Oral History Interview of
W.D. Vardeman

Interviewed by: David Marshall
July 08, 2013
Woodrow, Texas

Part of the:
Agriculture Interviews

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Recording Notes:

Original Format: Born Digital Audio
Digitization Details: N/A
Audio Metadata: 44.1kHz/ 24bit WAV file
Further Access Restrictions: N/A
Related Interviews: Vardeman was also interviewed on August 15, 2013.

Transcription Notes:

Interviewer: David Marshall
Audio Editor: N/A
Transcription: AV Department Staff
Editor(s): Jason Rhode

Transcript Overview:

This interview features W.D. "Buzz" Vardeman, who discusses his upbringing, rural life, his experiences as a farmer, his partnership with John Deere, and his role as an agricultural innovator.

Length of Interview: 04:07:48

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Keywords
Rural life, agriculture, farm equipment, John Deere, innovation, engineering

David Marshall (DM):
The date is July 8, 2013, and this is David Marshall interviewing W.D. Vardeman at his home south of Lubbock and near the community of Woodrow, it's really kind of between Woodrow and Slaton, isn't it?

W.D. Vardeman (WDV):
Yes.

DM:
Can you give me your full name?

WDV:
My name is Wendell Dean Vardeman.

DM:
And people call you?

WDV:
Better known by Buzz Vardeman—that's about the only thing people call me, really.

DM:
And can you tell me when and where you were born?

WDV:
I was born in San Saba County, that's in central Texas. My folks moved to San Saba from Brown County, up by Bangs, and they're from nowhere there; they came from Ennis in the Waxahachie area of Brown County, and then they came out of Mississippi, and they'd been through Tennessee, the Carolinas is where they both sides of our family, that's kind of the track that they came going to San Saba.

DM:
They made that westward movement, and you continued it, too, coming right on out. Can you tell me when you were born? What's your birthday?

WDV:
I was born in November 1927. November the eighteenth. I was the last of nine kids.

DM:
Oh, is that right? Okay. Where they all born down here, or kind of on the move?

WDV:
They were born either in Brown County or Richland Springs, where we lived in San Saba County.

DM:
Can you tell me your parents' names?

WDV:
Kenny Vardeman and Betsy Schauffner was my mother's name.

DM:
Schauffner?

WDV:
Schauffner. Their folks all come to Plains about the time I was born. But there were most of our kinfolks moved out here about the time I was born. But we stayed down in San Saba County and I was kind of the last ones left down there.

DM:
Oh, is that right? So when you came out here in the forties, you already had family around, too.

WDV:
Yeah, we had family and that's the reason I came out here. They helped me find a place and everything to move to. Our farming operation down there got to where it took too much hand labor for all the fruit orchards and pecan orchards, and I wanted to find some way where you would use machinery instead of hand labor.

DM:
You were always kind of interested in the machinery part, weren't you?

WDV:
Yes, I was—

DM:
—because of your vocation.

WDV:
Far back as I can remember, I was interested in anything mechanical, I was interested in. I wanted to know how it worked. And the first thing, you know, I wanted to know if I could make it better. So while I was there at San Saba, I had five little inventions—well, I say little, it wasn't necessarily little—by the time I was a sophomore in high school. My first one was a bottle washer. We—one of my uncles over at Levelland, he was selling this Bireley's Orangeade, and he had a dairy that they'd run too. That was my mother's brother. So he talked my mother in to start selling Bireley's Orangeade in San Saba. So anyhow, she did and so we'd have about three hundred to three-hundred and fifty bottles to wash at a time. Trying to wash those with a hand brush was terrible.

DM:
That gave you incentive for an invention.

WDV:
I thought I could make a powered brush and pull it with a Maytag motor.

DM:
Golly. Did it work pretty well?

WDV:
It worked great. And man, our bottles, in other words, when we were doing it by hand, we had to inspect every bottle and then there was the last person who inspect them, and if there was any little speck that wasn't clean, we had to do it over. It was quite often we was having to do it over. When I got the powered brush, bottle washer, that almost eliminated any mishaps.

DM:
How did it work? Did something fit down in the bottle?

WDV:
It was just a spinning brush that had a cover so it wouldn't fling water everywhere. So you'd pick your bottle up out of the water, it was soapy water, and stick it on the brush and that brush would spin and you'd let it spin in your hand for a few rounds and that'd get the outside clean. It was a fast deal. It was really a great invention compared to what we had.

DM:
Well, excuse my ignorance, but what is Bireley's Orangeade?

WDV:
Bireley's, B-I-R-L-E-Y-S. Bireley's Orangeade. And what it was, it was a concentrate from the real oranges in California, put in gallon buckets sealed up, and then you mixed that with—in other words, nine gallons of water with that gallon of concentrate, which was supposed to be equal to three oranges per little bottle. I still have one of those little bottles, I got to show you. But anyhow, it was really a good drink. We had the old paper caps like the milk used to have and all that.

DM:
So this was made from gallon containers, this machine you made, this washer was made to wash gallon bottles?

WDV:
No, little bottles, six-ounce bottles. So it's a small bottle.

DM:
That's pretty good. You have any pictures of it or anything?

WDV:
No, I don't. And then we'd already started raising peanuts, and boy, I loved peanut butter but the entire time I was growing up when I was little, nobody had any money. I tried to get mother to buy peanut butter, you know, and she'd say, "Well, if you want peanut butter, you shell the peanuts and we can make the peanut butter." We had a food grinder deal, it had a peanut plate for making peanut butter. So anyhow, I started hand-shelling peanuts. Boy, first thing, "y'all got to find a better way to do that." So anyhow, I come up with a way to make a peanut sheller. And

I could shell peanuts fast. You know, and then when—what we say when the hoe's out in the wind? Well, it wasn't enough wind to suit me, so I made a blower that I could blow the peanut holes away from the—so anyhow, I wound up making everybody in the community peanut butter.

DM:
Oh, really? Now, how old were you?

WDV:
Well, I was probably about ten, eleven years old when I started that.

DM:
Well now, how did you—did you know someone else that invented things like this or did you just have a knack?

WDV:
No, I was just going by my own ideas, you know. Been around a peanut thresher and I'd seen how it threshed the peanuts, but it didn't shell them or anything. That's where I got my idea to make the wind, you know, because it had a fan on that would blow the whole dirt and stuff, trash out of the peanuts.

DM:
Did you all call that winnowing or just—?

WDV:
Winding. There was a real common one, we'd say, like, we'd have dried peas and things to hold over for seed. We'd put them down on the tarp, an old cotton sack or something like that, you know, and grab the husk away from the hole and you'd hold them up to the wind and let the wind blow the deals out, that was common practice.

DM:
But you called it winding.

WDV:
Yeah, they'd wind them out. So anyhow, I didn't have enough wind out of that to do a good job on the peanut holes, so I made a deal to cure that problem. You know, when I first started out, we had a single-cell Maytag engine and we had to buy a new twin-cell Maytag engine, and with that twin-cell Maytag engine, I had lots to experiment and do with it. I pulled my fan with it, pulled my bottle-washer with it, my mother didn't wash another—

DM:
Maytag would be proud to know. What else did you come up with at about that age?

WDV:
Then when I was a sophomore in high school, there was all that orchard that we had, pecans, pears, but mainly the peach trees had to be pruned every year. Well, all of it did some, but

peaches was the main thing. The worst job in the world there is trying to hold that brush or what we'd call the brush to prune off the trees. So anyhow, I had the idea that I could make a rake deal, it's what I called it, rake, from an idea that I'd seen, what they called a bush rake or a buck rake. That team [of horses] was behind it and pushed. So it pushed it and this hay would come up on the teeth, and then you could back out from under it. So anyhow, I only knew one of those, a guy between us and San Saba that I'd seen when I was selling peaches to him. He couldn't raise peaches down in the black land there, but were we was it was more of a sandy ground, and we had really good peaches. So we got acquainted with him. So I got in the car and went down to—or pickup, and went down to visit him and ask him for his old buck rake. It was just sitting out there rotting down, he had two of them. One of them was rotten completely down and just had the metal parts left, and the other one was still probably good enough to use, but he hadn't used it in a long time because the tractor. So anyhow, I asked him for it and I told him what I wanted to do was try to haul a brush with it. He said, "I don't know if it'll work or not," and I said, "what would you sell me these old parts for?" And he said, "You just pick up all them old parts right there and take them with us. Bring me a bushel or two of peaches." So I carried that home and told my dad what I was going to and he tried to discourage me, but I didn't take no for an answer. So anyhow, I'd come home from school in the afternoons, first thing I bought enough two-by-fours to make my teeth out of, but anyhow, after nearly a week of working on that—I told my dad the first day when I had the idea, I said, "You start doing the limbs out in the middle where I can run under with the deal, so I don't do them twice." So anyhow, he did. It was on a Friday afternoon when I finished that and went to the fields. The sun was just nearly down. Before dark, I hauled more brush than we could've hauled in probably two weeks.

DM:
Golly. That convinced him.

WDV:
It was the biggest labor saver you can imagine. The thing is, it was fun to drive because the faster you went the better it worked. You let the teeth down on the ground and just run under the brush and that'd ride under the teeth and push it all the way to the back. And when you got it full, you'd raise the teeth up and carried out on the edge where the peanuts had been planted, and push it up in a pile, and then you'd burn that brush. So anyhow, then he'd prune every day and I'd pick up that in a few minutes. Then all the neighbors seen what we was doing, so all the neighbors wanted me to come over and brush. They got lots of use out of that.

DM:
Now, were the teeth those metal tines?

WDV:
No, they were out of wood. They was the hardest part of making it. I just had to take a wood saw and taper that down and then take a plane and a rasp and make that round.

DM:
So you made every one of those teeth?

WDV:
Every one of those teeth out of two-by-fours. It was the biggest job, really.

DM:
Oh, how many teeth were there?

WDV:
Oh, probably close to twenty teeth. That took a good bit of work there.

DM:
Well, what did your dad think about all this?

WDV:
You know, it was kind of funny. First, he told me he didn't think it'd work, and after he'd seen it work, he encouraged me to go right ahead. Next thing I invented after that was a rock rake. We always had some rocks that you'd plow up through the years, you know. We hadn't hauled the rocks out of the field for several years, and that's a big job, because you go around and pick every individual rock up. So I had the idea that I could make a rock rake out of the—however—a side delivery rake? There was—we used the rake on peanuts. So I took the teeth off our peanut thresher, which they were a lot stiffer and a lot shorter because the teeth on the side delivery rake is about twice too long, and not as stout.

DM:
It's about a foot long? Twelve inches?

WDV:
So anyhow, I took all them teeth off that side delivery rake, took all the teeth out of the thresher, and put them on the side delivery rake. Anyhow, then that made it where my side delivery rake wasn't low enough to the ground, so I took the big wheels off the side delivery rake and took—got too wheels off the old binders, row binders that made bales. Took them—I took them and that was just the right height. But turned it faster, which made it rake the rocks better. So anyhow, this thing worked great. It really did. So I wind rowed all of our rocks. And then I made a deal on the back of the tractor with teeth and everything, same way I made the pick-up brush, only this was to pick up rocks.

DM:
But this was going to push them in front?

WDV:
It'd go under them, and you know, and you got that full, you'd raise it up. So anyhow, the day I got that and went to the field and tried it out, it worked pretty good. That night, we got about five inches rain. Rained all night long. And the ground was wet. When I laid it down, I just scooped up wet dirt. So we had to literally go between the wind rows and fork those rocks onto the trailer. The first load of rocks that we picked up, put them on the trailer and then you've got to throw them off one at a time. And I told my dad while I was throwing them off, I said, "We got to fix this trailer where it'll dump." "There's no way this trailer will do that." I said, "I believe there

is." So I took the bed off the four-wheel trailer and scooted the back wheel up as close as I could get it to the others, which made--

DM:
To a pivot point.

WDV:
Like a pivot, and then made a pivot point kind of in the middle of the bed, just past them middle, just enough so the bed would stay down, and then I put a spring from there down to the tongue to hold it. But anyhow then, when we'd pitch the rocks on there, we'd load this front end and then we'd start loading towards the back until it got to where it was almost balanced. So anyhow, the first time, of course, I just turned it loose and raised the front end up, and it went to the ground on the back and I drove out from under it. From then on—this is kind of a funny part—from then on, whenever we'd get to the same position to unload, I'd put the tractor—I could split the gears and make a high reverse or a low—and I'd make a high reverse, and I'd put it in high reverse and get it started backwards, put it fast and then I'd hit the brakes and that bed would tilt and I'd drive forward.

DM:
Golly, that's a great idea.

WDV:
I didn't even have to get off. So anyhow, the first time I'd done that, my dad went to clapping. So anyhow, I thought my dad would have all of us haul a bunch of rock all year before, because we had several piles of rocks, you know, rock piles, we'd call them. Then my dad hauled more rocks off a rake, and all, and went over all the land we was farming, which was a whole lot more then than what—we hauled more rocks than we'd hauled in all of our lifetime.

DM:
Golly. Did the neighbors see this?

WDV:
Yeah.

DM:
Uh-oh.

WDV:
So that was five little inventions that I'd made.

DM:
It's interesting too, how one led to another. You were able to rake the rocks, then you found a way to dump the rocks.

WDV:
Anyhow, that's just typical way really that my thinking always was. I'd say from the time we started going field hoeing or whatever, usually the first thing I'd do is look across, how far it was to the other side, try to figure out how long it's going to take me. And I was always trying to figure out some way to make something faster and better and easier.

DM:
Problem-solving. Kind of a natural problem-solving—

WDV:
Those inventions then, during World War II, all the young guys had gone to service, so it was just people my age and then the older ones left in the community. It was short-handed, I tell you. You couldn't hire anybody. You just had to do it yourself. So anyhow, when anybody around our community would have any trouble with a tractor or something, they'd come and get me.

DM:
Because you were mechanical.

WDV:
I was mechanical-minded enough with the tractors. Just like my dad. He was mechanical-minded, but anything about that tractor, he just wanted you to do it. He didn't want to fool with it. He didn't want to drive it, he just bought it and my brother, which was ten years older than me, he moved out here. Anyhow, it was just me and my dad at that time.

DM:
What this means was you got a lot of experience working with the—

WDV:
It's like running the peanut—we did the side then we had the thrasher, baler, and everything it run for the public, around in our whole community, see, so it was about fourteen families that was involved in what we did around there. So we'd all work together on everything. So if our tractors had a trouble with a tractor, it wouldn't start or something, they'd just come get me. So that morning I was going to San Saba to get some magneto points to put on this guy's—fix this magneto— while I was there, this Mr. Cherry, he was a blockman for the John Deere Company, came in, dealer there said, "Mr. Cherry, I want introduce you to this young man. Right now, if anybody has any trouble in the community, they'll go get him before they'll ever come to us. Y'all need to take him and make an engineer out of him. He's already got five different little inventions that he's made. Y'all need to get this guy and send him to college." Well, he started talking with me and asking if that's what I'd like to do, and really, that was kind of my thinking that I was going to do. So anyhow, after we'd visited quite a while, he says, "I'll come by every month. You go home and talk to your parents about this. If you think that's what you'd like to do, you meet me back" —and he gave me the date that he's going to be there the next month. I was down there and met with him. So that was our plans—I was going to—but I told him, I said, "I don't know anything about—I'll have to go into the Army probably when I'm eighteen." He said, "I understand. We'll just start making plans and then see what happens." Well, the way the deal actually worked out in the long run, the draft law ended on May 7, 1945, so anyhow, the

atomic bomb stopped the war just before I was eighteen, see. So anyhow, though, when it come my time—usually, on your eighteenth birthday, that's when you went to the service. You left that day, unless it was on a Sunday or something. But anyhow, like in my time, it came along, they waited until they got a busload, and mine was November, and they waited until the sixth of January to take us to San Antonio, there were forty-two of us, and there was only two of us that hadn't quit school. So they deferred us to finish school. School was out—draft law ended on May seventh; school was out on May fourteenth that year. But anyhow, every month I would get this card that would say I was still 1A, so I could get called at any time. But I never did get called.

DM:
But you can't get any closer than that.

WDV:
No, that's about as close as you can—see, I'd already been—went and took our physicals and sent home on a seven- to ten-day furlough, and then they said because I was still in school and hadn't quit school, I could stay in school and finish if I wanted to, but like I said, the war was over, but it was just occupational Army—was what they were calling it at that time.

DM:
So the draft was not—

WDV:
Anyhow, though, after that, instead of going on with John Deere and going to school, I still was undecided about the military, because I'd get this—I mean every month, I'd get this card. And even after I moved out here, for two years, I still got that card. But anyhow, we decided to—kinfolks helped me rent a farm, that was in May of '47 —

DM:
That was out here?

WDV:
Out here—they helped me rent this farm, providing that I'd get married and move out here, see, for the '48 crop. So I rented this farm for the 1948 crop.

DM:
I see, that's how you came out here.

WDV:
That's how I came out here.

DM:
Okay. Well let's go back and talk a little bit more about the Richland Springs thing, too, if you don't mind, before we talk about all of this out here. I wanted to know, first of all, when your parents were over in—did you say in the Brownwood area?

WDV:
Brown Country, yeah. Bangs was about six miles west of Brownwood.

DM:
Okay, and then San Saba County—were they farmers all their life? Was there family farmers before then?

WDV:
Yes, yes. You've got to remember, back—even the time I was twenty years old or so, there was—eighty percent of the people—I mean, wait a minute—there was ninety percent of the people lived on the farms at that time, and really only two percent of the population was in the—what you call the cities—at that time. So really, people was on farms, literally raised their food and everything, and that's the way of living at that time.

DM:
Now what kind of a farmer was he? What kind of—I'm talking about your dad and your mother—what kind of farm did they have? What did they raise?

WDV:
First off, when he was farming with horses and mules, it took about a fourth of your farm to grow the feed for the livestock. So about a fourth of that was things that was things that you grew and kept. The rest of that would be cotton, and back then you know, forty or eighty acres—or something like that—per family, if you didn't have some help, that's about all you could do. So you couldn't farm a lot of acres at that time with just teams. Like I was saying today, if we had horses and mules doing what we were doing today, you couldn't harness them up and unharness them in a day that—take to do what a tractor would do. You know, I mean, it would just be completely out of the question.

DM:
It's amazing how it's changed—and in a fairly short time.

WDV:
Right. But when you go back to those days like our—it was just all hand labor and—everything except your team-drawn ploughs and all that.

DM:
Now how many acres would you estimate that your dad tried to cultivate?

WDV:
Well, like when he first started there, he had half of a hundred and forty acres, which would be about seventy acres—is what he started out there. And then, I don't know exactly how many acres we had by the time I left down there, but it'd be several times that because we took on—one, two, three, four, five, six—six other farms that was around us.

DM:
Now, did he hire labor? Did the kids all help?

WDV:
No, that—when we was growing up, it was just us and—you know, we never hired anybody. Now, during harvesting peaches, if we could find somebody to help, we'd hire them, but if we didn't, well, we'd just have to do it ourselves.

DM:
Okay, so seventy—starting out, seventy acres in cultivation, roughly, about a quarter of it was for feed for the livestock, something like that, and then most of the rest was cotton?

WDV:
Cotton was number one—

DM:
Cotton number one—and then what else?

WDV:
In other words, it was cotton, and then your feed products, was what Dad raised early, and then they started in to putting orchards out later.

DM:
Can you talk about that, the boll weevil, and what—?

WDV:
Well, boll weevils really just put us all out of the cotton business. There was just unheard of, like how, you know, I mean, you just didn't think about that happening like it would, but there was not any kind of poisons or anything that you could do anything with boll weevils. Everybody tried everything, but the thing is, when a boll weevil lays its egg, it punches that little small boll that, at that time was almost water inside—it's just little fibers starting—but that's just in a little water sack, almost—he punches that with his bill and lays the egg in that boll, then that hatches into this little tiny worm, and that little worm lives in there and eats that inside of that boll, then this boll can—the outside can grow bigger, and you can think that you've got a boll of cotton there, but if you'll look, if it's got a puncher place where that he's laid an egg in there, it's not going—it may be one quarter of that boll eat out, or all of it eat out—ever how long that little larva—what size boll it is—in other words, a big boll, he wouldn't be able to eat the whole thing—small boll, he could eat the whole thing.

DM:
He's got a meal, anyhow. Well, it sounds, too, like he's protected from any kind of sprays.

WDV:
He's immune to it, because no way any kind of spray is going to get to that weevil to kill him, so—and the bad part is, most people didn't realize that they had a crop loss until it was too late. So it was a bad deal. And then, say like, for instance, jumping on out here, people out here didn't think the boll weevil would ever get this far, because of the colder winters and things, and I kept telling everybody I'd experienced that all down there growing up. I said "You better wait and see. Don't count that boll weevil out." And sure enough, whenever it came out here, we was

farming this place out up here—which is, today, right on the south side of 98th street—that was all irrigated, and the first year that we seen boll weevils up there—because that was closer to town; we didn't see any out here—but the boll weevil started, and they literally winter in the town better than they can out in the country, because they got more cover. So anyhow, that was some of the highest boll weevil counts that we've ever heard of is right up here, right around the city of Lubbock. But, going back down to—when we grew up, once we seen the boll weevil was—it took everybody probably a ten-year period just to gradually go to something else, and you know, it didn't just change one year.

DM:
Orchards take a while to get started, too.

WDV:
Back home, peach trees—in other words, by the third year, you can have a pretty good little production—not many bushels, but good peaches. Some of the biggest, prettiest peaches can be on a three-year-old tree, but it might not have over two or three peaches on it. And then, from then on, it just gets bigger and better. But the average peach tree, its life, ten to twelve years is about the life of a peach tree. And of course, pecan tree—we had pecan trees—like in those old pecan bottoms along the river and things—no telling how many hundred years old they was out in San Saba county. But all the later model improved pecans like we had, they was being planted. So you planted them in your wettest areas of the ground, and back then, we just thought it'd always be that way, so—but the pecan orchards that we had out where we are—or were at that time, when I went by there last year—there was very few of our pecan trees left. Dry weather has just about killed them.

DM:
Now what about this last year? In a lot of parts of Texas, there was a bumper crop of pecans, and I'm not exactly sure why, unless the dry weather actually encouraged those trees to put out what they could. I don't know, you know how sometimes—

WDV:
Well, a pecan tree—let's go back to the beginning of the pecan deal. There was a guy from—there was a horticulturalist from England named W.E. Risien[1].

DM:
Now you've got to—spelling for me—what is that?

WDV:
R-I-S-I-E-N—Risien—at least, that's the way everybody pronounced it. When I was young, well he'd help my dad set our pecans out, which, you start out with a native stock, and then you bud on all these other varieties of pecans that you got today. And back at the beginning, when I was little, there wasn't that many kinds—about five or six kinds—but now, then, there's probably, maybe fifty kinds.

[1] Edward E. Risien.

DM:
Were you telling me that there were some cowboys down there or something that found a paper that they knew where there was a—I guess it was a native paper shell.

WDV:
Yes. San Saba, if you go through there today, San Saba is known as the "Pecan Capital of the World," and used to, they had this sign across the street—you know, big sign—

DM:
A banner?

WDV:
—banner-type sign that, at first was made out of wood and everything. And there it was, "Home of Paper Shell Pecans." All right, what that meant was, this Mr. Risien—there was two cowboys that come into San Saba, there, one day with this limb of big pecans that nobody had ever seen before. And Mr. Risien, being a horticulturalist—somebody called him to come see this, so he came down. He bought that limb of pecans off those two cowboys if they would take him and show him the tree. So they did, and then he bought the tree off of the rancher, which was out close to the bend—that's out—bend in the Colorado River is what that means—and that was close to where this big tree was.[2] Well, off of that one tree is where all of the buds and everything of the—what we call "paper shell," or the big pecans—the thinner shell pecans, and that's—they all started right there, and that's the reason that San Saba is called the "Home of the Paper Shell Pecan." So Mr. Risien, he was really interested in promoting pecans, and so anybody that had an orchard of any size, he'd go out and help them, you know, advise them on how to bud and graft pecans, you know, so—

DM:
About what year would this have happened?

WDV:
I can't remember the exact year when that all happened, because that was a little bit before my time. When my dad first started setting out pecans was probably about eight or ten years before I was born. That was just the start, but like when I was big enough to remember, Mr. Risien was out at our place about once a week, checking on the pecans and helping my dad, you know, and promoting them. He went around promoting pecans to everybody.[3]

DM:
But you remember him?

WDV:
Oh yes. Yes.

DM:
Did he have an English accent?

[2] Today, it is known as the "Mother Pecan" tree.
[3] Edward E. Risien settled in San Saba in 1875.

WDV:
Well, somewhat, yeah. Not many people that stays in Texas too long—

DM:
—keeps it.

WDV:
But he did have a little more of an English accent. Anybody that usually—by the time they're grown, they don't change as fast as—

DM:
How many pecans did your dad end up putting out?

WDV:
I've forgotten, now, exactly the number of trees we had—probably two hundred and fifty or so, maybe more than that—two pecan bottoms, we called it. And the thing is, a pecan tree needs about fifty inches of rain a year, and if it's not in a fairly wet spot, or irrigated, it don't do too good. But it's like where out pecans was, back in those days, man, they did real well. But like down at San Saba today, most of the pecan orchards down there today is irrigated out of the rivers and things.

DM:
But yours were always in the bottomlands, anyhow, along the creeks and rivers. Now who came up with the idea of making this an orchard country—making—going from cotton cultivation to orchards—fruit orchards? Was it a government program?

WDV:
Back in those days, you had what you called "county agents" and everything in each county, and they were big in promoting, and—say like we was in San Saba County, we was in fairly sandy ground, and that makes good peaches. Pecans, they like—they can grow in sand or anything, as long as it's wet, a pecan will grow. But like most of our peach stock came out of Stephenville and Gorman and up in that sandy area, they'd started raising peaches up there—they was like everybody else, they went to peanuts, later. But anyhow, the sandy-type soil—the peaches there at San Saba was known everywhere as being some of the best. And they were.

DM:
You said y'all put out a lot of peach trees, I believe.

WDV:
Twelve hundred peach trees was what we had, and that's a bunch when you've got to pick peaches. We had peaches that started ripening in May, and wound up at the first of September. But most of them—the Alberta peach was the most popular, and the best one to sell, and the best one all around to eat and can and everything. Cling peach—there's only one variety of a cling, and that's a peach that we made pickled peaches out of, and they couldn't be beat for that, but most of the cling peaches back in those days, like you can buy in the grocery store today, you couldn't sell one then. And the thing is, those cling peaches, you can't haul them—and when I

say "haul them," put them in a truck and drive a hundred and fifty miles to San Antonio. They'll—in other words, any little old spot—if it's not a green peach, you're going to have a mash spot. Well, like Alberta, it would be getting to the stage of being ripe enough to eat and still be able to haul that. So it was the best peach, and it's a freestone. That means you can just pull it open and the seed is free. So Alberta was—most of them, they started around the first of July, starting mainly around the fourth and going through until about the first of August. That was your biggest crop.

DM:
Now what other kinds of fruits—fruit trees—were there?

WDV:
What?

DM:
What other kinds of fruit trees besides peaches?

WDV:
Well, like pears and—in other words, plums, pears, peaches, pecans, persimmons—my dad loved these big old persimmons that get, you know, about the size of a big peach or orange, and those are the prettiest things to grow in your—so they start out as just being an orange color, and they don't get ripe until in the fall. And when you look at them on the tree, they are beautiful. And then, they go from that orange color to when they get really ripe, it turns to red. The persimmon has got a characteristic about it when you're eating it, it don't affect everybody, but about probably ninety percent of it does. When you take a bite or two of persimmon, all of the sudden, your throat will start closing up and you'll get choked. And you'll think you're going to die—I've did this a lot of times, I never knew it to kill anybody, but you think you're going to die.

DM:
Just some kind of allergic reaction, I guess.

WDV:
Oh, it just—it has a reaction that really kind of closes your throat. People say it draws your mouth up, but you've got to experience this. So where we had our row of persimmon trees—we just had one big long row of them—we'd plant a watermelon patch right on the bottom side of the terrace, right below it. When you start to feel yourself choke, you can take just a little sip of water and it's gone. Anything with—it's gone. But you'll think you're going to choke to death, literally, I mean—and whenever I'd carry them to school, I wouldn't dare eat that persimmon until we got outside to where the water pump was, because—and everybody—other kids, the same way. But anyhow, like on those persimmons, we'd have people that hadn't ever seen them, and they'd see them from the house—"Oh, man, what's that down there?" You always had to take them down—

DM:
—and say "Here, try this" —

WDV:
—and give them a persimmon. They'd bite into it, and by about the third bite, or maybe fourth, they'd start beating on their chest, you know, and trying to talk to you. First, you'd act like you didn't know what they meant, then you jump over the terrace and bust a watermelon and give them a piece of that, then "Oh, you saved my life." So we always had a lot of fun out of peaches, but like I said, I never knew anybody to choke to death, but you would sure think you were going to.

DM:
Well so you had watermelons, also—did you have cantaloupe?

WDV:
Yeah. There wasn't anything, hardly, we didn't grow. Like we'd have—garden would have all kinds of beans and peas and corn and okra and squash—everything you can think of.

DM:
Well, how much land was devoted to that kind of crop? It doesn't take much to produce a lot.

WDV:
We'd have—out garden was about a two-acre garden—

DM:
That's a big garden.

WDV:
On top of that, see, we'd have peas and things that we'd plant out in the fields—or maybe an extra corn patch or something.

DM:
Okay. Did your mama can?

WDV:
Oh, can? We canned all the time.

DM:
In the hottest time of the year.

WDV:
Peaches, they wasn't—just an ordinary day, we'd have a hundred cans of peaches while we was picking peaches, because we'd just pick out the ripe ones. And then on a day when we was going to—had a lot of extra ripe ones, we'd have like as many as three hundred cans a day. We traded canned peaches like you'd trade money. They would sell like you wouldn't believe, to anyone. The first three of our sisters that came to Texas Tech, we brought canned peaches and traded for some of their room and board, and even some of the books. All you had to do to sell those peaches was let somebody taste them, because like canned peaches today, that's not even close

to what home-canned peaches was—where they was tree-ripened, and then sugared on top of that—sweetened on top of that.

DM:
Were these steam-bathed to pop the lid, did your mother ever use wax—did y'all ever use wax sealers or anything like that, or was that earlier?

WDV:
No—I should take you out there in the barn and show you where—when my mother and dad first started farming—or first got married, rather—in other words, the way that they sealed the can at that time was to solder the lid on with a soldering iron. So I've got the original blowtorch and the soldering iron that they used to do that with. And like my dad said, you know, about eighty percent of the cans would be good. So that'd be about twenty percent of them that wouldn't get sealed good, and then would spoil. And then, the next after that was the first hand sealer, and on it, you cranked this right hand, and that turned the can, and then you put the pressure on with the left hand and rolled the lid in, see.

DM:
You crimped it.

WDV:
Crimped it—and if that didn't get done perfect, you'd have a bad can. So like on that, it was about ninety percent good, or maybe a little better. And then, they came out with what they called the automatic sealer—and I've still got our old sealer out here in the shop—and it was classed to be like ninety-eight percent, and like on ours, we hardly ever had a bad can.

DM:
Okay, now, how does that work?

WDV:
What it does, on sixteen turns of the crank, goes through the cycle of rolling the lids in on a—it's got a cam wheel in there that—in other words, turns real slow, and it gradually pushes these rollers in, and it automatically does that. And it automatically puts the tension on there—right amount and it's not overdoing it like you will with your hand. So you just—when that was done right, you just hardly ever had a bad can.

DM:
How many times did you count to sixteen?

WDV:
That was my job from the time they bought that thing, and man, I was just a big old kid. But that was my job from then on, to run that sealer. Sixteen turns per can to put it on—in other words, you put your can on here with a lid, and you put this can in—they've got a groove where it's a number three can or number two or one, and then you've got a deal that you flip out up here if it's a number three can—that's the big size—so you've got to change that if you're going to go from one size to the other. But you put your can in right here, you put your lid on the can that

you can feel, it goes on the groove, and then you raise your little lever around here like that, and that pushes that up and you feel of it and see if you've got it centered and everything. Then you start turning—sixteen cranks and you stop, let it off, and put another one on there and go sixteen. But you count your RPMs, because that's your timing of what starts and stops your rollers and things.

DM:
How many times did you count to sixteen?

WDV:
And also, that sealer costs sixteen dollars and fifty cents.

DM:
That sixteen is in your head, isn't it?

WDV:
But the sixteen number is—you learn real quick that you go sixteen turns and not less and not more, because that starts over a new cycle every time.

DM:
Well, I can tell by the way you're describing this that if this was set in front of you right now, you would just do it without even having to think about it.

WDV:
Oh, there wouldn't be any doubt. But man, everything that you done back in those days, you know, I've thought a lot of times about killing hogs and all that stuff. The first cold spell that was cold enough that you could put meat out on the top of the house and let it cure overnight without spoiling, that's when you kill a hog. Well, when you didn't have refrigerators or anything, you can't believe how good fresh meat was. So that's why you had—we'd start in February raising baby chickens for eating purposes—fryers, we'd call them—fried chicken. Well, then, that'd go through all summer, and then there'd be a period during that summertime when the only fresh meat we'd have would be if somebody killed a calf or something, the average family couldn't eat that all in one day, so you'd share that with a group of your neighbors. And then, when they'd kill one, they'd share, so you'd have some fresh meat along, but you'd get to where you literally craved fresh meat. Then, when school started, it'd be a fried egg and a biscuit—that's all you had, just about—and man, you get tired of that pretty quick, every day. And then, when you first got cool weather, and you had your first hog killing, you'd have a biscuit and a sausage—man, that was a real step up.

DM:
Gosh, that sounds good, too. Well, how many hogs would you keep on hand?

WDV:
Oh, we'd always have a hog ready to kill during the wintertime.

DM:
At least one.

WDV:
One of the things I can remember about—we always kept a steel barrel especially for the scalding hogs—well, that same barrel was the only measurement that anybody had for the amount of rainfall. One night, in 1938, it run—everybody in our community out there that had barrels—it run the barrel over. In other words, the barrel was level full, run over. All right, it started to raining at—it was already wet—we had already had probably nearly six inches of rain in about three days. And that night, it started raining about six o'clock in the afternoon. And at that time, I remember making the comment "I never heard it rain this hard before," and for about another hour, every little bit, it was harder and harder. And you cannot believe—during that twelve-hour period was when it run the barrels over. All right, now, during that time, where we lived there, at Richland Springs, and then the little community out east of Austin called Elgin—that was in the history books of having the highest twelve-hour rainfall of any place in Texas.

DM:
What was the amount?

WDV:
Like twenty-eight inches was all the barrel measured, but we had more than that. But man, that's when the river got overflowed, and like Buchanan Lake got filled up with one rain when they said it was going to take seven to nine to ten years to fill up.

DM:
Is that when you went out there and sat on the bluff over the suspension bridge—or not—the suspension bridge wasn't there.

WDV:
—the old bridge, and it washed out, and then the suspension bridge was built after that.

DM:
Now that was kind of a wet time, wasn't it, the late thirties and early forties, wasn't that a wet period?

WDV:
Oh yeah. Down there, there was—we had a wet year. You know, during the kind of Depression years and several years after, like where we was, we never thought about not having a crop because of not having rainfall. It just rained enough every year that everything did good that way.

DM:
Different consideration out here, now.

WDV:
Oh man, there for—we had plenty to eat all the time. Say like on our farm, where we had

peaches and peanuts and watermelons and plums and pecans and pears, we had—we ate well. And the people that didn't have that, they—a lot of them that really went hungry. But the thing is, man, we canned all the time because you didn't want to let anything go to waste. If you couldn't eat it, you fed it to the livestock. Like watermelons, we'd eat all the watermelons. Like then, if it wasn't a big old—in other words, the choice watermelon was a forty-pound watermelon. You couldn't even sell a forty-pound watermelon today; people couldn't lift it to start with. Then, they wouldn't have a place to put it in their freezer, so the want these little old bitty watermelons nowadays, though. And like the watermelons back then, we'd have like ten to twenty acres every year of watermelons. So a truck comes by and wants to buy watermelons, well, you'd let him pick the patch for twenty-five cents. Well, they'd just get the biggest watermelons, you know, and then past that it was cheaper. But like peaches, the price of peaches was variable from year to year, but not a whole lot—about a dollar and a quarter a bushel, or sold like that is about the highest I ever remember us selling peaches for. Most of it was—let's use 1940. We had the biggest peach crop San Saba County had ever made that year. Well, we was one of the biggest peach growers—had the highest number of trees. On July third of that year, we just realized we were having more peaches than we was having trucks come by. My dad and my older brother and me went up to Brady—which is thirty miles— bought a new '40 model Chevrolet pickup—cost six hundred and forty dollars—carried that home, and that afternoon, we built a twelve-inch—put a twelve-inch sideboard around the—to make the bed deeper. The next night—from then on, twenty-seven days in a row, my brother went to San Antonio with a load of peaches. And during that time, the biggest part of them sold for seventy-five cents—well from sixty-five to eighty-five cents—around seventy-five cents was kind of the average price. But there was two loads of peaches that you raised them, picked them, he hauled them to San Antonio, and then he put them in a new ten-cent basket—new bushel basket cost ten cents. So when you got there, you had to take them out and put them in bushel baskets, so that cost you another dime. And then, they sold two loads of them for thirty-five cents a bushel, which that meant twenty-five cents a bushel is all you got for your whole year's work. So it was some—it was some hard times back in those days.

DM:
A lot of work, too, twelve hundred trees, I think you said.

WDV:
Oh man, you—like I said, we picked peaches all summer long, but especially during July, through the first part of August.

DM:
Now the way I'm hearing this, the pecan production, it came in, actually, earlier than the boll weevil problem—

WDV:
Yeah.

DM:
—but the orchards and the peanuts came, maybe, as a result of the boll weevil problem?

WDV:
Yeah, as a result of the boll weevil problem.

DM:
Okay. Now what about—you've mentioned some livestock that you had on the place—the hogs, and then you had some cattle, too, I think—

WDV:
Yeah, we had—in other words, just like whenever I was real little, we'd have like three or four milking cows, and then maybe one or two or three calves that we'd have for butchering, you know, raise them. Well, the calves we'd raise. But then, it was a little further along, we got to where we was running around thirty, thirty-five head of cattle along the end of this, as the orchards quit, we started running more cattle.

DM:
Well this was really a diversified farm—and a self-sufficient farm, it sounds like.

WDV:
Oh, it was—you couldn't describe it any better, because literally, I mean, we grew nearly everything that we needed to eat—meat, fruit, vegetables—and you made it happen. It didn't just happen, you've got to make it happen.

DM:
It sounds like you had plenty of—

WDV:
And that was one of my favorite sayings today: "Nothing just happens; somebody's got to make it happen." And man, my mother and dad, the way they worked making all that happen and all, boy, they—you know, like people don't know what hard work is today, compared to what we went through.

DM:
I know that's right.

WDV:
And then just like whenever my dad—seeing me develop something that I could haul brush and make that easier—boy he'd be tickled to death at what I'd done.

DM:
He'd love to know, too, that you'd continued this and you continue it today.

WDV:
I'd like to see what he would think about what we've accomplished out here.

DM:
Exactly. That would be something. Well let's talk about when you were young and you started school. You said you were at Bethel—Bethel Community?

WDV:
Yes.

DM:
Okay. Where is that kind of in relation to—

WDV:
Bethel Community, that's kind of the—about the center of the county. And that's on Cotton Belt Road; Cotton Belt is the longest straight road running north and south through San Saba County. And that's where Bethel Community is, just about in the center of the county there.

DM:
Is there anything there now?

WDV:
Everything is gone now, it's just a little spot of ground, still, there, but the school and the church and the little store and everything, that's been gone a long time ago.

DM:
So at one time, there was a school and there was a church and a store—anything else?

WDV:
No, that was—

WDV:
It was supposed to be nondenominational, but it was about ninety-nine percent Baptist because Howard Payne College is in Brownwood, and they'd send new preachers down there all the time.

DM:
But it was one of those—it was intended to swap out different preachers at different times? Okay.

WDV:
Yeah, we'd have all kind of different preachers every time, and there was like an old brush arbor during the summertime, you know, that—get out of the house. But our little country church, there, we had carbide lights in that, and—do you know about carbide, how that worked and all?

DM:
Pellets—carbide pellets.

WDV:
Yeah. Do you know who built the carbide plants?

DM:
I don't remember that.

WDV:
The Colt Company that built Cold firearms.

DM:
Is that right? Okay.

WDV:
Yeah. In other words, what you did was dig a hole in the ground, and this tin of galvanized sheet iron—was what this—and it was about as big around as this table here, probably right at four foot across—or maybe not hardly that—three and a half foot. And you'd put this in the ground, leave, say, about a foot out of the top. Then—in other words, what this was, was a watertight container. So you'd put this in the ground, and you got everything seated and everything, and then you plumb in for your line to your house. We had carbide lights at home, and all, too. And cook stove and iron and all that for a while. But anyhow, like you pour your—in other words, you put water up to a certain level in this, and then you put your carbide up here in this dry top, and then you turn this—be just like a barrel—it's open on one end and closed on the other one, and it's got a little three-quarter-inch bung in the bottom of it—here, top. But we going to turn it upside down, and put it down over these dry pellets, but there's water down below. All right, now then, you put the little plug back in the top here where that the gas can't—and when this thing comes down and it hits a little trigger right here, it'll let a few pellets fall into that water, and that makes a gas. And then it'll push this inverted barrel back up, and that'll be where your gas is, and that—when you use the gas down, well it'll drop down and feed a few pellets in, and so they're really good. The only thing was having to clean that all out and redo it when it come, but when it was working, that was a good light.

DM:
What about in the lines? Did it leave any kind of residue or anything in the lies that needed to be cleaned out, or was it pretty clean?

WDV:
I never knew of it giving any problem that way—we never did have any.

DM:
Was it pretty safe?

WDV:
Yeah—well, carbide is a really explosive deal, but like open air and a house and things like they were, I never heard of anybody having any trouble. Each little light had a—we called—like a cigarette lighter—

DM:
Did it have a flint in it?

WDV:
—flint in it. In other words, you turned this—you turn the gas on low, you could hear it spew, and just as it started to spew, you'd twist this deal and it'd light it with a little flint.

DM:
That's pretty clever. The only example I know of down around here, now, is at the Ranching Heritage Center at Texas Tech—that big Barton House—it was a carbide—they had a carbide plant with that, and they have a couple of the accessories. I think they have an iron, for example, and some lamps that ran off of that.

WDV:
Then Coleman came along with the gasoline irons and lanterns and things, and people just kind of quit the carbide and went to something a little easier to work with. But the carbide lights—like at the church house and all that—that was pretty good light. And all that was, was a flame. So like bugs flying at night, or something like that, when they flew into that, that was a dead bug. And they didn't have mantles, you know, like a Welsbach lamp or something. So anyhow, it was a good deal during this time, but that was—

DM:
Did it create soot? Was there a soot problem?

WDV:
No, that thing—that little old light—you know, it's just like a—same thing as your torch today that you use—cutting torch. When you burn that real bright white, that's when you've got the mixture right. Well, this little old fork that that fed out of was fixed to where it turned on, that was the way. And it just made this real bright little white light, which was better than most lights was during this time.

DM:
Well, now, in the summertime that might be a little bit warm.

WDV:
Well, everything was warm in those old houses in summertime, because man, they wasn't—you didn't have that much ventilation, and no insulation whatsoever. Boy, those old houses, when you already got a wood cook stove built to heat the inside—I don't see how Mother and them stood the inside like they did, I really don't.

DM:
Just whatever you're used to, I guess.

WDV:
Yeah, you just do what you have to do. Anyhow, then, gas stoves came along, and my dad, he didn't like the kerosene stoves, and other people didn't either, except the convenience. But the kerosene smelled and you could actually taste kerosene—like biscuits cooked in a kerosene oven—because the flame was in there with that, and if you wasn't used to that, you know—but anyhow, we didn't have a kerosene stove. I wished we did because I was having to cut the wood,

and do all that. So like when I was in school, up through the sixth, seventh grade, along there, when you got home, the first thing you did was try to find you something to eat, and after I made a peanut butter deal—oh man, I'd have peanut butter and syrup everything—but you do that first, and then you got to the wood pile and chop all the wood for the cook stove, and in the wintertime, the heaters and everything. And then you go and gather the eggs up. You'd feed the chickens, and you'd feed the hogs, and then you'd milk the cows, and by that time, it'd be after dark, just about.

DM:
That's a long day.

WDV:
Like kids today, they don't know what—man, that is—it wasn't like it was then. You'd milk anywhere from—as little as one cow at a time, but most of the time, it was about three.

DM:
It is different now, and very much an indoor culture now, instead of outdoor.

WDV:
But man, just like kids growing up, we never did any of this—we made our own fun. And we always had a bunch at our house—like every Sunday dinner—very few times we ever went anywhere else, but we'd always have a house full of company come and we'd have a baseball game or a croquet game or volleyball or something, but the biggest part of the time, we were out trying to figure out something about—put a motor on something. And one of the things I did there during that time—we had a Model T chassis that some of the folks had left out there, but it didn't have the front axle under it. Well, I took this chassis part, and took the wheels off of the front end of the baler, put them on the front, and took the motor off the baler and put on—hooked it direct to start with, and that was too fast—so my neighbor had an old Chevrolet truck that he parked, you know, and I asked him about—could I have the transmission out of that, and he said "Whatever you want." I took the transmission out of that truck and put on there, and boy we had a cart that everybody just couldn't wait to get to ride.

DM:
That sounds like a lot of fun.

WDV:
But I was always making something.

DM:
Did you do any hunting and fishing as a kid?

WDV:
Oh goodness. Hunting and fishing was part of our life—but I say that, we didn't just go all the time. We had so many kinfolks in West Texas that come down, and when they'd come, they'd want to go fishing. And the biggest sport in the wintertime, especially, was going what we called "gigging" at night. A gig was made out of a pitchfork, and had three prongs, usually—or a four-

prong—and take that and a Coleman lantern out in shallow water and—those old round-back sucker in those days was—that was a good fish to eat. So man, we could get plenty of them.

DM:
Did you—what'd you have in the summertime, catfish and perch?

WDV:
Catfish and perch, yeah, that you could catch out of the deeper water.

DM:
I bet you had plenty of water moccasins and copperheads around there.

WDV:
Oh always—yeah, around the creeks and rivers—there was always a lot of water moccasins.

DM:
What was the deer population like?

WDV:
You know, that's—the deer population is pretty interesting. People don't realize [that] back whenever I was a kid growing up, we never seen a deer out where we were. But you go about five miles south of us—down by Richland Creek—from then on, that was where the Blackland started, at Richland Creek. And north of it was a kind of sand hills, so—and those deer—there were so many people out in this sand hill area that deer just—they didn't even come out there, literally. But south of that, there was deer. There was some places you'd go hunting, but—and we'd see deer when we'd go to the river and things some, but deer wasn't that plentiful. What started the population was a screw worm eradication deal. When that came along, you can't believe—the deer population just exploded. I'm serious, it literally—and like today, there's not a spot in the United States that don't have whitetail deer, it's just how many. So that was something else.

DM:
This was all whitetail in San Saba County, right?

WDV:
Yeah. That's all whitetail.

DM:
Now what about varmints? You had all these crops—you had fruit and vegetables—did you have a raccoon problem?

WDV:
Yeah—coons, opossums, skunks, fox—people hunted all—and in the wintertime, of course, there was a lot of people that literally made a living out of skins. We never did—one of my brothers-in-law, he enjoyed that because he grew up doing that. And he would always enjoy catching some, but boy, there'd be—a lot of times, that was a pretty lucrative business.

DM:
Now how about coyotes—did you have a good coyote population?

WDV:
Very few coyotes, we had back in those days. Burr rabbits? You wouldn't believe how many rabbits there—like all the way through high school, when you were in 4H, you had to have a project. So every year, I'd have hogs for one of my projects. One year, I had eight mule colts as a project. My ag teacher laughed, and he said "Buzz," —he'd been teaching ag class, I've forgotten how many years at that time—"I never have had a single colt as an ag class deal, much less eight mule colts." But anyhow, that was kind of funny. The people in the community would always have a few colts that they'd raise. That year at the thrasher, everybody was using teams to pull the wagons, and if you had these little colts, you know mule colts or something, then of course they had to go with their mama. Well, we had this big old belt that we run on the thrasher, through the tractor—boy, it was a hundred-foot, endless, eight-inch-wide belt. And that thing's heavy, you know, we'd pick it up. So really, it acts kind of like a big flywheel when you get it on the tractor, going. And you want a long one like that because of that effect, because the longer that belt, the more weight, that belt will stay tighter, and that's extra flywheel involved in thrashing, so you want a long belt. So anyhow, like on—we'd pull in and set the thrasher and try to line the deal up—belt the deal up—and he'd start the thrasher. These little old mule colts would come up and lean against the belt and let it rub them—scratch them. There was about four of those little old colts there at that time that those guys would bring every day. And those little old colts kept doing that, and got to where they'd lean against it hard enough that they'd make it run off of the belt, and that'd shut the thrasher down. So man, you can't believe how many times we'd have to stop, go around there, and pull the tractor up and put the belt back. You know, you'd lost ten minutes, but it's fast as you can go. So anyhow, one day there, this guy had these two mule colts, and my dad told him, "You're going to have to leave them at home," and he said "Man, they won't stay at home. I haven't got a lot that would hold them." And Dad said "Well, how much do you want for them colts?" and that guy said he'd take, you know, twenty five dollars apiece. Dad said "Well just bring them over there and put them in my lot, it'll hold them." We had a picket fence lot that we had, so he bought them first two, and then the next day bought another two, and then the next three days he bought the next four. Then, anyhow, I took them from my dad and played them and took them—so I made a little money out of the colts. At that time, mule colts would still sell pretty good.

DM:
Now was this—these were ag projects. Was there an FFA at that time?

WDV:
There was an FFA.

DM:
Was it FFA?

WDV:
Well, we had 4H starting whenever I was in third grade, and my first deal on a 4H project was learning to lay off terrace. How many kids you think could do that in this time? Well my job was

carrying the transit deal, and the agent was—advisor deal—teacher. So anyhow, then, I learned to do that, and my dad was one of the first in the community that put in terraces. We had a terrace on level and everything, so when I learned to use that; well, from then on—we still use it. So anyhow—

DM:
So that came out of FFA?

WDV:
That come out of 4H. Yeah, and then FFA was when I started in high school.

DM:
So already in, I guess, junior high is what you—junior high, you were doing terraces.

WDV:
Yeah. We laid off terraces and the guy built them off of our—what we did there, under the direction of the county superintendent. You know, his name was C.E. Tisdale—and this is kind of interesting. I knew him all the time I was going through school and then after I moved out here, he buried—in other words, his wife grew up over here where like Ransom Canyon is now, there was a ranch there at that time, and that was where she lived. So after we moved out here, he married a lady that was right over here.

DM:
I'll be—kind of a small world. Now you were at Bethel school—was this first grade, when you started?

WDV:
First through the sixth grade.

DM:
First through sixth—how many school were in the county at that time?

WDV:
Oh, every little community had a school. Every community had a school.

DM:
School, church, and a store, pretty much—general store?

WDV:
Yeah. That was just a common deal in every community.

DM:
Well how many would that be in San Saba County, do you have a guess?

WDV:
Oh, we could count them up here, but probably—I'm going to say twelve to fourteen, at least.

DM:
Okay, and then when you left Bethel, where did you go?

WDV:
Well, we started going to Richland Springs. In other words, all the little schools consolidated into Richland Springs or San Saba. So there was only two schools left in the county at that time.

DM:
By the time you were in junior high or high school?

WDV:
That was when I started in the seventh grade. Joyce, who was later my wife—she lived—they lived on the farm on the corner to us. So as long as we could remember, we remember each other far back as we can remember. And we always like each other as far back as we can remember. But anyhow, the road between our farms divided the school districts. So I went to Bethel and she went to Richland Springs. She really lived in the Shiloh district, which was the next little community over but being as they were able to transfer into town, they sent her to Richland Springs. So she went to Richland Springs all of her—all the way through school. So starting in the seventh grade, Joyce and I, you know, was in the same grade together. So anyhow, they just seated all of us in alphabetical order, and at that time, there was forty of us in that classroom—which is too big for one room—and then they wound up dividing us by age. In other words, if we was—oh, what would that have been, thirteen or fourteen? Anyhow, if your birthday was before school started, you stayed in one room, and if it was after school started, you went on. And in that same year, they started the twelfth grade. So here we was, we was that class that stayed in the same room, same teacher for two years so we could go twelve years. That's the way they divided the—made you go twelve years. Well, if it hadn't been for that, I would have went to the service, you know, without being—but anyhow, all these other boys that was a year older, they'd already all went on. But anyhow, though, after school—hadn't been going but about three or four, five days, something, they had us all just seated in alphabetical order, and the boy that was right in front of me, we'd been through school together, you know, knew each other all the time. He'd stay turned around, wanting to talk to me all the time—teacher would get on him about every thirty minutes. And finally, though, after about the fifth day, or whatever it was, the teacher got up and came back there and said "Y'all better get your books out of your desks and come with me." And she stood there until he got all of his books and carried them up there and put them on her desk, and then she said "Joyce, you move back there where Aubrey was." And Joyce was sitting right in front of her desk, you know, so anyhow that moved Joyce back there. It hadn't been but a very few—I don't know, many five or ten minutes, Joyce turned around and says "Can you believe this?" I said "Well I was hoping you was as proud of it as I was." Anyhow, from that time on we started being sweethearts, and the rest of the time—there wasn't any doubt in our minds, you know, the way it was going to be. Joyce, she was most unusual. She was such a nice girl—you never seen her dissatisfied or complaining or unhappy—she just wasn't. She was always in a perfect mood and nice as she could be, but the thing is, from the time she started in school, all the way through—and her two older sisters was almost this way—Joyce—they kept all of her books all the way through school. The last that we know of, she'd still had—at graduation, she had the highest grade point average of anybody that had ever been through school. When she was handed a paper, if it was graded by number, she had a hundred on

it, and if it was on ABC's, she'd have an A-plus. We used to laugh about—you know, especially when I was in—well, from the time I started at Richland Springs—when school started, you got to school until harvest time, and then you'd be out of school for, you know, four weeks to ten weeks—different kids was different. Well man, mine was always the longest time, because we had all the thrasher stuff and everything, so when we'd start back to school, well the teacher would always put Joyce with me to help—I always tell everybody, "I never would have got out of school if it hadn't been for Joyce," because she'd help me—

DM:
She helped you catch up.

WDV:
—catch up. But man, that was just a common deal that people—they actually turned out school whenever we was at Bethel.

DM:
The school just completely shut down, huh?

WDV:
Yeah, because that was out in the country. Richland Springs school didn't close the school, but they'd have kids that didn't go.

DM:
Now what was Joyce's maiden name?

WDV:
Her name was Joyce Pierce.

DM:
And I remember you mentioning that—I think after you came out here, you contacted her, and she was at Denton. Did she go to college up there?

WDV:
Yeah, save like in 1947—May of '47 —kinfolks out here, they'd talked to the guy that owned the place—they'd been renting from him—and they told him, said they had a brother-in-law that was fixing to graduate from—I mean had graduated from high school, and he's kind of looking to come out here and get started, and if we could rent a place for him for the '48 crop. And they said "Well," —and the thing is, I'd met the couple, you know, so they knew me at that time—so anyhow, they said "Yeah, we'll do that." So I—we didn't have telephones and everything then, so I wrote Joyce a letter. She was going to college at TSCW—Texas State College for Women at Denton. So anyhow, I wrote her a letter and told her we had the opportunity to move to Lubbock if we wanted to get married and move out there the first of the year. And she wrote back and said it sounded good to her. She was ready if I was. So anyhow, we had already kind of been talking about this, but we didn't know we was going to move out here. We was just talking about getting married, you know. But anyhow, Joyce had never even seen the Plains.

DM:
Well that's different.

WDV:
Anyhow, our first old house over there, we lived a mile north and a mile east of Slide, and it was pretty nice little old house for them days. It wasn't much. And then we lived there one year, then moved over here, and this was a terrible place, I'll tell you, it was growed up—

DM:
Out here in this area?

WDV:
Yeah, right here where this is.

DM:
This spot.

WDV:
Yeah. This farm. And that old house was—really, it wasn't fit to live in, I'm serious. It was bad.

DM:
You said it was a seven-hundred-and-fifty square foot section?

WDV:
Seven hundred and fifty square feet. Man, it was just terrible.

DM:
Was it old?

WDV:
Yeah, it was the first house that was built out in this whole neighborhood.

DM:
Was it board and batten, or what kind of house was it?

WDV:
Yeah, just an old shiplap side on it. But anyhow, though, the reason we moved over here was it had a new irrigation well on it, and all the other land was dryland.

DM:
Now what year was this?

WDV:
That was in '48 —the year of '48 —in other words, we moved out here and farmed over at Slide in '48. Okay, we wound up only making twenty-one bales off four hundred and eighty acres of dry land. That's not too good. But, to show you how frugal we was at that time, I got a job

working in a blacksmith's shop when I could at sixty cents an hour, and Joyce got her a job in a little country store at Slide, fifty cents an hour, and we'd go home at night, be eating supper and talking about [how] we were going to bust Slide, taking a dollar and a dime an hour away from them down there. I guess we had, because there's not any Slide anymore. There's a Slide name, but—anyhow, Slide's a little community over on Slide Road, and where it got its name was—when they built the first little country store, after they got it built, they found out it was on the wrong section, so they had to slide the store over. They put it on skids with horses and tractors all pulling, and skidded that a mile. So that's where the name "Slide" comes from. But anyhow, we had a kind of a fun year, and we only went in debt like two hundred and fifty dollars that year, not counting what we made on the side—

DM:
But that was because of the dryland.

WDV:
Anyhow, when we moved over here, we had—we got a ledger in there—Joyce used to keep the books, and she'd write down everything—if it wasn't a nickel or a dime, whatever, it's written down. We had like twelve hundred and forty dollars when we moved over here in the first of 1949.

DM:
Now that was early irrigation.

WDV:
Yeah, that was—irrigation was fairly new in those days.

DM:
How many other irrigation wells were in this area?

WDV:
Well, biggest part of the farms right around here had put them in, or was putting them in.

DM:
Now was this open-ditch—these big concrete—yeah.

WDV:
It was all open-ditch.

DM:
You still see these big concrete things that—I take them to be the open-ditch—the start of the open-ditch irrigation, you know, where it comes up and—

WDV:
Well, what you had when you drilled a well back in those days, you'd have a concrete block that you set your pump on—right in front of it, you'd have another concrete spillway, we called it, which was made to set your motor on, up over your pump, and a place for that water to come out

of the ditchyard pipe and not hit and wash out our hole, see. But that's where you put your cooling tubes and everything to cool the motor, was down in that, so everybody had that kind of a setup. Then out of that, somebody would easily kind of fix a little spot that'd give the water time to kind of stop it swirling around and washing stuff out after you left. And they were just wide open ditches.

DM:
Now how much—typically one irrigation well would cover how much acreage?

WDV:
Well, back then, we had—our first well was about an eight-hundred-gallon well. In other words, it would pump a full eight-inch pipe. And then my second well was down on the west end here, and that—the water table and everything down there was higher, and that well would pump right at a thousand gallons. It took fifty two-inch tubes on that—now the ground was flatter, okay, down there, but it took fifty two-inch tubes to keep the ditch from breaking. If you had less than that, you were going to have trouble. They'd take at least fifty tubes. Man, we got down to where now, I don't think there's hardly a well around here that would run ten tubes.

DM:
But back then, with that amount of water—like, let's say for example the water you had here—the irrigation well—how many acres would that serve? How many could you call irrigated?

WDV:
Well, it's all in how you wanted to spread it out. In other words, I literally watered about two hundred and twenty acres out of that well, and then we built a second one so it'd have more in the summertime—it'd get over it quicker. So it varied about, you know, there was all kind of deals—different places and—

DM:
Anyway, your production went up.

WDV:
Yup, so, in other words, like Mr. Neel—Mr. and Mrs. Neel, they'd—when they started out down at Palestine, Texas, and got married, they borrowed ten dollars to get married on. She was a Methodist preacher's daughter, and then he got a job with the railroad, on a paint crew. And after a month or so, well, they put him as the head of that. So they had this little, about four-car train that they'd move up and down the track, you know, and paint everything—all the signs, bridges, everything, section houses, depots, everything—you painted everything as you went along. And so he was the head of that, okay, then, that's what they done, and then Mrs. Neel got—they hired her to be the cook for all that bunch. So that's the way they got started, all right, and then during World War II, when the military built an Army base or Air base or whatever, they just went to an individual, like they needed a guy to paint the bases or whatever, they went to Mr. Neel and told him "We want you to take this and do whatever we'll tell you to do—paint an Army base or whatever. You get the men, and what the deal is, is cost plus ten percent." Well they had up to three hundred painters at the most, and Mrs. Neel did the bookkeeping for it. Well, they took what money they made during that time and paid down on these farms.

DM:
Okay, and this was one of those?

WDV:
This was one of them, and where we was, was one of them, and they had—let's see—three more farms besides that that they paid down. Well—and like I said, I first met them in 1941, so you know, I'd known them, but I didn't know that much about their—but anyhow, in '48, after that dryland year where we made twenty-one bales, well they wasn't going to be able to make their land payments. And I didn't know this at that time, but Mr. Neel had told me that he was having trouble with some of his renters and all, and things were getting tight, and whenever I was talking about moving over here, and whether it was irrigated, he told me I could either stay where I was, or move here on this place or move west, to Slide, to a section over there—"You just take your choice and let me know." He'd come around every Sunday morning, and I mean early Sunday morning. He'd leave Amarillo and be down here by the time the sun came up, with his Sunday clothes on—tie and all—and drive by and look at everything, and be back to Amarillo to be at church on Sunday. That was the type of guy he was. He didn't let—they didn't have any kids or anything, so anyhow, Joyce and I just happened to be about the age that, if they'd had a kid, well that—so Mr. Neel literally just wound up taking us in like we were family. I mean, he was the only one that would stop and get out and visit with us and everything, so we got to be really good friends from the start. But anyhow, that year he went by the First National Bank—because they was the ones that held all the notes—and told them—see, this is the thing he didn't tell me about until later—but what I'm telling you is what he told me, he said "I went in and told them, I said 'Well, I'm not going to be able to make the payments on those farms. If you think you've got to take them back, you just have to, but if y'all will stay with me, I've got a young man that's going to make this work, if y'all will stay with me.'" So they did. Well, the first year that we was over here, he give thirty-seven and a half an acre for this farm at the courthouse steps on a for sale. We paid him forty-three dollars an acre rent. So that kept them from foreclosing on him, so Mr. and Mrs. Neel always told us from then on, you know, if it hadn't been for us, they would have lost everything they had. So anyhow, he wound up wanting us to take all the farms, and that's kind of the way we got started.

DM:
Y'all eventually took care of Mrs. Neel, too, didn't you?

WDV:
Yeah, Mr. Neel, he died in 1972—January. In other words, right before Christmas—it was during the cotton harvest of that year—we knew he got sick and he wasn't able to come, and I went up to see about him, and he'd gone to the hospital, and they just cut him open and sewed him back up and said "You've probably got less than thirty days to live."

DM:
He had cancer?

WDV:
Cancer. So anyhow, just about a week later, I went back to see him again, and when we got to Mrs. Neel's door, she said "Mr. Neel wants to see you first by yourself." So I went in, and he

said "Buzz, we don't have any kids, and we've been talking about this. Mrs. Neel don't want any other of her family to take care of her. I want to know if you'd do that." So I said "Well, you bet we will." So anyhow—less than two weeks after that, well, he died. So, you know, we took care of Mrs. Neel another twenty-six years.

DM:
Right down here?

WDV:
Well, she lived—they lived in Amarillo at that time. And we kept—took her—took care of her up there until she couldn't stay by herself, and then we built a special room on this house because they gave us the deeds to the farm, even though we was trying to buy it from them. She kept saying "No, we're not ready to sell it, yet."

DM:
Because she knew she was going to give it to you.

WDV:
Evidently. Anyhow, she—we'd bring her down here at Christmastime. So she had the deeds to the farm that she put in a package under the Christmas tree. So anyhow, after that, we'd been drawing plans to build a house—I'm not kidding you, for—before we built this house, we drew plans for over twenty years—and kept putting it off, you know, and after Mrs. Neel—we were waiting to buy the farm—and then after she gave us the farm, then we knew we were going to build a home here, then.

DM:
By the way, where was the other house?

WDV:
Where Keith's house—the middle house over here.

DM:
Oh, right here, this next house over, the one in the middle?

WDV:
That first house was right up against the road. You went out the edge of the pavement today—five steps from that pavement, you'd be in the front door. You know, this thing was built whenever there wasn't no, really, roads—

DM:
—just a dirt road—

WDV:
—just a little old dirt road. And it was the first house that was built out in this area, and of course, that was a ranch at that time. And the west end down here they finished off a forty-acre block and sold it, in Johnson grass, for a horse pasture, and they had a windmill and one little old

room, about like what you'd call a tack room. But, what that room was for was for the cowboys to stay if they got caught out down here—but to have a place where they could have another horse they take a change.

DM:
Kind of a line camp.

WDV:
Yeah, that's what this was to start with. And Mr. Neel was the fifth guy to buy it from a sale. The first five people that bought this place lost it, and he liked to have lost it.

DM:
By the way, what—do you know what his first name was—and hers?

WDV:
Bill—W.C. or Bill Neel—

DM:
And is it N-E-I-L, or—

WDV:
N-double E-L

DM:
N-E-E-L

WDV:
His first place that they bought was where the state school up there on north University—that section—that was their first place to buy.

DM:
Do you know when they came out here—about what year?

WDV:
Well, that was right after World War II, when they—well, they was out here before World War II, but during World War II was when they took on the military deal, and then after that, they lived up on north University, there, and then moved to Amarillo and started their paint company up there.

DM:
Did Lubbock Army Airfield draw them out here—painting that base out there—South Plains Airfield?

WDV:
I'm sure that they was involved there, and some out here at the glider deal, too.

DM:
Right, the South Plains Glider School.

WDV:
Well, on the glider deal, let me tell about this. In 1942, my sister and brother-in-law had lived down in Lynn County, and then they had moved up here on Slide Road—which, the south side of their farm would be 98th Street, Slide Road would be the east side, and they had that half-section right there—but then they worked Mrs. Canclapp's place, which was a section right across, east of that, which was from 98th to 82nd, and over to Quaker—man, that was way out in the country, then. Well, we had been down to the other places, and driving back, going north down Slide Road, and about a quarter of a mile or so south of where 114th crosses Slide today—remember this, all it was, was a little old two-wire highline, there, and this was way out in the country—okay, we seen this glider airplane, which was an old C-47, like is out at the glider—you know, out where the glider—

DM:
Glider museum is?

WDV:
—museum is—pulling this glider. And he was coming around to the—going south, right west of Slide Road. Well, if you notice over there today, there's a pretty good drop-off there—used to be a big old lake down there—and that was a pretty good little hill, come up there—still is today. Well, all right, here's that plane pulling that glider, and he come behind that house, and they was right down on the cotton. And he come across, and we said "Man, he's not going to have time to go over the highline." Well, he started over the highline, then he went back down and rolled his wheels across the road in front us, went under that highline—came across there—and the glider, the glider would be up above them a little bit to try to stay out of the prop wash. Well, that glider, he was up here, and we thought "Well, he's going to hit the highline," but at the last minute, he ducked down and done the very same thing. The wheels rolled across the—and that was just a caliche road at that time.

DM:
Golly. Did they not realize that that highline was there?

WDV:
I don't know, but they went on, just like—

DM:
I'm glad you didn't watch a disaster there.

WDV:
—and I mean we was right—they was just right in front of us, you know. Boy, we talked about that for a long—we were with that old boy (laughs). But anyhow, the glider deal was going on, and Mr. Neel, he was involved in I don't know how many of the Army airbases and things that he painted on, but—

DM:
He was a painting contractor.

WDV:
Yeah.

DM:
Now what was Mrs. Neel's first name?

WDV:
Her name was Susie Belle Neel—Susie Neel is what all of her—

DM:
Okay, Susie Neel.

WDV:
Yeah.

DM:
What year did she die?

WDV:
She died in '97.

DM:
Y'all—so you—did you move from the little house over there right into this house?

WDV:
No, that old house—we knew from day one when we moved over here, as soon as we got able, you know, and the Neels—we was going to do something different, so—and lived in that other one in 1961 we built that other house. It had about 1920 square feet.

DM:
That's a fair amount bigger than—

WDV:
A lot bigger than what we was—that seven hundred and fifty we lived in.

DM:
It's the one that's in the center right now?

WDV:
Yeah, except back, when we built this house, then, we doubled the size of that house, and Keith lives in it. Then Dean, he got married and built the third house down there. Dean and Keith—this right here is the only place they've ever lived.

DM:
Now what about—so what year was this—oh no, Mrs. Neel, did she move in when you were over in Keith's house, or was she still up in Amarillo?

WDV:
She was still up at Amarillo, but she'd come down and visit with us, spend Christmas and all over there in that other house, and she was always interested, and we told her when—because she had already gave us the farm—that when we built her a new house, we was going to build a place for her—she said "Well I appreciate that, but I'm not going to ever do that." But she did. We brought her down here in the last five years, she was here—lived, she was—you know, Mrs. Neel was a—she was an exceptional-type person, one of the nicest people you'd ever meet. But her mind was always sharp, and she was always thinking. And the minute that—when Mr. Neel passed away, Mrs. Neel told me the next day, she said "You know, I've already lived longer than anybody in my family. There's not any reason for me to think I'm going to be living. I want to get everything fixed up and ready." And I mean, we went to work on all their stuff and helped her—carried her to the accountants and the lawyers and everything to draw up everything, you know. She got ready to die right then. She got everything ready for that to happen.

DM:
But she lived another twenty-five—

WDV:
She'd have another twenty-six years.

DM:
But that sounds like the kind of prepared person she was.

WDV:
Well she was, I mean—and the thing is, you know, just like Joyce had Alzheimer's, and I still think Mrs. Neel was the first one to detect that, just before she married, but we didn't call it that, because we didn't know, you know. But anyhow, Mrs. Neel didn't have enough memory loss to count. She was just sharp as a tack all the time.

DM:
How old was she when she died?

WDV:
She was ninety-three.

DM:
Is that right?

WDV:
Yeah.

DM:
When you came out here in '48 to this—

WDV:
Yeah, last part of '47 was the day when we come out here.

DM:
What was the place like? Was there a weed problem out here, was the soil okay, had it been—?

WDV:
The people had been farming the land pretty good. The farms were fairly clean. This place here, the first time I seen it was in August of '48, and it was high as your head, and tumbleweeds and Johnson grass, and they'd planted cotton and didn't harvest a boll. It was the biggest mess you ever saw.

DM:
What do you do—?

WDV:
We went to a funeral over at Slaton, and come back down—we'd went from Slide, so we went down forty-one, and went to Slaton, and then we come back this road across here, and that's the first time I'd ever been down this road. So when we got to the other end of the place down here, the east end, going west here, brother-in-law said "This is Mr. Neel's place right here. You can probably rent it if you want to." By the time we got down here, past the house, I remember making the statement, I said "I don't know if he'd give me that; man, that's terrible." I couldn't believe anybody would make such a mess, and that old house, man, it was just junk. Well, anyhow, come that fall, we'd harvest our little twenty-one bales and the guy that was on that section over there, west of Slide—five miles west of Slide—that's where 179 crosses over there today, back to the southwest, that section. He said "I'm going to give that place up and move up close to Bovina. If you want to rent that, well tell Mr. Neel." So I wrote Mr.—or had Joyce—Joyce, she was the expert about all this writing and things, so I told Joyce what we were going to do and she wrote Mr. Neel a letter, and told him that we might want to move to the section if—he come by. So that Sunday morning, he comes by and says "I got your letter. You can stay where you are, you can move on that section, or move to Woodrow where you've got irrigation. You just tell me what you want to do. I'll see you later." That morning he didn't stop and visit, he was just gone.

DM:
He had to make it back to Amarillo.

WDV:
And I guess he was already worrying about what he was going to do about his payments, because—I'm sure he was. But anyhow, we come over here that evening—Sunday evening—after church and all. We decided that old house was too bad to move into. During the week we got to talking about it, you know, "Man that's got irrigation. No reason that isn't good farmland. It just needs somebody to work it." We come back over here the second week—that Sunday

evening—just me and Joyce—of course, that was before Dean was born; we didn't have any kids. So I just made the statement, I said "You know, we could fix this old house up and get by for a year or so—make it work if we just wanted to do it." Joyce just turned around and got right up in my face and says "I'm just as tough as you are. If you want to move over here and do this, let's do it." So that's what we wound up doing.

DM:
Well how do you do it? You come out here and you have tumbleweeds and Johnson grass everywhere—how do you tackle something like that?

WDV:
You wouldn't believe what we done. In other words, I took a stalk cutter, and the stalk cutter blades wouldn't even hit the ground because of the weeds and Johnson grass. I mean, it wouldn't even touch the ground, it—and that wasn't getting rid of it, and I didn't know what I was going to do. I was trying to burn some of the stuff off, and I was up here close to—about a fourth of the way from the east end—the wind was blowing probably forty-five, fifty miles-per-hour that evening, and I was out there and I couldn't get a fire to burn or nothing. The old fence was just—all the fence was down—some of it was still up on the posts, but most of that was just—you know nobody had seen after nothing over here. So I had the idea, I went out there and got me about, probably three hundred yards of barbed wire and hooked onto the tractor. And where I got the idea about that was—one of my uncles over at Levelland was talking about how they put the highline in, and he was fixing to move from a Sudan patch for the cows, he was fixing to move the wire around, so they hooked on with a tractor and dragged that wire around to the next patch, you know. So he was dragging and it come by the highline pole, and it sawed that highline pole—before he realized what had happened. So I had the thought, "What would that do if I hooked on one of those wires and started dragging that out here?"

DM:
It's kind of like chaining the land—chaining it for mesquite trees—that kind of thing.

WDV:
Yeah, except they were bigger than that. You ought to seen what—if you hadn't been there, you wouldn't believe this. I mean I just started going in a huge big circle, and it just cut everything off at the ground.

DM:
Did you have one end of the wire in a post?

WDV:
No, I was just dragging that wire behind the tractor—

DM:
—in a circle.

WDV:
—just making circles—went from fence to fence, but you know, like this.

DM:
Just sawing it off, kind of.

WDV:
And man, them—everything out there was leaving. I say, well, tumbleweeds and all that—the stalks—Johnson grass stalks, that'd lay down, but all that high-up tumbleweeds, they just going across the country to the neighbor over there on the east side. He come along and he said "Ain't your name Buzz?" and I said "Yeah." He said—we'd just met one time before for a few minutes—and he said "What are you doing?" and I said "I'm trying to get rid of these tumbleweeds and things so I can farm this land." He said "Boy, it's making a mess on people's below us—you know, where I am over here. But you've got to get rid of this, just go ahead. Where'd you come up with that idea? I don't know where you come up with that idea, but it's working. Go ahead, I want to watch you." I just put the tractor in fourth gear, going pretty fast, and man, it wasn't a few minutes until I had fifty acres, and then I just started coming on up this way. Shoot, in a couple of hours, I had the whole place—all the tumbleweeds.

DM:
That's funny. I just imagine what that was like, all that taking off.

WDV:
Oh, man, you couldn't believe it.

DM:
I always wonder what it's like right off the Caprock, to the east, where all those tumbleweeds must go.

WDV:
You know, I'm glad you asked that question, because we used to go down there on Jack Lott's place and visit, and there were places down there right off of the Cap, that those old tumbleweeds would be piled up in some spots—not as much as you'd think, but spots where they just blow off, and there's be piles of tumbleweeds there. Ain't no telling how many thousand tumbleweeds would be in some of those places. Yeah, they'd just go there and quit.

DM:
Well, at least they knew that once this was cleaned off, it wasn't going to be growing tumbleweeds anymore.

WDV:
Yeah, just like he said, he said "Otherwise we'll have tumbleweeds for months."

DM:
Yeah—and every year.

WDV:
That was the last ones that ever grew here. And then, like I say, we didn't have any kind of chemical for Johnson grass or anything, so what we knew, if you didn't let Johnson grass go to

seed, you can get rid of it, because that—in other words, it'll literally starve itself out if you don't ever let it make seed. So anyhow, we never let a head of Johnson grass go from the time we moved over here.

DM:
Now what other kinds of weeds did you have to worry about?

WDV:
What we called a "slick careless weed," oh that was the worst thing you had, and then you had white weed and a blueweed. That was about all we had, but blueweed was just in a few spots. White weeds was virtually everywhere, and careless weeds was everywhere—

DM:
Careless weeds get about this tall, don't they?

WDV:
Yeah, or they'll get high as your head.

DM:
Real stalky.

WDV:
Well, they're pretty bushy, and probably one big old tumbleweed—no telling how many thousand seeds. A guy—let's see, what was his name—was a county agent—something Merle—Burl—Merle—anyhow, up here at that time, he was talking about out in California, they'd grow these things, thousands in the ground on some, and he was talking about that they'd made a study on these careless weeds, and said any kind of weed seed, there's only a fraction of an inch that they'll come up. They won't come from deep—that seed will only sprout that—all right, now then, if you've plowed these seeds and everything from careless weeds like that's out there, that you—if you don't let another one go to seed, you're going to have weeds for probably another thirty years. Before you get all of that mix to the right level where they'll come up—well, that's true. It's like that, because you can let—you can have stuff grow out here where we hadn't had a careless weed go to seed in probably the last forty years, and I'll promise you, you're going to have weeds if you don't put chemical or something. And like cocklebur—the seed out of one cocklebur will come up for—one every seven years. And you can't make it do otherwise; that's Mother Nature's plan. I was taught that when I was little down at San Saba, because my dad would not let us let a cocklebur go to seed.

DM:
Now what about—there's a goathead problem—or has been a goathead problem—

WDV:
Goathead, yeah—goatheads was really a bad problem when we come out here, and they brought in a weevil from Russia, is what I understand, and they'll do the same thing to that goathead that a boll weevil does to a cotton boll. He eats into that weed while it's green and growing, and eats

the inside of it, and therefor will—that thing just about—it didn't eliminate the goathead, but it nearly did. So that was really a good problem.

DM:
I bet that would raise some eyebrows, though, hearing that they were importing a weevil of any kind.

WDV:
Well, when you're talking about importing one to eat a goathead, it wasn't as bad as you think about today.

DM:
Well that was a lot of work, getting that started, I'll bet.

WDV:
And then, just like on their farming from them early days, you can't believe—say, for instance, the first year I was over here—we got rain, and in fact, we started off with a really wet season, because we'd had ice and snow and rain and one of the—had a wet soil profile to start with. When I planted, then—back then, you had to plant fairly deep so that you'd have dirt on your bed, just to roll in and cover up the weeds, you know, you didn't have any chemicals. You had to know what you were doing about preparing ground and being ready for the next step and what you were going to do and you had to plan ahead what you were doing. So like on the first planting, come the rain, and the ground literally—the crust literally rise up off the ground because of the weed seeds—Johnson grass—from the year before—all that stuff, everything would sprout. Okay, I wound up—had to plant the fourth time, just because of the weed problem and it rained hard enough, it had just washed so much dirt in on the—I didn't have any way of scratching it up then. That was before the rotary hoe days. I only had a drag scratcher—that was a fencepost with nails in it. So anyhow, after the fourth planting then, I was able to, you know, plow it and get it over, and like I said, I made one of the best crops we'd ever made—

DM:
That first year?

WDV:
—that first year over here, that was the second year out here. From then on—then the rotary hoe began to come onto the market, and I learned right off that nobody knew how to run all that stuff—I mean, you had to teach yourself because nobody could tell you—there was theories and all that, but like on the rotary hoe, everybody was trying to run a rotary hoe with the hook turned this way on the bottom, so when it'd come up, it would try to pull the roots up, so to speak. All right, that theory was okay, but that's not the way you want to do it. A good rotary hoe job is running the teeth with the scoop towards the front at the bottom. And what it does, you have a little bit of a dragging motion on the wheel, and that wheel will scoop under the dirt, under the ground, and kind of scoop. And as that wheel does this, it'll turn that clod over. All right, now, if you do all this during the proper time, when all that plant is little, and still in the real small stage so that you disrupt that plant when you turn that crust over, you've won. But you've got to be out there just at the right time, and three days from now, you just forget it.

DM:
Again, you've got to know what you're doing.

WDV:
You have to know what to do, when to—all right—man, I'd get down and study that thing by running—literally, running one by hand—one way, and then the other, and how much pressure I needed to put, and figure that all out, and then put it on the plow, and I'd literally find somebody to help me if I could to drive the tractor while I was making this all work. And I'll tell you, the success of the rotary hoe and all, a big portion came from right here—learning how to run, when to run, and doing all that, and man, it got to where I was working all this land and being successful with it and making it work, and—

DM:
Well did you get a reputation? Did people start asking, "Hey, what are you doing?"

WDV:
Well—we had a professor over at Tech, his name was Archie Leonard. He had a farm over there by where I was the first year. He bought—I think he bought that farm, if not, he rented it and lived over there for a long time—and he tried to farm. He was the worst farmer you ever saw. Everything that he'd catch me doing, he'd want to come out and see what I was doing, and get down and measure everything—how deep I was running, he wanted to know everything, and he put it right—and I'd have these kids up there at Tech, you couldn't believe how often—they would run in to me, they'd hear my name and they'd recognize me by—they said "All we ever hear is Archie Leonard talking about what Buzz Vardeman's doing."

DM:
Would they come out here?

WDV:
Oh yeah. But anyhow, it was kind of funny, because at that time, well, I was his experiment station, so to speak. But anyhow, just like all the rotary hoes and things and the go-devils and started out with you four-row, and then your six-row—like the first six-row—we had trouble with the go-devils outside row working, it'd want to twist, and wouldn't run the same, and when you was up on the tractor, you can't see all that. If you're down here, and somebody else is driving, and you know what you're looking for and what you're trying to make it do, then you can figure out what's taking place. So I'd hired a Mexican guy to help me some, and if it hadn't been for him, I wouldn't have learned near as fast, because just like I said, if I wasn't being able to get down there and ride and see what needs to be changed, well I wouldn't have figured it out as quick. But anyhow, like on the—especially like on the six-row—then from the six-row, the eight-row, or ten-row, whatever—if you go out here, and I've still got equipment that I went from four-row to six-row to eight-row, all on in they're still operating today. But it's making that to where that nothing sways, nothing twists, everything out there is going to run straight. Okay, you've got to realize, when we had the first four-row stuff—and then I was going to go six-row, let's go to the front of the—start of the six-row. John Deere, from the time we moved out here, we'd been involved with them about the cotton strippers and all. And then on the tractor deals, I suggested changes and things on that. Then, whenever they was fixing to come out with a new

tractor, that was the 4010, and it came on the market in '61. So John Deere, you've got to be four years ahead, they've got to have four years of experience before they put it on the market. So they wrote me this letter, and then they called me up to the John Deere house there ahead of time, showed that they was going to have these five guys down here, and "We can either come to your farm, or we'll be up here at the John Deere—you tell us where to be," and I said "Well, be at the John Deere house, y'all know where that is" —

DM:
Now which John Deere house was it?

WDV:
That was when it was down there on 19th and—not 19th, but Broadway and Q—east Broadway—not Q—east Broadway and Avenue C. —and the AC house was right across the street, east, of it, and then the Moline house was right across from it, so we had three implement houses right there together, and then the International house was downtown at that time, also, and then the Ford house—all of them was—Oliver's deal up here—Oliver—so it was all right there close together. In fact, well, Oliver was right behind where the AC house was there.

DM:
Did you say AC was there, too?

WDV:
AC—Allis-Chalmers.

DM:
Allis-Chalmers was there, too?

WDV:
Yeah. But anyhow, we met the five guys up there, and they just told me right up front, "Tell you what we're going to do here, we're going to try to come out with a new tractor. We understand what you've been helping us with and all, and we think you've got some pretty good ideas, and we want you to just—you start out with an idea of building this new tractor. Start at either end you want to, just start at the front end and go out to the back end, and you tell us how you want everything built and why." Well, for five and a half hours that afternoon, that was all we talked about. And when you look at what we designed, it was the 4010 John Deere. Man, I was tickled to death when I seen the prototype, then, of what—and it was an exact picture of what I gave those guys. And the reason why—every bit of it—I said "The two-cylinder days are over because we can't get enough horsepower out of a two-cylinder to do what we need to do." And they said "Well, you can take a thirty-horsepower tractor and do a lot with it," and I said "Yeah, you can—if you go slow enough. That's the problem. We've got to have something that'll pull what that thirty-horsepower tractor will do, but pull it fast enough that we can pull several rows at a time. We've got to get over more acres. We can't get by on what y'all have built. We need to look to the future and build what we know can happen."

DM:
What kind of—

WDV:
As far as engine, I said "A diesel engine ought to be at a hundred horsepower or more." Well, their first diesel was a ninety-horsepower, which, man, at that time, that was a lot. But anyhow, there were—things like that, they went on the small side of what I suggest. They did that all the way through—even today, they'll do that. But that's where the 4010 came in.

DM:
When you first saw what they—when they showed you something and said, "Go front to back, back to front, and change," —were you kind of—did you say, "Ooh, this is a mess," what was your impression of the first—I mean, did they have something for you to look at?

WDV:
No—talking.

DM:
Oh, you were just bringing this all up out of your head?

WDV:
Yeah, you just start out right here—man, I'd visualize all that stuff in my mind.

DM:
Okay, so what you envisioned did come to being in this prototype they showed you later.

WDV:
Exactly. And I'll promise you, there wasn't anything about what I told them that wasn't in that prototype. I'm serious. All right, now the main thing that made that tractor—and this is statistics that I'm telling you; it's not guesswork—when the 4010 John Deere came out—and the smaller ones under it—that put John Deere number one twelve years after they come out with the 4010 before they had competition—twelve years that they was number one before they had the competition. That was a pretty good step up. Well, that makes you pretty proud when you look at the whole picture, but all I was looking at was what it was doing for me, because man, it—so, for instance, though, I bought two that—the first two they got—which was later on in the spring, and I didn't have time to plan that far ahead that year, but—and I was only able to get two of them. So I bought the first two tractors and run them as four-rows that year. Then I went back, and I told Bryant, you know, early that year—like August—I said "I want three more 4010's, and then I'm going to go six-row with everything."

DM:
Now who's Brian?

WDV:
He was the dealer at that time.

DM:
Brian Who?

WDV:
Brian—farm supplier—Bill Bryant.

DM:
Bill Brian

WDV:
Bryant—B-R-Y-A-N-T—Bryant—and they called it "Bryant Farm Supply," and he had it up until Hurst bought it. But anyhow, old Bill Bryant, he was always—me and him talked enough that he knew that I was planning for the future a lot more than what was out there, and it showed them how to change a lot of things, like a four-wide front end on a tractor. John Deere come out with their first ones, they wouldn't even turn back on four rows, you know, you couldn't turn out and turn back without backing up. Well, everything like that I'd remedy, and fix, and then first thing you know, everybody—like John Deere people—they knew what I was fixing and knew all the history about all the cotton stripper deal that I'd done ever since 1947 with them. So they was easy to talk to and so anyhow—but anyhow, like, say for instance when the six-row, you didn't even have a toolbar that was a good six-row toolbar. You couldn't go buy the kind of stuff that you needed. So you had literally what you had—make do with it, you know, put two small toolbars together and that stuff. So all of that—it took time to get everything going.

DM:
Were you in pretty close communication with Bill Bryant on this? Would you tell him, "Hey, this needs some support here," or that kind of thing—did you talk to him about design—Bill Bryant?

WDV:
Yeah, but Bill wasn't the kind of guy that would understand what you were talking about that much.

DM:
Oh, okay. How was this information—how was John Deere finding out that you were making these modifications? How did that ever come about?

WDV:
Through Bill Bryant.

DM:
What's that?

WDV:
Bill Bryant would find out and call them

DM:
He'd mention it—okay.

WDV:
You know, and tell them "You guys got a guy down here that you need" —

DM:
Ah, I see. So Bill Bryant kind of started that connection there between you and John Deere.

WDV:
Well, yeah, he—in other words, at that time, old Verness Ford was the dealer when we first came out here. And for instance, my first tractor was—I bought it in San Saba from Roy Ragsdale. He'd been trying to sell us a tractor, but we had John Deere, you know, but he was always—we was good friends, and knew him all of our life and all. So anyhow, whenever I found out I was fixing to move out here—like the first part of '47 —May of '47 —first place I went was to the John Deere house and asked them if they knew of a G or anything, see, I didn't think there was a chance of getting a new tractor. That was during the war, and they hadn't built enough to start. So John Deere—he didn't know of anybody, and he said he'd keep his ears open, if anybody come up, if he ever heard of one. So I went to Mr. Ragsdale, and I said "If I can buy a used M or G John Deere, that's what I'd prefer—either one of them." And we visited a good little bit. I told him what I was fixing to do—get married and move to the plains and be farming—he said "Yeah, I've been trying to sell your dad a tractor for years, and y'all fool with them old John Deere's." —anyhow, I said, "Well, I'd like to buy a new one, but I guess that's out of the question." He said "You said it's going to be next year when you need this?" —it was in May of '47 —and I said "Yeah—first of the year for the '48 crop." He said "Let me see what I can do. Would you want a new one if I can get one?" and I said "Yes, I'd love to have a new one." So he said "Well let me see what I can do. Come back by in a week or so—or at least three or four days, or whatever." So anyhow, I went back by, and he said "I got you an M ordered. It's supposed to be here by the first of the year," and I said "Man, that'd just be perfect." Well, I went ahead and drove all over the country around there for about a hundred-and-fifty-mile circle, trying to find a used tractor, just in case, but I never was able to find nothing. And so I just finally give up and, "Well, if I get this new tractor, man, that's what I want anyhow." Well, we couldn't get a planter and cultivator with it, so I wound up finding the parts to a planter—in parts—at Sweetwater—and bought the parts and put the planter together, and that was my planter. And I was wondering what I was going to do about the cultivator—that had me worried—and I was working down there at the blacksmith shop in Slide when I wasn't farming or doing anything because Mr. Copeland told me, said "Buzz, you just come when you can. I don't care if there's not thirty minutes, you come any time you can come." So I was working down there, and my brother come by and he'd been to the—up at Verness Ford—John Deere house at that time—and he said "While I was up there a while ago, this guy walked in and said 'We've got a carload of four old cultivators out there, they're fixing to unload on the boxcar.'" At that time, you could—boxcar come up to the building. And so anyhow, Raymond just come straight back out to the blacksmith shop and said "Would you be interested in buying a new John Deere cultivator?" and I said "Man, would I—that's what I'd like to have." He said "You think you can put that on an M?" and I said "Why, there's not any problem with that. Man, I'd love to have a new four-row plow. Why are you saying this?" and he said "I was up there a while ago and Verness got a carload of four-row cultivators, and I was talking to him about it, and he said 'They come by and wanted me to place an order for things, and I just ordered a carload—not

even knowing when I'd get them or what—and didn't have any idea I'd get these.'" All of it just—

DM:
Came together, didn't it?

WDV:
And so anyhow, one of the first ones that they unloaded up there—I sent Raymond back up there because—they wasn't all put together completely. They carried a trailer up there and brought that out there and I put it all together at the shop and just put it on out there at night. Out of the—whenever people would come up there and they'd see that cultivator—Mr. Copeland would tell me, said "You drive that home at night, you bring it back tomorrow and set it down for people to look at." Would you believe, out of that carload of cultivators that he got, fourteen of them come to the Slide blacksmith shop? I put one on a Massey Harris, one on an Oliver, and two on Molines and all the rest of them on M's, and they could take their old cultivator to that auction sale and sell it for more than that new planter—four hundred dollars for that new planter—I mean new cultivator, and an International—old, used—was bringing like six hundred up, owing to how old it was. And I say, like on my new tractor, I could have sold that for double what I give for it, but man, I wasn't interested in selling it; I was interested in using it.

DM:
Did you have to make any adaptations to get them to—?

WDV:
Just the main adapter there on the front where it has a deal to hook my rods to—the sides, you wouldn't have to worry about that, but everybody that walked up and seen that thing said "Man, you build me one just like it—just like what you've got. Don't vary from that." They liked what I'd done.

DM:
All you had to do was just sit it out there and let them see it, huh?

WDV:
That's all they'd see. Then, first thing I built, there, earlier that year, was—I went over there to get a slide made for my tractor, you know, back then that's the way you had to do. So I just backed in the shop, and I just got off of the tractor and started helping those guys. I never had worked down there, or anything, I never had even mentioned that kind of stuff. But anyhow, after a couple of hours, I noticed Mr. Copeland standing over there watching me, and I thought, "You know, he may not like this." I didn't even say anything to him—I knew Mr. Copeland, went to church and everything with him besides all that, so I'd known him several years before all that—not real well, but I knew him. But anyhow, whenever I told him he might not like what I was doing, he said "Buzz, I've been watching you. You're better help than these guys I've got working here. I ought to put you on the payroll." I said "Well, Mr. Copeland, I'm farming, but I would like to work down here when I can." He said "You just count yourself hired—sixty cents an hour—and you come when you can." So that's the way that started at the blacksmith shop. For about the next three to four years, I spent a lot of time over there, but nearly every bit of it

was building something new that somebody hadn't done or something like that. One of the first things I built that went in production immediately—on the starter on the M Farmall and H back then, you had a little old five-sixteenths rod that went through the pipe that held the steering wheel—come up to the steering wheel—and it was right in front of the seat, and you couldn't hardly get your toe—or you couldn't hardly get your heel—either one on it, and if you had overshoes, you sure couldn't hardly get it. A lot of times, you'd have to try to start the tractor before you got on the tractor. So I decided I could make a better improvement on that deal, so I made this, and the day that I made that, I stayed down there after dark and made that. Mr. Copeland seen that the next morning, he said "Buzz, you make two of them for my two Farmall M's" —but I wound up making about twenty-something of those things. And anyhow, after the first day or so there, Mr. Copeland picked up the phone—I just happened to be where I could hear him—he said "First time y'all got International Engineer down here, you send him to the blacksmith shop at Slide. We've got something he needs to see." So a few days had passed—it wasn't four or five days that passed—this guy shows up and Mr. Copeland says "You go show him what" —see, I'd ride my tractor down there every day and leave the car for Joyce to come in. So anyhow, I was on the—I had the M sitting out in front. So I went out there and showed him what I'd made. He was in this black, four-door Chevrolet car—I can still remember this guy so well—he looked at what I had, got his camera out—didn't even comment on it, just had a smile on his face—didn't say a word—got his camera, made four snapshots from four different directions, put his camera back, got his legal-sized yellow pad and his ruler and measure—he had all of his little tools with him, and he drew a perfect scale picture of that—I mean perfect—he measured everything about it, and said "I'll see you." And I said "Well, what do you think?" "Well, we'll see you later." Didn't say "Thank you," didn't say "Good idea," —when he left, I was just standing there watching him driving off, and thinking "Well, you sorry booger, you could at least told me what your idea was." Twelve days from that day, the new Farmalls that come to Lubbock, Texas had that on them—twelve days from that day they was on the Farmall that come to Lubbock, Texas—and the reason we knew, Mr. Verness called us and said "Hey, we've got this starter deal that Buzz has been talking about on my new tractors up here." Here, that guy just literally stole that idea—didn't even say "Thank you."

DM:
He never compensated—you never heard back? Ever?

WDV:
No—never heard a word. So anyhow, that costs International a bunch, because they been by here wanting help with a lot of things that—I carry them and show that—I've got one hanging up over that barn door out there.

DM:
A starter?

WDV:
Yeah, that I made, and I carry them out there and tell them the story—guy walks up and puts that in production and don't even say a "Good idea" —don't say "Thank you," don't say nothing.

DM:
Have you told International people about it?

WDV:
Yeah, that's what I mean. I tell them—

DM:
You ought to ask them, "When are you going to compensate me for that, anyhow?"

WDV:
The last one of them was guys about the planters—they come wanting me to help them with an idea on that—the same way, the cotton stripper. That really did hurt my feelings on that, because he could at least have said "Man, that's a good idea," or "We'd like to have that."

DM:
Now when did you start hearing about—or thinking about patents?

WDV:
Well, we talked about things on patents, but most of that kind of stuff was through me working with John Deere, because I started—well, let's leave the tractor deal and go to the stripper deal. The strippers started—John Deere's first fifteen-stripper—the prototype was being built and tried out down at Lamesa by a guy. And then they put it—they sold the first one in 1947. Well—brother-in-law that lived over here on Slide Road, Layton Lawson—at that time, there was about eight or nine different kinds at that time, and the next year, I think there was twelve different ones at the first of the year in '48. People had built different kinds, and the reason I'm talking about this—they had a deal up at the experiment station where they let everybody bring in their different kinds of machines and run them. But anyhow, Layton brought three that year. He was farming nearly two thousand acres at that time, and at that time, that was a pretty good-sized farmer. And he bought a John Deere fifteen, and a Boone and a Wallace. He bought those three to figure out which one he'd like to have out of the bunch. So—see this is in '47, and I was fixing to come out here and start farming the next year. Well, in August of '47 I come out here, and I was helping them do things, and I come several times during the year that year, and helped them with some of the planting and cultivating and—not that much, but you know, a little bit at a time. So, come back then, I run those three strippers over there on that farm and across the road that year, and to me, the John Deere was going to be the best out of the bunch, so that was kind of my pick of the bunch. And sure enough, then, later on it was. So we was in on the running of that very first year, and have been involved in everything John Deere has built since. There's not hardly—there's very few ideas about any of those changes that hasn't come from us, because John Deere back there early that any idea that I had was something was going to work, or I wouldn't fool with it—and that's one of the first things that I realized myself. "Don't be spending your time on trying to figure out how to make something better that's not better. If it's not something that's going to be good and better and be helpful, don't worry about spending time trying to make it—worry about things that you can make better."

DM:
Don't invent just for the sake of inventing, but when you really need it.

WDV:
When you need it. Just like the need is a mother of invention—that's number one—if you don't need this thing, why invent it?

DM:
You know, I think that's a real important lesson for today, because you have a new car model—or a model of anything come out—they've got bells and whistles on there that they don't really need, but they put it on there so they can call it a new model. So I like your take on that, I think that's real important.

WDV:
Necessity is the mother of invention—I didn't come up with that idea, but that's one of the truest—necessity—a need for it—that's the mother of invention, and that's what we're talking about.

DM:
Has John Deere always treated you right?

WDV:
Yes they have. John Deere has always been up front and all with us, and we don't—John Deere don't give us any royalty or nothing like that, we—in other words, I told John Deere back, from the start, "You know, as long as we can make a living and improve things,"—that gets back to this patent deal. In other words, a lot of the changes you make, I was making on John Deere's stuff, and I could have got patents on a lot of that stuff, but I didn't—but anyhow, later on, then, I got patents on like the guidance system and all. Then, when I built this big new stripper with the tube cleaners and all on it for John Deere, well then they've got me as the inventor on that patent, see, on that.

DM:
Most of it has been modifications along the way, but every now and then something big—you have a patent on.

WDV:
Well, that's true. But like—say, like, in the cotton strippers—that was mainly just little modifications every year, and then some years would be—well, say like when we quit the old chain-sprocket deal and all—their engineers down here that year, and I said—he said "What about next year?" and I said "Next year's model, let's start completely new. Let's do away with every chain and sprocket and go V-belts and all that." And the reason I had that idea—I had to prove this myself—there's nothing wrong with sprocket and chains except for dirt and wear—but they pull and they don't slip and all that, but they're noisy and—but a V-belt is quieter and smoother-running and longer lasting and less trouble in the long run and they do just as well in the long run. So anyhow, I said "Let's just sit down here and talk about this. We're going to start out with a whole new design. We're going to have all V-belts and V-pulleys—no sprockets, nothing—and we're going to start over with a whole new machine." All right, now that's the 280 to 281, then 282, then the 283—all those two-row models was each a step from that. Then they proved to be by far the most popular. So we bought an International 21, run it, and then a 22 and

run it a little just to learn. They had a pretty good machine, but the thing it wasn't—that I didn't like as good about it—running—I run both of them all the time—you just compare the—we had the front gathering part here on the John Deere, it was easier to drive and easier to get your stalk in and everything than the International was, and International was—together, and it didn't have a flat—when we went to the flat straps that comes around, that was a big improvement. John Deere started out—they had a flat one, and then they had one turned up edgeways welded onto that, and whenever you got in little cotton, that wasn't too good. And then we went to the single strap—come all the way back—similar to what you've got today. In other words, it was like all that stuff you've got today, every bit of that it my design. That come from right here.

DM:
You know, a lot of people who would have gone to all this trouble to modify would have insisted on royalties on these kinds of things. Were you approaching it as "This is going to help my farming"?

WDV:
This is going to help my farming, but it's going to help everybody else's farming. Just like I started in 1950 with an idea of "If we're going to raise cotton out here in West Texas, we've got to come up with a way to mechanical harvest all this, and do it, because right now, nobody has got this ready, and we need to make this happen because if we're going to stay in the cotton business, we've got to make it happen, because you can't get people to hand-pull all this and do all this."

Pause in recording

DM:
Well let's just start back with where you were talking about the equipment and the modifications—let's continue with that if you don't mind.

WDV:
Okay, like on the equipment deals, like we mentioned back earlier—all the rotary hoes, rotary sandfighters—when we first come out here, sandfighter was just a drag-deal with teeth on it. You hadn't heard of a rotary sandfighter like we've got today—or rotary hoes—all that was in the future. And then learning to build those and build them wider and bigger and everything—like on sandfighters, when the rotary sandfighters came out, the company that was trying to manufacture those, they was talking to farmers, but for some reason, they kept thinking that you wanted the curve on the tooth to be coming in the up position at the back, instead of being in the forward position, you know, in contact with the ground. You want the cup forward, and if you turn it the other way, what happens, the dirt that comes up, it'll just throw it up and burst that into a lot of little bitty clods. And what makes a good sandfighter deal—what sandfighting is, is being able to stop the sand from moving. So you want to punch the holes, and then you want to leave the clods, and the bigger the clods, the better they are—and the bigger the hole, the better it is. So you get a good cross section of what can stop sand from moving—being able to trap those first little parts, because the first little ones is the ones that's loose and going to blow easy, and if you let them keep blowing, that loosens all the other. I had a doctor that used to be—Dr. McCullough—grew up at Levelland. He was real interested in talking to me one day, said he

went to Europe and studied three years when he was getting his doctor's, and said they was studying a lot about these allergies and what causes them and all, and he said "One of the things we learn about West Texas dust is that after a rain, you know, that slicks the ground down, and then when the sand starts moving—when the wind starts blowing, that moves the first little grains of said that's floated to the top, and once that starts and the humidity is dry enough, then those little grains of sand creates a static electricity. Then, therefore, they begin to repel their-self. And there with those grains of sand, then, that starts moving, they'll repel their-self and get in the air, and the more that happens, the worse the sand blows on the bottom. Well, all that's probably exactly true, because you get out here and watch that, and the only thing that'll stop the sand from blowing is you get the ground roughed up or the humidity gets high enough that it kills that static electricity, and then that'll stop it. So then the sandfighting deal, one of the first things I learned when I come to West Texas—that you can't farm—you can't get by by farming more than you can sandfighter in less than a three-day period. If you've got to go over three days, you're going to lose out because—in other words, the sand will win. It'll cut your cotton off and kill it and all, so you've got to be able to—you start in spots that gets dry first, but usually that's over—you've got about a three-day period that you can do all this, so what it means is you've got to cover every acre of your farming in that time, or you're going to be out of business. And mainly, you need to do it in two days. That third one, you're getting kind of iffy, because that's just the way Mother Nature works. So like on sandfighting, in other words, you started out and it was just a nine-row sandfighter was as big as we had, and we'd go angling across the rows, and we'd do everything trying to stop sand. And then you got your rotary-type hoes, and they still did them the same way. And then, when we got to what we call more "bed planting" —because used to, you had to plant in a hole, but with herbicides and everything, that proved to not be the way to do it, see, we planted more on the bed. So we had to sandfight up and down the row by running the rotors on your sandfighter down the middle so that it wouldn't run over your cotton. And as you had those, then you started folding—then you got up to where you'd have like an eighteen-row sandfighter—that'd get nine rows, skip row—or eight—I mean sixteen rows solid. So that was pretty popular. So we decided to build a ninety-foot, twenty-seven-row sandfighter that would fold and fold when it comes over, it'd be one in front of the other one so that you'd fold flat. So we built that—me and Dean and Keith—and I think it was in '97 —and that's still been running today with not one single mishap. And yet, you've got other people making these things, and nobody's had a successful one. The one we built is still the best one out there as far as the frame and all.

DM:
So what are the problems with the others that have come out?

WDV:
Well, they've got good ideas, but in practice, they don't work as well. In other words, you've got too heavy—a long beam right here with a good idea as far as it folding and folding down flat in only one fold, but you're putting so much pressure on those fold parts that it's pulling eyes out of cylinders, it's tearing up the bearings in the deals and right now, they've got a—there's quite a few of them out there, but—

DM:
There's too much stress.

WDV:
Too much stress in that point. One way it has a double fold—a forty-inch deal and then, when they fold across each other to come down flat, well then, one beam folds across the other. And the way we make that do is by angling our fold point. When it's folded down, the bar is straight across—one end to the other, ninety foot. Then, when you fold the two thirty-foot deals, you have a one forty-inch space, and then the rest of it, and then they cross over by angling your pivot. So there's always a way to figure out how to do something, it's just—

DM:
If you can do a ninety-foot width and make it work, that's quite an accomplishment. That's a lot.

WDV:
Well it really is, and just like today, where—you know, you get out here and the average farmer is farming two thousand acres now, and the larger farmers are farming up to seven to eight thousand—that kind of stuff—you've got to have a lot of equipment to go in a hurry to cover that within that two- to three-day period.

DM:
Right, you sure do.

WDV:
But anyhow, like all the equipment, and then the way your plows that we do—but the main thing that's made all this really easy, that was the big sprayer—like John Deere's 4700 series sprayers. When John Deere Company—they brought their five top guys, their five secretaries, and the next forty—I mean next thirty people under them, which is forty total—they come, spent ten days with us in '95. Out of that was one of the best things that probably happened to West Texas, because we was able to convey to them the type of harvesters we need—like on sprayers, I made the mistake, kind of at first—I said "You guys don't realize how far y'all are behind on some things." And I mentioned the sprayer, I said "You said you can't make a ninety-foot boom, and we've been running one sixteen years." So he just stopped me and said "Mr. Vardeman, we've been talking about building a big sprayer. Would y'all help us design and build that? And if we build what you want, would you buy one?" and I said "That's what we're talking about. Sure. That's what we need to do." Well, today, their 47 series sprayers is one of the most popular things in the farming industry because you've got a big sprayer that can cover lots of acres of wheat, corn, soybeans, any kind of row crop or crop, period, you've got something that'll do the job now.

DM:
It's not just for cotton; it's for—

WDV:
At that time, this was something you had in your mind, but nobody built it.

DM:
But it's versatile. It's not just for cotton; it's applicable to any—

WDV:
Yeah, it's just a sprayer that'll do anything you want to spray.

DM:
How often would they do something like this—come down with a team of people to visit with you?

WDV:
When they feel they have a need to do something—it's usually—you're talking to them one-on-one. Say, like, for instance when they come up with a guidance system—or several different things in between that would come up that's really important—and the biggest part of the time, instead of me calling them, they'll hear about this through the dealer or somebody else, and, "You need to get down there and see what the Vardemans are doing." Well, that's the way a bunch of this has happened. So like the guidance system—old Bill Bryant, the dealer here, he called them and he said "Y'all need to get down here and see what Buzz and his two boys built about the guidance system." Well, they was down here the next day, and we went through all that.

DM:
Didn't take them long to get here.

WDV:
No. Anyhow, through all the rest of the planters and things—we've been through—involved—in every one of them, man, there's not any part of that—and our deal, like on some of the cover and stuff, that's all part of John Deere's deal.

DM:
And these prototypes are living out here in your buildings, right here on this place, and you go out and make these modifications—and you and your boys, Dean and Keith, go out there and make these modifications all pretty much right here, and then they come and see them. Is that—?

WDV:
That's the way it happens. In other words, there's not any of our stuff that we go get somebody else to make. It's all made right here, and a lot of people can't understand that, but when you have an idea of how to make something better—we've been lucky enough that we can do that ourselves, and see if it works, make it work, or whatever it takes. And if it's something good, John Deere's ready to put it in production.

DM:
You're out here actually trying it out—testing it—in the field, making modifications, cutting metal, welding metal—everything.

WDV:
The whole deal happens right here. And just like right now, it's kind of a joking deal with us and some of the people in John Deere—I've told them, I've said "I've probably been better off for you" —see, I had the opportunity that they was going to send me to college [and] make and

engineer out of me when I was a sophomore in high school. Well, that didn't happen, I just—on my own. Then, starting on the cotton deal, from 1947 until now, nearly every bit of the changes that's been made in the cotton part has come from us. Well, just like we'd kid John Deere, and I said "I probably worked harder for you, not being on your payroll, than I would if I had been—and probably done more for you," and John Deere will admit to that. And like John Deere don't pay us to do anything, and we don't get any royalty, and the reason I've always said this—if all my neighbors thought that I was getting five hundred or a thousand-dollar royalty off of everything they were buying, they'd everyone be mad at you. And this way, none of that's ever happened. And as long as we've been able to make it all work, why everybody gets the good out of it. And just like a cotton—if it hadn't been for what we done in the cotton industry—a lot of it in the cotton-growing part, but especially in the cotton-harvesting part—we wouldn't be in the cotton business out here today like we are, because somebody had to come up with ideas how to make all this, and like I said there at the start, there used to be like nine to twelve companies trying to build cotton harvesters like we need out here, and now then there's just one. And I've had the people from John Deere say "You've put everybody else out of business but us. You've built the best and the best is what wins." No, we had the opportunity during the—for other companies coming to you, wanting you to help them, and all. I guess the one that kind of got my attention the most was the Ford Motor Company guy—that's who he introduced his-self—Verness Ford Motor Company was Ford tractors and things at that time. He come to me with a big checkbook—three checks in a deal—and gives it to me and says, "Mr. Vardeman, I want you to take this checkbook. The first check on it, you write yourself a check for what you want to do this. And then the rest of those checks for what it takes to do it, but we want you to build us a cotton stripper or brush-type cotton harvester." Well, we'd already talked to them some, but anyhow I guess we spent probably an hour and a half, and after about thirty minutes, I told him, I said, "I could do this, but I'm not going to do this. I'm working the John Deere right now, and we just—we don't have no signed agreements, no way, and I'd be free to do anything I wanted to do, but being as I'm working with John Deere, and they've got my ideas and things, it'd be hard for me to come up with something that wouldn't infringe on one way or another. I just don't want to do this." Well, I'm not sorry, to this day, that I turned that down, but then it wasn't too many months later, Heston come by with the same offer, except they didn't bring their checkbook with them. I've had a lot of offers for different companies to help them with different ideas and things—everything from speed controls and you name it, we've been involved with it.

DM:
I think it's interesting that you didn't go to engineering school, but that allowed you to go into farming, where you really got the practical side of all of this, and without that, it doesn't seem like any of this would have really happened—to be able to apply it.

WDV:
Just like myself, the only experience I can give you, really, is from what my feelings and everything has been. You've got to have an idea first. Well, just like me, you can't believe how many things I've had ideas about that turned out that I could have had a good patent on. Say like cruise control on a car—I had the idea for that probably six, seven years before it come out. Intermittent windshield wipers—little old things like that, you know, that really makes a lot of improvement in a car, that I could have done, and done easy, but I didn't. And I don't regret that, but what I'm saying is you've got to have that idea first. And then, if I have an idea, and I don't

build it myself—or get somebody to—that idea won't go anywhere. But like most of the ideas that I have is something that we're involved in using, and something that I know we need an improvement on, and then we just have an idea to how to build it, and I'll have people all the time say, "Well, how do you come up with your ideas, and where do you start?" Well, it's just like I said, you've got to have that idea first, and then, if you don't do it—or get somebody—that idea didn't go anywhere, so it's not any good. Well, any time I have an idea, I'm working on something that's pertaining to what we need. And you've got to have that need for it, number one.

DM:
Necessity is the mother of invention.

WDV:
Necessity is the mother of invention. And that is—well, it just don't vary from that.

DM:
Well this is what seems to set you as a designer apart from the engineers working for these companies. It seems like to me they've got the job to sit and modify or come up with a new design, but they're not out there where they're really seeing the real need—they're not face-to-face with the real need.

WDV:
And say like we're right here—we're farming—that's preparing the ground for planting and raising that crop, and then harvesting it, the whole picture, and every step—all the tools that you need, all the way through that. There's not any part of that we haven't been involved in. and if you go out here and look at all the farm equipment that we've got—or all the farm equipment that other people have—there's not very many pieces of that that we haven't been involved, by talking to somebody or helping them some way. I mean, it's—

DM:
So, you know, a designer of farm equipment would be at a giant disadvantage if they didn't farm.

WDV:
I don't see how you can be—in other words, unless somebody gives you an idea, like we said, how's that engineer going to come up with something? He's got to have—you've got to see the need for it first. And just like that, that's—my mind—I'll tell you, my mind don't ever stop—it doesn't—I mean, even at night, I dream nearly all the time at night, and you can't believe all the stuff that you'll think of at night that—just because you've been thinking about it all day, I guess—and a lot of little—a lot of not little problems, but a lot of the major problems that I've solved is not just happens at night, but all that thinking that you've been doing, all of the sudden at night, here's the one that jumps up and that's the answer. But anyhow, there's a lot of things that I'll start to build that I'll honestly have any—three, four, five, up to eight different ideas of how I could do this, and then you start kind of narrowing them down, and then you start building the ones you think, and sometimes, then, that'll change before you get through.

DM:
Some trial and error involved there.

WDV:
Just like when we built this big John Deere stripper out here, John Deere just brought the chassis down—a picker chassis—and wanted us to build a big stripper, you know, with two cleaners and everything on it. Well, I'd already been picturing this stuff in my mind, and therefore when John Deere asked us if they thought I could do it, I said "Yeah, we can do it." Anyhow, then, the next picture—the next thing, they wanted to know if I could kind of sketch them a picture of what I was—and I said "Well, I probably could, but I don't want to do that. I want to be sure of what I'm building before I start, and there's a bunch of things we've got to figure out how to get it done before we—there's a bunch of steps here to get before we can just dram the end picture. I could draw a picture like I'd like for it to look right now," but anyhow, what I told John Deere—and here, there was five of their guys here with us—I said "What I can tell y'all today is" —this is after we'd already talked it over and agreed to do it, and they brought the machine—the chassis to us—and the two cleaners. And we was standing out there in the shop, and I said, "What I'm going to tell y'all right now—I'd rather not try to draw you a picture—but when we get through with this, if it's not something that works—if it's not something that I would go buy—if it's not something that works—if it's not something that looks nice—if it's not something that I would go buy, I don't want my name associated with it." And he just sticks his hand out and says "That's good enough for us." So that's the way we built that—what we call the "V-2000" stripper out there. That's kind of the beginning of the prototype for the new round-bale deal.

DM:
Have you had any situations that you can mention where you've worked with engineers that didn't quite—that you kind of had to bring them up to speed on what was needed, because they didn't understand because they weren't farmers?

WDV:
Oh, that happens a good bit on things we've done. I mean see, John Deere would send the engineer down here—I don't know how many years this went on—for probably fifteen years that they'd send one of their new engineers, and spend six weeks with us during the harvest.

DM:
It was an instructional time for them.

WDV:
So just let me give you an example of what that was. One of their top engineers up there today that we're still real close with—Jeff Wigdahl—here, he—I didn't know who was coming that year, but I had an idea of how to—which turned out to be one of the biggest changes that has been made in the—about our cleaner situation—just about almost doubled the capacity of the burr extractor, cotton cleaner—is that I was wanting to change the air chute, and John Deere engineers was telling me not to fool with that because I was going to foul things up. Well, I decided to do it anyhow. So anyhow, one morning that I was out there in the shop way before daylight, and had the lights on, somebody walks up to the door and knocks, and I told him to

come on in, and he stuck his head in and said "Mr. Vardeman?" and I said "Yeah." He come on in—I was up on the stripper—I got down and he walks up and we shakes hands, and says "My name is Jeff Wigdahl," and I said "Well I'm Buzz Vardeman." He says "My instructions are I'm to come spend six weeks with you. I'm supposed to take every step you take and listen to every word you say, and you'll teach me more than I'll ever learn back at the factory. That's my assignment." And I said "Well Jeff, we'll see if we can't make some of that come true." Then he says "I'm fresh out of college with a good engineer degree and all that, but I don't have any practical experience, but I'd like for you to help me any way you can. I'm willing to learn." Well, Jeff was—during that six weeks, there wasn't many times I couldn't reached out and touched him. I mean he just stayed right by my side. But he wanted to know from day one, all the steps that we'd went through getting to where we are—all these years, all these different models—we had something to talk about every minute from the time he was here. And Jeff is one of their top engineers today. That part right there—they was down here this summer, and we went out to experiment station there one day with them—it was in the spring—then they was trying to see how much capacity they could get through the cotton cleaner—and of course, we'd already done all that stuff out here on the farm. But they was wanting to verify it even through up here—trying to determine how big of a cleaner they needed to put on this new model coming up. Well, the whole answer to that—you've got to have ability, and you've got to do all that, but what they learned up there is not more than what we learned out here. And when Jeff come that day, when I was trying to explain to him what I was wanting to do, you could look at him and tell that didn't have any meaning to him—he didn't know what I was talking about. That goes to show you, he's a new engineer, but he hasn't seen the idea, and how's he going to come up with an idea. He's got to—that idea's got to come from somewhere. But just like today, he said that whenever their engineers gets together up there, they'll kid one another about—"Have you been to the Vardeman University?" That was a pretty good compliment, really, in a way.

DM:
Now how about the economic considerations of these designs? Surely a big company like that is always worrying about the cost of design, but are they—?

WDV:
The first thing about any of that, if it's something that'll work—if it's something there's a need for—and they can see that that's going to be an improvement, then they are ready for it, it's just a matter of what are we going to do, cost-wise, and all that, because every pound of steel—John Deere is going to try to cut out any part of it they can. That's just common sense, you know. We go through all of that with them.

DM:
Do you sometimes have to say "No, you really need that. You can't cut that out?"

WDV:
Well, you've got to—they learned a big lesson on the 7450. That was one stripper that we wasn't involved in any way with, which, that's the only one that we wasn't involved with. But they went in, and two engineers tried to kind of make things less expensive for John Deere, and unfixed the things that we'd already fixed, and you had to come back and do all that over before that was an acceptable machine. And so that was really a big lesson for John Deere right there, that you can't

go—when something is done and done right, there's a reason for it. And that's what I try to tell those guys all the time. There's a reason for everything being a certain shape. I mean, there's not hardly a thing about that piece of equipment that hasn't been tried in three or four different manners before. And if you find something that's working and working well, try to find something else. Don't try to tear this up, or if you're going to change it, be sure it's for the better, not for the worse. Don't go backwards.

DM:
Well you've been involved in more than just production. You've been involved in the aspects of marketing, too, with the denim plant up at Littlefield. Weren't you involved in that, also—finding a market for South Plains cotton?

WDV:
Well, we was in on the design from the first beginning of that all the way through. You know, there's a good lesson for everybody to learn about what happened at the denim mill. There was a lot of people that wasn't in favor of that—majority of the people—because they didn't want to put their cotton in a pool, just to be in the denim mill at first. So they didn't like that idea. But anyhow, if you go back and look at what happened, everybody in the denim business told us flat out that you cannot take West Texas cotton and make Levi-quality denim. The reason for all that is Levi had the best denim quality at that time, they was number one. And so everybody was trying to tell us "You can't do this." Well, the idea was that if—in other words, right off, you have a lot of things you have to go through, and say like, fiber fineness—micronaire—in other words, the higher the deal, the coarser the fiber. Say, like from the scale that they judge you on, say like a two up to a five, see—well let's say a two and a half is half of that five. Okay, that means that this fiber on a two is as fine as it gets, and a five is about as coarse as it gets. All right, now, if you take a handful of each one of these fibers and dunk them down in the dye, and you bring them up which one—they're not going to be the same color because there's more—finer fibers in this hand than there are this one, so if you put the two together, just one behind the other, you'd have streaked denim. So our answer to that was "What if we can blend all this good enough to make it work? Well, that was what we started working on. That starts a lot right here in the field by going from one end to the other in your basket and then like at the ginning process—in other words, feeding off of there—and say like over at Crosbyton, they dump trailer loads and then tried to blend it—cotton off of all the way across—well we went through all of that part, but the idea of putting, you know, like twenty to thirty bales, and I think they wound up on thirty-two bales at a time—you set them all down, and you've got all these different grades and staples and micronaires of cotton, and if you just take a fraction off of each one of them—backwards and forwards, backwards and forwards—that proves to be the best thing that's happened. And so anyhow, what that did was prove that you can take West Texas cotton and make as good a quality denim as anybody can make out of cotton that's not just all long, stapled, high-price cotton. So anyhow, what that's done for the whole South Plains cotton industry has been great. And just like they was literally selling cotton to mills already selected, and these groups of bales, or where that that mill could take them and just set them down and go. All right, now, one of the biggest cotton mills in the United States—the guy that owns that, he come to Lubbock because he wanted to buy cotton. So he wanted to talk to a farmer. And they brought him out here to our place, and it was just me and him, and the other guys just all stayed in the background. And this was probably for nearly a two-hour deal that he wanted to know about all

the growing parts and harvesting the cotton, and everything about a cotton deal—and then started talking about the denim mill, and I was telling him—he said "I've already talked to them at the denim mill and all. What do you know about this blending idea?" and I said "That's just plain common sense that if you take that and then blend this cotton, that it's going to work. It has worked, and that's going everywhere right now." Well, the last I heard, that their denim mill is setting down fifty bales at a time and blending that, see. So he even took it a step further because it's a lot bigger mill and everything, and therefore, they can—they get the same results, except for a lot more machines.

DM:
Now where is this mill?

WDV:
There, up in the Carolinas.

DM:
Can you tell me this person's name?

WDV:
Offhand, I—

DM:
That's okay, maybe it'll come later.

WDV:
I can't believe I can't recall his name.

DM:
Well where is most South Plains cotton going today?

WDV:
It goes literally everywhere—it really does. They brought—we've had people from every cotton-growing part of the world visit our place, but the biggest part of them comes from buying cotton, and they want to come and see where it's grade—and harvesting—and they'll bring busloads of people, or people in busses out here from China, Japan—let's take the ones from Egypt, that—there was about seven or eight of those—and that was here during the off season, and we went into the barn to show them out cotton harvesters, and you could tell that didn't have—they looked at this big old machine—that don't have any meaning to them. And I said "Well, I can show you some video of it running," —of course, you had to talk through the interpreter—"Yeah, we'd like to see them." So I brought them in here and showed them this, and boy, the lights, you could see, starts turning—comes on—when they look at something like that. Then, usually the first thing they'll say—on countries like that—"Yeah, but you're putting people out of business." And I'll say "Well, that's true, but the thing is—like here in our country right now—you couldn't get anybody to—if you offered to give them that cotton, they wouldn't hand-pick it for it, much less—so you'd be out of business. So for us to grow cotton, we've got to find a way to mechanical[ly] do all this." So anyhow, then, then they kind of agree with you, and one

of the things that I always ask every one of them is, "How many people in your county does it take to pick a bale of cotton today?" and you know what, this don't vary nowhere—natural—everybody—they'll even get their little calculators out—but the answer is five people per day per bale. Well, that's—you know, people's not going to be that much faster, when you think about it, in one place or other. But anyhow, then—but just like you go from five people per day per bale—so like in 1947, when we could pull ten bales a day with that stripper, we thought "Boy, this is great. Man, this—I don't know if that'll get any better than this." That already replaced fifty people, you know, and fifty people, that's hard to come by. Well, like our three machines that we're running out here today, we can average like a bale a minute on that in good cotton. So you just look at all the progress that we've made—and during that progress of speed, we've kept it up to where we get a cleaner cotton and all. But just like on this cotton cleaner, the burr extractor and all that, when they first started with that, I was having a hard time accepting it because I thought it wasted too much cotton—and it did. But I went out and picked up cotton and measured off what it all equaled to, and I thought "Well, even wasting that cotton, it's still a profitable thing to do, but the thing is, we've got to make this better than that. We're not willing to accept this." I even made the statement to John Deere there, one day, I said "If you want to sell more cleaners, you just go to one-price ginning at the gins, that's going to create a—people to think in the terms of pounds. And sure enough, that was the truth. But just like on our deal, what improved our—in other words, just like right now, we're probably running more than twice the cotton through our cleaners, and doing a better job than what they used to do. Okay, now then, what did it take to do that? That was a process that took a good little while to figure out. But if you spread the cotton in a thin bat of cotton going onto the saws, then the saw don't get behind that much. Well at first, they wasn't spreading the cotton, and therefore, it was going on there in big lumps and things. All right, now those teeth on that saw can't hold on to more lint that the width of the tooth. So, therefore, if you've got a wad there, it can only grab on to that first lock of cotton, and then that tooth is full, and if that other cotton gets dragged through just by friction, then there's not any tooth to hold it, it throws it off and it goes on the ground—so you've got all this waste. So my idea was thin this cotton down to a thin bat where it just almost—just locks of cotton hitting the saws. The way we was able to do that was changing the width of the chutes and things where the air—spread the cotton, number one, but when you spread it widthwise by changing this, it also spreads it lengthwise; therefore, you're thinning it two ways when it hits the saw. And then we worked backwards from that through the cross-augers and all that by putting double flighting on the crossovers—turned them faster—so we worked backwards through that, thinning that cotton out all the way until we got to where we were doing more than twice the capacity of a machine just by the way it's being fed. Well, that's all just plain common sense to me, it's not no science, so to speak, it is In one way, if you can look at it, but still, it's just plain common sense.

DM:
It's practical application. Now the V-2000 is—

WDV:
Just like for instance, where I was trying to tell John Deere engineers—and this was like three years before I decided to not listen to them and try my idea—which worked in the long run—but I said "You've got the square inches of space down here where your cotton is coming out, and then you go into the square inches of space up here that's going into the cleaner—it's twice as

many square inches. Common sense tells me that that same amount of air and cotton comes in through this smaller space down here going into a wider—twice as many square inches—is slowing the air down and not spreading the cotton—and that's the very thing we don't want to do." Well, the engineers didn't get what I was saying—so I decided just to try this on my own. So I fixed the chute where that I could pull it back to their spacing—which is thirteen-and-a-half inches—or move it into seven inches, which cut that down to the same square inches, see. And the very minute that I started in the field with this back here—had it fixed where I could just move my hand and move all this—and the very minute that you start forward, you could see the burr trail cleaning up; you could turn around and—I had the door fixed so where I could watch the cleaner—and you could see that we was spreading the cotton—we found our answer. Well, that was the morning that I was telling you about—Jeff Wigdahl had come—and I was trying to explain that to him, and he didn't understand what I was talking about, so we went to the field and—you could see immediately, you know, we'd found the answer. So we hadn't gone a couple of hundred yards and I said "Jeff, you just—call your boss man, tell him we found the answer we've been looking for a long time." And I didn't mean "go right now," or anything, I was just talking because man, I was tickled to death that we had seen a big improvement on such a little work that we had always done. So we got back close to the end, Jeff jumped off of the stripper—running towards the barn just as hard as he could go, and I thought "Well, I guess he's got to go to the bathroom or something." I didn't even think any further, and we turned around—me and Dean and Keith was talking; we was just tickled to death about what we'd discovered, and couldn't believe we had put off doing this, because we already thought it'd work, yet we wasn't trying it because John Deere's engineers was trying to tell us we was going to foul something up. So anyhow, though, here comes Jeff, back, running just as hard as he could go, and he said—he got close to us, he said "They're going to be here first thing in the morning." I said "Well Jeff, I didn't mean go call them right now." Anyhow, the next morning the top two guys come, and they understood what the problem was, but they didn't have any clue about how to fix it. And when we got on there and explained everything to them and everything, we didn't go fifty foot until they said "Man, anybody can see this. How come it took so long for you to figure this out?" I said "Well, one of the reasons, about the last three years, your engineer was trying to discourage me from doing what I thought ought to be done." He said "Well don't let that happen anymore."

DM:
Where do they come from, anyhow, where's their headquarters?

WDV:
Well, the—Moline—Iowa—in other words, all the cotton harvester—they got a section of land there that, during World War II, was a munitions manufacturing deal. And after the war, then, the government was going to let that out to somebody that'd take it and make something out of it, so John Deere wound up making a manufacturing deal, and then a lot of that section of land—the biggest part of it is took up by John Deere, but they got—I've forgot now—it's like seventy-something acres under one roof up there—just at that location—maybe a lot more than that by now because they built a new plant up there, I understand, this year to build their new sprayers in, too. They had already been building them there, and then they moved to Georgia, and then they built a plant back up there because of demand.

DM:
Well what are the—let me see how we're doing on the time, here—what are the challenges of farming here on the South Plains? Now, we're in a drought—or we've been in a drought—would you call it a continuing drought at this—?

WDV:
Droughts always nearly goes in cycles, and most droughts that we've known in the past—say, like in the fifties—'53 was the start and '57, it was kind of over. So you usually have about three- to four-year periods of bad drought. And evidently that's what we're in right now. In farming, you one hundred—in other words, weather is something that we talk about every day, but we can't change it; you have to just live with it and do the best you can and that's what you have to do in farming. You just have to take it as it comes. Like this year, we didn't have any underground moisture to start on, and where we had water we could plant our irrigation, but we wasn't going to be able to plant dryland. We got water—rains on some places, and we still have a couple of sections that's not even dry enough to plant sorghum on, or anything—I mean not wet enough to plant anything. On our irrigation that's, say, in Lubbock County here—the southeast quarter of the corner has all been dried out, I mean as far as cotton. So there's roughly thirty thousand acres of cotton right here in this area that's gone back into milo, number one—and probably sunflowers—a few things on the others, but milo would be number one. But west of here, the irrigated cotton is pretty good, but not much dryland that's—so it's going to be a tough year.

DM:
How does this last couple of years compare to what happened in the early fifties?

WDV:
Well, like in '53 —of course, we had full, eight-inch-pipe irrigation then—and where we was irrigating, we just went on like—you just had to run a lot more, but I mean we made good crops. But dryland, there wasn't any. That went on through '55 and '56 on all the dryland acres, basically, out here. But anyhow, like this right here, the year before last, we started out with some underground season, but we didn't have any rain like we did this year, so this is really in the second year of a bad drought, really. And prior to that, we had a couple of years of some of the best crops we've had out here. So it's all hit and miss.

DM:
What does the future look like? With the water situation and things like that, what is the future of cotton farming out here?

WDV:
Our irrigation problem out here is—in other words, we've already gotten to the point that we've only got supplemental irrigation. If we don't get our normal rainfall, we haven't got the water to water very many acres. If you got normal rainfall, then you could kind of spread that out and help more, but that's where we are on irrigation. I can see a day coming that irrigation is liable to be a thing of the past, not too many years off.

DM:
What will happen out here—will it be dryland farming?

WDV:
Well, if you—that's what it'll be if you keep to farming. It'll be less acres and spread out more, or "every other year"-type deal, or every other row—like when you have skip-row farming, what we call it. All that means, you got so many inches of moisture stored in that soil. Well, if you take it out with one row of cotton there, instead of, say, four rows, that one row is going to naturally do a lot better. If you tried to make it on four little bitty stalks—so that's what you're doing with skip-row. And you could go back to that, but the main problem we have out here is not having enough—like on our soil after we harvest—there's not a lot of stuff on cotton—especially on dryland cotton—that keeps the land from blowing. Even on milo and a lot of those crops, that gets to be the same way, so we'd like to do more farming where you didn't really do any plowing, but out here you've got to do something to control the sand from blowing.

DM:
Well let's kind of wrap this up, maybe with some ideas of—would you do anything different? What are your biggest successes? Can you talk a little bit about those kinds of things?

WDV:
Well, I guess, offhand, we're real proud of our success. There's a few things that you can look back and wish we would have done a little earlier, because you learn later that you could have, if you just tried a little harder. But the main thing is, you don't want to try to do something that's not going to work. That's one lesson, you just don't want to make those mistakes. Anyhow, just like on our cotton harvest deal, if we continue to make a good enough crop and the price of equipment don't get too high—that's really getting to be an obstacle—the price of new equipment is just terrible in relation to what we're able to do. But anyhow, the labor situation—man, nobody wants to work—like, especially, they don't want to do farm work. They want to be able to work eight hours—partially—and get paid for a full eight hours, and then they want to take off any time. Well, when you're farming, you've got to be there when the weather lets you, and when the weather—you've only got a certain length of time to do any kind of job when you're farming, and if you can't get it done in that time, you're going to be whipped before you start. And that's where a guy with no experience—he's going to be whipped before he starts. So just like today, one of the main problems with farming that I see in the whole United States is [that] the average farmer right now is like sixty-two years old. Okay, who's going to be doing all this coming up? And that's going to be in a fairly short period of time. Okay, the new person—you take a new boy out of high school or college right now, and he wants to go into farming. If he hadn't got family or something to help him, he goes up to the banker and says "Hey, I want to borrow half a million dollars to get started." Well, a half million dollars won't even start him on what it would take for him to make it on. He's going to have to have a big enough acreage and everything. All right, now, if hasn't had the background—the knowhow—to farm—know when to do what—he's almost whipped before he starts, and that banker, he's not going to loan that kind of capital to somebody. So these young farmers, if they don't grow up and learn how—the United States is going to be in a heap of trouble.

DM:
It needs to be something passed down from generation to generation it sounds like, so that the next generation can learn as they grow up, and they can assume the equipment that's available and the land that's available.

WDV:
Our government—you're going to have to eliminate estate taxes—all that kind of stuff that tries to do away with what we're talking about. In other words, if you don't have a young boy growing up here—let me use my grandkids right now as an example. When I was eight—well, from the time I was four years old, I was in the field, helping my dad—running a team in front of him on the planter, and I'd be running a stalk cutter or section there with a horse-drawn team back in those days. You had to be able to turn them around and get them on the right row, but basically, you didn't have to just drive them through the field—they'd stay on that row pretty good. But I was out there helping do all that. Well, when my kids come along, I put them out there doing the same thing. All right, now, their kids—we've got Ty, he's fifteen right now, but for the—since he was ten years old, he's been driving a tractor as good as anybody. And the tractors you've got now, with the GPS and all this, it don't take any manual—nothing heavy to do. It's all up here. And these young kids, they can catch on to this computer stuff, and all that, and any piece of equipment that we got our here today, there's all kind of computers involved in it. I mean there's nothing made anymore that [there's] not computer stuff involved—from the guidance systems and—our guidance system was a good teacher on that because my idea was—for the guidance systems on a cotton harvester, you've only got an inch and a quarter to put your stalk through. Well, you've got to be right on the money. Well, I'd tell the boys, "If we can make the guidance system work, well, that'd be nice." Well, it took us fourteen days after we give up on Northman doing what we was trying to tell them to do—took us fourteen days to make this thing work. Well, whenever it got to where that we could go from—

[Phone ringing]

DM:
I'll pause it if you—

Pause in recording

WDV:
So like on the guidance system, when we got that where it would work, it changed from being nice to a necessity. So we had the first three guidance systems running in the world, is what they told us. So anyhow, there's probably a hundred people that come and had to see and ride, see what our deal—and so I was telling Dean and Keith and one of our drivers there, "Y'all keep up with what they say. Write it down so we'll know what the feedback is on all this." And it was kind of funny, about eighty percent of the people, before you'd go even a couple hundred yards, would say "Man, I've got to have one of these." So that type of thing is a pretty good success. But like when you got this type of equipment—like Ty, from the time he was ten years old, he was running the cotton strippers or the tractors, didn't make any difference, and we'd have people call us and say "Y'all got a tractor running without a driver?" because he was so little you

couldn't see him sitting up in the seat. But really, with GPS, that was going on at that time, but everybody was curious to—wanted to know if had one.

DM:
Isn't it just amazing, the changes from the time you started in this until now?

WDV:
Oh, man, it is amazing. But just like these kids right now—even Molly, she's thirteen, and this year, she's drove the stalk cutter, the sandfighter—drove the planter some—and thirteen-year-old girl, well, that's pretty unusual. But, when she grew up around here with it, and she understands, you know, that's a whole world of difference in what kids that don't have that ability to do that. Yet, here we've got a government that's wanting to penalize you for hiring younger kids—they're wanting to even make it illegal—well, how are they ever going to learn anything? You need to be able to hire kids from the time they want to do something to go and pay them according to what it takes to make that work. Anything other than that is ridiculous.

DM:
So what it's going to create is this disconnection between generations that we're talking about.

WDV:
My goodness, as far back as I can remember, it's like you had a job to do at home—cutting wood and carrying wood and milking and doing all that kind of stuff—well, that was a man's job, but that didn't mean a kid can't do it.

DM:
And my generation did it, you know, but the next has been—or at least a lot of us in my generation grew up that way, but since that time, there's a disconnection, it seems like, between us and the next generation.

WDV:
I may be wrong in saying this, but I think a lot of that thinking come from unions trying to make everything be that high, specialized labor—well, everybody can't fit in that category. Then I 'll guarantee you that if I tried to work like a union person, where I can't do anymore than—

DM:
Right, you'd go out of business.

WDV:
I wouldn't—you think I'd have done what I've done? No way.

DM:
Do you have any other thoughts to put on here today?

WDV:
Well, I guess I'm kind of thankful for the country that—well, I'm not kind of thankful, I know, I think, how proud I am to be in a country that started out with all of our forefathers and

everything with their drive to get where we've got to, and then where I was able to pick up and go on. And then all my kids and grandkids do the same.

DM:
And you know, really, to live in a place where you're allowed to think and design and come up and improve, you know, as an individual, or on your own terms—that's really a wonderful thing. That hadn't always been the case.

WDV:
We had a guy come out here, and he got our name from the—some way—come out here, but he was wanting to know the history about all of our equipment and everything, and what part of the government helped me design and build all this—but anyhow, he started with his camera, and I told him, "Now, part of this stuff out here you're not to be making a picture of because it's prototype equipment and you're not" —so then he started taking it anyhow, and I just went over and physically stopped him. And I said "Wait just a minute, I want to understand what you're out here for." He said "Well, I'm trying to get an idea of what parts of the government did you get all your information from to do what you're doing." I said "Well that's the part that you don't understand. The government hadn't been involved in any of my thinking. I didn't go up to the experiment station or somewhere to get all my ideas. My ideas come from right out here on my own, working with what I've got to do to make a crop and make something better, and go from there."

DM:
Well see, that's exactly right. It's a place where you're allowed, as an individual, to do things like this. It's a really great thing.

WDV:
Who would want to be in a country that stopped you from doing something like this? Just like right now, we've got the best cotton harvesting equipment in the world. Where'd it come from? You got people from Australia—big farmers over there—that send a young man out of college over here to spend six weeks with us, wanting to learn what we was doing. Well, that's a pretty good compliment if you stop and think about it. Now, let me tell you about one from South Africa. One morning, Bill Bryant called me and says "We got a guy coming that we want to bring out to your farm after a while, would be okay?" and I said "Sure." Well, it was three or four hours later, here he come and he was from South Africa—white as a white person can be, full-blood Englishman with an English background—his people from England. They'd went to South Africa and had a large farming operation. And here he was, a young man with a farming operation about the same size as ours at that time—about seven thousand acres. All right, he was having so much trouble with his people—four thousand of them—and that's what I literally told him, that it would take four thousand people to do what we're doing with mechanical—when he got here. And he said "You're the guy that I need to talk to. I got four thousand people there right now, and they are giving me trouble that I can't even hardly stand to face—and they're striking and—cotton crops be good. I just bought an airline ticket to Houston, Texas, and got off of the airline and went to the telephone and called John Deere headquarters and told them to send me

somewhere where I can see cotton being mechanical[ly] harvested. I thought they hung up on me for a little while because it took them a good little bit, but anyhow he says 'Call the dealer at Lubbock, Texas, and tell him what you wanted to see and he'll put you in touch.'" So the dealer told him to come to Lubbock and he'd—he brought him out here—well he stayed in town, but he'd come out here—one of the nicest young men you'd ever—spoke perfect English—not like we speak Texan. But I mean he wanted to know everything in detail [about] how we was making everything work and everything. You think about a guy like him, having four thousand people there, just thought that he couldn't handle this anymore, and get on an airliner and go somewhere like that to try to find a mechanical way to do this. And then he said "We live right next to the game preserve" —where their property was—"I want you to come visit us. We've got every kind of game animal that you want to look at, hunt, or do what, but just we'd be glad to have you." Well, we thought that'd be a good opportunity. Well, it wasn't too long after that—that's where they was having all the war down there with the blacks killing the whites and the—man, makes you wonder.

DM:
Oh, so you couldn't go down there.

WDV:
Well, when you think about what a county we're living in—all this, and yet what problems these other countries—yet, they're wanting what we have. But man, it makes you kind of proud of America.

DM:
It sure does. Anything else today that we ought to talk about?

WDV:
I guess that's—if you're satisfied.

DM:
Oh, I am.

End of interview