Poweshiek History Preservation Project

Interview Transcript

Interviewer: Lucia Dhooge

Speaker: Gene and John Bartachek

Date: March 30, 2017

Place: Brooklyn, Iowa

March 30, 2017
Persons Present: Lucia Dhooge-I

Gene Bartachek-S

John Bartachek-S

Dhooge: My name is Lucia Dhooge, we are in Brooklyn Iowa, the date is March 30th, 2017, and I'm here with Gene and John Bartachek for the Poweshiek County Oral History Project. So, hello guys!

G. Bartachek: Hello!

J. Bartachek: Hello!

Dhooge: I think I'll start by having each, now, you are a father and son. I think I'll start by having you each tell your name and your date of birth. Your full name and your date of birth. Gene, you wanna go first?

G. Bartachek: Yeah. My name is Gene Fred Bartachek, and my date of birth is May 26th 1932.

J. Bartachek: And my name is John Bartachek, and my birthdate is July 16th, 1952.

Dhooge: Okay, thank you so much. Well, were here to talk about your family's tiling business, and we want to record these things for future generations to know what you did in that business. John, maybe I'll start with you. When did you start, when did you join the tiling business with your dad?

J. Bartachek: Uh, in May of 1970 I took over my granddad's half of the trencher.

Dhooge: Your granddad. What was your granddad's name?

J. Bartachek: Fred Bartachek. And, uh, actually started working around the trencher, they bought their trencher in 1959 in the fall, and in 1960 I helped in the summer months, and in the summer months to follow.

Dhooge: So you were still in high school then, right?

J. Bartachek: Oh, yeah, I was young. 1960?

Dhooge: How old were you?

J. Bartachek: Well, I'd 'a been, uh, eight years old.

G. Bartachek: Yes.

Dhooge: eight years old!

J. Bartachek: We handled clay tile back then, and so there was a lot of work, manual work.

G. Bartachek: Used, you used to take a pitchfork, you'd pick, and you'd lay and string 'em out on the ground, and you'd take a pitchfork and pick up two at a time and set 'em over next to the tiling machine so that man behind could put 'em down in the ditch, where they'd spend their life there.

Dhooge: Wow. And those clay tile, they were about, how long were they?

G. Bartachek: 12.

Dhooge: About 12 inches, and about, usually about four inches?

J. Bartachek: Anywhere from four inches up to 12.

Dhooge: 12. Oh my god, around?

J. Bartachek: Yep, inside—inside.

Dhooge: Okay, got it. Now, Gene, you started well before that. When did you start in the tilling business?

G. Bartachek: Well, I was a freshman in high school, and I hauled tile with a farm tractor and a hay rack and I, they'd bring 'em out from the cities or the tile plants where they made 'em, and they'd bring 'em out and put 'em in a pile, and I'd load them and take 'em out in the field and scatter 'em, string 'em out so they were on the ground, and ready to go on the ground, then we'd fork 'em over and carry some of them too. I, I worked for my uncle Ed. I started out when I was a freshman in high school, and I think, I know we spent the whole summer down around Deep River tiling, and, uh, that was my vacation, and I was, just, tiling at that time.

Dhooge: [laughter] I was thinking about how strong you were as young people from lifting all those heavy clay tiles.

G. Bartachek: Yeah, you got so you could carry four at a time, of 4 inch.

Dhooge: Yeah?

J. Bartachek: Yeah.

Dhooge: Now, I'm curious, did you have time for other things, did you, John, did you play sports at school?

J. Bartachek: Uh, football. During the summer I didn't.

Dhooge: Oh, because you were working.

J. Bartachek: Mhmm.

Dhooge: Got it, got it. Huh.

J. Bartachek: No, and ‘course back then we didn’t have the environmental issues so there were a lot of buffalo wallows, as the old farmers would call them, and you’d drain them, tile them out and stuff.

Dhooge: And the buffalo wallows, talk more about that, what that was.

J. Bartachek: Well, they were low points in flatter ground, and just were wet and carried a certain amount of surface water, and in fact, you just don’t see ‘em like you did. And they called them buffalo wallows because when we had bison or buffalo, the country was frontier, well, they would stomp around in that, drink water, and of course stompin’ around with their hooves they sealed it up worse.

Dhooge: Oh, I see.

J. Bartachek: So, and everything was different than it is today. It, you just don’t see some of the conditions that you seen back then. You had to carry the clay tile into those places by hand, you couldn’t drive into them.

Dhooge: Oh, they, it stayed too wet all the time, to drive in?

J. Bartachek: Quite a bit of the time.

Dhooge: Because the water couldn’t, it was low and the water couldn’t get away.

J. Bartachek: Yeah, and been packed, and been wet so long. Course back then, they shelled corn, the farmers did, out of their cribs, and so they would fill the trenches with corn cobs, to help it so it wouldn’t seal back over. And the water would percolate down to the tile through that. So, of course we don’t have corn cobs today.

G. Bartachek: [laughter]

J. Bartachek: So, we use, I use, uh, baled up corn stalks if I can, unroll the round bales, and then put them in the trench.

Dhooge: So you were saying you don’t see that, those buffalo wallows—

J. Bartachek: No, not like you did.

Dhooge: Not like you did anymore.

J. Bartachek: No.

Dhooge: Gene, how ‘bout you? What were conditions like that you can remember when you first started?

G. Bartachek: Well, we used the, for when they first unloaded them off the truck, we’d hook a tractor on it and pull it in the field real slow, and then there was fellas, usually about four of us, scattering the tile laying ‘em out, and then we got to where they’d bring them out an put them in a pile. We used to get tile out of Northern Iowa, and they brought ‘em in semis, and they would haul four inch tile, they would haul 7,000. And they’d come out and those trucks were made and equipped so they could move very slow, and we used a shoot, a pipe, and it was cut in half, and slide up the tile, we’d stand up in the truck, three fellas usually, and let the tile slide down and they’d be already strung out and ready to go. And just so you had ‘em where they were supposed to be, that was the main thing.

J. Bartachek: Sometimes you couldn’t. Because the truck wouldn’t, you couldn’t go through a—

G. Bartachek: Yeah.

Dhooge: And then would you put them as close as you could to the right spot?

J. Bartachek: And carry ‘em over in that spot, yeah.

G. Bartachek: Yeah, my Uncle Ed, he ended up, he had to quit, his back couldn’t take it, and we carried a lot of tile and we carried ‘em in to where the machine would come through and lay ‘em then. The machine didn’t lay ‘em, there was a man in the back end that was hookin’ ‘em in with a, about a six foot stick and on the end it had a hook, and you’d pick these tile up and put ‘em down in there, you had to, some of the tile sometime were kind of crooked, the heat when you cooked ‘em they had too much heat on ‘em and they would warp, and you had to turn ‘em to keep the top always closed, and your water comes in on the water tables on the bottom of the tile. And so, any opening you left on the bottom as much as you could.

J. Bartachek: Then later on in the clay tile times then they came with pallets, palletized tile, they were on pallets, and they just unloaded ‘em off and you had a unit you slid under the pallet and pulled alongside the machine or scattered them ahead of the machine, and of course at that time, then they went to a tile layer, which was in the back of the machine, filled the, kept it full of tile as the machine moved ahead, and a man behind to kick ‘em and straighten ‘em.

Dhooge: Ooh.

J. Bartachek: Because it wasn’t perfect by any means.

Dhooge: So the man behind, the tile were already placed down in the trench.

J. Bartachek: Yeah, yeah.

G. Bartachek: They laid out and they—

J. Bartachek: You'd have to step—

G. Bartachek: Step down—

J. Bartachek: Step down on 'em, make sure they were in place, kick 'em, and even sometimes if they were crooked, turn 'em so they were where they're supposed to be.

Dhooge: And how deep would those tile have been? What would the range of how deep?

J. Bartachek: Well, in the buffalo wallows, maybe 30 inches to the bottom where the ground was so tight and it was such a low spot. Up to, good range in our soils in Poweshiek County's around four and a half foot, four foot. But on, where the soils tight, why, sometimes it's better in the low spots to be shallower. But you don't want to be too shallow. So.

Dhooge: How did you figure out, Gene, if you were too shallow or not too shallow?

G. Bartachek: Well, I just took a lot of time. You just had to work along with somebody else that had done it long enough that they understood. And you can take, I went over to Marion School for about a week there where I picked it up, and at the soil office they had a bunch of us in there and you'd add and subtract, there was a way you went through it and it would tell you and then you drove little stakes in the ground about this long and drive them in and then you'd measure off of them.

J. Bartachek: Took your ground shots.

G. Bartachek: And that was your preliminary shots you took before you dug anything, and then you figured this out, I remember when I first got my first addin' machine that was really nice because you used to have to figure it out up here [gestures to his head?] if you're tired, well that didn't work too good.

Dhooge: Can I ask you to talk a little more about those ground shots, I don't think I quite got what they were doing.

G. Bartachek: Well, you take, you set 'em every hundred feet in a line right beside where you're gonna put the tile, and they had things that came with the tile machine, grade stakes they called them, and that was, you put them and you measured right, you put them right beside the little stakes, and those, and then you'd measure up and the stake had a thing that moved up and down and you could adjust it, and there was an imaginary line, there was a thing on the machine—

J. Bartachek: Sighted off of that.

G. Bartachek: That you'd look through that and this imaginary line, we used to have I think it was six of 'em when we first started, and you'd set all six of them and then you'd go ahead and tie all of them, just follow that imaginary line, that was your water line, and where the water

would be, how deep you were cutin' down in the ground, and it really, well, uh, it just something you had to learn, what I mean. It just came with time. And—

J. Bartachek: Most of it, a lot of these flats, why, you would, you used a transit at that time, instrumental, surveying instrument. And you'd take all the shots off of those stakes which are little hubs, we called them, then you figure, say you want to be three, three and a half foot at the lowest point, you would figure that back to the outlet where you started. And that three and a half foot, you'd do it with addition and subtraction, clear back to where you started because that's where you had to be depth wise to be, be a hundred rods out into the field you had to be that depth. So you knew your depth before you ever started that job, your lowest points and everything.

Dhooge: So, talk a little bit about if you were not at the right depth, if you were too high or too low what would happen?

J. Bartachek: Well, you're better to be too low and have cover on them tile than to be too shallow, especially today with the heavy equipment that we farm with today. 'Course you're too shallow, you won't reach out as far as you need to reach too at times. Once you're there it's too late. So, and I still do that, even with the laser, I figure it the old way.

Dhooge: You do?

J. Bartachek: Oh yes. A lot of these bottoms that were pattern tiling, there's a reason they haven't been tiled because they just didn't have the equipment or know-how to do that, to realize that you had to know everything ahead of time, to realize that you might have to be nine foot deep at the crick for your outlet to be three foot deep all the way out there in the field. So that's why I do it that way. It takes a lot of time though.

G. Bartachek: Yeah, your water, you had to have a grade or slope on it so it ran down the hill, and most of the time you was workin with in a hundred feet you'd have about that much slope, and you just had, the man on the machine, well, everybody round the machine knew pretty much, at least two or three fellas knew what was goin' on.

J. Bartachek: And the lasers made it a lot easier as far as, you don't have to set targets or anything, but it's still, you had to figure your cuts and everything. Now, we're going to GPS, and it's kinda left me behind, I've decided well, I'm old enough that I don't trust everything automated. Sometimes things can happen. So.

G. Bartachek: You take a transit if it's windy, why they'll, well, when you buy one, well, you want to buy a good one, and if they shiver or shake, why, that point off there can be off by a bit.

J. Bartachek: Further out. And then you, your laser's the same way. If the wind's blowing hard, it, well, most of the good ones have an automatic shut off. And if it shakes it enough to throw it off, well, it shuts down, so, no, being, you don't go nowhere.

G. Bartachek: See, what it does, is it shakes, it moves out by a grade down and up, and it should be a straight line.

J. Bartachek: And if you're out there a thousand foot from where that shivers a little, it can be off a half an inch or better, with the wind shiverin' and so. You've gotta have certain conditions.

G. Bartachek: Most of them, might be off, the, about the most you'd be off is about a quarter of an inch in a thousand feet. It was, you had to know what you was doing and understand it, and—

J. Bartachek: Today with GPS, I haven't been around it, but they'll take, like, a four-wheeler, and they'll run a topographical scheme of the area that they're wanting to work, and then they take the readings, feed 'em into the computer and then the computer feeds, figures all this information out, then they take that, put it in the on-board computer for the trencher, the plow, whatever it is that they use. And that does that, all that, for them. But there are some places there that I still think you have to check those figures out so you know before something would show up.

G. Bartachek: 'Bout everybody has worked on the back end of the machine laying tile, and you can tell if water is leaving ya, that they're working alright, and if the water's catching ya, you don't have no slope on your tile, and that don't work.

Dhooge: Hm. It sounds like you need so many skills and so much intuition to do it correctly. It makes me wonder, were there people around, other businesses that didn't do it so well, or

G. Bartachek: Yes. [laughter] They usually didn't last very long.

Dhooge: Ah.

G. Bartachek: A year or two, and they'd have some tile and act like, it wasn't workin, and they didn't have no slope on them to drain, to pour that outlet where the crick is. It was, I know, I took Shirley along a lot when we worked flat ground when John was in school, well she'd fork tile over with a fork.

Dhooge: And Shirley is your wife, right?

G. Bartachek: Yep.

Dhooge: [laughter] So she must've been strong too.

G. Bartachek: Well, she, she knew how to get dirty, was, you get in the mud and stuff, and once in a while you slip, fall down or something. It was hard work. It was, lot of hot days, pretty hard.

Dhooge: Now John, you were just telling me a story of what just happened this week with the mud, and how it can complicate things so much when the weather comes in.

J. Bartachek: Yeah.

Dhooge: Do you wanna tell that story of what you were up to?

J. Bartachek: Well, you have to, you have to be able to have some decent conditions, unless it's just not gonna straighten up, and then you just have to wallow through the mess, but it's best if, at least walk around without slippin' and fallin' and being in a slimy mess.

Dhooge: And you were telling me that you were trying to get a four hour job done and you were just peeling off the mud and—

J. Bartachek: Yeah.

Dhooge: Talk about that. What does that mean, peeling off the mud?

J. Bartachek: Peeled the slimy mud off the top to get more of a solid base there to work with.

Dhooge: With, what machine were you using?

J. Bartachek: Trencher.

Dhooge: Peeling off the mud with a trencher?

J. Bartachek: Oh, the mud, peeled the mud off with a dozer.

Dhooge: Oh, with a dozer.

J. Bartachek: Yeah. It's best if you don't have to do that.

Dhooge: Especially if it starts raining right after you—

J. Bartachek: That's right, then you're right, you're back where you left off. That's what happens.

Dhooge: So Gene, talking about the equipment, John mentioned the dozer and the trencher. Back when you started, what pieces of equipment did you have?

G. Bartachek: Well, we had a dozer, we started out with a pretty good sized one. And they seem like they'll do everything but what you want 'em to do.

Dhooge: How's that?

G. Bartachek: Well if you're cutting with a tile machine, you try to go as flat as you can, so that machine, you got adjustment on that digging wheel, moving it up and down the bottom of where you lay the tile in, back behind. Has to be, that has to have this slope on so the water will run and everything. Everything has to be so-so. And there's some days, you get in the ground that's got mud holes in it, and you gotta pull machines and stuff, you really gotta be careful, you gotta check, and if it's caving in, it's so wet it's caving, the sides are caving in, you gotta check those

tile and I know we've dug 'em out, take a spade and a shovel, dig the dirt back out, see if they're laid so they got that slope on 'em, 'cause if they don't got that slope they're worthless.

J. Bartachek: See that they didn't get, clay tile, got knocked out of line. If it slid in, and it could do that, and it would because—

G. Bartachek: The ground, if it goes, slides in,

J. Bartachek: Slides in bottom first.

G. Bartachek: Uh, it just tips over, it's pretty good, but if the bottom slides in, it pushes the tile, mismatches them. Well, year or so, then you'll know because—

J. Bartachek: Well, he's talkin', that was before the days of backhoes, so you took a spade and a shovel, checked 'em.

Dhooge: They didn't have backhoes yet?

G. Bartachek: No.

J. Bartachek: Not back then they didn't.

G. Bartachek: Yeah, we, it was a lot of work. I've had calves get in the tile ditch, and they, tile ditch about this wide—

Dhooge: How wide is that?

G. Bartachek: Oh, about 18 inches, is the rule, and sometimes, most of them was 24, anyway, they'd get in there and they'd walk on them and they'd knock 'em out of line. And I know, I remember one Saturday afternoon, we, my dad and I was gonna quit at noon, we'd had a pretty good week of work, and we was gonna, take, go home, and do some other things. Anyway he walked down towards where it come out in the crick, and here was couple calves in there, and of course they couldn't get out, and they'd get to thrashing around and they'd knock the tile out of line, and they'd get mud in them. It was just a mess, and there was no vacation that afternoon, you have to take a crummer (?), and one guy takes the tile out and the guy gets down in that ditch and pulls that crummer along and makes it real smooth again, gets that slope on it, so the water'll fall.

Dhooge: Now, I'm glad you brought up a crummer, but probably people don't know what a crummer is. John, can you describe it, a crummer and how it works? This is just a hand tool, right?

J. Bartachek: Well, yeah, it's got a, usually like a seven, eight foot long handle on it, it's a half-moon shaped piece of metal hooked to that handle, and what it does, it shapes to the bottom of your tile, so they'll stay in line when you get done, why, they'll lay in there right.

Dhooge: Do you have to use a crummer all the time, or is it for problem areas?

J. Bartachek: I do it, junctions, that's where you hook one line into another. I still use it because the tubing is, originally the specs on tubing when it came to this country, you had to have a, a shape, half the diameter of the tubing, for the tubing to lay in, or it would squarsh it when it was covered over. What it'll do is it supports the sides of the tubing.

G. Bartachek: The tubing, to be, stand up and hold the dirt above it, why it has to be braced on the sides because when it, it is round and it, if it don't, if it flattens out, why—

J. Bartachek: It'll flare out the flatten, so it'll ridge the sides, so it don't flare out—

G. Bartachek: So the water goes down the middle of it, so the open space.

Dhooge: I have to tell both of you I wish that the listening audience could see you because I have the younger John on my right who sits with his arms crossed when he's not drinking coffee, and tells his story, and I have Gene on my left who talks with his hands, and whenever he shows, tells the story he's talkin' with his hands, I wish everyone could see that.

G. Bartachek: Yeah.

Dhooge: It's lovely. Can you talk now about the transition from clay tile to plastic tile and, well, when was that?

J. Bartachek: For us it was the fall of 1970, late fall. It came in to the area, I'm gonna say, late '70.

G. Bartachek: Yeah.

J. Bartachek: No—yeah, basically, yeah, I mean, they started trying to sell it, I think it was the late fall of '69, but like anything, it was new, and the farmers were reluctant to use it, and I guess you might say we were too. We didn't lay a lot of it in the beginning, we did some, but it was just getting comfortable with it, I guess. That, and you had to adjust the machine to lay that stuff in the groove the way it was supposed to. It wasn't the same as laying the clay tile.

G. Bartachek: You had that groove had to be, half circle, 180 degrees, and that plastic would come down and lay in that, and you had, most of us had a corn planter wheel run on top of that plastic and kept it down in, there was a thing underneath the tile machine that made a round 180 degree groove. We still have that now, a lot of 'em don't use it, and most of 'em went out of business, but, 'cause if it squarshes out, well the top comes down, and no place for the water to go.

Dhooge: What kind of changes needed to be done to the machine to switch from clay to plastic?

G. Bartachek: Oh, we changed it a lot of times because we got disgusted, and you go back to hookin' 'em in by hand—

J. Bartachek: Clay tile.

G. Bartachek: 'Cause, uh, you knew that was right, and you could see it, and, but we finally, we got, well, I know one day I got disgusted and we made that round groove in the bottom of the ditch, the tile machine did, and we made it deeper, and by golly the plastic would lay down in there and it was braced on the sides so it couldn't bow out and flatten, and if it flattened, why, just a matter of time, why it would go clear shut.

Dhooge: What was it that you got disgusted about that day?

J. Bartachek: Trying to get the adjustments right on the back end of the machine. The pitch on the crummer of the machine, it, you had to flatten it out where the, have a level crummer where the clay tile, you had the pitch on the crummer so the very back end made the groove, the V groove for the tile, clay tile.

Dhooge: Are you talkin' about the same day he's talkin' about, you remember this day?

J. Bartachek: Well, we do, we, when we had time would, mess with it until we got to where we had it the way it should be, and then, we felt comfortable to use it that way.

G. Bartachek: I think we probably were almost a couple of years—

J. Bartachek: Horsing around.

G. Bartachek: Gettin' around that thing to work to suit us.

Dhooge: When you made a transition from red tile to plastic.

G. Bartachek: Yeah.

Dhooge: really?

G. Bartachek: Yeah, the red tile were real hard and solid, and the plastic, it depends on the ground, the shape of the ground it's settin' in for some of its strength, and, well, if you don't have that strength, why, it'll flatten. And a lot of it has flattened.

J. Bartachek: And then when you change size of tile, you gotta change that back plug to finalize the shape for the size of tile you're laying. So, we, [sighs] I still do that. Which kills a lot of time, pullin' the unit out of the ground and changing that and settin' back in. It's—

G. Bartachek: See on tile you've got, well, started out they had 2 inch tile, was a hole in them only 2 inches, as big as it was, and they had 3 inch they built—

Dhooge: Can I just interrupt, so way back at the beginning the tile was only two inches in diameter?

G. Bartachek, Yeah, 3 inches, and then there was fellas hand dug em, dug the trench and put ‘em in, and they easily bought 5 inches, about as big as they go, ‘cause you had to dig such a big ditch for them.

J. Bartachek: Back in the ‘30s they had, well, the predecessor to the tile plow today, they had a cap stand that they’d bury every 100 foot in the ground, and a plow on two metal wheels, and a cable hooked to that plow on the mules or the horses would go around in circles every hundred foot, they’d have to dig a set in hole again, and they used a, was it cable, or wire, to, they’d have a ribbon, they called it a ribbon, a hundred foot-hundred tile ribbon, and they’d start that in the trench, in the started hole, and they could go a hundred foot before they had to reset, and that was better than a spade, as far as—

Dhooge: Yeah.

J. Bartachek: Still a lot of work though.

Dhooge: Did you work with that, Gene, with the horses and—

G. Bartachek: Uh, no, that was before my time.

J. Bartachek: Well, your dad—

G. Bartachek: My dad did.

J. Bartachek: And uncle Ed did.

G. Bartachek: Yeah.

Dhooge: Do you remember it, Gene?

G. Bartachek: Well, I’ve seen ‘em.

Dhooge: You’ve seen ‘em.

G. Bartachek: Yeah. Seen ‘em working.

Dhooge: Now your dad, so for the history of it, your dad was Fred—

G. Bartachek: Yeah.

Dhooge: Bartachek.

G. Bartachek: Yeah.

Dhooge: And then your uncle that you're talking about was Ed—

G. Bartachek: Yeah.

Dhooge: Bartachek.

G. Bartachek: Yeah.

Dhooge: Okay.

G. Bartachek: Yeah, he—

J. Bartachek: Ed was the one that started, in 1947, or 48?

G. Bartachek: Forty… '47.

J. Bartachek: Uh huh.

G. Bartachek That was the summer, we spent the whole summer down around Deep River, tiling. There was a man, Al Silverman was his name, and he had quite a few farms. And we were tiling 'em on his farms, that's puttin' tile, draining them out, yeah, it, it was quite a thing. Soils, soils act different. A clay-type, clay soil, the water don't want to leave it, it don't want to release the water. And you can put tile in that, and it's slow, the water's slow to leave, it don't wanna—a good black soil, it's grainy-like, and the water goes between the grains and goes to the tile, goes down them, and it goes down wherever you take it to to get rid of it.

Dhooge: What are the different kinds of tile that we have here in Poweshiek County?

G. Bartachek: Oh, golly. [laughter] We've got, uh, there's a Muscatine soil, that's pretty nice, and then we've got a Tama silt loam. If you can put tile on that, why, they work very good.

Dhooge: You said, [slowly] Tama-silt-loam.

G. Bartachek: Uh huh.

Dhooge: What's that like?

G. Bartachek: It's a black, dark soil, and it'll have clay mixed with it, you get in the hills and stuff. And there's several different kinds, there's a Shelby, and when you come onto that, why, the first thing you do is after you've got tangled up with it once, you stay away from it. 'Cause it's, it, you can tile it and the tile don't work right. You can tile it, and the water won't come out of the soil and into the tile.

Dhooge: So, how do you stay away from it, then?

G. Bartachek: You just don't do it.

J. Bartachek: That, or, if it's coming from above you intercept the water before it hits the surface of the ground. You go above that, where the water's actually showin', and same way with side hills in this country, and glacial clay material, heavy clay, you'll have wet side hills up on the side of the hill, and you intercept that water before it hits the surface. And, it's, at one time they didn't, in the early years they didn't worry about side hills like they do today, because they didn't plant until the 10th of May. And by that time it'd be warming up, the soil temperature warms up, and if you open that ground up, and dry it enough, you could get yourself through it, farm with it, but now, why, the 12th of April's when you start planting, so it's different.

Dhooge; What are some other soils that we have in Poweshiek County?

J. Bartachek: Zook. And that's on bottom.

Dhooge: Zook? As, Z-O-O-K? Zook?

J. Bartachek: Yeah. And then Buffalo Wallows.

Dhooge: That is Zook?

J. Bartachek: Yeah. What it is, it'll turn up gray colored when you trench it, and it's a tighter soil because the water set there, and the gray is actually minerals residue from the water slowly leaching down through time, and will turn a white to a gray color, real heavy, and you have to treat, use corn cobs or corn stalks to get your maximum good out of the tile.

G. Bartachek: But, uh, corn cobs, they decay when they're in the ground. And that's what, and they displace, they turned dirt in time and in themselves, and this, that, that lets the water go to the tile and through the dirt.

J. Bartachek: Also, today, you'll use surface intakes to take the live water that sits in them places, get rid of it quicker.

Dhooge: Surface intakes.

J. Bartachek: To drop water right directly into the tile

Dhooge: Oh. Oh, those big, they stick straight up in the air, those orange things?

J. Bartachek: Yep.

Dhooge: Ooooh.

J. Bartachek: That, or, they've got a yellow beehive top that you just come to the surface of the ground, and set that, and that way the farmer can raise the planter up and go over it and drop it right away, he don't have to work around it as much. They don't like using intakes anymore than they got to.

Dhooge: Now I know that you know our, my husband and I, you know our farm. So say, in our hundred and sixty acres around our house, and you've worked there many many times, how, what are the different kinds of soil that we have on that one piece of ground?

J. Bartachek: [laughter]

G. Bartachek: [laughter] Well, it varies. If you got the Tama or the Muscatine type soil, well, you've got one step in the right direction already. Tile'll perform in that. But you get to some of this clay, that Shelby, that stuff is orange colored, and once you put the dirt back on the tile, and it just tightens up, and water won't hardly go through it. The water has to go through the soil, leach through it to get through the tile, and that's the thing you gotta do when you go out and look at some work, well, you wanna see what kind of soil it is, take soil maps and stuff, and lot of times take an augur and go down in the ground and take soil samples.

J. Bartachek: Yeah, so if it's bad enough, yes you better take some samples or dig with a hoe, but yeah, you'd have, I'd hate to guess how many different types of soil on your farm there.

Dhooge: On that, just that 160 acres?

G. Bartachek: I'd say there have to be a dozen different types of soil, probably.

J. Bartachek: Yeah, may not be much of an area of that particular soil, but—

G. Bartachek: And then a lot of it, you got nice black soil up here on top, go down a couple feet, and you've got this white colored soil, and that will slow water up, it's, what it is is the real fine particles of it, it's not grainy to let the water through, and it'll, well, what it does is won't let the water through and it just, the tile won't work.

J. Bartachek: Not as fast. Sometimes there's a way to counteract that, you see it more today, is spacing, maybe a forty-foot spacing—

Dhooge: Of the tile lines?

J. Bartachek: Yeah.

G. Bartachek: That's the distance of the tile trenches. We used to work. When I started, well, we, lot of times we'd go 70 feet in this black soil. That would drain good. And it would do a good job at that, but now, why, you've got a, 'cause they go out, they work quicker now, they go out when it's a little wet, and it's gotta be, well, It's gotta be drained, and the way you drain 'em quicker is you set 'em closer.

J. Bartachek: Illinois, and places here in Iowa, they're setting them as close as 20 foot, which is really close.

Dhooge: What do you think about those close grids of tiling that we see in the fields now sometimes?

G. Bartachek: Well, if you're really farming hard, using big equipment, why, you better put it closer together so it acts quicker and does its job, so it gets that water out of the soil and gets it down to the crick.

J. Bartachek: Yeah, on average here, would be 50 foot now, spacing, and then when you get to potholes, low places and flats, 40 foot, I've done some of that.

G. Bartachek: Sometimes you go through, and then you turn around, and after it kind of starts to dry, you run one through the middle.

Dhooge: Oh.

G. Bartachek: Of a smaller sized tile, so it don't cost as much, but you get 'em through the middle, and make darn sure you got rid of the water. You have to—It just takes a lot of time to understand and read on it every time you get a chance, if there's something, you know, there was a lot of stuff put out, on, literature and stuff, on it, and you just, it's just how good you want to be.

J. Bartachek: And how much you wanna spend. [laughter]

G. Bartachek: Yeah, yeah, that had a lot to do with it.

J. Bartachek: Yeah, there's a point, an economic point to things, whether, whether you justify running 40-foot spacing, or whether you run 50, and 'course your soil has a lot to do with that, and if you can wait, let the weather warm up a little bit, why you'd probably get by with a wider spacing, but if you gotta get in there and plant it right away, why, then you gotta spend more.

Dhooge: And then the farmer is the one who decides how much to spend, how far to go, how much money he has this year.

J. Bartachek: Yeah. If it's a bad enough situation maybe you just do part of it, or every other line, or something like that, 'til he can justify filling, filling in the spaces basically.

G. Bartachek: That's, we've never done that much, well I've done it a few times, set it double width apart then come in and put another line in a year or two later. And then you have your spacing and everything like you should have.

J. Bartachek: Quite often when you'll tile a flat, you tile the worst part or the part that bothered.

G. Bartachek: Yeah.

J. Bartachek: And then later on they find out the other part isn't drying as fast as the tiled part so then you go in and tile the other part.

G. Bartachek: Then they gotta, to get it so all, they can work at all the same time, why they have to tile every bit of it, and that's the reason for our spacing, we try to figure out how much we should, how much spacing we should allow.

Dhooge: What kind of differences do you see in the farmers who own the land, as far as how much they wanna do, how they take care of their land…

G. Bartachek: Well, a farmer that I'd say is kind of a above average farmer, will be the one that's tiling and stuff 'cause they don't wanna have to, takes extra time to do this stuff if it's muddy. And it stays kinda muddy too long.

J. Bartachek: that, and the crop don't produce, and it stays dry. Crop don't, don't, uh, root down, and you get a hot dry summer, why your yield shows up the differences.

G. Bartachek: There is one thing, soil, will get red, will let water go through it and off, the darker soils, and you can, well, what I'm tryin to say is, it goes through it and it'll go down, you can set your tile a little deeper, and you can set 'em a little farther apart, if you got darker soil. And if you got clay that's tight, and real fine soil, well it's more grainy, it won't release its waters quick.

Dhooge: Well I think we're coming up on an hour, and I don't wanna go much longer but there's just two, two questions that I wanna ask, and then anything else that you'd like to say. The first question is, what kind of things have you found in digging in the fields, in trenching in the fields, that we maybe didn't even know where there?

J. Bartachek: [laughter]

G. Bartachek: [laughter] Well, they've buried stuff, and course we learn too, you know, when you bury stuff, you don't bury it in the slough, in the low part, because you'll have to dig up through there, that's not gonna work so good. And it can be pretty disgusting sometimes, what you get into, get into, I've gotten into, they've throwed a whole fence line, they've rolled a whole fence up and throwed it in the ditch, and then you fill the, close the ditch up, and you come along, you go to go across that ditch, and then, boy, then the fun starts.

J. Bartachek: This last week, I hit buried fence with the fence post on it, a harrow, [laughter] brought it up, sometimes big rocks will end up, roll them into a ditch and cover them, just about any, well, even corn pickers! [laughter]

G. Bartachek: I've, I've hit combines that was buried.

J. Bartachek: Cars—

G. Bartachek: Old cars, that was out here on the Ray Anthony's, and I hit, went through an old Studebaker car, they throwed it in the ditch, and I came up to the tile machine and I went crossways, and I just let her dig slow, and you just gotta live with it and slow down. And you hit

steel, another thing is, water pipe, they've had a windmill out in the field or something, and you hit that, you'll do damage to your tiling machine then, if you hit it too hard.

J. Bartachek: Concrete. Little bit of everything. Trees that grow underground, sideways.

G. Bartachek: Yeah.

Dhooge: What?

J. Bartachek: Logs. Trees that been pushed into ditches, covered.

G. Bartachek: I had, Uncle Ed and I, we were out on the Walnut Crick, and we got, where that old crick had been, and they took the timber out, and they pushed it into the deep part of the crick, well, you come along 20 years later or so, and you hit one of them trees, and that's it, and then you gotta take her out of the ground, and back then we didn't have no back hoes or nothing, and you'd dig and dig up to the tree by hand, by hand and then dig underneath it, or on top of it, whichever way you could get, sometimes if it was erect, elve- or long, right elevation, why you'd have to just stop.

J. Bartachek: the tree, buried wood, most buried wood don't decay fast. The air don't get to it as well as it should—

G. Bartachek: It don't deteriorate.

J. Bartachek: It can be in there 40 years and still be in good shape.

Dhooge: Oh my gosh.

J. Bartachek: take a saw, a chainsaw or something, if it's just one, if you're lucky, why, saw 'em out, dig through.

G. Bartachek: Saw, dig it out wider, and saw it out, back up and go, drop in and go on.

J. Bartachek: And often times you got water around the trees, because they seem to hold water around debris, well then you gotta use PVC or a metal pipe to bridge that so you don't sink or lose your grade in that mess.

G. Bartachek: We're having trouble now, our metal pipe that they had galvanized on the outside, that, we put in 20 years ago, 25, why it's galvanizing is deteriorating, and then the pipe rusts out, collapses.

J. Bartachek: A good average is about 37 years, and then it starts showing trouble. You gotta do something.

G. Bartachek: That's the reason we're using so much PVC pipe now, to bridge across where we have to.

Dhooge: I've often thought that so many of us take for granted what's underneath our feet, and that you are two of the people who can really visualize what's down there.

G. Bartachek: Yeah, most anything.

[all laughing]

J. Bartachek: You don't wanna visualize it.

G. Bartachek: Foundations, cement, brick, [laughter]

Dhooge: Well, my last question is, what do you see is the future of tiling on farm fields?

G. Bartachek: Well, I can see, we've got fellas that's doing it with plastic, and if they've done a good job, and got that plastic where it won't crush and stuff, well it'll last a long time. If they just put in in a common ditch, a flat bottom ditch, with no thing to strengthen it or anything, why it might last a year or two and—

J. Bartachek: It, it can take up to 10 years before it really becomes apparent, actually completely shuts water off. And our materials today, the plastic, all our plastic has seams in it. And I've seen some back from the '80s, there are companies that aren't in business no more—

G. Bartachek: There's a lot of 'em.

J. Bartachek: But I've seen some of it where they didn't use a groove, that's part of it, to lay it in. So that seam naturally would crack, and then it'd finish itself off. And now I'm seeing clay tile, that would be from the, let's see, that was late '60s, and early '70s, there was one company, at the time you thought they were good tile, Northern Iowa Tile, they were a mainline company, I've seen them where they develop a crack in it, and I can't figure that out why they done that, other than they must not've been fired hard enough. Actually, another company I noticed some of that, and a lot of that stuff was sold in this area, and no rhyme nor reason, it just, I've noticed it.

G. Bartachek: Well they used to use the old beehive kilns that they cook, they put tile in, then they cook the moisture out of them and they got hard—

Dhooge: That was a wood-fired—

J. Bartachek: Well, coal—

Dhooge: Wood or coal-fired big mound.

G. Bartachek: Yeah, yeah, and—

J. Bartachek: They were redder tile too, harder burned.

G. Bartachek: Yeah, you could tell the tile'd stand quite a bit, just as soon as you, you stick that hook back there, and if they sound funny you don't put 'em in the ground.

Dhooge: Oh, could, so there's a defect in there.

J. Bartachek: Yeah, there's a dull sound, instead of a ring.

G. Bartachek: The ones that really made you work was, we used to put 12 inch tile in, and you have to handle them by hand pretty much until you let it down in the tile ditch. And I've seen, well, we used to, my other boy works for the city, why he used to work for us, and we'd change off, go maybe 10 tile, and then the other guy would get in and he'd lay 10 tile, because there he was, I remember one time I'd laid a bunch of tile one afternoon, and heck I just walked on 'em, and bent over and stepped and reached down, and boy, I felt pretty good when I got done, and next morning I couldn't hardly bend. It—

J. Bartachek: And there was concrete tile at one time put in this soil. It doesn't work here for some reason; our acids in our soil deteriorate the concrete soil.

G. Bartachek: Yeah, the concrete, it would just kind of shale up, you could just grab 'em and just get a handful at a time.

Dhooge: Oh, I'll be darned. Hm.

G. Bartachek: There's some of them around yet.

J. Bartachek: Yeah, yeah, you gotta replace 'em. 'Cause they, they just start making holes in the ground, and that leads to them tile, and they're pretty much gone.

Dhooge: Well, Gene, is there anything that you kinda wish I could've asked about?

G. Bartachek: It's, it was a job, that you should try to do, as perfect as you can do. And we never ran the high footage some guys ran, some of them would get where they'd go out, they'd dig an awful bunch of tile in a day, and cover 'em up and forget about 'em.

Dhooge: Hm. And that wasn't your style.

G. Bartachek: No. I hooked tile behind my Uncle Ed for, well, several years, and then there was, when I had to have school, why, you go to school, and then work weekends and stuff.

J. Bartachek: I think the biggest thing that I see is, anybody who's getting in the business, they need to work with somebody that knows all this stuff, and you don't learn it in two years, I mean, it's a, should say, truthfully, a five year learning, curve, and then it wouldn't hurt if he was working with you yet, to tell ya, that, what you're doing wrong, because it saves a lot of trouble.

G. Bartachek: On the, figure these fields, to get to the depth of the tile and stuff, why, it took a lot of time, it really did.

J. Bartachek: And it still does if you wanna—

G. Bartachek: Yes, yes.

J. Bartachek: End up with something that 40 to 60 years from now is still as good as when you put it in, it takes time.

G. Bartachek: We've got tile that we [inaudible], and, uh, they're, look as good as when you put 'em in.

J. Bartachek: Hook into them old tile, and they're still like the day they were put in, from back in the '60s, and, well, even some of them back in the '50s.

G. Bartachek: Yeah.

Dhooge: I love to hear your thoughts about that, because I know for my husband, he wouldn't have anybody else tiling in his fields, and he knows, he knows what he gets with you. And that's really important.

G. Bartachek: Yeah.

J. Bartachek: Well, if it's done right, it'll be more than one generation'll get good out of it, it will.

G. Bartachek: Well, I always enj- kind of enjoyed it, and what you enjoyed is when you got done, and you had, the water ran through the tile, the field dried up, I've seen flat ground like over around Montezuma, you tile it, you couldn't get into it, and you'd wait and catch it when you could get in, and, you've, well, it just, knowin' that you did a good job.

Dhooge: Well, I think that's a perfect place to end, and thank you both so much.

G. Bartachek: Yeah.