

Bernard Youngquist

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Interview with Bernard Youngquist

**Interviewed by Professor Clarke A. Chambers
University of Minnesota**

**Interviewed on July 25, 1994
in Falcon Heights, Minnesota**

Bernard Youngquist - BY
Clarke A. Chambers - CAC

CAC: I'm Clarke Chambers and I'm interviewing Bernie Youngquist who, for many years, was with the University of Minnesota at the Crookston Campus. We are recording the interview in his office in his apartment in 1666 Coffman.

Bernie, you were kind to take the time to share for posterity your angle on the history at the University of Minnesota, which is a very complex institution scattered all over the state and you were scattered over the state yourself. Why don't we begin with just a few comments on how you got interested in your field, how then you trained for your field—you came to the university in 1947—what you found when you came, and then we'll be off and running.

BY: Very good, Clarke. The university is a very precious part of my life and when you put in around forty years continuously, it is a very major part of one's life. I was born and raised up in northern Minnesota, the oldest of nine children, on a small little old red clay farm in Pine County.

CAC: Heavens.

BY: In those years, in the 1930s, I wanted to go to school. It was a difficult decision for dad to let me go because in that country, in those years, an extra hand was an important matter in a family; but mother talked dad into letting me go to high school. There were no buses going by; so, I had to find a job working on a farm milking cows, which I fortunately found, and worked for this gentleman for four years while I went to high school at Willow River, Minnesota. It's a rural high school but ran buses out about thirty miles in many directions, an excellent educational system. There was a brand new teacher of vocational agriculture and I interested myself in that matter. He's the person that really whipped this person's mind in terms of going

on beyond high school; so, I began to say to mom, as we'd visit there—I left home, of course, then at fourteen years of age and have been gone since—"I think I'll go to college." She said, "How are you going to do that? We haven't got any money." I said, "I know, Mom, but John Curl tells me, 'You don't really need money because there are helps out there to help you with that part of it.'" You remember, Clarke, [Franklin D.] Roosevelt's NYA [National Youth Administration] Program?

CAC: Oh, you bet.

BY: I was still ill at ease about this whole thing. My brother and I, after I graduated from high school and he had not graduated—he didn't even go—we sneaked off to the CCC [Civilian Conservation Corps] camps the summer of 1934. John Curl heard about that; so, he went to see my folks. If you remember, in the CCC camps, the folks were sent twenty dollars a month. We could keep five but then we got board and room. It was a wonderful experience for me. I learned something about working with people, handling a TD-9 caterpillar, and all that kind of stuff.

CAC: You were just eighteen, seventeen?

BY: Yes, just a youngster. Well, John Curl went to see my folks. "Is it necessary," John put it straight, "for Bernard to be in the CCC's so you folks can live?" My mother quick spoke up—I wasn't there but I know her— . . .

CAC: [laughter]

BY: . . . "No, that's not necessary." "Is it all right if I go get Bernard and get him started in college?" Mom cried. John Curl came there and got me out of the CCC camp, drove me down to the St. Paul campus, got me a job, and set me up.

CAC: God!

BY: I don't know if you know Dr. A. M. Field? He used to be the head of the Department of Agricultural Education, part of the College of Education . . . all set to go. I got a job in the Ag-Engineering Department as a draftsman, working with Loren Nuebauer and H. B. White on the matter of farm structures and things of that nature. So, that's how this person got started.

CAC: That's a story that I hear so often doing these interviews . . . that some teacher along the line really inspired . . .

BY: Ahhh!

CAC: . . . and promoted. Gosh! oh, it's just . . .

BY: And how important, Clarke, those things are because there's no question but what he opened up this person's eyes.

CAC: You bet.

BY: My, what you call, experience work . . . In those years we kind of had to have on the job training even though we were in high school in Vocational Agriculture; so, I set up a system of testing Bill Pemberton's herd for butterfat and set up a system of production records for them. He developed, in four years, one of the top herds in Pine County, a tremendous experience for me. It helped me understand that dad's kind of hand-to-mouth lumberjack farming . . . yes, it served the purpose . . . it kept the family together but dad really wasn't a topnotch farmer. He loved to cut timber, and he loved to trap wolves, and live off the land. He was back to the Native American days and did it very well. That's the beginning.

CAC: It's a good beginning . . . grass roots.

BY: [laughter] Yes, there's no doubt about that.

CAC: You got your bachelor's degree from the St. Paul campus?

BY: From the St. Paul campus of the university here.

CAC: In what year?

BY: I graduated in 1939. I had a major in Agricultural Education but I also had a minor in Animal Science and also in what they called, loosely, Farm Shop or Agricultural Engineering in the less technical sense.

CAC: Now, the St. Paul campus at that time in the 1930s had a heavy practical orientation?

BY: A very practical orientation, down to earth; although, the interesting thing about the curriculum in Agricultural Education is we were very well educated in the sciences, physics . . .

CAC: Basic sciences, sure.

BY: Yes, basic sciences. We went over to the Minneapolis campus. My first class—uffda!—was around 400 students in a chemistry lecture class and with my name beginning with Youngquist, I was way back up in the corner and to whip that . . . Almost a third of the class flunked; they just could not cope with that.

CAC: Sure.

BY: I had a wonderful high school chemistry teacher and it was easy. It was a review of what Bill Emke taught me at the Willow River High School.

CAC: You got your degree in 1939 . . .

BY: In 1939 and, wouldn't you know—I graduated early in June of 1939—by March, I already had a job teaching Vocational Agriculture, opening up a new department at Starbuck, Minnesota, in western Minnesota, almost near the university location there of Morris, Minnesota.

CAC: Oh, yes.

BY: That's where I met my dear wife. In those years, you know what was happening, the war was coming on.

CAC: You bet.

BY: As I think back to those years . . . what I read in the newspapers on matters of that nature, really in the late 1930s, how many of us really knew that there were some real serious matters going on in Europe? I didn't know that. The war broke loose and Bernice and I knew that things were going to be different for us before they settled down. To make a long story short, I had to leave the teaching service in about 1942 and went, from 1942 to January of 1946, in the armed forces.

CAC: Which service were you in?

BY: I was with the air force first in their technical training school, helped them set up some small ones around the country but the draft board wasn't that excited about a young man not going out to fire guns even though I was working in the war effort. I had to be in the service or I would get drafted; so, I filled out an application for a commission in the navy and the ink wasn't even dry before it came back with orders to go to Cornell University . . . 120 day wonder or a command officer. [laughter] I put almost three years at sea, sailed every major ocean on this earth, visited every continent, several parts of some. I was privileged to be on the battleship Missouri when we signed the cease fire orders on Tokyo Bay.

CAC: Oh, my!

BY: I could go for hours on this, Clarke; so, let's go to the next. [laughter]

CAC: All right. We'll come back to the university. The navy is a pretty big institution, too.

BY: Yes.

CAC: The war is over and . . .

BY: The war is over. I navigated the ship I was on back from Shanghai, China—we were there on occupation duty for three months—and came back the great circle route and came into the gates of Long Beach, California. That's where we mustered out. The crew was sent to various parts of the country, depending upon where they lived, to get discharged from the service. I was sent to Chicago. Bernice had been teaching all of the time in Deer Creek Public School, staying with her parents. A little son had been born to us shortly after I left.

CAC: Ohhh.

BY: I hadn't seen him, which was a tremendous experience.

CAC: Oh my.

BY: Then, I didn't really want to go to work yet. Bernice met me at the old Milwaukee Depot downtown Minneapolis as I returned from being mustered out at Chicago. We had a few days together and I dropped in—you know, your favorite haunts attract you—at the St. Paul campus to see old Dr. Field. Wouldn't you know, he had two people in there looking for people power. At that time in our history as you know, it was very difficult for educators and researchers to keep their person power up. There was a man by the name of Ted Fenske from the School of Agriculture and Experiment Station at Morris begging for people. Dr. Field said, "Here's a young man that I know something about and he'll exactly fit what you need." I didn't really want to go to work; so, I shook hands with Dr. Fenske and said, "I really don't want to go to work yet. I want to get reacquainted with my family." But, I went back up home with Bernice—she was staying with her parents at the time—and that phone rang almost every day. He needed help; so, Bernice and I talked about it. What right have we to hold back when maybe we should help? So, I took a three month appointment with the University of Minnesota and it ended up to thirty-eight and one-half years.

CAC: [laughter]

BY: That's where my career began with the university. I started out teaching, teaching Farm Shop and I was also the liaison person between the school and the parents, go out to visit them in the summer time, in charge of the summer project work.

CAC: When we talk about outreach, that's a very personal outreach.

BY: A very personal thing. That was a good thing because I learned more about that school in a shorter time than you can imagine, the problems the students have, and where one could help, and where we as a school were slipping a bit and could improve . . . all of those things could come right back quickly. It was just a tremendous experience. As time went along there, Bernice and I ran one of the dormitories. We had 100 to 120 ninth grade freshman boys.

CAC: Oh my.

BY: I'm sure that I learned a lot more than they did. It was, again, one of those wonderful, wonderful experiences in a lifetime where you have an opportunity to understand what counts in the business of education. We moved along and the GI [Government Issue] bill was very generous, as it was to World War II veterans. Bernice and I said, "We like this place. We like the university." As Bernice put it, "Dad, you've got to have more education if you're going to hang in there." It was very nice to have a mate that would push you along. We went on leave and headed for the St. Paul campus in 1949 and twenty-five months later, I had completed all of the course work of the master's degree and selected a Ph.D. thesis, got the languages out of the way, and went back to Crookston. I had promised to go back at least a year after I finished my grad work. That only lasted until July of 1952 when the citizens in southern Minnesota, through their legislature, established an additional secondary level School of Agriculture under the University of Minnesota located on the Agriculture Experiment Station at Waseca.

CAC: The Southern School of Agriculture?

BY: The Southern School of Agriculture there. The university, I think, made an error but it was one of those honest things that you do. They sent Bernie and Bernice Youngquist down there and out of the middle of an alfalfa field was a swearing contractor coming out of the dirt with an institution, dormitories, shops, classrooms, dining facilities.

CAC: These all had to built from scratch in Waseca?

BY: They built it from scratch.

CAC: There were no existing buildings that you could move into?

BY: No, nothing.

CAC: Just out of a field? All right.

BY: In fact, as a grad student, I worked on the plans considerably; so, I had a chance to have some input. There we were and we had six months, six months, to hire a staff, to get a student body, to buy \$250,000 to \$300,000 worth of equipment. We got her done but . . .

CAC: Moved right along.

BY: . . . it was difficult. It was difficult. Bernice got a break down because dad wasn't around; so it was difficult for the Youngquist family—we came out of it. The school went very, very well. It was a success right off the shot. Bernice and I are both kind of northern Minnesota-ites and in early 1946 . . .

CAC: In 1956, it must have been.

BY: You're right, 1956. Thank you. Early in 1956, the superintendent up at Crookston, at the school and experiment station there, became quite ill and Ted Fenske kind of knew that the task of getting the Waseca thing rolling was a little tough on the Bernie and Bernice family and wondered out loud to us, "Would you be interested in going up to Crookston? You can't really go anyplace but up there because the School of Agriculture is going great. It's at its peak." The Experiment Station had gone down hill not because someone hadn't done their job so much as after the war was over, you just hadn't been able to get the equipment and staffing to meet the standards which agriculture was moving ahead in.

CAC: Yes.

BY: We talked that over and there was a sparkle in Bernice's eye and we said, "Okay, we'll go. It isn't that we don't love Waseca or that it isn't moving but it's well on its way."

CAC: What degrees, what programs were offered in Crookston when you went there in 1956? Was it still a secondary program as well as . . .

BY: Yes, still a secondary program. Maybe we should come back a little bit on my Ph.D. work and studies and then come back to this. Is that all right?

CAC: Fine, sure.

BY: I entered a field under a person by the name of Cliff Archer. I don't know whether you knew Cliff or not, Clarke; but he was just a tremendous individual in the College of Education. He had a sector there called Rural Education. I was one of the fourth or fifth Ph.D. students of his. My major was what you called General Education with a sprinkling of those matters that were specific unto rural areas. In the process then, I picked up about three collateral fields and in addition a minor in Educational Psychology. I had a collateral field in Research Design and Statistical Analysis, those kind of matters. I also had a collateral field in Rural Sociology.

CAC: It was a very general doctoral program you were in?

BY: Yes, a general doctoral program and it fitted almost perfect into the responsibilities up at Crookston where the administrator was responsible for an educational process of the Northwest School of Agriculture. You were also provided responsibility for a group of Ph.D.s who were doing research, agricultural production research, plant breeding research, livestock breeding research, etcetera; so, it was an excellent training for that kind of a responsibility. You spoke about the curriculum; yes, it was a secondary level curriculum. These schools started out at a time in history in this country and in the state of Minnesota when the rural population was very sparse and training beyond the country school was not very available. That was true in many parts of the country. There were once 108 of these regional . . . I hesitate to call them

agricultural schools but kind of vocational schools with a general education but a good smattering of those special understandings and skills that you needed to have to go back farming or homemaking.

CAC: Good enough. The universities played a major role . . . the Land-Grant [unclear].

BY: The Land-Grant universities figured very heavily all across the country. They started in the state of New York and some of those finest . . . If you remember, back in the 1960s, 1950s, 1970s, those technical schools, technical colleges from the old schools of agriculture that started way back about 1880 . . .

CAC: Well, at Waseca and Crookston, you were in a long tradition of university outreach for education of a general sort.

BY: Yes, it started way back about 1885 with the old School of Agriculture, which actually settled in to St. Paul but it was out reaching to these young farm men and women who came here to the campus for six months a year and then went back farming and come back, back; so, they were getting started in their business but they were getting an education. That was the immediate start. Then, our outstate legislators were becoming concerned. They'd like to have one of these regional outstate schools of agriculture, one or more. The first one then started at Crookston. It started with the experiment station. A gentleman—you've heard about this person . . . maybe have met him—by the name of James J. Hill gave nearly 500 acres of land to the University of Minnesota up at Crookston after he'd run his railroads across it a couple of times. [laughter] He said to the university, "Now, I want you to put an experiment station here. This is kind of a low piece of land; it's soggy. I want you to do research as to learn how to farm that soggy sod. Once you have done that, I then want you to set up a school of agriculture [like those] that have started in other parts of the country by Land-Grant universities where you can teach what you have learned." That's what happened then . . .

CAC: That's very foresighted.

BY: . . . in 1905.

CAC: So by 1956, is there a program beyond the secondary level at Crookston?

BY: Actually, Clarke, it started out as a school where youngsters who didn't have a chance to start high school and they were maybe nineteen, twenty years old, some of the twenty-two, twenty-three went to this School of Agriculture—the Aggie School, they called it—and that lasted up until about the middle second decade . . . 1915 or thereabouts. Then, it began to shift towards the secondary level. By the time 1930 rolled around, it was entirely secondary level. But, as you know, vocational agriculture teaching came into the high schools. County agents came out into the counties; so, all of this kind of a thing that was done entirely by the schools of

agriculture and their staffs now was being provided by good high schools and by county agents and their staffs providing some service for mom and dad on the farm.

CAC: By the 1950s, it's gone into post secondary work when you go up there?

BY: Yes, right, it had gone into post secondary work. When I went to Crookston in 1956, it was entirely at the high school level. I had done the research on my Ph.D. thesis by that time. When I look back on it, Clarke, I'm kind of wondering if this young man at the time wasn't a little bit more . . . oh, I can't even think of the word right now . . . maybe dreaming a little bit too much according to what's good scientific fact, if I can put it into that language. [laughter] I could see with the good vo-ag departments, the wonderful training in shop, and in home economics, and those kind of special things in high school . . . I was concerned about these tremendous schools of agriculture that existed at Grand Rapids, at Crookston, at Morris, and Waseca. I reasoned, we'd better take a look at these. Ted Fenske encouraged me. He said, "Bernie, you might work yourself out of a job." He could see this thing happening as I did.

CAC: Sure.

BY: I went at my doctoral thesis and did the research, actually, pretty much while I was on the job at Waseca and also just a bit before. My thesis was that the schools of agriculture had outlived their usefulness . . .

CAC: Ahhh.

BY: . . . and ought to be replaced by some post high school. There it is. It came out in the affirmative strongly. So, you see, I arrived at Crookston knowing that the end of the trail was in sight for the schools of agriculture. Maybe knowing is not the word . . . having good evidence that this was appropriate. I had a very interesting experience with that Ph.D. thesis. We had respectable people on our university staff that really didn't want that young man up at Crookston to publish that thesis—it was about ready to publish when I arrived there—because this was making a change, a major change; but Ted Fenske, who was my chief at the time, said, "Bernie, a Ph.D. thesis is a Ph.D. thesis and a university operates a bit differently. Now, you'll be criticized, and it'll be questioned but I've read it, and I've got no problems with it. Other people have read it and they're excited." Do you remember Stan Wenberg?

CAC: Oh, yes.

BY: Stan Wenberg read it and I'll tell you, that started the ball rolling.

CAC: He was a mover.

BY: He grabbed the ball and he went to the legislature and said, "We've got to do something with these schools of agriculture and we've got to find . . ."

CAC: He was working for James Morrill at the time, right?

BY: He was, yes. That's exactly what happened. It was a tremendous experience.

CAC: You were there to put into place the main thrust of your dissertation?

BY: Yes. Not very many Ph.D. candidates have the opportunity to be part and parcel of the warp and woof of putting into the place of the findings of their Ph.D. thesis.

CAC: That's a great story.

BY: It was a great experience—not without concern though. I was on the committee that brought Stan Sahlstrom to Crookston. At the time, one of the logical things that some personnel in the university thought, particularly in high administrative circles and Board of Regents, Well, Bernie, this was your idea. Grab her and go! I kind of had a sober look on my face and said, "I really don't want to grab her and go. My thesis pointed out the problem very well. I'd like to be part of it but I want to stay with the Experiment Station." I made some promises to some of the constituents of northwestern Minnesota. They thought that maybe a school coming along would completely outshine the station. The station was about twenty years behind time and while we were making good progress, we needed to make more; so, I said, "I'll stay with the station. That's where my love is and my understanding is anyway," and we brought Stan on the scene. We phased the School of Agriculture out in 1968, brought the college on the scene in 1966. We called it a technical institute at the time. I headed the first Division of Agriculture, the Ag curriculum. I told Stan, "I'll do this but I'll just get it rolling until you have a chance to get your feet on the ground but then you'll need to bring on a qualified agricultural educator so I can give my full time to the research station." From now on, we'll talk about research, is that right?

CAC: Okay.

BY: Maybe we should talk about, before we get to that, about another institution, which I inherited going up to the Crookston area called the Red River Valley Winter Shows.

CAC: That's well publicized so I think we're on an interesting topic.

BY: Yes, and it was very much a part of the University of Minnesota. It began in 1910 under C. G. Selvig who was the superintendent then of the school and station. There weren't any county agents at that time. There weren't any vo-ag teachers. There weren't any industrial ag agents working for John Deere. The only industrial agents we had who were interested in the rural scene were the railroad land agents at the time; so, these farmers that were getting rolling, up in the Red River Valley particularly but other parts of the state, too, really didn't have any capability to get help. You did it like your dad did it and that just maybe wasn't good enough.

CAC: And they had a lot of time on their hands in the winter?

BY: And a lot of time on their hands in the winter; so, this person, C. G. Selvig, who was a tremendous educator, said, "We've got to get something rolling." They got together with a few business people in the city of Crookston and in the surrounding counties and said, "Let's see if we can't come up with"—they called it—"a short course, a farm crops short course."

CAC: Ahhh.

BY: In other parts of the state, they were called institutes at that time. Let's run it at a time when the School of Agriculture students aren't there, say in between the fall session and the winter session where we can get mom and dad. He emphasized that. We can get mom and dad off the farm . . .

CAC: And you had dormitory space?

BY: . . . and stay in the dormitory. The agronomist can talk about crops. The livestock man can talk about livestock. The home economics teacher can talk about those kind of things. Well, it was a bingo right off the shot. By that I mean, it was a screaming success. The second year, they had to rent space downtown for people to stay and they brought in thirty some sleeping cars . . .

CAC: [gasp] My heavens!

BY: . . . to sleep people on the railroad sidings for the classes.

CAC: That's a story.

BY: It started out with a bang and, really, it lasted that way for . . . my goodness, I was president of that for twenty-seven years. It built quarters downtown for showing livestock, and for having a crop show, and for the growing allied industry to agriculture of fertilizer, of farm machinery, of credit, whatever.

CAC: So, you're really into agri-business [unclear]?

BY: Yes. They could have their wares there to show to the public.

CAC: It became really a fair in a way?

BY: When I came to Crookston in 1956, the attendance was about 6000 or 7000 people over about a five-day period. The board was unhappy with the quarters downtown. They'd been there since World War I. The people downtown were concerned about parking and all that kind of thing during the exposition. So, we bought twenty acres of land from the University of

Minnesota right next to the city of Crookston. Bernie Youngquist being superintendent of the station and president of the show . . . it was kind of a difficult position to be in . . .

CAC: Excuse me, I have to interrupt. This program then is autonomous. It's free-standing even though it's associated with the Crookston . . .

BY: It's autonomous and free-standing, you are absolutely right.

CAC: But it wouldn't go anywhere if the university hadn't been there to do all the work?

BY: It would not have gone to first base.

CAC: Yes. So, you had to buy land from the university when the university is really doing it?

BY: That's exactly right. The university sold it even though it was land right next to the city of Crookston for the going rate of farm land at the time, providing if the show ever stopped its existence, the university would have the first chance to buy back what they sold. [laughter]

CAC: All right. Fair enough.

BY: Those are interesting kinds of things . . .

CAC: Under your direction there, it increased enormously, at least by what the archives tell me.

BY: Yes, it grew tremendously. We built new facilities for it. The big show building was bigger than a football field. By the time that I left, there were about 38,000 people who would go through that show building in ten days.

CAC: In ten days . . . so you went up from four or five days to ten days?

BY: To ten days.

CAC: That's pretty concentrated. They were short courses as well as . . .

BY: Short courses and seminars, educational meetings. The politicians really loved to come there because they could shake hands all day long. [laughter] We tended to stay away from purely political . . .

CAC: [unclear].

BY: Quite so. We had the presidents of the university. We had deans and research professors who carried on work in animal science and all of these kinds of things.

CAC: It kind of sounds like a mixture of county fair on a big scale and chautauqua because you're throwing in lectures and seminars.

BY: Absolutely . . . chautauqua, music. You see, the weather in northwestern Minnesota . . . the winters get pretty long. This is a ten-day break. Now, having said that, that went great, great guns and up until the time I retired, it was right at its peak and continued that way for several years but I'd report that right now, at this time in history, the Red River Valley Winter Shows is going through quite another adjustment because all of these things are changing, television, agricultural extension work, the new four-year college coming on the scene at Crookston . . . all of these give the sixteen county board another challenge.

CAC: For thirty or forty years, it served a very felt need.

BY: Oh, a very felt need and it's still serving a need, which won't be the same.

CAC: Things change. That's a remarkable story, again, illustrating the flexibility of a large institution and its adapting to new conditions and serving the needs of a larger community because these weren't regular students.

BY: These were farm . . .

CAC: How large a radius do you suppose out of Crookston did you get the farmers?

BY: In sixteen counties . . .

CAC: So, it's the whole northwest.

BY: . . . all the way from south of Moorhead to the border, east to Lake of the Woods County, Beltrami County, Becker County; so, it was quite an institution.

CAC: When most people think of the University of Minnesota, you know, it's the Twin Cities kind of focus that citizens generally have and those of us who had our life here . . . That's a wonderful illustration of the outreach of a big institution.

BY: Oh, yes, and an outreach to where people are, and as to what they were doing, and where they needed help in a way that would fit their needs. The early growth and development of farming in particularly northwestern Minnesota and that was the case in other parts of it, too, but particularly there where you had such wider open spaces, and larger farms, and much more distance in between them than in other parts of the state.

CAC: Just out of idle curiosity, did my old friend Hiram Drache ever participate in these matters?

BY: Oh, yes, Hiram Drache never missed one in his years and he spoke at several of the seminars.

CAC: He was Mr. Agricultural History to that area, wasn't he?

BY: Yes, and highly respected without a doubt and I call him a very good friend [unclear].

CAC: He was at Concordia College, a private college in Moorhead?

BY: Yes. I think he may be retired now but his heart is still there.

CAC: Yes. In the meantime, your major appointment is still with the Experiment Station?

BY: Yes, very definitely with the Experiment Station and the challenge was to continue bringing the Experiment Station up to the challenge of modern agriculture.

CAC: How large a staff did you have, Bernie?

BY: The staff were five Ph.D.s, a couple of master's, and quite a number of technicians.

CAC: Support staff.

BY: Actually in the summertime when we were at the peak of the effort when I was there, I suppose we went on up to sixty-eight to seventy people on the staff.

CAC: What crops did you specialize in then, sugar beets . . . sheep?

BY: The crops we specialized in were wheat, barley, oats, and some of the speciality crops. We actually gave birth through my time there—this took place in the late 1950s, 1960s, 1970s—to the sunflower crop.

CAC: Ah, which is a booming thing this year.

BY: It doesn't mean that it couldn't have happened otherwise; I think it would have but it would have probably happened at a little later date. When we first started doing research with the breeding of the sunflower crop, which was the late 1950s . . .

[End of Tape 1, Side 1]

[Tape 1, Side 2]

BY: . . . I retired in 1983, there were about 3 million acres just in a relatively short period of time . . .

CAC: Now, forgive me for interrupting but not sugar beets? I thought there was good sugar beet country around Crookston, too.

BY: Oh, yes. Could I say a little bit more about sunflowers?

CAC: Oh, yes, you bet.

BY: We'll come back to the sugar beets. It was a very interesting development and, again, whenever you make changes—you have been in the university long enough, Clarke, to know that—sometimes if one is ambitious or you're in there pushing for change, you don't always kind of get the God bless you, go full steam ahead kind of a signal. I was having considerable difficulty with mounting the kind of research effort that Bob Robinson, who lives at 1666 here, was doing some pioneer work in. There was a new director of research, a gentleman by the name of Bill Hueg, who came on the scene . . .

CAC: At St. Paul?

BY: Yes, at St. Paul here . . . and to make a long story short, Bill said, "I think you people at Crookston are right and we're dragging out feet here at St. Paul. I don't know where I'm going to get the money but we've got to get that thing rolling." At the time, I was able to find some funding at the station to partially put on a full time agronomist; so, in consultation with my colleagues here at the St. Paul campus in the Department of Agronomy and with Bill Hueg in the Agricultural Experiment Station, we hired a plant breeder. Sunflowers is it. You've got to take care of other agronomic concerns that we have going on at the station but your big job is to get that sunflower program rolling. His name was Dr. Freeman Johnson. Well, we got her rolling and we got the [unclear] collection of genetic material in on the place and got underway.

CAC: Just a minute. I think the future historian would want to know, as I do now, what the relationship administratively was with Crookston and the St. Paul campus. You speak of Bill Hueg. Does the campus report to the St. Paul Institute?

BY: Yes, the agricultural research effort reported to the director of the Experiment Station, Bill Hueg.

CAC: In St. Paul?

BY: In St. Paul. He worked under the dean of the College of Agriculture.

CAC: He himself was on the way up to different higher positions?

BY: Yes, absolutely.

CAC: So, you reported [unclear]?

BY: I reported to the St. Paul campus.

CAC: And eventually the St. Paul campus reports to the vice-president for Academic Affairs . . . ?

BY: Absolutely.

CAC: . . . but you never did directly? It all comes through St. Paul?

BY: It all came through St. Paul. I didn't have to get beyond St. Paul.

CAC: Now, Sahlstrom reported to whom?

BY: Sahlstrom reported, at the outset, to the—I think he became vice-president then . . . not at first—dean of the College of Agriculture, Forestry, and Home Economics, at the time.

CAC: So, Sahlstrom reports to St. Paul, too?

BY: Yes, he reported to St. Paul, too, but I reported directly to the director of agriculture research.

CAC: Yes. See, these are things that everybody knows but historians . . . people in the future don't know those.

BY: That's a very good point. We moved ahead strongly in the sunflower research and Freeman Johnson was a tremendous researcher, a tremendous organizer of a highly detailed program. A large corporation by the name of Cargill . . .

CAC: I've heard of them.

BY: . . . was also becoming interested in sunflowers at the time and was doing some of their own research work and they were keeping a close eye on Freeman Johnson. I attended the second International Sunflower Conference at Morden, Manitoba, and there I met the three top sunflower researchers in the world: Madame Pustivoight, Professor Panchecko, and Professor Susseloff from the Krasnodar Experiment Station in the Soviet Union. I was impressed! I was a young, not knowing very much, administrator in agricultural research in the USA and, after that conference, I realized what little we knew about sunflowers on the North American continent. [laughter]

CAC: The Russians worked a similar kind of country, of course . . . I mean, climate and soil?

BY: Yes. The interesting thing is the wild sunflower was originally a North American plant. The Spaniards took it back to Spain. It went from there to Yugoslavia, and some of these other

countries, and eventually Russia. But the Russian peasants made an oil crop out of it. We had, I suppose, maybe 200,000 acres of sunflowers at the time of that conference in this country and in Russia, they had 5 million hectares of the crop. The soybean is our oil crop in the USA, on the North American continent. The sunflower became it many, many years earlier. I was impressed and this young brash professor without knowing what he was getting into really but having a sense that this was needed, invited the third International Conference to come two years hence, after the one at Morden, to the University of Minnesota. I didn't really succeed in getting anybody interested in bringing it to the St. Paul campus; so, we brought it to the Northwest Experiment Station. That took place in 1968. We had fourteen nations represented, twenty-one states, and 121 research people working in the sunflower industry and reporting.

CAC: God!

BY: Again, the three leading people in the world were there from the Soviet Union. To make a long story short, Cargill hired Freeman Johnson right away from Bernie Youngquist—they could pay him twice as much as the university could—but I consider that a compliment.

CAC: Sure.

BY: We hired another plant breeder to take it at least one more step along the road, and he took it for four years, and another sunflower company, Dahlgrens Incorporated, hired him. Bill Hueg was still director at that time, of research. I got together with Bill Hueg and with Herb Johnson from Agronomy and said, "I'm wondering if we haven't taken this far enough now. We've got some good germ plasm going. We have interest in providing some USDA [United States Department of Agriculture] money for a sunflower breeder at NDSU [North Dakota State University]. Maybe, we should transfer, if they're willing, all of this genetic material to a full time breeding program so the Northwest Experiment Station can get back to attending to the other agronomic concerns, which we haven't been pushing quite as hard as we would like to." That's what happened then four years later.

CAC: So, that went to North Dakota State University?

BY: It went to North Dakota State University.

CAC: What was the exchange for this? What did you get in return—other than goodwill?

BY: Other than goodwill . . . the thing that I'd like to say that the university got in return . . . is that the program well started. It was well respected. We did what was needed by the farmer, what was needed by industry and had gotten to the point where it was beyond what a branch experiment station should be handling.

CAC: I see.

BY: It needed to get into an academic community where you had direct access to those who do entomology research, disease research, the fineries of production research.

CAC: The genetic stock was an enormous . . .

BY: Oh, yes, and that was a godsend. We had brought it along. We had all of the major stuff from Russia; so, it was good.

CAC: Right.

BY: In addition, Cargill and Dahlgrens were both able to have direct access to that material to get into their breeding program; so, it gave a modern high-speed push to what would have taken maybe twenty years if . . .

CAC: This means that Crookston dropped that program entirely then?

BY: No, we didn't. We kept on with what we called production research, fertilizer research, matters of that nature that fitted our part of the agricultural research work. Robbie, Dr. Robinson, who lives here at 1666, continued his work on it and his work actually increased.

CAC: He was doing his work in St. Paul?

BY: He came out of St. Paul. He was located on the Agronomy staff but much of his research work went on at the branch stations: Crookston, Grand Rapids, Waseca, Morris.

CAC: I see.

BY: He was very successful in setting up such productive working relationships and he was a pleasure to work with. That's the story on sunflowers.

CAC: It's an engaging story.

BY: It was a wonderful experience to be part of that.

CAC: I'm going to interrupt just a minute.

BY: Yes.

CAC: It's that kind of a story that largely goes unrecorded in formal documents.

BY: Yes.

CAC: I'm just saying that it justifies this kind of conversation that we're having here.

BY: Yes, that's true. Here's the . . .

CAC: There you are . . . "Sunflower . . ." Great! Yes. So, there are documents but you wouldn't know how to get there.

BY: That's exactly right. It doesn't do it in quite the manner that you're recording here. I compliment you on taking time in your retirement years to do this.

CAC: I'm having a good time. Let's come back to Crookston now.

BY: Yes, let's come back to Crookston. How about sugar beets for bit?

CAC: All right. It's popularly thought that that's sheep and sugar beets that's mostly . . . and small grains.

BY: And small grains, yes. There are some what you call hay crops and there are other developments there. We can cover them later. Let's hit sugar beets. Sugar beets was a real interesting thing to me as I came on the scene. One of the interesting things that happened, Clarke . . . A superintendent of an experiment station is a qualified researcher and professor in the University of Minnesota with a speciality related to agriculture in some way or another and it's awfully easy for farmers to kind of look askance at those kind of people. You have to establish a working relationship with them as fast as possible. I suppose I had been on the job three or four days, five or six days maybe, but within the first ten days anyway, when four farmers walk in and here was a peach-fuzzed scared, about a forty-year old administrator with a major responsibility in a rather substantial agricultural area of the state of Minnesota. They said—they were very formal—"Dr. Youngquist . . . "

CAC: [laughter]

BY: " . . . the sugar beet industry needs help. There are some stockholders in the eastern part of the country that own the company and aren't very much interested in the kind of research that we need out on the farm and they aren't necessarily interested in some of their management policies, which might be better for the production of greater sugar producing beets and also improving the manufacturing process of producing sugar. Would you be interested in helping with the research and growing beets on the farm even though the Crystal Sugar Company puts kind of thumbs down on any kind of interference from the outside? We don't think they can stop you from you doing it." "No," I said, "they can't stop us." [laughter] I said, "I don't know the bottom end from the top end of a sugar beet, fellows, and you've got to help; so, let's set up a little informal task force here and you help me understand what's needed." One of them said, "You've got a man here by the name of Olaf Soine"—that's Doris Soine's husband . . . the one that has Alzheimers. "We like him. We think he's a farmer's researcher. He talks the farmer's language and we'd like to have him be on it." I said, "He's on my staff now and he'd be on there

whether you asked him to be or not because he's the person that's going to have to carry the first load here." To make a long story short, we got rolling.

They also said, "We understand you're kind of an organizer. Would you help us with our floundering Sugar Beet Growers Association?" I said, "I'll do what I can. I'll have to come to some of your meetings and hear what you've got to say and about what you're doing." I was able to help them considerably as they rolled along. They made the suggestion, "Bernie, you're going to need some money and we don't think you're going to get it out of the legislature as fast as we want you to have it because some of these problems in growing sugar beets desperately need technical study and findings that are dependable so you can recommend them for our use in growing sugar beets." They organized themselves. They taxed themselves so much a ton, which was paid to the association and then we'd go to the association for backup money for research. We started almost immediately. Olaf Soine got \$6,000 the first year and that was in 1959, the first year we raised beets. They also said this, "We kind of think that if you could manage it—if you haven't got the personnel, we'll provide money for personnel—we think that you should grow some sugar beets on the station so the agronomist has a first-hand, right next to his research plots, look at the problem of growing a sugar beet from seed to getting it to the factory. That kicked us off. About that time, we had a campaign on to buy the land for the Red River Valley Winter Shows, built the new building, and we set up one of the seminars for sugar beet growers. In those years, only one or two county agents dared to teach anything about growing sugar beets because the American Crystal Sugar Company wanted their own field men to control that knowledge thing 100 percent. There were some reasons for the company doing that but they weren't the right reasons. [laughter] We rolled along with this group of people and set up a seminar to take place at Winter Shows time. The first seminar was controlling nitrogen fertilizer in the production of sugar beets. Using nitrogen is a very critical matter in the production of sugar beets. If you put it on at the wrong time, or put too much on, you inhibit the process of getting sugar out of the beet; so, it has to be very closely controlled. Over 600 beet growers showed up, the largest kind of county agent meeting, or that kind of a meeting, ever held in northwestern Minnesota. A need? Yes, a need. That's where the Sugar Beet Grower Institute began. I wrote this, after I retired, which was a history of the institute. Now, it's a four-day seminar for the sugar beet industry where the allied industry brings in all of their services to sugar beet growers, where you have technical education and discussion, and because the sugar beet industry is also connected to the political process in Washington, D.C., there was a chance to develop working relationships with politicians in positions of leadership. So, that went on and developed into a yearly affair . . . still going on. They had the institute at the Dome this year in Fargo. It will be coming back to Crookston next year to the Winter Shows building.

CAC: I'm just thumbing through this report from 1991. I'm a lay historian. I started out as an agricultural historian . . . you probably didn't know that. At California, that was my dissertation.

BY: They're available.

CAC: That's a highly technical account that historians would be tempted to skip over because it's too technical and what you're adding is the political and social dimension here, where that comes from and what it meant to the economy and to the individual farmer.

BY: Yes. In the back part of it, you'll find a little bit of the other that you're mentioning.

CAC: But here's the university again responding to the agricultural needs of [unclear].

BY: Absolutely, responding to the needs, not through the usual professorial lecture, seminar, thing, in some hall or another in some city but in a way that those who needed the information can understand it. The industry is more than just growing sugar beets; it's processing sugar beets. It's the allied industry that provides the many services that the growers need. It's an industrial institute . . . Sugar Beet Institute, yes.

CAC: I'm guessing that the persons on staff for an experiment station over the last fifty years were persons much like yourself; that is, you come out of farming. You know . . . you're [unclear] farmer, [unclear] family and you know these folks. You have to be a highly skilled research scholar but you have to be able to talk the language of the farmers who are doing it.

BY: You have to get it into their language . . . first understand their language and then think through your findings and your . . .

CAC: You have to be acceptable to them.

BY: Absolutely. They have to have confidence, and trust, and faith. [laughter]

CAC: Acceptable and accessible.

BY: Ahhh! and that accessible thing becomes a problem. Once there were problems out in the beet field, that telephone would ring right off the wall. We just had to put personnel on, Olaf Soine the earliest, and then the other agronomists and, finally, we hired a full time sugar beet agronomist, the current superintendent of the Experiment Station, Dr. Larry Smith. The head of the Department of Agronomy, and Bernie Youngquist, and the director of the Experiment Station, Bill Hueg, hired him. We didn't have to go quite through the process we've got to go through today to hire personnel. It's a good process but in those days, we didn't have to scratch quite so deep. We brought Larry on the scene and he's done a tremendous job. It's a story of the university responding to a need out in the countryside. It isn't known in the urban media. It isn't known even in most parts of the university but it's a very, very important educational and research response to an industry that is, I suppose, about a \$2 billion industry.

CAC: In the meantime, Bernie, you've got regular students at Crookston.

BY: Yes.

CAC: Why don't you say a bit about that now? What kind of students are they? Where do they come from? What kind of courses did they take? We're talking now the 1960s, 1970s, 1980s.

BY: We're headed into the college scene. In 1966, we brought in the first students and these were high school grads coming from the region, in fact, all over the state of Minnesota and North Dakota. They came in there for a two-year college level, somewhat vocationally influenced, curriculum whereby they would graduate and go out into mid management, early management, early service professions or service work in the allied industry for agriculture. Some went directly back farming. Some went into business and industry in accounting.

CAC: What would the size of the student body be in the 1970s and 1980s?

BY: The initial student body was—I just have to kind of guess—. . .

CAC: Approximate, I mean.

BY: . . . in the neighborhood of around 100 students. Currently we're in the neighborhood of 1000, 1100 students.

CAC: How many of these students originally were women? What percentage?

BY: At the outset, it was probably—I'm just kind of giving you a general picture—. . .

CAC: That's fine.

BY: . . . a third, thereabouts . . . a quarter or a third.

CAC: That high? What were the women studying then?

BY: Some of them were studying technical ag. But there was a heavy curriculum in accounting, secretarial, legal secretarial, and things of that nature; so, that attracted the . . .

CAC: Does the proportion of women increase during the period then?

BY: That's increased and I don't know what it is today.

CAC: When you left it was . . . ?

BY: When I left it was approaching fifty-fifty. I don't know what it is today.

CAC: Some of them were being trained in basic science, genetics and . . . ?

BY: Oh, yes, yes.

CAC: How much liberal arts, so to speak, did they have. They had basic sciences. They had history, economics, [unclear]?

BY: Yes, very definitely. In fact, that was one of the strengths of, what we called it at the time, the technical institute. They got their technical training but in addition a strong sector of liberal arts, math, and science, and economics, and sociology, and so on.

CAC: Okay, good.

BY: There was also even a curriculum emphasis where you graduated and you were almost all liberal arts; and that way, you transferred on or got a job where the person that hired you would say, "Sounds pretty good. Let's go to work." [laughter]

CAC: I'm guessing that an increasing—just a guess; so, I'm checking with you—proportion went into Agri-Business rather than back into farming?

BY: Oh, yes. At first there were a fair number but the number going back into farming was always rather limited, primarily because there aren't that many farmers.

CAC: Of course.

BY: The opportunity had to be there.

CAC: A farmer farming beets, for example . . . what acres would be normal for northwestern Minnesota?

BY: All the way from a couple of thousand to ten, twelve thousand.

CAC: That high? Okay. If they were farming small grain, it might be smaller?

BY: No, not necessarily. The farms in northwestern Minnesota—when you talk about the sugar beet, sunflower, small grain, potato industry . . . we haven't talked about potatoes— . . . [laughter]

CAC: We can't cover every crop but . . .

BY: . . . the farms run largely the same. You've got more than one crop. You don't just grow sugar beets.

CAC: Yes, yes.

BY: You have one crop one year . . . another crop another year . . . another crop another year. You have a livestock kind of a system for disease.

CAC: As an outsider, I always considered there were more sheep than there were dairy or beef cattle in that country. Is that . . . ?

BY: Over in the eastern part of that country, yes. Jim Hill, when he gave the land to the university way back in the early 1890s, his fond dream and hope was that we could have what you call generalized farming in the [Red River] Valley where you would have livestock and crops. He was a great pusher on livestock. But where you have such wonderful land as you have up there, where you have land that's amenable to farming with large machinery, mechanized operations, you're going to have more crop farming.

CAC: The economic . . .

BY: Roughly around 75 to 80 percent of the income is cash crops in the Valley, the rest others, mostly livestock and poultry; whereas, in the state it's almost the opposite. It's roughly 60 percent livestock and the other crops.

CAC: If the typical student was going on, off the farm and on to something else associated with agriculture, what proportion of them came with a farming experience?

BY: At the outset, it was largely a farming experience that came to the college. Now, it's across the board.

CAC: It changed in the time you were there, the 1970s and 1980s?

BY: Yes.

CAC: So, they would come from Moorhead and Crookston?

BY: All over the place.

CAC: But from small towns and larger towns?

BY: Yes. It has a relatively large—I couldn't tell you how much at this time—rural segment if you put the towns, say, of 10,000 and below, plus the people who live out in the rural areas . . . it's a relatively large rural segment as a small college goes.

CAC: Your political connections at Crookston . . . It's not heavily populated. The population is scattered so therefore the politicians wouldn't have a great deal of clout—I'm speculating again—in the legislature and, yet, Crookston did very well politically?

BY: Yes, very well politically. Interestingly enough, they had the kind of people in the legislature who picked up tenure because of where they lived and when you've got a good person . . .

CAC: You reelect them.

BY: . . . they kept them. Really, it was political clout that closed the schools of agriculture and brought post high school on the scene at Morris, at Crookston, at Waseca, and at Grand Rapids. Now, at Grand Rapids, it's a little different tune there. Remember, I said something about this Ph.D. thesis. That Ph.D. thesis actually resulted in four new colleges coming on the scene for the university on University of Minnesota property: Grand Rapids, Crookston, Morris, and Waseca. The thesis kind of pointed out that it was appropriate that some post high school training should take place. At Grand Rapids, the university didn't have something to kind of plug right in there; so what happened? The community college needed a campus. The university, the superintendent of the old school there and the experiment station said, "We've got some buildings. Can you use these?" I said, "I can't give you permission but I'll send the word up to the Board of Regents." To make a long story short, word came back, "That's a good idea." At the campus, they've put buildings on it now in addition. It's a lovely location for a community college; so, there again the university has reached out to a need, to a neighbor, to a higher education institution.

CAC: I'm just guessing—I do a lot of guessing in interviewing—that what was going on at Waseca was not dissimilar. I mean, it was a relationship with Agri-Business, and the farmers, and so forth?

BY: Yes.

CAC: What happened? Why would Waseca close and Crookston expand? Because recently, it was a four-year program, established, and Waseca has folded.

BY: Yes, that's a very good question. At this time in history—when I say this time, I think back to the years when Waseca was going well and serving a very, very good purpose, and in this person's opinion, I think it could still be serving that and still have a population that wouldn't be much different than it was then or maybe even a few more students—it was, however, a rather expensive kind of education. The number of laboratories, the number of experiences that they wanted these young folks to have by the time they graduated are particularly expensive. That was a real problem for the university and I can understand those kinds of problems for administrators, having been one. [laughter]

CAC: But the expense arose from decisions made by educators to invest in that kind of expensive education.

BY: Yes, yes, that's right.

CAC: All right.

BY: You're absolutely right and it's a little hard for me to understand why they couldn't have bit the bullet on it, to do what they could to maintain it. There are those who think that the university can't be everything to everybody and that's well taken. I, as a retired person having had all my experience out there in what you call the hinterlands of the university, can understand why it was a very difficult thing for the Board of Regents and the top level administrators to meet. It's over the dam now. It could be going yet.

CAC: But theoretically, Waseca and Crookston were on parity? They were an equal mission?

BY: They were an equal mission in a different part of the state, yes, and tending to add emphasis to a . . . For instance, they didn't necessarily both have to be real strong in, say, equine education and training. One could handle that. They were doing reasonably well as they were shaking down, as to similar institutions, in their service to the state. The picture up in the Red River Basin, as I call it, the Red River Valley, Crookston, in my judgment, there we find the kind of a staff that was looking beyond the two-year service thing. They were looking to the point where even in four-year education with appropriate liberal arts and general education, there was a technical dimension that is kind of essential and important to a higher education institution that is located in such a highly rural area.

CAC: Some might guess, in addition, that Mr. Sahlstrom was on the Board of Regents . . .

BY: Yes.

CAC: . . . that this might have played some small part in keeping Crookston and sinking Waseca?

BY: I'm sure that he was able to communicate the needs, the developing scene, a little more sharply to the minds around the regents' table—it's just not regents there, as you know—and to others that need to understand it. In addition, these kinds of things also have . . . I go back to the years that I was personally at Crookston—I did say something previously about the kind of people we had in the legislature—when Stan Wenberg was able to move the School of Agriculture to post high school work, the chairman of the House Finance Committee and the chairman of the Senate Finance Committee were both from the Red River Valley and highly respected: Dick Fitzsimmons and Don Sinclair. I don't think you'll find any more people highly respected by all their colleagues, urban and rural, in the history of the legislature—and one Mr. Wenberg understood that. [laughter]

CAC: [laughter]

BY: He understood the opportunity and made great strides. The four-year college at Crookston . . . here's Stan Sahlstrom in places of leadership, the leader in the Senate represents the Crookston area. Well, those are all convenient ingredients to the process of such a thing taking place.

CAC: But Crookston was doing its job well without that [unclear]?

BY: Crookston was doing its job well and without that and without the foresight, without the kind of taking a good strong look at what some of the opportunities are down the road . . . For instance, the chancellor there . . . one of his first moves was to get a lap computer on every student's lap.

CAC: Heavens!

BY: One of the first, if not the first in the country . . . those kinds of moves . . . gutsy, you might say, but having considerable technical good sense in the time that we're living.

CAC: You bet.

BY: I don't know where this leaves us right now, Clarke.

CAC: Do we have items on the agenda further? I've covered many of my items and then a thousand more. Of course, you opened up all kinds of possibilities. It's an engaging story.

BY: Let me take a peek here. We might talk about the research effort after the college came on the scene, the agricultural research effort at the station. I made some promises to the farmers that, yes, we need this technical college. We need that but we also need to keep the research effort going and I promised to stay with that because I enjoyed it, number one, and number two, I had some experience there, and number three is that I wanted them to have confidence that it wasn't going to go down the drain with the college and the strong leadership they had. They had tremendously strong leadership to bring it in, Stan Sahlstrom and others. You've got to be on your toes if you're going to keep up with those kinds of gentleman. It's challenging and that's good. I think that's good for any institution. We went back into the laboratories and took a good look. We helped the college get the curriculum in technical agriculture going once they had their own staff largely on the scene. We, then, indicated to the head of the college, Stan Sahlstrom, that for about four or five years, we were going to limit ourselves to teaching one technical course in agriculture by the research staff a year. We needed that time to get ourself reharnessed into the . . .

[End of Tape 1, Side 2]

[Tape 2, Side 1]

CAC: . . . moving ahead toward a resolution on the Crookston campus.

BY: As I have indicated previously, when the technical college opened its doors in 1968, Stan Sahlstrom, the chancellor at that time, provost as they called him, asked me to put together the first agricultural curriculum for the two-year technical institute. Myself and my research staff

put that together with the understanding that we'd like to be relieved in a year or two, at the most, so we could get on with the agricultural research effort at the station. There were some things badly needing doing which, anyone could understand, had been let slide in the tremendous effort to get the new college rolling and it was not easy to phase out the old School of Agriculture. There were those of us . . . we loved those schools. We had great respect for what they could do in teaching not only technical matters but what they taught in learning how to live.

Let's go on to agricultural research at the Northwest Station after we were relieved of our major educational launching duties in the college. I'll just slip way back here now to about 1895. When Jim Hill gave that land, it was a soggy thing and he said, "The first research I would like to see done and I hear farmers saying they'd like to see done, is How do you really manage this flat soggy land so that it can consistently raise crops?" So, the first piece of research was drainage research. Some of the major principles that were uncovered at that time hold today. It took them about ten years to kind of get that all run through the hoop.

CAC: Could you say simply, in two or three minutes, what the process was? What did they get onto?

BY: Okay, simply. It's relatively flat land. It slants toward the Red River of the north at about one foot per mile . . . average. [laughter]

CAC: That's not much of a grade.

BY: Not much of a grade but that's average, you understand; in places, it's more and places, it's less. You had to find ways in which the excess water could head toward the river and also to retain that which you needed to retain for the crops. Your system of managing the land, and cropping it, and so on was such that you maximized the soil's capability to retain moisture as long as possible but when you got too much of it, you tried to put into play some structural assistance to get that water flowing to where it needed to flow. Now, that's got problems and it took not just a few years to solve those problems. We were still working on those problems when Bernie Youngquist came to the Valley in 1956.

CAC: Particularly because if you do it for one plot, one farm . . . drainage has to be for an enormously large area [unclear] coordinate?

BY: It's a neighborly effort. One of the community, regional-wide relationship matters that I put a lot of time on and still do consulting work on is watershed management work. How do you manage the water resource in an entire watershed? It's a tremendously interesting kind of thing. So, the earliest research was done at the University of Minnesota at Northwest Experiment Station.

CAC: You speak of the Red River of the north, which indeed does flow north, which none of our rivers does.

BY: It's one of the very few in the world that flow north at that latitude.

CAC: Right. I'm put in mind—the students of the future will have to forgive me—that Burton K. Wheeler, who is later a distinguished, long term senator from Montana and was a lawyer . . .

BY: Ah! I've heard the name.

CAC: . . . stopped off in Fargo/Moorhead for a year or two and tried to get established. Then, he moved to Montana and when he left he said, "There's no place for me. I can't stay anywhere where the rivers run north and the Irish vote Republican."

BY: [laughter] Oh, my! Oh, my!

CAC: [laughter] That was true. That's pretty good Republican country out there, too, right?

BY: Yes, yes, I should say; although, it's been swinging in the last decades but there are some hardcore ones. Let's spend a little time here, as we bring this to a close, on the research effort, particularly after the college came on the scene. We spent about a half a dozen years doing two or three things, as they come to mind here. First of all, we needed to strengthen our ties with the researchers at the St. Paul campus and with the departments at the St. Paul campus because modern production research, breeding research, out in the hinterlands of the state of Minnesota beyond the St. Paul campus here, have got to be up to snuff. They've got to be up-to-date. They've got to have the most modern kind of thinking . . . the computer came into the picture . . . the modelling of human ideas to the research effort in testing it out and all that kind of a thing. We spent time on that even to the point of our Ph.D. researchers heading back to the campus for a quarter or so with the departments teaching and sharing. It strengthened the teamwork, which was needed. Then, we had to find more land because you were able to carry a greater number of plots. Sometimes, one researcher would have 40,000 to 50,000 separate entries out in the plots. When you've got, including the researchers here from the St. Paul campus plus those out at the station, them all together, you've got that multiplied a bit. [laughter] So, you needed more land. The land that was given by our dear benefactor, J. J. Hill, wasn't the best piece of land and we needed additional land that was representative of more of the soils in the Red River Valley. So, again, the superintendent of an experiment station or the agronomist doesn't decide one day he's got to have more land and next week get it, particularly in an institution like a university. You've got the Board of Regents. You've got the legislature. You've got the works. However, we had a man who was treasurer of the university at that time, Mr. [Bill] Middlebrook. You well may remember him?

CAC: Indeed, I do. We lived in his house.

BY: Is that right? He was a tremendous individual, had such a sense of being able to manage matters within the confines of a public institution in relationship to the citizenry of the body

politic of the state. The Northwest Experiment Station was trying to interest a farmer who was retired. I had spoken to him over a period of two, three years. It was a beautiful piece of land for the university and he's located next door. Well, he just wasn't responding and that's understandable but a very good friend of the university. Another piece of land came up for sale, not as good, but to make a long story short, we made an initial offer on it. The day after he made the initial offer in walks our friend; he's ready to sell. [laughter] When the university starts making initial offers, that's not a private party doing that. You've got a relationship so that placed me in a particularly difficult position. He made a counter offer then which gave us a chance to turn it down. We did that. You've got to have money. We went to our friend. By that time our beet research work was going. We had commercial beets on the place; so, we went to the beet growers and explained our problem. The president of the association said, "If you had 100 acres of additional beets, could you pay that thing off?" Of course, he already knew we could. [laughter] I said, "Yes, we could pay that off and do a few other things." He said, "We'll guarantee it. If you go to the university and get permission to buy that on a contract for deed, we'll take care of that in the first five years and if there's a balloon payment, we'll handle that." So, I went to Dr. Fenske, who was my boss at the time. He said, "You've got to talk to Middlebrook." He called Middlebrook on the phone. Evidently, he gave me a pretty good send-off because I walked in there and he said, "Young man, I hear you want to buy a farm." [laughter] I said, "That sounds a little bit brash. The university needs more land if we're going to take care of our commitments." To make a long story short, that's the way it went. Here again is an example of how an institution like a university can sometimes do things but it takes the cooperation of the body politic and if there's a trusting relationship . . .

CAC: And a few well-placed people?

BY: Yes, a few well-placed people and if the body politic and the university trust each other . . .

CAC: That's important.

BY: . . . and the goal is appropriate, we go. We paid that thing off in three years and, in addition, upgraded our ability to do research with sugar beets. Our initial work with sugar beets by Dr. Olaf Soine looked at the restrictions that the Crystal Sugar Beet Company put on farmers. Sugar beets use quite a bit of water and, in addition, the task of weed control in those earlier years was tough. They would require farmers to have twice as much land available for producing sugar beets as they contracted for; so, if you had 100 acres of contracted beets, you would have to have 200 acres of land. One hundred you would fallow, keep black all summer, keep those weeds down and the water would not be used by crops. You'd save it for the next year. Dr. Olaf Soine, who was the agronomist at the Northwest Experiment Station, spent quite a few years thinking about that and he said, "I don't really believe that's necessary." But of course, American Crystal field men and their researchers couldn't listen to that because they were doing pretty well with the system, even though the farmer had to have twice as many acres as he really needed to produce. Olaf did seven year's worth of research which tested out the thesis that you really don't

need to do that; there's another way to go, if I can put it in the vernacular. It was stated more sharply than that. The research came out very strongly positively. You don't really need that.

CAC: You could farm the same land with proper fertilizer . . . ?

BY: You bet. With proper management, you don't need that fallow. Of course, the sugar beet researchers knew that Olaf was doing the work and they were watching it. They were there looking right over his shoulder. [laughter] They knew that they'd had it when Olaf got his work done. He reported it not only at the Sugar Beet Growers Conference when he had all his work summarized but he reported it at the stockholders' meeting. The president requested it because they wanted some of these hard-nosed people from out east [to know] that there was something in the wind that was going to change some things. That was a major piece of research by the Northwest Experiment Station that changed the entire cropping practice.

CAC: Of course, the refiners had it easy. The burden was on the farmer himself who had to keep half his land fallow.

BY: That's exactly right.

CAC: They didn't loose anything either way.

BY: They didn't loose anything. They did nothing but gain.

CAC: Yes. It helped the farmer who could use his land to maximum.

BY: Yes. That was a major contribution on the part of the station. Also, another major contribution on the part of personnel, Dr. Olaf Soine and others, and the superintendent, was that they entered into industrial, that is, the sugar beet industry, affairs to the point of being of assistance in the direction that the industry was taking. For instance, the superintendent, that was Bernie Youngquist who is doing the speaking here, the growers finally got to the point in their relationships with American Crystal where they said, "Let's see if we can buy them out. We'll do our own processing." They tried to get additional processing plants that were really needed and update the old ones. The company wasn't interested in putting in any investment money and that's understandable. We set up a task force, including myself and people like Arthur E. Anderson, and the law profession, and industrialists, farmers, and took a look at this whole thing. After a year's work on it, the recommendation came, "Let's go." Then, we reformed the task force to include the finance industry and our neighbor across the hall, Lloyd Ulliot was president of the bank for farm cooperatives located in St. Paul; so, Lloyd was on the task force. I was on the task force and about twelve, thirteen additional people. That was a \$½ billion project. It took us about two and one-half years. What happened? The beet growers convinced themselves, after appropriate study and research, that they could afford to mortgage their farms up to \$150 a beet acre, or something like that, to underwrite the purchase of the American Crystal processing plants from American Crystal Sugar. That's the story. Now, that's not agricultural research;

that's a service on the part of the university personnel who are in a position to provide a piece of the total information that's needed for this group of people, of citizens, who are interested in a project way beyond their individual capability or even group capabilities, to do it without help. I often wonder if matters of this kind of nature get in the history books of the university.

CAC: Not much.

BY: [laughter]

CAC: That's why I'm doing this.

BY: It's a very significant kind of happening.

CAC: Beets are labor intensive, too, in the sense but they were they using migratory . . . ?

BY: They were labor intensive.

CAC: I'm an historian so I'm talking past tense. There were a certain large number of Mexican-Americans or Hispanics attracted to that area?

BY: Yes, yes.

CAC: What kind of relationships did the university have with those migratory agricultural workers most of whom were . . . ?

BY: We had an excellent relationship. In fact, for three years, the Northwest Experiment Station hired migratory people for the intensive part of our production of sugar beets. We went away from it. We were one of the first ones to go away from it because we could see the direction was changing.

CAC: Toward total mechanization?

BY: Yes, we had to be in the forefront of that operation.

CAC: Did you pay going wages or better wages?

BY: We had to kind of hang in there with the going wages but we went over and above that. We provided better housing and when it was all over, we'd slip them a little bonus. [laughter]

CAC: But you couldn't do more without antagonizing the farmers?

BY: Without antagonizing the industry, yes. You could do some of these extra things without getting into it, if you didn't get too reckless. That's a bit of a little different story in the sugar

beet area. There's another area that's different in research and that is that we had an agricultural engineer by the name of Gene Miller. Gene Miller was a researcher that had more ideas in five minutes than most of us have in five years—they weren't all good ones. [laughter] Those are the kinds of people that pound on the desk of an administrator that are a joy to have around if you're willing to do some listening and able to find some funding to back them up as they move along. He was interested in different kinds of fuel, wood chips and all of those kinds of things, and did research along those lines. He was always a very practical, down-to-earth person. For instance, in northwestern Minnesota some of the blue oxygen-free silos came into the picture, Harvest Store silos. The clay soils up there have a tremendous coefficient of shrinkage and swelling between extreme dry and extreme wet. When it's extreme dry, you can get cracks in the field that wide and loose tools in them. It drops down and that's it. [laughter] In extreme dry, it just shoves and pushes all over the place. We had building foundations being pulled apart on the campus. I think you visited there. You may have seen one or two of those buildings that has a great big bolt right through . . .

CAC: [laughter]

BY: . . . to hold the building from being affected by these things. These big silos, the way the foundations were designed, just didn't stand up. Here's a person like Gene Miller who says, "We'll float them on that soil." He designed a large concrete pad, slab, that was big enough and sat the silos on there. We've got there six or seven of these big Harvest Store silos and they're sitting just as straight today as they were thirty years ago. It's these kinds of practical, down-to-earth bits of—I hesitate to call it research—applied research applied to a particular problem where engineers had worked on quite some time but it didn't fit a particular situation.

CAC: Yes. You had to know the soil.

BY: Gene Miller was a tremendous help to the industry on many of those kinds of problems. One of the things we did is we hired quarter time one of the wildlife habitat pros that they hired for the technical college so that we could be abreast of this whole environmental changing scene. Dan Sadarski was hired. His first task was to look at the wildlife habitat, the scene environment, in old gravel pits. The Red River Valley when . . . I don't know what kind of an engineer the good Lord had when that was formed—I put it in the vernacular again—but some interesting things happened on some of those shorelines; there were tremendous deposits of gravel and they have been going out for decades, and decades, and decades. There are great big holes. What's happened to this scratched up earth? So, Dan went to work on that and found some very, very interesting kinds of information. He really identified what was happening in that environment. Also, he was able to identify some of the different uses that could be made of these gravel pits. One of the primary uses that really came out it was a pretty good idea—if they can be left in an appropriate manner, whatever that might be—for wildlife habitat. The Northwest Station has become known really across the country as pioneers and continuing work in that area.

CAC: What range of wildlife would that be . . . pheasants, for example, or fox?

BY: The range is across the board . . . ducks, birds, and various kinds of insects, and so on that we don't even think of as being part of wildlife, and small animals but the whole range of kind of small animals, and a lot of bird life, a lot of larger birds that can have full time water or part time water, particularly part time water. It's been, again, very useful. He set up a symposium on wildlife habitat use of gravel pits. He succeeded in getting . . . There should be one here someplace but I can't put my eye on it right now. He set that up. Around fifteen people from fifteen states came in and it was the first symposium of its kind around on that rather specific topic. Here again, people who had that kind of interest were able to bring in their papers and that is a real live topic. I went to England about fifteen years ago, and made a report on that conference, and that resulted in an interest in some other area of consulting work that's been going on for the last twelve years; so, you never know when those little bits of unusual research in the environment and here out on the land and in wetlands . . . Many people . . . what's a wetland good for? What's a piece of swamp good for? It isn't good for anything. You just leave it there. It plays an important part in our lives.

CAC: That's an engaging story. The *otherness* of this institution is just staggering, isn't it?

BY: It is.

CAC: There's just a variety of things that take place.

BY: One of the near closing comments . . . You're out there 300 miles from home base. One of the things that one of the heads of the Department of Agronomy said is, "Bernie, you can do things out there that I can't touch here. We've got such a bureaucracy built in, first of all right among our own professors." You've got ten, fifteen of them, you know. They've got one whale of a time to move out on a request on the part of somebody in the body politic or among themselves. He said, "You can engage yourselves. You can get your machine into gear much quicker than we can. Let's work at that. I'll help you what I can here." That was one of the reasons we could kind of get into some of these unusual areas, not necessarily always putting more fertilizer on but helping like on this American Crystal thing.

CAC: Yes, yes. Bernie, I sit here . . . you have twenty plaques of recognition. This is an honor to you but also to the kinds of things you were doing that on the other campuses or in other departments . . . These are citizen's awards for the most part . . . "sincere appreciation," "dedicated service," "outstanding and dedicated service to agricultural research" . . . I'm just glancing at these. I mean, we're talking about that, too, the rewards that come to an individual.

BY: But these are awards that came to the university. [laughter]

CAC: Well, sure, of course, but you were significant [unclear].

BY: If I hadn't been a professor, a staff member in the university, with a rather substantial freedom to move on the general mission of agricultural research for northwestern Minnesota . . .

CAC: But I'm looking at who's doing these. For example, I would say that internally to the St. Paul, the Twin Cities campus, that we have awards annually which [unclear] for outstanding research, outstanding teaching. There are complicated ways of doing this but most of yours come from the community?

BY: They are all from the community from individuals, from Future Farmers of America, State 4-H, from various grower groups . . .

CAC: These are tokens of appreciation from community persons rather than internal to the institution itself?

BY: Oh, yes. None internal.

CAC: That's an enormous difference and I should think must have been a source of great psychological income.

BY: And almost embarrassment at times. [laughter] Yes, one looks back on those.

CAC: Some are to Dr. B. E. and others to B. E. but a lot of them are to Bernie, which kind of suggests that as well.

BY: Here's one . . . this is what they call the . . .

CAC: Builder of the Valley.

BY: . . . Builder of the Valley and it ends up by saying, "We note the strong caring family interfaced with love and respect . . . Bernie and Bernice." In other words, they recognize that it wasn't just Bernie Youngquist. If it hadn't been for a very strong partner and a supporting family of children . . .

CAC: This wouldn't happen on the Twin Cities campus either.

BY: Ah.

CAC: I mean, to recognize husband and wife as a team and by the community. That's a wonderful commentary on a part of the university's history that we don't often credit.

BY: Yes. I suppose there are some places within the university where there is a kind of closer family relationship to particular body politics, to particular groups, sociology areas, and some of

these kinds of things. How does that go? . . . and I'll cling to the old rugged cross till my trophies at last I lay down.

CAC: [laughter]

BY: Well, I don't really look on them as trophies . . .

CAC: No, no.

BY: . . . but I do come in here once in awhile and I'll take a little glance and say, "They're a little evidence that you've been rattling around, Bernie. Now, you better pray to the Lord for a little help and health so you can keep pecking away for awhile yet."

CAC: It does reflect another part of the university and, of course, that's what my project is up to, to try to recover and preserve that record, the variety of records that are there.

BY: Yes. I'm so glad to see you working on this because there are many places in the university where there's a lot going on that . . . you don't get out to the body politic.

CAC: No.

BY: I've been involved in some research in other parts of the world and in other projects in other parts of the world where my experience in the university has been very, very helpful and has influenced some of the decisions we made and some of the research, for instance, water and soil research inventories, that have been carried on in third world countries. It's some of this experience here that has taken Bernie Youngquist over across the waters to be part of the advice and counsel. Yes, that's the way it is. Not a specialist in digging into the soil in some third world country, that's done by a task force, but advice and counsel to foundations and organizations who want to put money into that kind of a service.

CAC: And in turn, we get these young men and women from around the country to come here to study and very strong in agriculture. I know that a whole bunch of Australian people come to St. Paul to study agronomy.

BY: Yes.

CAC: That's a part of the story of the university that I'm trying to capture also. It's a complicated institution and I'm certainly grateful for two things: one, the part you played in the history itself and then sharing these thoughts with us for nearly two hours.

BY: Thank you.

CAC: It's now down for posterity.

BY: Down for posterity and, Clarke, again, thank you. I could keep going, really, for another two hours . . .

CAC: [laughter]

BY: . . . but that's not necessary. I think we've caught the spirit.

CAC: We have caught the major things, right?

BY: Yes, absolutely.

CAC: It may be that some scholar who will be writing this ten years from now, two hours will be his limit, too, or her limit.

BY: I hope that it might give them an insight that will be helpful as they look down the road and as they meet the challenges of where they are and where they're going.

CAC: This was an extraordinary couple of hours. I thank you very kindly.

[End of Tape 2, Side 1]

[End of the Interview]

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