Oral History Interview with John S. Crosby

Chittenden Nursery, Wellston, Michigan

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Transcribed by: Joan Raymer, October 3, 2009

Crosby bio: John S. Crosby was born in Plainwell, Michigan in 1913. His father was a doctor who died a year later. To care for the family, his mother went to work as a secretary for Bardean Paper Company. Crosby attended Grand Rapids Junior College before transferring to the University of Michigan, graduating with a degree in forestry in 1934. He worked for the State of Michigan and the U.S. Forest Service doing forest inventories, plantings, and nursery work. He was the assistant nurseryman at Chittenden Nursery from 1935-1942 where he directed CCC labor. During World War II, he was stationed in China, Burma, and India forecasting weather for the U.S. Army Air Force. After the war he worked with the Forest Service in Escanaba, Michigan. He later transferred to the Lake States Forest Experiment Station and worked on fire research where he co-evaluated a weather danger meter. He worked on this research in Minnesota, Michigan, and Missouri. He retired in 1972, living in East Lansing, Michigan, Glen Lake, Michigan, and Ocala, Florida before settling in Lees Summit, Missouri.

Interviewer: **"Mr. Crosby, please tell me about where you were born, your family, your childhood."**

I was born down in Plainwell, Michigan. Plainwell is in Allegan County and it's just ten miles north of Kalamazoo and thirty miles south of Grand Rapids. My father was a country doctor and he had moved from Otsego to Plainwell, but his hometown, where he grew up, was New Buffalo and Three Oaks, Michigan, down at the tip next to Indiana. He had gone to Ann Arbor to high school as well as college. He went to medical school for two years. Later on he went to Germany and studied too. So it was quite a bit for a doctor of his time. But he died about a year after I was born in 1913, so my mother brought us up. She had grown up in Otsego and had been a—she had learned to be—learned secretarial work and she was the bookkeeper and secretary for the Otsego Paper Company. Mr. Bardean—the Bardean Paper Company. Mr. Bardean had built the mills and lived in Otsego and mother, she was the bookkeeper, the payroll master—she was it. She had a Spencerian Steel Pen with green ink and she could do anything you could think of. So, mother was left with two kids to grow up, so we were brought up in Plainwell. Later on I went up to Grand Rapids to Junior College for two years and then over to the University of Michigan to forestry school.

Interviewer: "Who was—what was your sibling's name?"

My sister was Rachel and she had gone to Kalamazoo to Western Teachers College, as it was called in those days. She became a teacher and she taught kindergarten in Plainwell until her first students were having grandchildren. She knew everybody in that area pretty well and her kids live there yet.

Interviewer: "What were your outdoor experiences like as a child? Did you get to run through the fields of Allegan County?"

I use to work in the onion fields in Gun Marsh and they were just to the south and [east] of Plainwell. There were a few places out there, but they brought a lot of kids my size out there to pull weeds all summer in that little patch of onions. I was all by myself too. That was the employment situation. I (also) used to mow lawn around town and things of that sort.

Interviewer: "Did you do anything as a kid that made you think, "Boy being out in the forest all the time; that sounds like a good way to live?"

You know, we had a course in community things, I can't remember just what they called it. They began talking about forestry and all the good things you could do in forestry. That caught my eye and I followed it from that point on.

Interviewer: "So, you went to the University of Michigan. What was the academic environment at the U of M in the 30s?"

Well, in the 30s we had … The forestry school was located in the basement of, what do they call it, it had geology and forestry—the Natural Science Building. It was in the Natural Science Building and it was right next to the Chemistry Building, if I can think back that far. Later on after we left there, they took over the old Medical School Building, which was on the east side of the campus as I recall, across campus from the Natural Science Building, and that became the Forestry Building. I'm not sure what happens there now, if they are still there.

Interviewer: "Was Sam Dana in charge there?"

Yes,

Interviewer: "What was he like as a professor?"

He was a wonderful man. He taught us forest policy and things of that kind. He had been there, so he knew what it was all about. There were good textbooks and he was a real inspiration, Dana.

Interviewer: "Did you have any—was the Forestry Club active then? Did you get to do much field work?"

We didn't do too much. We took field trips and that kind of thing. It depended on what the class was and we had our—where we had to name all the trees and stuff, and that professor was into plant pathology. He was a plant pathologist, but he taught us the trees and we used to go on Saturday mornings all over Ann Arbor, which is a good place to find all the kinds of trees you would want to learn.

Interviewer: "Had they started the Arboretum yet?"

We had a little place called the Saginaw Forest. It was about three miles out of town on a lake and they had been doing—they had some plantations. The forestry school had been working out there for several years, quite a few years as a matter of fact. One summer, I spent the summer out there tending store. That was kind of fun. We had two properties, one down there which I can't name, just outside of Ann Arbor and then there was a place out about ten or twelve miles out of town. I lost the name of that one too, but it was about 200 acres or so. They did some plantation work and there was some forest land, some logging, and things of that kind out there.

Interviewer: "What responsibilities did you have that summer you spent out there?"

I was a caretaker, I didn't have any big jobs to do, but they had a little nursery there in Ann Arbor. I kept track of that thing for a while and saw to it that it was wet.

Interviewer: "Now, you would have been in school during the Depression. Did the Depression have any effect on your education?"

Well, it did and in a way that you wouldn't expect. It was the thing that put all us foresters to work in the CCC program that followed. When we finished our class work in Ann Arbor everyone had a job. Everyone left and no one was there for graduation.

Interviewer: "Did you have trouble paying tuition or did you have to work an extra job?"

As a kid I put money in the bank at home and the day I went to get my money out of the bank account [at home to go to] Ann Arbor, the doors were locked. That was a problem right there. I didn't think I was going to be able to make it because we didn't have much to go on. But I went down … I had a job in Ann Arbor, at the bookstore, Whar Bookstore. (I had done) all kinds of things and had a room and signed up for school and I went down there intending to say goodbye to all that for a while anyway. But there was an old friend of our family's, Mr. Brown, and he was the small town newspaper man. I went over to call on the Browns because we knew them quite well and I told him what was going to happen. And he said, "Oh, you can't do that, I've got old war bonds in the bank here and we'll go down and get them out. You can pay me back when you get a job." We went down and he got his war bond out and cashed it. I went and paid my tuition and took my room back again and started school. It was kind of a near miss, but Mr. Brown saved the day.

Interviewer: "Well that's good."

We paid him back the first opportunity we had.

Interviewer: "Was that in Otsego or Plainwell?"

Well he had never had a paper right in there. He had it in that town over by Detroit; north … What's that town?

Interviewer: "Northville?"

Yes, Northville, but I guess maybe at one time he might have been in Otsego. He was a family friend and he was a great fellow. I owed him quite a debt of gratitude.

Interviewer: "So, you said that you had a job and you didn't have to wait for graduation. They sent you out. Tell me about where they sent you upon graduation. Where was your first job?"

Right out of graduation I went to work for the State of Michigan. The State Forester [Marcus Schaaf] had been around and hired two or three of us and we went out to one of the camps. I went to Fife Lake camp and was there all summer. I did forest inventory work for them. By fall I had taken the civil service examination. I thought that was the way to go. I took my job and around Thanksgiving time. I drove up to Kenton, Michigan. I went to the Ottawa Range District.

Interviewer: "What was it like to do a forest inventory in 1934?"

> We didn't have very much to do because the areas—there was almost nothing on them. They had little groups of aspen and a few oaks. We just kind of inventoried what we came to. We went two strips to the forty and it was mostly kind of a tree count to see how many trees there were. I suppose in a way it was just a make work job, but I suppose they did get a lot of good information out of it because they didn't have detailed information on their back country. It was kind of an interesting job.
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> **Interviewer: "Were you just looking at state land or was it everybody's land?"**
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> State land, forest land, in the Fife Lake area. The camp was right there at Fife Lake as a matter of fact.
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> **Interviewer: "What did the CCC have to do with that process? Anything?"**
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> They supplied me with some boys to run lines and take tallies, and so forth. I had some wonderful boys.

Interviewer: **"A couple of guys to order around?"**

I had two boys and each one came from a family of twelve kids. Can you imagine that? They had signed up for the CCC program and they went together. They had to name all the people in the family and they just couldn't remember the baby's name. I guess they hadn't had him long enough to get use to him yet.

Interviewer: "Now, from my work, I know that in the 1920s P.S. Lovejoy and his guys went out and did a land inventory survey. Did the Land Economic Survey from the 20s have any bearing on the work you were doing?"

Not necessarily, but their work was … In fact I knew some of those people that worked on that, in fact we're friends. Ben Jenkins is a name you may have heard around. He wound up in East Lansing. He was down there for years and died recently. His wife just died last winter I guess it was. There were a couple of the boys that had been in the Land Economic Survey and got their start under Lovejoy. There was another old stalwart that they spoke of quite a lot whose name I can't think of right now. We glued together on most things and those fellows were coming to see us too. We became well acquainted.

Interviewer: **"So you went up to the Upper Peninsula, up to the Ottawa. How did the work up there compare to the work you had done before?"**

I got there in a foot of snow and I never saw the ground until spring. I was sort of working in the dark. I didn't know anything except snow piles, so it was kind of interesting. In spite of that we did some survey work and got on snowshoes, day in and day out. When it was too bad, we would stay home and go out with the crews that were digging slash out from under the piles of snow and burning it. It was kind of a make work job, but it was kind of putting down the fuel situation so it didn't amount to too much. It was quite a winter.

Interviewer: "What were the goals of those surveys? What were they hoping to learn from the surveys that you were doing?"

Just the inventory and knowing what was on the ground and once in a while they would run across a patch of timber that that was suitable for sales. Later on in the spring … See, Clare Hendee was the ranger at Kenton when I went there. There was a little hotel and the ranger station was across the street. I wound up there after Thanksgiving. Everyone was having breakfast at the hotel and I had put up there for

the night. There was a big guy, Alt was his name, and he was Hendee's assistant as I recall. I had quite a little visit with him the night before, Sunday night, and he said, "When you meet Clare Hendee, he's a pretty straight forward fellow. He'll appreciate you coming up and giving him a big handshake." I sat down there with all the people eating breakfast and pretty soon they had all gone out to their snowplows and gone to work. There were only two of us left and I hadn't found out who that fellow was. But he turned out to be Clare Hendee. So, I met the boss right then. I had contact with Clare Hendee all the way to his Washington office one way or other. He was one great fellow.

When I got up there Kenton District was part of the Hiawatha [National Forest], I think it was, from out east. By spring they had set up the Ottawa National Forest. Clare was the logical man to be supervisor. So, he took that over and was the supervisor, the first supervisor of the Ottawa, a great fellow. There were several of those fellows from Michigan State—Waldo Sands was one. He was here on this forest [the Manistee NF] as the planning supervisor for the rangers in the supervisor's office and that was Al Miller. They located down in Muskegon and there were some of those fellows from that time—I guess it was 1928. There was another one, Cook—Howard Cook was another one. Howard went through the Forest Service and he went out west for a while. When he came back, he was forest supervisor, the first supervisor I believe, on the forest in Indiana.

Interviewer: **"The Indiana Forest. Is that the Shawnee?"**

Was it Shawnee? [It was the Hoosier NF.] Anyway he was the supervisor. Brownstown, I think it was Brownstown. They had a project that started up in the spring—that would have been 1935. Yes, the spring of 1935. They had bought a property out at Little Girl's Point, way out there on the west end of the Upper Peninsula. The thing was an original forest that had never been logged. They sent a couple of us out there with a couple of old rangers that they brought over from Minnesota. We cruised that place and set up a plan of attack for it. They went up there and began to log it off. It was a wonderful place with virgin hardwoods, great big pines in there maybe six feet through. I remember one yellow birch sitting there and it must have taken up a half an acre all by itself. Oh, there were some beautiful things in there.

Interviewer: "Where was that at?"

That was out there in Ottawa and Little Girl's Point out that direction anyway. It was way up the Black River. While I was doing that, I lived at Watersmeet. Charlie Mony was my partner and Charlie was … He

took over the nursery there when we organized the nursery at Watersmeet. I think a ranger at Watersmeet said there was—they were looking for people to go into the nursery business and there was an opening down at Wellston. They asked me if I was interested and I said I was.

Interviewer: "What down here made the job attractive? What was it about the nursery business or this job that was attractive?"

To me it was just the work I was interested in, that end of it. Clare Hendee called me into the office and he said, "We put a little effort into you here at the Ottawa. But if you're interested in it, I'll promote you for it." And he did. Right away I went down there and I got here in time for the first season of trees to [plant]. I was here almost from the beginning. The buildings were all here. They had done a wonderful job at this place that first year and I guess it was all covered with trees. They cleared the land, put up the water system, and built the warehouses, the office, and a home for the superintendent. It was a going place when I got here.

Interviewer: "Can you describe the operations there in 1935? I looked at the numbers and they said that you sent out 45 million seedlings that year."

I don't know if we did that the first year or not, but what we had were one-year old jack pines because we hadn't been there long enough. They probably went to work and planted up all their jack pine as fast as they had trees for it. From then on, we were just going full blast. The nursery was practically all seeded down in the seedbeds. We had mostly red pine and some white pine, a bit of spruce, but not very much. We still grew some jack pine, but we didn't have much call for it anymore. The Huron was more the jack pine site. They had their own nursery over there at East Tawas and it had been there since 1909 when they set that place up. So, they were there to teach us.

Interviewer: "What were your responsibilities? What was a day like in your world?"

I was Assistant Nurseryman to Charles Rindt, who was the Nurseryman. We also had a man by the name of [C.C.] Buenger. I can't think of what his first name was. Did you know about him?

Interviewer: "I don't know him."

He had come here and Buenger was one of those people who had started in forestry and never developed it. When the CCC program came along he just fit in very well. He had been working in the camps and they brought him in as a bookkeeper/clerk. Very soon, I think that same fall; they got a civil

service man by the name of Burke. What was Burke's first name? He was my best friend and I can't remember—I'll think of it before long. But Floyd—Floyd Burke, he came from Maple City. That was his home up there at Glen Lake. He owned property on Glen Lake and he had gone to Arizona to college because he had asthma. He also had a hair lip that—it had been repaired, but it was a little bit noticeable yet. They didn't know how to do it quite so well then and his speech was impaired slightly. Floyd was a wonderful fellow and he had borrowed money from the Cedar Bank to go to school out there. He had ridden his motorcycle out there to go to school. He needed some money to pay off the bank and he insisted I buy a piece of his place up there at Glen Lake. I did and I'm still there. That's how I got to Glen Lake, but Floyd was our clerk. He did a wonderful job and he was just a great fellow. There was Charlie and Floyd Burke and Buenger and me that took care of the nursery.

My day was—I'll put it this way—Alex Sams in the warehouse and Ernie Olsen, he was the construction man; he still had plenty of things to do. We had some of those other programs that took men from—mature men … It was WPA and we had one that was called ERA, Emergency Relief Agency. Most of our people were ERA, I think. They came from as far away as Baldwin or Manistee. We would have about twenty or twenty-five of those fellows and we kept them busy most of the year doing jobs in construction or whatever kinds of things there were to do. They did whatever there was to be done. We had some mighty fine black men too from down Baldwin way. I got there in the fall of 1935. We just banged right into the planting season and we were digging trees and shipping trees. There were a million things to do; getting the water systems going right, planting new seeds and we had the whole works at our feet. I didn't have any particular thing; we just did whatever became necessary.

Interviewer: "Whatever the day brought."

If it was seeding we did that. It took quite a bit of work to get the seeder ready to seed with the right number of seeds coming down and preparing the seed bed. There were an awful lot of things going on.

Interviewer: "How much of that did you know how to do when you got here? Were you learning on the job?"

I was learning on the job, just like everybody else was. Charlie Rindt was just an excellent manager. He had lots of good common sense and he was a wonderful fellow. He came from Wisconsin too, but he had

steered us through there. He was along with Waldo Sands and Al Miller and who was our engineer? A big tall guy, but he [Hank LeFever] was wonderful. They just kind of kept things in order.

Interviewer: "So, did Charlie have quite a bit of nursery experience?"

I think he had a little experience in the nursery. His father had been a canner over in Wisconsin, so he knew the canning business pretty well. We kind of learned on the job and we all were good learners and we got along just great. Our main CCC foreman was Red Gravensgood. He came from—I guess he was right here in the Wellston camp. He was an excellent man with the boys and Bill Vaughn was an old contractor. He was great too.

Interviewer: "How was the labor provided by the CCC?"

We had first call on the whole camp. They were just next door to us you know and there were times in mid-summer—and of course there in the wintertime, there were times we didn't have much in the camp to do. So, they were out doing timber stand approval work and that. Sometimes we had to go out and help supervise it too. I was paid by the CCC and assigned to the Forest Service, so I was kind of a neither here nor there person I guess. I had to take my share of the duties while we were at the camp as well as at the nursery. Waldo Sands finally became the camp superintendent out there because he was one of those old Michigan State fellows. I don't know if Waldo had a Civil Service rating or not. I suspect he did, but he came out and was camp superintendent there when we lived in Wellston. We all lived on Main Street. We looked at the church this morning when we came to town. The house is gone, but Waldo's house is still there.

Interviewer: "What was your roll in supervising the CCC?"

I didn't directly supervise the camp kids. They came with their own overhead, which was largely that one fellow, Red Gravensgood. He was a wonder and he could just get those guys to produce whatever was needed. It was a sight. He was kind of their main supervisor and my job was kind of to make sure they would get the right kind of technical… We did a certain amount of thinning as we pulled the trees. We were supposed to pull the smallest ones out so we didn't have to bother with them in the field. It was a difficult thing to get the boys to learn to do, but they did a pretty good job. That was kind my job, I took care of the orders and made sure we had the right kind of stuff ready for … and they would come with their trucks and carry away the trees. I got some pictures of loads of trees going out of there.

Interviewer: "Did Red have to do much motivating of the boys or were they just ready to work?"

He was a motivator and the boys looked up to him. They all thought the world of Red Gravensgood and Bill Vaughn too. He just made the nursery go and that's about all I can say for it. He was just wonderful.

Interviewer: "Were there any problems? Did you have any big incidents?"

We had some problems, little things kept coming up. You get a couple hundred boys working out there every day and a lot of things can go wrong. We shipped all that stuff to the camps in wooden crates and we finally came to a good size and a means of filling them and packing them so it was simple and quick and we had to make sure it was done right.

Interviewer: "How many could you put on a truck?"

Oh gosh, I can't remember. They would come in— we had one big truck. I'll show you a picture of that. It was stacked several deep, a huge load. They would come up from Baldwin and take the trees down and there would be two or three trucks in there in a day to pick up all the stuff. We had trucks going east to the Cadillac District, the Kellogg Tract and even some that went down into Freesoil, there was a camp or two down there. I think there were thirteen camps in the Manistee Unit by itself. That's a lot of boys planting a lot of trees. At planting times in the spring and fall that was about all they did pretty near.

Interviewer: "How did you spend your time outside of work? When you weren't here putting in your hours?"

Oh, I don't know, there wasn't too much to do around here. Wellston was not quite as big as it is now. (laughs) There was a little hotel down there that was going strong. Across the street from the hotel there was a little store building—two store buildings and one of them was used as a post office. There was a lady by the name of Mae Dust who kept that one going. The other store was right next to the railroad tracks and that was Grandma Axum and her daughter. Floyd stayed at the hotel for quite a while and so did I to start with. I rented a house on Main Street. There were two log cabins over there and I lived in both of them at different times as long as I was here at this job. This family was … the man had died and there were three children and the grandmother and the mother and they had no visible means of support. Floyd took a room over there and lived with them. We finally talked them into preparing our meals. That was kind of our home place for several years. We had good times and grandma was a great girl.

They had parties over at the town hall at the site of the old Norman Township Hall. It's empty now and there's another place they are using. But I was kind of … Jim somebody had a store around the corner. The garage was a going concern and it's still a garage I guess. Those were the main buildings in town. He had a grocery store there on the corner and he was kind of sweet on the lady that ran the hotel. She did cooking there so we would eat at the hotel. It was just kind of a home place. We knew everybody in town and everybody knew us. We had good times together.

Interviewer: "Were there dances?"

Yeah, we had dances in the town hall.

Interviewer: "There were plenty of boys around, but where did they get people for the guys to dance with?"

There were some farm girls around that would come in on Saturday night you know. The CCC boys generally went to Manistee rather than entertain themselves here.

Interviewer: "There was a lot to do down in the big city."

I don't know what they did. I never paid much attention to what they were doing. They were trying to keep out of trouble I guess.

Interviewer: "As long as you didn't have to talk to the police, it was okay."

Yeah, but every weekend there would be two or three trucks going into town. Of course there were kids from other camps too and Manistee was quite a busy place. So was Cadillac, but Manistee was a little closer so that's where they went.

Interviewer: "So you kept kind of to yourself then and not going out to all of these wild events."

I didn't do too much going out. I had plenty to do—books to read.

Interviewer: "Did you fish?"

Not very much. My house belonged to some people named Hunter and they were farmers from down in Indiana. They spent their summers up here and they had these two little log cabins and one I lived in. They entertained a lot of people who came up here fishing and they fished every day of their lives. They could tell you everyplace to go to catch whatever you wanted to catch. There was good walleye fishing up on the lake here back of the dam [Tippy Dam]. There was a fellow I use to go with up there and he would take me out walleye fishing. We would go out there and it was a great place. I got fifty dollars'

worth of hooks down in the bottom of that thing. It was full of trees and they never did pull the trees out of that place and you would lose the fish. But it was a busy place.

Interviewer: "Was there much of a problem with poaching?"

Oh yeah, the game wardens had their trouble. But, you know, it was Depression times and they weren't too vigorous about that. Most people lived out away from the villages and had deer and venison to eat most of the year. They knew it and if they happened to catch them there was a little trouble. But most of them were pretty lenient I guess. I think most of the game wardens were that way.

Interviewer: "Were there a lot of deer? I know they had the hunting closed for a while."

It was, in fact I guess it opened up while we were up here in the early thirties I think.

Interviewer: "About 1936 I think."

Was 1936 the first year?

Interviewer: "Yes, the first year they opened it back up."

After that there were just deer hunters—Wellston was covered up with deer hunters and fishermen, all summer. Lots of people from Indiana, it was interesting. I think that started because that railroad came through here and it terminated originally up at Petoskey. What's that little town on the north side of Petoskey?

Interviewer: "Harbor Springs?"

Harbor Springs—no it wasn't to the west, it was right on [US] 131.

Interviewer: "Pellston?"

No, that's too far north. It was just a part of Petoskey really, but it had a name or something. Indiana, Indiana, it was just full of Indiana people and they came up here because that train started down there and I guess it finally went up to the Straits. I can't even remember the name of it. It wasn't the Michigan Central. I think it had already changed its name once, but it still was going up through Baldwin and all those towns down M-37. There was another little road up there from Frankfort. It came out of there and went to Traverse City. You could go anywhere you wanted to by train in those days.

Interviewer: "How often did the train come through town?"

About twice a day.

Interviewer: "That would be often enough."

I don't know if there were two trains going north and two going south, but it was about like that. Of course High Bridge was quite a tourist attraction in those days.

Interviewer: "So, we went for a walk. An hour ago we went out and we looked around and checked the buildings out. How do you assess the condition of the grounds these days? How do the buildings look?"

Well, it's a little hard to say. Right off I missed our old office building. It was on the side of what looks like a dwelling, but I don't think it is. It's the first one you meet coming in and that was our office. We did our work in there that had to be done in an office way. Then the next warehouse looks good and the oil house. That little pagoda was on the corner there and the rock, a dedication rock. And that, I think it says seed storage on that building now doesn't it?

Interviewer: "Yes."

That wasn't there, there was no building there at all, it was just the pagoda. That's where visitors were supposed to kind of stop and sign the book and walk in and then they could go out into the nursery and look around. The building structure has changed dramatically since I was here. This building for instance, where we're sitting now, wasn't here. We had the two cone sheds and I think one or two warehouses over here on that side road and one up by the office. We had more equipment than we could handle in one warehouse. So we built two more and they served other purposes where we could do lots of work. I mentioned to somebody, was it you? We made snow fences there in the winter—some winters and that kept our crews busy. They had a good warm place to be. We had a dump truck and a state truck and a pick-up or something and we had two or three tractors.

Interviewer: "John's [Davis] been researching the color that the buildings were painted—does he have the color right?"

Yeah, it's about right now. Yeah, you bet. It's good.

Interviewer: "Have the other physical features changed a lot? I know you said out by the larch tree that there was a road out there."

Well, it was a little circle. It went down and took in the seed storage and the seed extractory and then came back around so you didn't have to back up and turn around. That tree that I planted, that larch tree, was right in the center of the circle. It seemed like and the spot was empty and I said it was a good place

to put a tree, so I planted it one day. The cone [sheds] had strung out back along the lake and one had a cold storage in it and it was not too successful. We would fill that thing up with trees and there was so much moisture in it that the coolers frosted up and just stopped. So, we had to work someway to defrost the coolers before we could make them cool the basement in there and that was never too successful, but it was kind of cool anyway. That one year we got caught with, I think we had almost—we had a good million trees and an early winter and it just shut us right down. We had to do something with all those trees so, we transplanted them into … it froze you know, so we would shovel the snow off and put the trees in the trenches. We had some tents set up out there for them and we were planting trees out there until February. There was an endless supply of those things. Of course in the springtime we had to dig them all up again. I don't think we lost very many of them either. I don't remember what year it was, but we had deep snow all winter and it just shut everything down. It came way early, before Thanksgiving, way in early November. They were still planting trees and that only lasted them about a week or so you know. They were out there and we had to do something with them. So we brought them back to the nursery and we planted them all winter long.

Interviewer: "You sent some photos to Supervisor Paulson that show the parade floats?"

Yes.

Interviewer: "What was your responsibility in this type of community relations?"

We put our state truck into a float and we went all over the countryside up here that [summer]. Every town seemed to have a parade. Have you seen the picture of that?

Interviewer: "Yes, I've seen the picture."

We had six little nursery beds set out. They looked like hospital beds. They were tilted so you could see both sides you know, and we had it filled with dirt. We had little seedlings in them. We had a couple of girls that came along. They dressed in white with their Red Cross caps and they rode along with the nursery people. We had it decorated up with greens and stuff, so it was obstructed. We took it to the Manistee [National Forest] Festival. It seemed like everyone was having a centennial celebration [Michigan had become a state in 1837] and gosh, we went to four or five of them I guess. We also went up to the Cherry Festival [in Traverse City]. That kind of was my job. I took that thing over. I had a job all summer long pretty near, going to parades.

Interviewer: "How hard was the Forest Service working at trying to get public support?"

Well, we didn't have too much to do with that sort of thing. That was handled by the supervisor's office and we had lots of people coming here to see the nursery. So we did our share, but we weren't basically responsible for that kind of thing.

Interviewer: "You had a lot of visitors, what did they want to see?"

They came and they just wanted to see how you did things. What all the trees looked like. So, we just run them around the nursery and showed them what we had to show them. I recall—I had a girlfriend in Winnetka, Illinois. I met her at the university and I went down there a couple times to visit her and I would get down to Chicago and I would take the elevated that ran out there. Are you familiar with that out there?

Interviewer: "Yeah."

I can't remember what the occasion was, but something happened on that train one day—did somebody get hurt? Anyway, we got to jabbering with each another and I got acquainted with the motorman that was running the train. One day there was a fellow out there, he came here and he wanted to see this nursery. I showed him all around and we got talking. He said he was a motorman on the elevated train there in Chicago. I started telling him about my experience down there on that elevated and he said, "That was me, I was the motorman." It's a small world—you can't believe what's happening. What an interesting thing to happen.

Interviewer: "So, you were giving a lot of tours then?"

He was just by himself. I can't remember that he had anybody with him, but people would come that way—fishermen would come up here to see what was going on. It was quite an important place then.

Interviewer: "Yeah, not a lot to see in Wellston, this was a big attraction."

That was the headquarters for the nursery.

Interviewer: "Were you getting a couple of hundred people on the weekends in the summertime?"

Oh, no, nothing like that. But there would be just small groups visiting—a carload at a time or something like that. Once in a while you would get a little more than that. It wasn't a very time consuming thing.

Interviewer: "So, the big crowds would come when the Forest Festival was going on in Manistee? That would bring them out?"

Yes, that would happen

Interviewer: "What did the public think? What kind of responses were you getting from the people who came out?"

(They were) very interested in what was happening. Of course the Cooley Bridge was new in that day and a lot of people came just to see that bridge. Then they would come on up here. They built that road M-55 from Manistee to Cadillac and they put down hot asphalt that thick (gestures that it was about a foot thick). I bet it is the same old road that's out there now is it? Do you know?

Interviewer: "They might have worked on it a couple of times, but it's the same road."

That was one of the most successful roads I have ever seen built. They came out there and they had stations along the way where they heated that stuff up. They brought in the dump trucks and it was piping hot and they covered it up. They would dump that stuff out and run back to the place it was made. It had asphalt and sand and gravel in it. Oh, that was a mixture.

Interviewer: **"The people around town, the people you were friends with from the hotel and the stores and stuff, what did they think of the forest coming to Manistee County?"**

They thought it was great stuff. They got lots of business from it. They were great. They rented their houses to us and we stayed in the hotel. We would go there for dinners and we would buy our groceries at the grocery store.

Interviewer: "Did you hear of any problems? Were there people that were upset about planting trees?"

I never heard anybody mention complaints.

Interviewer: "Not that they would complain to you."

Well, we seemed to get along very well. I suppose there were some people that didn't think much of us—there always are.

Interviewer: "Yeah, but they didn't come around too much?"

They didn't bother us; they weren't activists if that is the word for it. They were pretty nice people there in town. Many of them, of course, had jobs with us of one kind or another, with the Forest Service.

Interviewer: "So, it was a big employer then? People were happy because it created jobs and business?"

Well, of course we didn't just go out and hire individuals very much because our help in those days came from the CCC, ERA, or WPA and that sort of thing. Many of those people were in those programs and they lived here, but they worked in those programs. They came here too and they were part of the whole deal. I suppose some of them were not too happy with us, but in general we had good relations with most people.

Interviewer: "That's good."

The lady up the street there used to do my laundry and she would just look after us like we were [family]. I wasn't married when I lived here so they were all trying to find me a wife of course—we had great times.

Interviewer: "While we're on the subject of visitors, there were a few special visitors that came to Chittenden while you were here. Can you tell us about the dedication and when Mrs. Chittenden came?

Yes I can. I got a picture did you know about that?

Interviewer: "Yes, I've seen pictures of the dedication."

With Mrs. Chittenden and me planting the tree?

Interviewer: "Yes."

You've seen the one of that. I can't remember that it was part of her visit. I'm almost positive that she came another time to visit and why I didn't recognize her, I don't know. But she had come in and came to Cadillac and got a taxi driver or somebody to bring her out here and I guess he was going to come and pick her up again. She was staying at the hotel and she had been there for her lunch. She was walking out here to the nursery. I saw this little lady walking down the road. I wanted to see if she wanted a ride so, I stopped and she said yes, she would like a ride and that she was going to the Chittenden Nursery. I told her that's where I was going and then she said, "Well, I'm Mrs. Chittenden." So we spent the rest of the day entertaining Mrs. Chittenden, she was such a beautiful little lady. Her husband had died and she wanted to see what that nursery looked like. She lived down in Lansing.

Interviewer "What did you do with her while she was here?"

We did everything we could. We showed her everything we had and she liked the whole thing. I suspect she was seventy years old, but it was quite an experience for her. Secretary Wallace of Agriculture came on Sunday and he went down to the house. I think Charlie Rindt and his wife were down there and he went and knocked on the door and she went to the door and answered it and he said, "I'm Secretary Wallace and I want to see this nursery." (laughs)

Interviewer: "Did anybody know he was coming?"

We didn't know he was coming. She was kind of an excitable gal. She was a wonderful person and she just leaped on it. She was so excited. So, she went back in the house and made coffee and got her cookies and doughnuts out and had a wonderful time with the Secretary of Agriculture. Then they showed him around. It was just family—nobody else was around that weekend. On Monday we all came in and learned about the Secretary's visit.

[Break in the taping]

Interviewer: "Okay, we were talking about Secretary Wallace's visit."

I forgot where we left off. He came and knocked on the door and Mrs. Rindt came to the door and it was Sunday morning and they were not going to church that day. They had one little boy. He knocks on the door and she went to let him in and he said, "I'm Henry Wallace, Secretary of Agriculture and I wanted to see this nursery." She was quite an excitable gal and she jumped all over the thing. She called her

husband and he came. They made coffee and they all sat down and had a good visit. Then they showed him the nursery. He enjoyed that visit so much, I guess.

Interviewer: "Was he by himself?"

He was all alone and I don't think he even had a driver. I think he had driven a rental car or something. I can't remember how he got here. It was such an informal thing you know. He was standing at my door and said, "I'm the Secretary of Agriculture and I want to see this nursery." I guess he had heard about it. I can't remember anybody else; I suppose there have been all kinds of people in here.

Interviewer: "Did he stay extra? Was he there on Monday?"

No, after he looked around, he just went on his way, back to where he came from, Cadillac or Manistee.

Interviewer: "In the reports, they talk about him going out to Cooley Bridge to see the Cooley Bridge and the plantings you guys had out there."

I'm sure they showed him Cooley Bridge, but I don't think that Charlie Rindt showed it to him. He just showed him the nursery. There was probably a party of them somewhere and he just dropped off there—maybe that's how it all happened. I never knew the details of all that.

Interviewer: "That had nothing to do with the election or anything? Because this is October of 1936 and the election with Roosevelt and Landon was a week away."

I couldn't have told you what time of the year it was when he was there. I don't think it was—well, it may have been out electioneering. That's probably what brought them up here, but when he came here, he came all by himself. That was an interesting thing.

Interviewer: "In the record it talks about it. Al Miller wrote something up in one of the reports about how the secretary came. I looked in all the newspapers and they don't have anything to say. Nobody knew he was here."

I expect that's true—I expect that's just the way he wanted it to be, one-on-one. He just enjoyed that visit and the Rindts were just the perfect people to entertain him that way.

Interviewer: "I find that amazing. If the Secretary of Agriculture came to Wellston today, there would be bands and parades. Every newspaper would want to talk to him."

Yeah, you couldn't get near it could you?

Interviewer: **"I'm guessing that he might be the last Secretary of Agriculture that's been to Chittenden Nursery."**

It would probably be only one ever and it was his baby too. He had heard about it—we had a Director of the Lake States Forest Experimental Station and his name was Raphael Zon, have you ever heard of him?

Interviewer "I know Zon."

He was quite a confident of those folks in Washington. He got the windbreak shelter built. All that shelterbelt stuff started out there and they were influential people. He was well known all over.

Interviewer: "Did he come here?"

He may have, but I never knew of it. As a matter of fact, I think he may have retired. We had a new director of the Lake States when I was up there. No, he was still there, but I guess it was his last year maybe. I can't remember, but I don't think he did too much fieldwork in those days. He was an old Jew you know and a great guy. I heard him make a speech one day to a group and he made forestry and nature look so enticing. I never heard a speech like that in my life. He started with a single tree and he grew a forest and it was just wonderful.

Interviewer: "Was that in St. Paul?"

That was in St. Paul, yeah. I have never heard a lecture like that since and I don't think there is one possible. We also had a man out there by the name of Gevorkiantz, he was a Russian, and I guess Zon was probably Russian too, but they were both Russian Jews. This Gevorkiantz, his family had a series of restaurants along the Siberian Railroad. He said they were kind of like Harvey's, if you remember Fred Harvey's. Of course when the Revolution came, they were non-grata people and they just escaped wherever they could. George, he got into China somehow in the middle of a load of hay and the rest of the family just came individually and they finally all got together again. But he spent quite a time down there in China and George had a … Do you like these little stories?

Interviewer: "Yeah, I like these little stories."

Well George, we called him George. His name was Suren—Suren Gevorkiantz, but he was George to all the rest of us. He was a little short guy and was very interested in everything. He was just a great chap. Our office was in the Green Hall in the Forestry Building at the University of Minnesota. There was a

special streetcar line and it went between the campuses and they called it the Intercampus Car. George was riding that thing and he had been over to the main campus one time and was coming back. There was a little Chinese boy sitting in the backseat and he kept watching him. Finally George got off over in St. Paul and this boy got off and he went up to George and he said, "Did you ever live in China?" George said, "Yes I did." He named the place and said, "Yes, I lived there." George had been kind of a physical exerciser and he had stuff in his yard and he chinned himself. Kids would come and play on his equipment. This guy said, "You know I use to play on your equipment." Now isn't that a good little small world story—that from two continents … Anyway George was that kind of a person. He went to Harvard and he learned under [Ronald A.] Fisher, the guy who invented statistical analysis. He was the only one at the university that knew anything about statistical analysis. The people were coming to his door and it was amazing. Anyone who had a project and wanted to get in the proper perspective would just come out there and George would tell them how to do it. That was George and he was one great person. I worked up there—I went from the nursery. I worked I guess three winters before the war in the seed lab up at the University of Minnesota under Gene Roe.

Interviewer: "That was before the war?"

Yeah.

Interviewer: "So, how long were you here then?"

I was here from 1935 until 1942.

Interviewer: "So, you were leaving during the wintertime to go out there?"

Yeah. I went up there to work in the seed lab for a while and Gene Roe was in charge of the seed lab. I did all his experiments for him. That's where I got to know all the people from the experiment station, Gene Roe and Paul Rudolf. Who else used to come out here? I guess some of the others, the entomologist, but it was kind of interesting going in there. Many of the people from the experiment station would have their field work in the summer and come into St. Paul and work there all winter. So I was just part of the bunch.

Interviewer: "Did meeting all these different people from all over the Lakes Region, did that give you new ideas to bring back and share during the summer?"

We knew a lot of what they were all doing and what their projects were and how they did it. There was another fellow there too and I can't think of his name. He was a real sharp individual and very individualistic too. We would go bowling on Saturday night and we had good times together

Interviewer: "So, there was more to do in St. Paul than there was in Wellston?"

There was quite a bit more (laughs). There was a Bill Kluender, have you got him down anywhere? He would come around here too and Bill was … He finally took a job as a forester for the Northwestern Railroad. He was at St. Paul too, but Bill and I roomed together. We lived with some people right near the campus. The man was with the Northern Pacific and he had a night route. He would go up to Brainerd I guess, or somewhere, and he would catch another train coming back to St. Paul. He would get there and he would tell us all the things that happened. Then he would get out and go bird hunting. It was crazy all the things they did. They had some new locomotives that had a big tall stack. It was so big that it couldn't get into the depot in Minneapolis, so, they had made the stack so it could be lowered with a crank. They would crank the thing down and this engineer came in there one night and he forgot about his smoke stack and he almost knocked the depot down. He thought that was the greatest story he could tell. It was a lot of fun.

Interviewer: "Now, I've read those reports that you helped write on the nursery from the thirties and the reports coming out of Muskegon about the Manistee [National] Forest. There's this expectation as I read them that inside the proclamation boundary was going to be all forest. They were going to buy up all this land and they were going to make this enormous forest. They were going to build fire towers and there were going to be these enormous plantations with all the seedlings provided by Chittenden. There was a lot of optimism—it's a big grand vision. What happened with that? You know, in terms of what was going on."

That's what my son and I were trying to find out when we wrote to you guys (laughs). We had just read a big story on how the southern plantations had just started a new industry, you know. We did the same thing up here, but you never hear about it. So, we started writing to people and you guys got a hold of it. We never did get anything about the plantations except what Paulson said about this one out here. And I had to send him an explanation of what happened that day. It hasn't been a big thing. I suppose—you know this area up here, in that period, was practically devoid of anybody that had grown up here.

Everybody had left here because they couldn't make a living anymore. Their farms were no good because of the sand and they all went down to Detroit and got jobs in the auto industry. Well, you should have seen the pack of people going back and forth here on weekends—it was tremendous. That [M-]115 Highway there was just tremendous—just loads of people. They all had to come home you know. It was in their blood up here. They had to get home for deer hunting and fishing and everything else, but that was the feeling up here in those days. People had left the farms and the farms were going vacant and they were just going to pot. There was a lot of room for optimism, but those people stayed in Detroit; they didn't come back very much. It's a different set of people who have come up here since. Part of that was due to the auto industry. They set up little plants in surrounding towns you know.

Interviewer: "Yes, the parts plants."

Parts plants, they were making little pieces for the auto industry.

Interviewer: **"In the later reports that you were involved in, from the late 30s into the early 40s, it starts talking more about the fungus and the diseases and the pests and the bugs and these problems that you had. Did it move from optimism to pragmatism with these issues going on?"**

I don't think so. I suppose we were just kind of you know—like somebody's house burns down or somebody goes out and shoots his neighbors—there was news items like that. I don't think those things (were significant). There was a lot of controversy in original when they started making these plantations in thinking that they would get colonies of all one kind of plant and the diseases would get to them and it would just ruin the place. Well, it could have done that too, but I don't know that it ever did flourish very badly. It wasn't anything like the elm disease or blister rust. No. Those things were always with us and we had to take care of the blister rust people and they always worked there. But we never thought of being in any dire trouble. Those things, I suppose, were kind of news items. The news people were kind of looking for a (story). They overlooked what was underneath their feet—how those trees were growing into forests. That's what John [his son] and I were trying to find out, what they're cooking up here. Those must be some forests now, some seventy years old.

Interviewer: "That's how I got interested in this, by seeing the plantations. When I was a kid, I looked at them and I thought, "The other forests I see, they don't plant them in rows. God doesn't usually do it that way."

No. they're a very erratic kind of thing; you don't plant them in rows. The Park Service up there at Glen Lake, they, what do you call that … We had the national park up there.

Interviewer: "Yeah, the Lakeshore."

Yeah, the [Sleeping Bear Dunes] National Lakeshore. There are some plantations up there on the dunes and they apologized for them. They say, "These are not native. They are not wild. There just something some people put up here and thought it was good planting." We sure did do a lot of planting and it did pay off, didn't it? People who were in that program were so interested in it and so personally involved. I think everybody I know who has worked up here said at one time or another that it was the best job they ever had. It was mine; I never had anything that was quite the equal to it. You were doing something really worthwhile. It was showing up and it was helping a lot of people. After the CCC boys, I suppose, things kind of settled down and it was just the folks who lived here. They could see what was happening and either knew about it or didn't—the excitement of it kind of dies down after a while. It's been seventy years now.

Interviewer: "Did I miss any good questions? Is there anything else about Chittenden I should have asked?"

I don't know. Let's see, what else could we talk about? I remember one place we had right out here, right next to where you come in. We had a bed of seedlings that was in block E we called it. I think that block is all displaced already, but we had a bed there. We planted some basswood seed in and nothing ever showed. We left it there for two years and then we said, "I guess that's the end of the Basswoods." We went and planted spruce in there and we harvested the spruce. While we were harvesting the spruce, we saw these seedlings coming up in there and it was our basswood coming up finally. I thought it was one of the funniest things that had happened. I think somebody did a doctoral degree on how to germinate Basswood seeds.

Well, Buenger was going to do that at one time and they had to treat it with nitric acid. He got a thing they had to put the nitric acid in. He went down in the basement of the office building to do it and kind of get away from things. When he put the seeds in the nitric acid, it exploded with an eruption of black smoke. It was that acid stuff you know, it will just eat you up. It drove them out of the office and it drove everybody out for miles around, I guess. It finally wore itself out where we could get back in there

and blow the fumes out of that place. I'll tell you, we had our trouble with basswood. But it was kind of fun to see it after all those years; it had started to germinate.

We would bring peat; we had a peat bog down the road about a mile or two. I don't know if it's still there. It probably isn't after we pulled so much peat out of it. We would store it up and we just piled it underneath the trees in there and some of it would stay in there for quite a little while. We had this one right close to the compost pits and we finally got around to putting that into the compost. After we did that, the spring came and the rains came and it started sprouting cherry trees. It was a sight on earth having all those cherry trees coming up in there. You know it was very interesting to view that particular thing because the steamboats used to come up, after they started having steam and not sail, and they would stop at Manitou Island and load on wood. People went up there and they just cut all the trees off up there to feed the steamboat. After that had happened, those areas were left to grow up by themselves and the cherries took off and started coming up. The furniture industry down in Grand Rapids had a whole business built on Lake Michigan cherry that came from Manitou Island. That was very interesting to me that there were some solid stands of cherry up there, black cherry. The same thing happened in Erie, Pennsylvania.

Interviewer: "Really?"

We use to hear about it. That was the source of wonderful cherry. I just came to believe, I bet you anything, that the same thing happened there. They cut the trees off to drive the steamboats and the cherry trees took advantage of it and made cherry stands. I never had anyone tell me the truth about that one. I just guessed it, but there were two places I knew where there was good black cherry. It had been very much in demand.

Interviewer: "That's very interesting."

There are a lot of interesting old things like that.

Interviewer: "Why don't we take a break?"

Okay.

[Break for lunch]

Interviewer: **"When we left off we were talking about a few things going on in Chittenden while you were here and you were going to tell me about the fire over at Mae Dust's house."**

Yes, well, the post office caught fire one day and they called for help from Sam at the CCC camp. Of course, there was not much of anything else to do; we just loaded up everybody that came over to see what could be done. They came over from the guard station across the street too. They brought a pump and a whole bunch of hose. They ran it down to the lake and put the pump and that hose and laid it out there. We just got the thing all set up and the train came along. Rather than let the train run over the hose, we pulled the hose back and let the train get by, the noon train. By that time it was kind of hopeless and we couldn't do very much more with the fire. I remember one thing, they had an open drum of kerosene—it was kind of a funny thing. It had a kind of open top, but it wasn't sealed in any way and that thing went through that fire and never caught fire. Can you imagine that?

Interviewer: "Why would they have an open thing of kerosene?"

They dipped it out of this to fill people's lamps and things of that kind, you know.

Interviewer: "But no lid or covering for it?"

It had a cover, but it was not an airtight cover, if you know what I mean. It wasn't sealed. It was kind of open. I don't know how they dipped in that, maybe they had a hand pump or something in there, but it never caught fire. That building burnt right down over top of it.

Interviewer: "So, they had to rebuild the post office then."

Well, then she went across on that north-south street there and she built that big thing that stands in there with railing and stairways and stuff. Mae had quite a place there and that was the post office and she had a little store where she sold little things, not a very big one. But Jim, whatever his name was, on the corner, he had the grocery store and he sold us all groceries.

Interviewer: "Your daughter said that you have a story about a snowstorm where your car got stuck, your truck got stuck, in a snow bank and you had to hike over to the nursery to check things out. Do you know what I'm talking about?"

I got to figure it out. I had to hike to where?

Interviewer: "Right here—to the nursery, to check on the nursery in the middle of the winter."

Oh, this was one of those heavy snowstorms that comes up over night, you know and we were just buried. I had left my car home and started walking across with snowshoes. I was just walking cross lots. The snow was very deep and it was soft and I was dipping down. When I got out there I didn't know if I

could ever get my breath again or not. It was pretty exhausting. I got back out and walked into the nursery.

Interviewer: "How was everything when you got here?"

It was slowed down pretty much, too.

Interviewer: "Pretty white?"

Pretty white is right. That was quite a storm we had.

Interviewer: "Can you tell me the story about when the lake got low in the hot summer?"

Oh yes, we had a—it had been very hot and we pumped so much water from the lake. It was hot and dry with no rain and so the lake level had gone way down. All the mucky stuff was coming up into the pumps. It plugged the pumps, but it also plugged the nozzles in the overhead water lines. So I use to go out at night and I would water all night because it was more efficient with the water. I would just put on my bathing trunks and walk up and down those lines and keep the nozzles unplugged. If you didn't, in the morning you woke up and you would have a dry spot there and trees that were turning brown. But the lake got so low that our intakes weren't effective, so we dug that all up again and set the pipes down and the intakes about two feet lower and then go out into the lake and open up a little ditch to it to get the water to it. But it would still bring in a lot of that mucky stuff off the bottom of the lake. We had our problems all summer and I would have to go down and take the tops of those pumps off and get them cleaned out. I think there were forty-eight bolts that held the top of the pump and a good seal in-between, too. You had to make that seal good and tight and tighten all those bolts. By the time you did that two or three times a day, you kind of felt like you were a plumber (laughs).

Interviewer: "Did it work out? Did you lose a lot of trees?"

We didn't lose, but a very, very little stuff. It was amazing too because for one thing, we had previously had snow fences lined up along the pipe lines. The object of that was to reduce the wind flow across the beds and it was to save water. Well, we found out when water was scarce—the rain wasn't coming—and to water with any kind of wind, the snow fence would stop the water from drifting across to one side. It happened to be the second bed in from the pipeline and they would begin to turn brown in the middle. We discovered it was pretty much that snow fence that was doing it. So, we tore those snow fences down and we never put them up again. That was part of the reason we made snow fence there in the

wintertime because we used it quite a lot for shade and windbreaks. But they also used them on forest roads and where there would be an open field and you would want to stop the snow. That's why they were called snow fences. They would build a little pile of snow on the alee side.

Interviewer: "Did you have trouble with wind storms or other kinds of storms hurting the plants?"

We were lucky—I think otherwise, I can't remember an occasion where we had anything other than deep snow.

Interviewer: "They get deep snow here; they do get deep snow here."

Yes they do.

Interviewer: "No floods, no other natural disasters? Severe thunderstorms?"

I just can't remember if there was anything like that. Of course during that real dry period in the late thirties was at the time of the Dust Bowl in Kansas and Nebraska. It was a terrible time for them and the people had to leave their farms. We even had great … the windstorms would come across here and drop the dust right on top of us, you know. It was amazing how it carried it in the air all that distance.

Interviewer: "Did it have any effect on the trees at all?"

No, nothing other than the heat and drought, but that was enough.

Interviewer: "That was enough."

That was enough.

Interviewer: "I know you joined the military during the war. How did you decide to sign up?"

I was twenty-eight years old when that started. That was the cut off point for the draft. But I wasn't quite to that point yet so, I fell into the draft. My number came up, so I just went. On Pearl Harbor Day, one fellow and I from the camp had gone into Manistee to the movies I guess. As we were driving into town the news came over the radio that Pearl Harbor occurred. He was kind of interested in the Army Engineers and I think he finally did join the Army Engineers. But I had no special specialties in army work, so I (just) went. But right off about one day in Camp Custer and by the next morning we were in St. Louis at Jefferson Barracks. They put us through all that preliminary work and tried to figure out what they wanted you to do and it said weather forecasting and I thought that sounded pretty interesting. If that's as close as you get to firing a gun, I guess that's a good way to be. I put my name on it and after I had done that, they said the weather people were the last to go. I was plenty ready to get rid of Jefferson Barracks,

but as it turned out, I didn't even finish basic training. They pulled my number I was gone off to Indiana to weather school.

Interviewer: "So, how did you decide that weather forecasting was the thing to do?"

I thought maybe it had some good applications to what I was doing in forestry. It kind of intrigued me anyway. I was a weather observer to start with and then we had a chance to go to forecasters' school. I signed up for it and they took me.

Interviewer: "Where was that?"

It started down near Rantoul, Indiana [sic, Illinois]. I can't remember the airbase that was down there, but that's where the first forecasters' school was held. In the midst of it, they moved us all up to Grand Rapids, Michigan. We took over a couple of old furniture warehouses. We spent the rest of our training right there in Grand Rapids and I lived at home.

Interviewer: "Interesting."

My wife's home anyway.

Interviewer: "When did they send you out?"

From there I went to Vermont, or New Hampshire I guess it was, to Currier Field at Manchester, New Hampshire. I was there until fall I guess. When fall time came our number was up and we started off to … we didn't know where … they sent us to … they didn't say anything about tropical. But anyway we were bound for India and I spent the war over in India.

Interviewer: "Did your forestry training help you at all in your weather forecasting work?"

Well, no, but he weather forecasting helped me with my forestry work.

Interviewer: "How is that?"

Well, I got interested in fire research and I kind of worked over into that. I worked with the weather bureau people quite a bit. I had a pretty good understanding of how weather worked and so, it was very useful.

Interviewer: "What did they have you doing in India?"

Forecasting the weather. It was pretty much a matter of knowing your climatology pretty much. Because the weather, when you get into the winter situation you have hot and dry and in the summer it's all wet and cold. Cool, not cold, wet and muggy. It was awful wet and it just rains every day. I was stationed for several months at a kind of a valley station and we could see through to the base of the mountain. It went

up 5,000 feet and on top was a little place called Cherrapunji. It was known for having the highest rainfall in the world. (coughs) Measured rainfall, there have been other places that had more, but it was a missionary station up there and they had been taking weather records for years and years and years. I think the annual rainfall was something over a thousand inches. [Average rainfall is actually about 450 inches. Its record rainfall in 1860-61, however, was 1,042 inches.]

Interviewer: "That's a lot of rain."

It just took that warm, moist air right off the bay down in… Yes, the air, the summer monsoon, comes off the Bay of Bengal. There's about a hundred miles to the foot of this mountain, which is about 5,000 feet almost, and the rain just condenses continually almost. The rain gauge up there was all automatic and I went up there and saw it one time. It was raining and it was just as soggy as could be. There was hardly any dirt on the ground; it was all rocks. Down below where our camp was there was a rice paddy that had been leveled off for a landing field. In the springtime during the monsoon, we could look up there any time of the day or night and there would be great gushes of water falling down the sides of that mountain. It was an interesting place to be. There was a one-way road, a single track. It was paved road—it was all the way up to the top of the place where there was a little town. I can't say the name of it now, but we were in Sylhet [part of present day Bangladesh] at the foot of the mountain. The traffic would start in the morning, at eight o'clock, from the bottom of the mountain and also at the top. They would meet in the middle and they would have lunch and stuff. At a certain time they would ring a gong and everybody would start going the other way. If you were going downhill you went to the left, and if you were going the other way you went up to the top of the mountain to the village up there. It was an unlucky person that got caught in there between times and had to wait. That was just an interesting little place where we used to go. We'd go because it was nice and cool up there. We met an Indian forester up there. We got acquainted with him. He showed us around some of his forests and it was very interesting. The rainfall was something to behold and it all came in half of the year.

Interviewer: "So, were you there for the duration of the war then?"

Yes, I was there until VJ Day. VE Day was last wasn't it? VJ Day came first I believe, when they dropped the bomb.

Interviewer: "The bomb was the last."

Was the bomb the last? Okay. Anyway it dropped and they were done with us. And we started making our way home.

Interviewer: "So, where did you find work when you got back?"

I went right back to the Forest Service. I picked up on one of the boys that had been running a sawmill lumber production survey on the Upper Peninsula. I finished up his job and got acquainted with all the sawmillers in the U.P. I had a wonderful time up there in Escanaba. Then about that time we had our first baby. She was born in (Grand Rapids) … that was Dorothy—the one sitting there (points to his left). My wife was in Grand Rapids then. We hadn't gotten really settled yet. Finally we got ready to go to Escanaba. I found a place to live. We went up just as deer hunters were all coming home from deer hunting season, the end of the season. They were backed up for about three miles out of the Sault [sic, St. Ignace] waiting for the ferry, you know. We (on the other hand) had straight going. We just went up across to Escanaba. It was quite a deal.

Interviewer: So, where did your work go from there?"

Oh, by then I had re-associated myself with the Lake States Forestry Experiment Station. I worked with Jack Mitchell, who had been doing their fire research work since they had a place to do it. He taught me all he knew and I used my meteorological education. We put two and two together and things worked pretty well. I spent most of my time doing work on the meters we use to determine weather conditions for fire work. We did a lot of that up here for the Lake States.

Interviewer: (checked video player) "It paused on me I think. So, you were talking about the weather meters."

Yeah.

Interviewer: "How did they work?"

Well, it was the result of quite a lot of study. You put the factors of humidity, rainfall, wind velocity and direction and you give yourself a rating which was pretty good for determining what the possibilities are for forest fires to start burning. You go from rainfall, which is zero chance of fires, to extremely dangerous when it's in a long drought. I don't know how that's working now with all the tremendously big fires that have been going on. I've kind of lost contact with all of that. But it seem like in the West they've had these fires that just continually get out of control, and they get to be of enormous size. When they're

around here it's still useful to follow with the danger meters to see what the possibilities are. But I don't think you have had many bad seasons here in quite some time, I guess.

Interviewer: "Not too many bad seasons. Nothing like they had back eighty years ago."

Yeah, in the West … Of course the fuel situation is considerably different now days, too.

Interviewer: "There was a lot of debate going on about the role of fire. There was strict fire prevention—put them all out all the time, and now there's discussion about controlled burning to control the fuel supply and things of that sort. Where was that debate when you were doing your research and how did that influence your research?"

Originally we were pretty much on fire prevention—the Smoky Bear era—when we tried to prevent fires from starting. We could see that in the West they were having a terrible build-up of fuel. Particularly, I had been out to Yellowstone Park and some of those places. We could see that if a fire got started … Of course the Park Service had no timber management at all. They just wanted things to be wild. And the wilder they got, the more fuel there was built up because everything that was dead fell down to the ground and became fuel. So, the West was a tinder box. Apparently it was just one of those things. We put so much emphasis on prevention that nobody outside of the people in the South were doing very much in the way of controlled burning either for fuel reduction or for timber management purposes. So, we got into both sides of the deal. We got to working with some of the folks that were using fire as a tool as well as those who were trying to prevent fires for occurring. But if you can control what you are doing, it makes quite a difference and it becomes a useful tool actually. I think there's a good deal of emphasis now on that. Particularly in the West where they're trying to get all kinds of fuel reduction measures going so they can prevent these terrible landslides. Of course with the mountain areas with the steep slopes, there isn't much you can do when a fire starts up a steep slope; it's gone to the top. Here in our country (Lakes States) you can sometimes build a wall of small fires and you can control them easily. The big ones sometimes get big like we had over there in the Huron Forest from time to time. I guess we've never had a real big one since back in the 1880s in this part of the country, though.

Interviewer: "Yes, for the most part. There was the fire in Metz and some of those that were in the early-twentieth century,"

The hardwood forests are not as fire prone as the conifers are either. So there's a big difference there.

Interviewer: "So, what was it like to work at the Lake States Research Station?"

Well, I enjoyed that very much. I was with them … I guess eventually we got taken over by the Central States Forest Experiment Station. But I think the whole thing is the northern group that takes everything on the northeast part of the country now, doesn't it? Or aren't you familiar?

Interviewer: "Yes"

I knew all the directors who had been out there at the Lake States a good many years. Finally there was a woman [Linda Donoghue], a lady, who got to be director and she still might be director for all I know. She came to Lansing when I was working in that office, so we kind of initiated that one.

Interviewer: "What kind of research were you doing? Was most of it experimental or out in the field?"

Well, we did some of all those things. We got involved in fuel measurements and later on, my work was changed into damage appraisal; although it wasn't wholly successful. Everybody thought that it was a very important thing to be able to assess a dollar damage to what fires were doing and that it would be a great tool to use in trying to prevent fires. There are some things that no matter how much you try you can't put dollar values on. We did our best and I finally came to the conclusion that the best thing to do was to find management tools that would be able to assess the relative values of different kinds of things and how prone they were to damage or whatever kind of words you want to use for damage. It could be benefits and losses. It's always kind of a tool between—I would try to identify the kinds of different parts of the resources that were involved in each of the different kinds of uses of the forests that became involved, but I finally retired. I don't think I had a fully good conclusion to all of that, but I think I gave them quite a few good ideas.

Interviewer: "Did you control the nature of your own projects—your own research—or were they dictated to you?"

Yeah, pretty much. I was assigned general areas of work and with the Lake States here and down in Missouri early. Missouri had a terrible fire situation and we had hundreds of fires in the spring. They were all set fires too. They were supposed to be useful fires to improve the range, get rid of ticks and chiggers and all kinds of things that didn't really pan out. We had a big job of trying to get people to do other things and keep the timber from getting all scared and burned up. I think, we worked quite a bit and

then one of the things that helped us as much as anything that happened was the emphasis that the agriculture people put on growing calves for sale. They didn't have good pastures, they didn't have good rangelands, but they could grow calves. They would have calf sales and people came from all around the surrounding states to buy Missouri calves. Once they got interested in growing good quality calves and livestock, they began to lose interest in the fires. I don't think the fire problem in Missouri is anything like it was then. There used to be hundreds of fires. It was free range, too. So the people that lived around the forest set fire to all the forest that didn't belong to them too, so their cattle could find a blade of grass here or there.

Interviewer "What do you consider to be the most valuable contribution of the work that you did for the Forest Service?"

Well, I think anybody that worked on these early programs with the tree planting was something that we all had great confidence in. We thought it was a very important part and almost everybody I knew, even later on, thought that was the best thing they ever did in the Forest Service. We enjoyed that work and we were doing something useful. We were helping all those boys in the CCC camps and we were putting the ground back to work. It was just a very satisfying kind of a thing to be doing. We all very much enjoyed it.

Interviewer: "So that would be the key source of pride from what was accomplished?"

I think so, yeah, I'm very proud of what we did. I think it's panned out to be a very successful venture.

Interviewer: "Yeah, the forests are all here."

Yeah, they're out there. You can go out and look at them and see them now.

Interviewer: **"I've gotten to the end of my question list so I just wanted to see if there is anything else you would like to add?"**

Well, I appreciate this opportunity to add anything that I might contribute to some of the old things that people forget, outgrow and outlive. I have been very appreciative of the efforts of the people here on the forest and you as an interviewer to have a chance to tell something about my story.

Interviewer: "Well thank you very much. I enjoyed it a lot."

I've enjoyed it too and I hope it all comes out to be something that will be worthwhile keeping.

Interviewer: "Excellent."