the Extension Service and he came up to the room and to me he said you gotta be careful what you say to these reporters. They will misquote you. I said I don't think they misquoted me. I think-- I believe that's the situation. Those insects are going to be around a long time and if I'm betting on us or the insects I'm going to bet on insects. Well, that didn't go over so Dutch Sylvester and I didn't see eye to eye on many issues. Again because he was he was he realized that the value of Iowa was attained through the change in the plant community and the change in the plant community was to destroy the prairie and go to productive corn and soybeans and his quote everyone and then with his slides he would say look at this stadium full of people. Now how could they be there unless we had productive agriculture? Every farmer produces enough food to feed a hundred and so many families. Well, Yeah, but my part was let's don't go overboard. It's a balancing thing and there are other important aspects of our community including our forests and native fragments. We had an amazing forestry department and I still am amazed that they retained that as long as they did and we could send young foresters to eastern forests and the pines we could send students to the western forests because we tried to cover all bases. So if you took Dendrology you learned eastern and western trees which I hated to give up. Once I got into that I really, I couldn't keep up with other things and I--

what John Mickel I think took over somewhere in there and then the-- another Fer-- Fararr finally took it over and I thought Fararr did a good job I think Mickel was, it was just a teaching chore to him. He didn't have his whole heart in it. Maybe I'm wrong.

I: One of the other botany faculty that I remember that you haven't mentioned yet is Duane Isely and I don't know if you had anything to do with him whatsoever. We had Weed Identification with him. Would have been '73 '74 and I don't know if there is any...

P2: With Isely he had a terrible family situation. He-- Helen took care of his wife who was on hospice a year or two or in that program. She had great pain so finally Isely was just in the botany department period. I don't know-- I don't know his home arrangement at all. We got along well and I don't know why, but I think we were both-- we both had the same attitude that we were not made to serve Deans they were made to serve us and in his retirement years he had some very very insightful and encaustic series of essays and he said "oh, I had to find-- finally had to close that down. I was getting a little too much static." He put his thoughts on paper and I don't know if I had-- have any left. I might have sent them to somebody in the more recent department. I don't know what happened to them. But Isely and Pohl I got along real well with and why I don't know. The first person to invite Helen and I to dinner, which the staff did very regularly was Richard and Margaret Pohl and within the first six months we were there. He had his basement full of tropical fish that he was learning to breed with modification of light. Fascinating but he knew I was interested in grasses and I had always wanted to teach a grass course but he had too many good graduate students so he went on a trip to Mexico or South Amer-- Costa Rica. He had graduate students that could fill in and teach the course.

I: I'm just kind of curious about the influence that some of the other botany faculty, Lois Tiffany and..

P2: Lois. We didn't deal much together. I was, we were just in different worlds. She was dealing with deterioration and I was dealing with photosynthesis. But I do remember once we had a little environmental issue. It might have been-- I don't know. And I said, well you are either on my side or in opposition with this environmental issue and she said "There are only two sides?" and I thought about that, but I don't remember any other situation other than after I left and I sent her some plant material of big bluestem that had a smut on it that she had never seen before and she wrote me a letter and said if you have anything, send it because that was a new-- a new collection-- a new genus or something and it was just an ol' smutty big blue stem, which I would disregard as a disease that was damaging my prairie plants but she could see the bigger picture. The George Knaphus we had many discussions over teaching assistants and sometimes I was assigned a teaching assistant that I didn't really want and I said how

come. Well we needed a teaching assistant so we gave them to you. Some of them turned out pretty well, and some of them didn't but there was nobody more enthusiastic about students than George Knaphus and the VEISHEA program-- I didn't I didn't participate as much as I should have but I admired him for his willing to talk to students anytime and perhaps I know he pushed people into botanical careers going through Iowa State. Don Evans was a good friend. He wrote a letter for me when I applied for the job. Cliff LaMotte was a Danforth fellow from A&M. We didn't do much together. We had the same fellowship that put us through graduate school and so there was a connection there and I had his father in Botany at A&M so I complained a little bit because I didn't think he was a good teacher but he was probably a good teacher because I learned botany. He was not a pleasant teacher. I'll put it that way and I had no coursework dealings with Cliff. Don in pathology-- Sandy McNabb we had this first brawl over the research on Elm-- Dutch Elm disease and later on we became pretty good friends when he saw through the problem that it was no easy solution and that the introduction of the pest--- or the disease-- you adapt it. We didn't adapt to the American Chestnut and it practically destroyed the country because of the loss of that tree. The Elm tree was more of an urban problem rather than a countryside problem and I'm trying to think of another staff member called Don who took over the newsletter for the nature conservancy chapter and he was a very quiet person but he was very interested in what we were doing but the newsletter was his way of communicating and he put stories together and gathered information and just I don't pull that one up. If you have some old copies of the nature conservancy newsletter from 1968 along in there he's probably got his name on it. Who else in the department... I mentioned my difficulty with Stanforth but in the end he was supportive in a different way by providing me with a chemical, helping me on the research plots-- plot area and probably telling somebody else that I'm a pretty decent guy and just different-- I'm interested in studying and I was not interested in their bowling league and I don't think I won any friends in the situation by refusing to join in the bowling league. They wanted a new member who had a very low-- what do you call it. Who had a very low score that was building up and-- what's the word when you when you

I: Is it handicap?

P2: When you compensate for age or a young age.

I: Handicap.

P2: Yeah and they could win with-- by handicap but I didn't want to do that. I haven't talked about Dr. Smith much. He didn't understand Ecology though he was pretty fair and listened to my argument when I was arguing for more outdoor lab situations and he was tolerant of my research funding. There were some reports that needed to be done

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and I was usually late on those but he was not a pusher with the administration with the first that the department head Bergeron he pushed for salaries. I was hired in May-- I accepted the job in May but didn't come on board until February and in that time the total faculty got a raise and I went from 6,500 a year to 7,000 a year before I set foot on the campus. Now that doesn't happen very much anymore unless you are a coach. Now a coach can make money turning themselves around.

I: It helps in the context because you had to do your work, that's helpful to know the environment that you were in and how supportive or not supportive. If you think about the whole, you know, not only university but extra people that were out across Iowa, is there anybody that you thought were particularly against prairie or that was more of a nemesis in that regard?

P2: You know, I really don't know anyone that would have stood up and argued about it. Probably one or two of the land owners would argue with me because they were not interested in any more land going into a preserve because it would increase their taxes. I remember one farmer said, you know I talked before about the value of these remnants and they couldn't understand why they couldn't get good money when they couldn't make a crop on it but that was touchy with the nature conservancy you put it into a preserve and it goes off tax records. I think in that and so that was a ticklish sport.

I: There was one other Iowa-- well two other Iowa conservationists that I'd just like to run past you and see. Dean Roosa and he's still in Ames and I'll be able to interview him. He would have been working with the conservation commission at that time when you were in Iowa.

P2: Who was..

I: Dean Roosa.

P2: Oh. yes. Dean Roosa was-- knew native Iowa better than anyone at the time and Dean Roosa finally took the Advanced Ecology course but he didn't go on either of our east or west field trips which would have been-- he would have been the teacher and he was not a very good student in class but his wealth and knowledge was most helpful in selection of areas that needed attention. Particularly, the wet areas and then he went into, I don't know if he was working on a degree under maybe John Dodd. I don't know the arrangement but then he became a state--

I: Ecologist or something

P2: Ecologist or something and it was at that experience that it was very important. Milt Weller and I were-- went to Dewey's pasture which was grassland around marshy areas but it was pretty well grazed and so it was a pretty tattered remnant. He was interested in rebuilding it to more actual conditions and of course he was interested in waterfowl and they tried to burn-- Dewey's pasture and I should remember some of the graduate student involved but I don't other than Dave Trouger and anyway.

I: One of the other names then, and I don't know if you would have had a reason to of interacted with him but Paul Johnson, the farmer from Decorah got into the legislature and was instrumental in the 1987 Ground water Act and some of that but I don't know if you would have had any interaction with him--

P2: No.

I: Okay.

P2: Doesn't ring a bell at all.

I: That's all good. I think. I think we touched on the things that I picked up out of here, that I wanted to follow-up on. I think we can stop again and shift unless you've got something else.

P2: No no. I had something come to mind and that the importance of the youth conservation group. Now, that was I don't know where the money came from, it might have been a federal program and Ames was very active and I remember they had a-- they would go and build a trail with the bridge over a stream and let Bill do the mechanical work. It was a little bit of physical training and mental stimulation and study and I wished that had continued and I wish it was around today. We have had something similar in Texas that we call either the Youth Range workshop which is one week and it seemed like those were half the summer or so and we have the Bob White brigade, the Buckskin brigade, and these were a week with high school students and the range group, my father was instrumental in getting that started and I'll tell more about that but that doesn't-- it was in my mind in Iowa but it was generated in Texas so I was really interested in any type of camp activity that I could support. Either with participation or discussion or commentary or setting up a place, looked forward to the work and I'm glad we are stopping because I am losing (coughing). I am losing.

I: You are clear.

Landers 6

I: February 18th 2016. Landers Session 1. So this morning you mentioned and this was in regards to the grass drill. You mentioned an organization called the Iowa Farm Foundation.

P2: I think that's the name of it. I was-- Iowa State Farm Foundation and the Dean of Agriculture was in charge-- was handling it and one of his assistants, seemed like it was a business-- for business not for teaching. They, I'm sure, received monies from alumni and they used it for improving stuff like farm equipment and the items like that that weren't found through the regular budget.

I: Ok.

P2: I wasn't aware of it until the grass drill purchase. I mean, it just kind of suddenly hit me like yeah, you got a grass drill, where did it come from? Well, from the foundation.

I: Fair enough.

P2: Fair enough.

I: Yeah.

P2: If I would have known that I might have put in a grant you know, put in a request or something like that. Apparently the Salisbury lab personnel were quite closely involved in recommending it and it was a couple of thousand dollars more or less.

I: And I didn't have other specific clean-up things but I did at some point if you want to circle back through any of the nature conservancy work and mention that.

P2: If you had anyone that entered your-- I really can't think of anyone-- I remember Dean Andre was Dean of Agriculture and of course, my attitude was this is a strong agriculture college and botany is a side issue and that's the way it is. I don't remember any conflict with Dean Andre. Another person was Louis Thompson who was assistant dean who had the background in climate and I visited with him a couple of times on tree rings. Hoping that I could get some grant money to do a more intensive study statewide except doing it on my own and he wasn't too interested so he said you just can't predict drought cycles. Well, I was hoping I could from tree rings that after a certain time. Anyway, that didn't work out. I think John Mahlstedt who had been in Horticulture became one of the deans before I left. Dean-- was it the assistant or maybe Full Dean--

we had a joint PhD candidate that worked on competition between trees and turf. He went on to Oklahoma and I don't have his name, yet and really made a name for himself in tree establishment and maintaining the situation where you have turf and trees like on a golf course or something of that sort. He had time to do some of techniques that we had developed in California on looking at chaparral plant establishment relative to the grassland but he was ingenious devising a laboratory comparison.

Phone rings.

I: I forgot to shut that off. Sorry.

Landers 7.10

I: Resuming session 10. Landers. So... oh, you were talking about various..

P2: Various Deans. I think that was that was the list that I can remember. Let me think. No Eileen Robb was very instrumental in building up interest in the urban prairie at Johnston and she had regular walks, a lot of time we Amy just for exercise but also with neighbors trying to convince them that it's an important function in the community. Original stories on the native prairie and apparently she was involved in some walking trail plantings in the community and worrying about how to keep them weed free and I said well, that's tough just put a label on it and identify it I guess. She was a very interesting person and we enjoyed her but she was very outspoken and perhaps people got tired of her and I don't know how it went to the state level. Another Iowa State member of the Botany Plant Pathology department was Don Barton. He was the newsletter editor of the conservancy chapter that I tried to mention earlier. Very outdoor oriented but not a participant in any of the groups and he would go to the Iowa academy and instead of going to the meeting, he would camp out and maybe make one of the meetings to be on... to show up, but we camped out once in Northern Iowa at Luther College and half the time we were looking at plants coming up in the woods rather than going to the sessions. Connie Mutel came to Iowa from Colorado and had a book already published. At first, I thought she was a little bit aloof in our groups and I just wasn't around her enough to change my attitude but apparently she was quite a good author and came out with several more publications that were quite good. As far as contributing to any prairie effort, I would simply say it was her publications that were significant and leave it at that. I just can't... in the landscape architecture department at A&M, they didn't participate in like the nature conservancy or organizations but they had a tremendous influence on students and that was Bob Dyass and then later on, Jim Sinatra. Now Jim Sinatra was too far ahead because he tried to convince people to let their lawns grow up to whatever would grow and he moved into an area and the flame-leaf sumac or whichever one it was came up in his yard and the neighbors thought it was terrible and he thought it was great because here was a yard with six and ten foot trees and he gloried in the shape of the leaves and the shape of the limbs and when I left they had just built a new building that housed the landscape people quite elaborate building and I corresponded with Bob Dyass for many years. So again, probably like Mark Ackelson was a landscape major and Hightshoe. Hightshoe was a landscape major. He did a lot of work on Iowa trees and in my mind I can see several others but I have no way of putting a name on them. Another faculty member wife that was Lotus Miller. Her husband was a Geneticist I think. Now Lotus, I felt, kind of fluttered around. She participated in meetings and was interested in everything and probably influenced a lot of people to take a look at Geology and plants and apparently her father was an

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amateur scientist in California or Oregon. West Coast area and knew everything about everything. That was kind of her. She was interested in prairies, she was interested in snails or bugs or so just one of those persons that may or may not have been in a position to influence the people. Little bit on Ada Hayden. She was the first women to get her PhD degree but to a large extent I think she was mis-- was disregarded by the male faculty and probably Bergoner or maybe Isely or Pohl that had met her said she had a high voice and she would start talking about prairie and get way up there and be shrill.

I: Oh, dear.

P2: And she did so much in the early days in putting the literature together that, whether she was effective in the classroom I have no knowledge of that. She and one of the landscape architects as I understand it were responsible for the Ledges planting and so that was that was the first planting of grasses. Prairie grasses in Iowa. I would be curious to know when the prairie planting was done in Wisconsin. That was early on and it was a little bit more mixture of prairie species, not just the grasses but we felt that the Ledges prairie was a first start to get some recognition and at least the students got to burn and we tried some transplants again. You don't transplant seedlings into established tall grasses. It doesn't work unless you invigorate them-- make them less vigorous. So either by removing-- making an opening for the seedlings to establish some way. A person that was instrumental in kind of stabilizing the nature conservancy chapter was William Poulter. What's the name of that college, southeastern Iowa, uh,

I: Central.

P2: No Central, no east. Methodist. Little college right down in the southeast corner. Wesleyan.

I: Oh, Iowa Wesleyan. Sure.

P2: Yeah, Iowa Wesleyan.

I: What was his name again?

P2: POULTER.

I: Okay.

P2: He was a photographer and he had retired from Deer and Company, across the river and he was teaching at Iowa Wesleyan. My first student was Deloras Graf-GRAF and she would drive to Ames for coursework, drive home and help milk and drive back to Ames. I tell you, I don't know how she survived but she was the first PhD candidate I had. She was never involved in any of the organizations but Poulter was and he directed the chapter in the early- earliest days of-- earliest days of the sixties when we were getting organized. He was reluctant to take on the chairmanship but he did a good job and I don't know who was next in line. Okay. That was this list that I had in names.

I: Can you spend a little more time on that nature conservancy development and...

P2: The thing that got in started was Don Berrys donation of the woodlands near Indianola. Berry Woods. We visited with him, he was retired in a nursing home and was a very strong proponent of the nature conservancy. He was so pleased with what they did and it was a good, it was a good woodland and so some of was that had met him were enthused about continuing but it was a struggle about-- Brayton a farmer up in Northeast Iowa John Brayton I believe was soon a member and became the treasurer and lasted to the-- until we left Iowa and was just a steady participant in that organization and I remember once we met on the Turkey River Ridge and he was so pleased, "anytime you go on a field trip, well, let me know. I want to go with you." There was a narrow road at the ridge of Turkey River Ridge. There was a farmer there-- there was a Dairy farmer that was on the edge of that road and he resented some of the work that Iowa City archaeologist had done because he said that was sacred ground up there and he didn't think they had any business digging up those graves but his attitude was very supportive for the-- for putting it aside as an actual area and particularly he thought it was a sacred place and I thought too it was very unique. Well, one day before we came with John Brayton and it might have been just the two of us. It might have just been a survey. A huge boulder had rolled down and almost blocked the road. Just a very narrow drive-by with the Turkey River right there and so we went around it and did our work and we were visiting with the farmer and he said, "You know, that rock has been sitting up there for thousands of years and it just missed you by a day."

Laughter

P2: And John thought that was the best remark he had ever heard and I heard him repeat it several times. We just missed it by a day, getting hit by a rock. Then, I believe, I believe he had some wetland that eventually went into some kind of preserve but he and his wife came to Texas and I felt awful because I just shouldn't show em. I was really locked in and Helen was not in good shape and we just had a visit and I

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suggested they go down to Sonora where some fascinating caverns and that was it. We I think but he was very important in the nature conservancy. Stabilizing, not a big contributor in any way just a member and treasurer. Larry Eilers was a chairmen. Myself. I don't know-- and it was kind of a you take two years and you work yourself out of it and I was ready to turn it over to somebody and I think Larry Eilers took it after me and I don't know who took it on after him.

I: Can you... I know we mentioned yesterday a couple of parcels but can you think of the names of some of the parcels that you were involved with acquiring. Whether prairie or not.

P2: Yeah. Yeah Yeah. The one that was critical when I was chairman was the spotted-- blue spotted salamander wet area that Dr. Goelner was so enthused in. It was heavily grazed but he said it's a unique area that-- it will recover and then we saw the lawyer for the family and the lawyer for the nature conservancy battling it out. How much money-- who gets to name it and I thought the nature conservancy lawyer should have compromised at a better level so that kind of, yeah. I don't like to battle like that but he was willing to-- but we did get it under a temporary agreement and then eventually it was approved and purchased and the Kettlehole as we call it up by Okoboji I had really little of anything to do with that. That happened very quickly with the gift and what else-- I dealt with the diggings with Susan Atwell and that was not a prized area but I think it-- and Susan's activity it was worth accepting and I don't know what happened to it afterwards.

I: I can follow-up on that.

P2: In terms of prairie remnants there was a kind of-- I don't know if Paul Christensen got into the chairmanship of the conservancy but he was very helpful in getting remnants recognized. Stinson prairie was one that I had visited but I didn't have any part in dealing with it.

I: Then the award, the Silbrooke Oak

P2: Oakleaf Award. That was Poulter had received it as a new chapter president and getting it organized and then it was in the early days of the conservancy so it didn't take much so they-- somebody submitted the recommendation and I appreciated it.

I: The question just flew out of my head. That happens to me too.

P1: Did you get to pick it up or is that one you just got by mail?

P2: Got it by mail. I didn't like to go.. I think you went with me to get a recognition from the wildlife association or something and it was an eagle mounted on a little stand recognizing me. I don't know what happened to it. The kids like it because here was a bald eagle sitting on a plaque and it seemed like it was on a meeting in Eastern Iowa-- Iowa City or someplace.

I: Yeah, a question that's rolling around in my head. Yesterday you mentioned you know that strong belief about outdoor learning opportunities and youth camps and stuff. Where did that come from in you?

P2: You know, we had a 4-H Camp. A State camp and when I was probably a junior in high school. I spent a week at Bastrop State Park and I can tell you a few of the names. We had-- it was a leadership lab. We lived in-- I imagine there were twenty or thirty boys in a cabin and the girls lived in another cabin and we had meals together. Just a good camp and then we had learning sessions. One of the 4-H leaders was named Freeburger and we called him free hamburger and he enjoyed people and that was alright. The leader, the state leader was Floyd Lynch. He and Irma Williams took four of us to Washington D.C. as state achievement winners so we spent a week in D.C. and that's where that long picture came from with President Truman in the rose garden. Well, we had we had study sessions. There was one on Forestry, and his name was Stumpy Simmons. We had one on Soils and his name was Donahue and we had one on insects and his name was the son of Donahue. Roy Donahue was a professor at A&M. Stumpy was with the Forest Service and there may have been another session but those attended and we were sitting out in the Pine woods and with Donahue with the soils we trekked down the drawl and looked at soil and that was most interesting and then I came back the next year after the Washington D.C. trip as one of the student leaders and I didn't attend any of the sessions it was more of a-- well, I don't know why I didn't attend any of the sessions. We were trying to write up a little workbook so it was mostly a-- chore but we had kids from all over the state and the thing was, I remember one kid was small and stocky and needed all the support he could get but by the end of camp he was talking and able to carry on a conversation with the group. That's-- so then I kept bugging my dad that we needed to do something like that. He was president of the Texas section of the Range society in 194-- In 1953. 1953, 1954. The-- okay. And he had followed Fred Walker who was then the extension Range Specialist at A&M. The first such position that the state had. Fred Walker had been the county agent in Menard prior to that so dad and he were very good friends so as dad took over the chairmanship he appointed Fred to get a range camp started. I was a graduate student. No, I was not a graduate student. I had kind of worked with him and this would have been-- no I was a graduate student working with Fred Walker who had a conversation and we had made the arrangements to have a camp at Junction in August of 1955. 55, 54 No. It was 50--

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it was 54. No it was 55. 55. We had been married a year, and I was spending too much time with this sort of thing and so the camp was set-up in August of 55. Helens folks were living in Junction at the time so I thought well, she can stay with her folks while we run this camp. Well that didn't work-- that didn't work too well. So I stayed with the camp half the time and argued with her the rest of the time. Came pretty close to separating because I was going into the Army the next week so we should spend that last week in Texas not going to a Range Camp, but I was stubborn and we pulled it off and the-- a little recognition service was Saturday morning at the last day of the camp. Well Friday night I was spending with her and her folks with her folks which was located in a little community out of Junction and we got rain during the 50's was welcome but it put the creek up so we couldn't get back to town. So I couldn't get back to town on Saturday and I was in charge of the recognition ceremony so finally we got a horse and we got across the creek to a telephone and why her parents telephone was out or something-- we got across the creek, got to a telephone, I call my dad and he was able to get over the to camp a little bit late and so that's the way it closed. That was the first camp and so it's been going strong ever since. So that was my contribution to this

Phone rings

P2: Excuse me. Let me take this. Landers, yes.

Landers 8

I: There we go.

P2: Here we go. So the youth Range workshop. I participated in it that first year, then went into the Army. Went to graduate school in California. Took a job in Iowa, returned to Texas in 1979 and attended the camp in 1980. Again, it was not the thing to do with Helen but we managed and the next year, I reduced my responsibility and it worked out. So pretty much since 79--1980, I've had a lecture or a small part in the camp and as long as my dad was alive he would appear at some point and we'd designated the top student we called the, well the top student as selected by the staff was the Roger Q Landers award. The top student in the plant section and notes taken was given the Sam Coleman award. Sam Coleman was the Soil Conservation service person in Junction who made sure that the camp worked in the early days. My dad could not lecture-- could not talk. He would start talking and he would go in a circle and wind up here and never get back to the main point and I inherited some of that so I'm sure it's inherited so that's the way my mind works, but then probably we were going to a different Ranch from about 1980 to 90 and then we started coming to the Ranch while dad was still alive and then we've had a day there ever since. We changed the location, we've changed a little bit every time and I've tried to keep it up to date with visitors and one of my plans, which never did work out real well, was to invite a good rancher in the state to talk to the group. Well, sometimes good ranchers don't talk well to the group and my dad was one but somehow they need to be recognized and the students need to be recognized. The first few years, it was all male. I don't know when the-- the girls started but you know that has really been a good blend of advisors and students and the best student last year was a girl. So, that's good. So that roundabout is why I think it's important to get students into an outdoor classroom situation. This group here of young, young people at the community garden-- memorial garden has been wonderful and one of our aids has a daughter in that group and she said her daughter had been bringing home radishes and stuff from her raised bed, the most excited kid in the world and I can see her. She's probably a fourth grader so the master gardeners-- master gardeners are doing well. Now if they would, now what-- when they get to high school, they need something and that's-- we send one or we send one a year to the Range camp and there are also other camps but we really need something at the high school level to keep this interest going and whatever competes with it.

I: I'm at an end for the questions for recording so I think we will click out.

P2: Okay. I'm all thunk out.

