ORAL HISTORY INTERVIEW

with

Dr. and Mrs. George Furnival

by

Dr. James E. Fickle

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701 William Vickers Ave.
Durham, NC 27713
www.foresthistory.org

Dr. and Mrs. George Furnival Oral History Interview

Tape 1, Side A

JEF: This is July 17, 2004. This is Jim Fickle of the University of Memphis History Department. I am in North Haven, Connecticut, to interview Dr. and Mrs. George Furnival, and I will be joined in this interview process by Professor Chad Oliver of the Yale Forestry School.

Dr. Furnival, I'd like to start by asking you where and when you were born.

GMF: I was born in Johnson City, Tennessee, I believe, May first, 1925.

JEF: And what did your parents do?

GMF: Well, my dad had a couple of years of mining engineering, and so he was working for a coal miner, a coal company, in Eastern Kentucky. We lived there for a number of years, until my mother died in childbirth.

JEF: You lived in Kentucky then?

GF: Yes. [Gloria Furnival]

JEF: Asheville, North Carolina.

GF: And several other places. His brother was born in a different place. They were apparently just going to the sanatorium in Asheville when they were at Johnson City when he was born. So they didn't live there any length of time.

JEF: So they moved around with the job basically?

GF: Yeah. And his father was in World War I and was gassed, and so he had TB, and that's one reason they went to Asheville. And so he worked above the mines when he was working with coal mines.

And what else can I fill in?

GMF: Coal mine? Is that what she thinks? I said Mother died in childbirth.

GF: Kentucky.

GMF: Yes. In Kentucky. And at Fleming, Kentucky.

JEF: So you must have gone to grammar school and high school in a number of different places as you moved around?

GF: Yes. One place was—where was it your aunt lived?

GMF: Aunt Fan lived in Fairmont, West Virginia.

GF: You went to first grade in Fairmont?

GMF: Probably.

GF: We looked up the school. We found the school you went to.

GMF: I didn't say you said it differently. Honey, I don't remember that.

JEF: I have a good friend who's from Fairmont, one of my colleagues. So where did you go to high school?

GMF: I went to high school in one of the best prep schools in the United States.

GF: Saint Andrews.

GMF: Saint Andrews in Middletown, Delaware. Now that was Aunt Christina got me in there. There's another complication. You have more aunts. You've got more aunts than a Georgian, for a deep Southerner, and I'm not. She was really my father's sister.

GF: Official guardian.

GMF: Official guardian after I was an orphan in there. I went to live with Aunt Margaret at first, and that was arranged by Christina, I believe. And I went to fifth grade there, if you're interested in my education part. In the fifth grade there. In a two-room school.

GF: Miss Pound.

GMF: Miss Pound, right. There was two rooms, two and a half grades on one side, and two and a half grades on the other side. And she was the makin' of me, I mean, education-wise. She was a tiger. She kept order with a ruler, and if you misbehaved or didn't answer properly and so forth like that, she'd take one hand up and WHAP! Just like that. [laughs].

That's the absolute truth. I don't think I ever got whapped, but my brother did.

GF: Younger brother.

GMF: My younger brother.

GF: But you heard all the grades above you reciting. And so by the time you got to that grade, you knew everything.

GMF: Oh, yeah. But I didn't have to worry about that, because I came in in the fifth grade. This is true.

GF: This is Rixeyville, Virginia.

JEF: Rixeyville, Virginia.

GF: R-I-X-E-Y.

GMF: And that's where Aunt Margaret lived. And after I finished going to that little fifth year grade, I went to another town to the north to high school for a while. Do you remember the name?

GF: Yes. Jeffersonton, and then you went to Culpepper.

GMF: Yeah.

GF: Maybe freshman year of high school.

GMF: Then I went to Culpepper.

GF: That was the nearest big town.

GMF: And I was already a pretty good—

GF: Scholar.

GMF: Scholar. And Aunt Christina, who was my father's—

GF: Your real aunt. Got him into Saint Andrews.

GMF: And I must have been on an almost wholly scholarship. Do you remember?

GF: No. I never heard. I think that's something that they don't divulge.

GMF: But at any rate, I learned to write the English language there. I had a teacher—you remember him?

GF: I can't quite recall it.

JEF: Is Saint Andrews an Episcopal school?

GMF: Yes. An Episcopal prep school.

GF: And it was fairly new and started by Rockefeller money, I think.

GMF: Yes.

GF: Had a lot of Philadelphia city, wealthy, boys. A boys' school.

GMF: What I'm tryin', wanting to say, is he taught me how to write. How to handle the English language. I was already pretty good in mathematics, but he really was a good teacher.

GF: Fleming? Fleming?

GMF: No. It's close. But don't worry about it.

JEF: We'll think about it as we go on.

GMF: And then we went on to—

GF: Then after prep school you had summer off to help with the farm, and then he joined the army. Wasn't drafted. He was gonna be drafted.

JEF: Oh, you joined the army right after high school.

GMF: Yeah. I volunteered in World War II, but I never went overseas. I went out to California and—

GF: Fort Benning, Georgia.

GMF: Fort Benning, Georgia. No. No. Fort Benning, Georgia, and Louisiana. And then we transferred out to—

GF: San Luis Obispo.

GMF: San Luis Obispo, which is a little bit on the northern coast of California. And we were due to attack, invade Japan. And thank God, they came along and dropped a couple of atomic bombs and made that totally unnecessary. And so I got shipped back to the East Coast, and by the time I got here it was over. I didn't ever have to go overseas.

JEF: So you then decided to go to college after you got back from the military?

GF: The Veteran's Bill.

GMF: Veteran's benefit at Georgia.

JEF: Why Georgia?

GMF: Well, I think I had—

GF: Because of the Florida land.

GMF: Yeah, I guess. Florida land.

GF: The family that adopted him later didn't officially adopt him as a child. He went to live with them when he was about ten years old. They have how many?

GMF: Yeah, they had timberland in San Augustine, in and around Florida, like that.

GF: Fourteen thousand acres or something.

GMF: And so that got me started in forestry.

JEF: I was going to ask you that. That's what got your interest in forestry? So you went to the University of Georgia planning to major in forestry from the beginning?

GMF: I don't know as I was— I think—

GF: You enrolled in the forestry school.

GMF: Yeah. I enrolled in the forestry school, and shortly after I graduated we were married.

JEF: Where did you all meet?

GF: In class.

JEF: Oh, you went to the University of Georgia also.

GF: I was at Georgia in my junior year when we met.

JEF: And you're from Atlanta?

GF: Yes.

JEF: And what was your major at Georgia?

GF: Psychology.

JEF: Psychology.

GF: I took a B.S. because I didn't like languages and I wasn't good with foreign languages.

GMF: And then after that's when we went to Duke, and she supported me. I got a tuition

scholarship, but she supported me doing my doctorate.

JEF: Let me go back to Georgia. Your interest in forestry was because of your adopted family owning this land?

GMF: Yes.

JEF: Did you have any other kind of interest that brought you to forestry? Did you like outdoor activities?

GMF: Oh, yeah. It was after that, I did a lot of hunting and fishing, but I was always interested. I think anybody that grows up in the hills is interested in the trees, you know. And so you got so you know ‘em pretty well. 'Course people will say things, you know, “I’ll meet you up on the side of the mountain by that sycamore.” Well, there ain't no sycamores there. But, you know, a hickory tree or somethin' like that.

GF: Well, and your adopted father was managing this twelve-hundred-acre farm in Virginia.

GMF: You mean Uncle Jim?

GF: Uncle Jim. He wasn’t ready to retire yet, you know.

JEF: So there wasn’t any space. Basically he had to—

GMF: Had to get out of there.

JEF: Sure. Yeah.

GF: So it seemed reasonable to do the forestry.

GMF: Bless her heart, Aunt Margaret outlived him. She was good to us.

JEF: When you went to Georgia, what were the backgrounds? Can you generalize what the other students were like at Georgia, where they come from, and why they were in forestry?

GMF: Well, I can remember—or could until recently, at any rate—remember the names of my first four students.

GF: Roommates.

GMF: Four roommates. I guess I was one of ‘em.

GF: But they were not foresters.

GMF: No. Some of them were.

GF: Not— Joe—

GMF: Uhler. He was. His family was in the tie business, in my recollection. I'm not sure of that.

JEF: So that's why he got into forestry.

GMF: Yes. He was in forestry. Then there was a little guy—

GF: Sax Daniels.

GMF: Daniels from—

GF: Savannah.

GMF: Thank you. Give me a chance, will you?

GF: He was in journalism.

GMF: Yeah. He was in journalism, and he had a way with words. There's no doubt about that. And also Savannah is a damned interesting town. So that was a lot of—

GF: And Chuck was the fourth one.

GMF: Chuck Minor.

GF: Lane.

GMF: Chuck Lane. Now Charles E. Lane.

GF: I don't know what his major was.

GMF: Charles E. Lane. I can't remember either, but we had contact with him for quite a while after that. Yeah. Charles E., Chuck.

GF: But he wants to know about the other people in the forestry school.

JEF: I just wondered if there was any pattern of where they came from or why they were in forestry.

GMF: You mean at Georgia?

JEF: Uh-huh.

GMF: Well, a whole lot of it was a fifty-two-twenty business. After you came out of the army, they gave you—I don't know whether they paid your tuition or what was it.

GF: Yes. Paid your tuition.

GMF: Paid your tuition.

GF: And we got a hundred and twenty a month.

GMF: A hundred and twenty a month. So that dragged in a lot of people. Just didn't want to go to work or couldn't find a job, so they could do that. So we had all sorts of interests.

JEF: What sort of curriculum did they have at Georgia at the time you were there? This is in the late 1940s. What was their curriculum like? The curriculum. What kind of courses?

GMF: At Georgia?

JEF: Yes, sir.

GMF: Dendrology. Of course, everybody took dendrology. Mensuration. And we did a good bit of land surveyin'. I remember I used to have that big, you know, tripod compass and—

JEF: Transit?

GMF: Well, we didn't—transits were expensive. So we did a lot more with a—

JEF: Staff compass?

GMF: Staff compass. Yes. Thank you. That's the word I wanted. You had to know your—what you call it--different declination and so forth. So we'd run a lot of lines and lay off _____ in there. I was very good at that kind of stuff.

Well, now I say, where was I?
JEF: You were talking about the courses you took at Georgia.

GMF: It seemed to me that we had something about the environment, too. At least at Duke we did. Gloria, we had something about the environment when we were at Georgia—or not?

GF: Not that I can remember.

JEF: Any ecology courses?

GMF: Uh, I just doubt if I can. I can't remember.

GF: Ecology was not even hardly in the language.

JEF: It probably was a little early for that.

CDO: Was Odom or Oldstein—they were at Georgia at that time. Do you recall taking anything under them?

GF: No.

GMF: Odom?

CDO: Odom or Oldstein.

GMF: No. Neither one of 'em.

GF: Al Worrell was here. Al Worrell was one of his teachers.

CDO: Oh, really? Al Worrell later became the economics professor at Yale along with—

JEF: Did Georgia run a summer or spring camp as part of the forestry school?

GMF: I just—

GF: I think it's probable.

GMF: I don't remember it.

GF: Seems like there was a cabin that you went out to, that we went out to for a picnic.

GMF: It could be, honey. I just don't really begin to remember until I got to Duke.

JEF: When you finished at Georgia, did you go to work or did you go on for further school?

GMF: Well, very shortly after that, why—

GF: Immediately.

GMF: Immediately after that, I went to Duke.

GF: No. Went to Stoneville.

GMF: Okay. I went to Stoneville.

JEF: Right from Georgia?

GMF: Yes. Absolutely.

GF: He graduated at the end of the summer session. He graduated in three years and one semester.

JEF: Okay. Why did you go to Stoneville at that point?

GF: Offered a job.

GMF: Yes. This I don't remember so she'll have to tell y'.

JEF: Okay. Well, who contacted you from Stoneville? How did they find out about you and offer you a job?

GF: Monty Payne?

GMF: Yes. Yes. Yes, honey. But as far as orientation, east-west is concerned, I was workin' on a sawmill, a saw project up in the hills there to the east of the Delta.

GF: That was at the University of Mississippi. That's when you were workin'—

JEF: Mississippi State.

GF: Mississippi State. Yeah.

JEF: But you went to Stoneville first.

GF: Went to Stoneville first. But he was not workin' for U.S.

JEF: You did not work with the Forest Service?

GMF: No.

JEF: Worked with the Extension?

GMF: I was workin' for—

GF: The State of Mississippi.

JEF: For the State Extension Service?

GF: Probably.

JEF: Or it could have been the State Forestry Commission?

GMF: Now what are we doin' here? What's the question?

JEF: I'm trying to find out why you went to Stoneville and who advised you to come to Stoneville.

GMF: Yeah, well. Gloria says I went to Stoneville twice. Is that right?

GF: That's right.

GMF: Okay. The names that worked there are Bob Clapp, who was from Yale and was runnin' the Yale summer camp, as my recollection of it, out there. And I had a sawmill project for them.

GF: You mean Mississippi State. Not Yale.

GMF: Bob Clapp was from Mississippi State? Okay.

GF: No. It was runnin' the Mississippi Forest Camp.

GMF: Yes.

GF: Not the Yale forest camp.

GMF: That's right.

JEF: But in any case, you think Monty Payne made the contact from Stoneville?

GF: Yes, I think so. He was at Mississippi State.

JEF: Mississippi State's extension service?

GF: Yes. And George sent in a lot of applications to places, and I don't know if—Patterson was a good sponsor of yours at the University of Georgia. He might have recommended you. He's a mathematician.

JEF: Okay.

GF: Anyway, Monty Payne was your first boss up there, and you went and met Mr. Putnam and Sid McKnight and all that gang out there and stayed six months.

JEF: What was your job there, at Stoneville, when you first went?

GMF: General dog's body, as I remember. [laughs]

JEF: So just helping out with anything that needed to be done, I guess.

GF: Well, he was a freshman on the team.

GMF: You just tell the story, Gloria.

CDO: George, did you meet Shoemacher at Georgia or Duke?

GMF: Duke.

CDO: Okay. Now when you graduate from Georgia, were you known to be good in math at that time?

GMF: Well, we met in a trigonometry class.

CDO: Did they hire you at Stoneville because of your mathematics?

GMF: Stoneville?

GF: I think so.

GMF: I haven't the slightest idea. I remember going— Essentially, the reason I got in at Stoneville was that they needed a representative from—from where, Gloria? From the State?

GF: I guess.

GMF: Yeah.

JEF: From the State of Mississippi.

GMF: Yeah. Well, now somewhere in there, there needed to be a representative of one of the experiment stations. Yes. They needed a representative from Mississippi State there. I think that's basically what it was, over in the Delta.

JEF: Now when you all first arrived at Stoneville, do you have any impressions of what it looked like? What did you think? Like it?

GF: Oh, it was strange.

JEF: Strange in what way?

GF: In the winter there were no leaves on the trees. No pines. No cedars. Nothing green. But it was interesting 'cause it was different. Our first son was born during that first six month's period.

JEF: At Leland?

GF: Yes, in Greenville.

JEF: At Greenville. You all lived in Greenville?

GF: At Greenville Hospital. And it snowed. We lived on Deer Creek Drive in half of a house, and Mrs. Hill—was it, George?—owned the house in Leland.

GMF: Where the hell are we now?

JEF: In Greenville.

GF: No. In Leland.

JEF: Oh, you were living in Leland.

GF: Yes. The child was born in Greenville.

JEF: Okay. I'm sorry.

GF: On Deer Creek Drive. And it was a pleasant small town. Fifteen hundred whites and three thousand blacks.

GMF: Where was this now?

GF: Leland.

JEF: Leland.

GMF: Mississippi?

GF: Yeah. And I could walk to the library. We just had one car, I guess, and George drove to work. Some times I would take him to work. But I wasn't very much involved with his business 'cause I had a child.

Okay. And then we moved to Mississippi State.

JEF: You moved to Starkville from Leland?

GF: Yes.

JEF: Now, how long were you in Leland?

GF: A year and a half.

GMF: Mississippi State is not in Starkville, is it?

JEF: Yes, sir.

GMF: It is in Starkville?

JEF: Yes, sir. So why did you move from Leland to Starkville?

GF: I think he was transferred.

JEF: Within the extension service?

GF: Yes.

JEF: Now, before you came to Leland, had you had any particular interest in hardwoods as opposed to pine, or did you have any orientation one way or the other?

GMF: I never really much cared. I was interested in measurin' 'em.

JEF: Whatever they were.

GMF: Yeah. It didn't make any particular difference to me.

GF: The Florida land was pine.

JEF: Sure. With the first stint at Stoneville—or Leland—were there any people who made a particularly strong impression on you?

GF: Meisenhelder. And Putnam, and McKnight.

GMF: Sidney McKnight. Sid McKnight. I believe he's still alive.

JEF: He is. I talked with him a few months ago. He's living in north Georgia.

GF: We exchange Christmas cards.

JEF: Yeah. My wife went down with me, and Mrs. McKnight and my wife became pretty good friends. They correspond and call one another all the time.

GMF: You'll have got all the names that were there at Leland. Meisenhelder. Sid McKnight.

GF: Mr. Putnam.

GMF: Mr. Putt, who was—he was Mr. Hardwoods, basically. I don't know what his education was.

GF: Michigan.

JEF: Yeah. University of Michigan. In fact, I think he hadn't finished, and then later they

awarded him a degree, I believe.

GMF: Well, anyhow, he was sort of the captain of the ship there. You know, the books have got all the people, the different people that were there. We did everything. John had us out. We cut timber, and—

JEF: So you got an introduction to the lowland hardwoods in the Delta?

GMF: Oh, yeah. Weren't any chainsaws in those days either. I guess, you know, it was Meisenhelder, and I can't think of the other one. But there was somebody there for plantations that worked with—

JEF: The cottonwood plantations?

GMF: And sprouts. You know, they did that with sprouts. I don't think that was Meisenhelder. Do you know who did that?
GF: I knew the wives, but I didn't know the husbands.

JEF: Was it Broadfoot?

GMF: Excuse me?

JEF: Was it Broadfoot?

GMF: I don't remember Broadfoot at all.

GF: Who?

GMF: Broadfoot.

JEF: Walter Broadfoot. Chip Broadfoot.

CDO: He was in soil. Now, Bob Johnson, I think, was too young.

GF: Yes. Bob Johnson.

CDO: Was it Bob Johnson who—

GMF: That name's familiar.

GF: It was the second time we were there.

CDO: But not the first time. Probably not.

JEF: Johnson worked with Broadfoot later.

GMF: How many years between the two times we were there, Gloria?

GF: Well, we were there six months, then a year an a half at Mississippi State, then two years at Duke, and then back. So it was three and a half years.

JEF: So what did you do while you were at Mississippi State at Starkville? You were working for the extension service?

GMF: Well, no. We worked at the Ag station. I mean, we worked there both times as far as I can remember.

GF: The sawmill.

GMF: Well, the sawmill was up in the hills, back up in the hills. And that's how I was with the Bob Clapp _____. That was much earlier.

GF: No. That was at Mississippi State. Bob Clapp was at Mississippi State. And that's when you worked at the sawmill. And Preacher was there, and the guy who blew up the—

JEF: Who was Preacher?

GF: Who was Preacher?

GMF: Forget it. [laughs] You've got me so screwed up over that that I can't figure out what's going on.

GF: Well, he did hands-on sawmill work with a crew, as a sort of a supervisor, and had some interesting stories to tell about what happened and about their lives.

JEF: So were these like demonstration projects?

GF: No. It was cutting wood on the state forest.

JEF: On the state forest? Okay. All right.

GMF: Monty believed in hands-on stuff. There's no two ways about that. I don't know what— He was what?

GF: John Starr was at Mississippi State. Your best friend.

GMF: Yes. John was at Mississippi State. Well, where are we now?

GF: Mississippi State.

JEF: Mississippi State.

GMF: Mississippi State. I don't remember a damn thing about it, so you can go on.

GF: Well, let me see. We got our first car there. Well, not first, but first real car.

GMF: Now how much of an education had I had when I started teachin' at Mississippi State?

GF: You were a graduate of Georgia.

GMF: I was a graduate of Georgia. Did I start teachin'?

GF: No. You worked with the extension service.

GMF: Okay.

JEF: And you were helping operate the sawmill in the Mississippi State forest.

GF: Or supervising.

JEF: Supervising.

GMF: Yeah. That's about right.

JEF: And you stayed there about—

GF: A year and a half.

JEF: A year and a half. Why did you leave there?

GF: To go to Duke for graduate school.

JEF: Yeah, why did you leave Mississippi State to go to Duke, to go back to school? Or why did you choose to go to Duke as opposed to another school.

GMF: Well, I guess, Duke had a good reputation as a good school, and that was when I got started in mathematics.

GF: Statistics.

GMF: Statistics.

JEF: At Duke?

GMF: Yeah. I went down. I worked with—what was his name?

GF: He was enrolled in the forestry school, but it was recommended that he go to Chapel

Hill.

GMF: Shoemacher

JEF: Not that Shoemacher?

GMF: Shoemacher. Thank you. Thank you. F. X. Shoemacher. Be quiet, Gloria.

GF: They had to go to Chapel Hill for a special—

JEF: Did Shoemacher teach at Chapel Hill?

GMF: No. He taught at Duke. He taught at Duke, but he sent me down— He worked there with—he was one of the first people to use calculators. And he had really old-fashioned keypunch-type jobs, and one of 'em was so damned loud and noisy we called it "hoppin' John." It would bounce on the table. I can't remember if we had a nickname for the other one, too, but it wasn't as bad.

And we worked there, and he was the first one that I know of that did any statistical analysis. He knew how to calculate a standard error rate, you know, and do some of that stuff. And he sent me down the road to UNC, which I think still has a good stat lab. And I learned to do computing and statistics down there.

GF: It was an Indian man, wasn't it?

GMF: I can't remember. Could be. You mean at North Carolina? Yes. Yes. That's true. You didn't mean an American Indian. You meant India.

JEF: Right. Sure.

GMF: I think that's so. At any rate, that got me started in statistics.

JEF: Those were the days of the big old mainframe computers, weren't they?

GMF: Yes. They were, as I say. Even when I got to Yale, that was true. They still had—it was even before the punch-card deal. Oh, I guess it was punch-card.

GF: Yeah.

JEF: Punch cards and reels probably.

GMF: Yeah. But you know how in those old reels that you used, you had—

GF: Sorters.

GMF: No. And please, honey.

You had a plug board. If you wanted to multiply this by this, you would pick up one column and plug it into the multiplier and then plug it into the output, then it would punch it back in another card. And that sort of thing.

But I started even before there were plug boards. They ran—I can't remember which one this was—but it actually—you had to be damned near a pipe-fitter. It had flexible cables, like a bicycle's speedometer. And you had to screw 'em in the thing. I don't remember the number went on that one. But that was the first one.

GF: The first one you worked on at Yale was at the Watson Lab.

JEF: This must have been the Univacs.

GMF: Could well have been, yes.

JEF: So you would have been one of the few people in the country that would have had that kind of skill at that time, wouldn't you?

GMF: Yes. It wasn't long after that that we got the—we went on up the line. We got a six-fifty. I don't remember any. Any of you remember the old six-fifty? It was about the first stored program computer. But there were still a lot of universities that had those old, older machines. The machine was old enough so that you had to have a terminal to get into it, you understand?

JEF: Sure.

GMF: And I wrote a program on a six-fifty—I don't think it was to run on a six-fifty—called "Tin Can." In those days that was a kind of a—

GF: Hillbilly term.

GMF: Hillbilly term, but it was two tin cans and a string.

JEF: Sure.

GMF: You remember? Okay. Two tin cans and a string.

JEF: Two kids with a telephone.

GMF: Yeah.

GF: That's what you named the program.

GMF: That's what I named the program. And this program I had that worked on this cheap little—it worked on one of the first Macs. Was it Marx? Mac. The first Mac machine.

JEF: Apple Macintosh.

GMF: The first Apple Macintosh. With Tin Can and an Apple Macintosh, you could get into this humongous mainframe that university had for practically nothing. I mean, it was so cheap like that. And I gave most of the profits to the—

GF: You gave all.

GMF: All the profits to Yale. To Yale or to the computin' center?

GF: Yale.

GMF: I guess that's right. Yeah.

GF: You got asked to the president's house that year for a reception.

GMF: Okay. That started at Yale.

JEF: So you came out of Duke with an expertise in statistics and computers.

GMF: That's right. I was so far ahead of anybody essentially that you could shake—

JEF: So when you finished—

GF: Went back to Stoneville.

JEF: Oh, from Duke you went back to Stoneville?

GMF: Yes.

JEF: Why did you go—

CDO: This time you went back to Stoneville, you were working with the Forest Service though. Not the Mississippi Forest Service.

JEF: Why did you go back to Stoneville instead of going on in school at that point? Because of family responsibilities, children, income?

GF: Let's see. We had our second child the second year he was—it was the first year of his doctorate. And I was working, but I couldn't work after the child was born.

JEF: This is still at Duke?

GF: Yes.

JEF: Okay. So you had originally intended to do the doctorate at Duke?

GF: Yes.

CDO: Well, you did do the doctorate at Duke.

JEF: Oh, I'm sorry. I misunderstood.

GMF: That's when she supported us.

CDO: One thing. Did you have a forest service scholarship or something?

GF: No.

CDO: You just on your own decided that you needed to go back to Duke?

GF: Probably.

GMF: Well, she decided.

GF: No. I don't think so.

GMF: I wanted to go, but she made it possible to go? Okay?

GF: Well, not the first year. When you stated your objective as to the V.A. for this, you know, the soldiers—they wrote it up with a master's degree. And so he had the first year at Duke under the V.A., for the first nine months. And then, the warehouse in Mississippi that we stored our furniture in burned—

JEF: In Leland?

GF: In Leland. Or it might have been in Greenville. And so we had the income from that, and he thought he should go ahead for the doctorate because he was into statistics by then. And so I got a job at the testing guidance bureau and worked there until our second child was born.

JEF: Using your psychology background.

GF: Yeah. Then that June, they offered him a job at Stoneville with the Forest Service, and so we went back.

CDO: Had you finished writing your dissertation by that time?

GF: No.

CDO: Okay.

JEF: You'd just started. You were just a year into the doctoral program.

GF: Finished his coursework. And hadn't done anything on his doctorate dissertation, I think. Now let me see. It's possible that one of those summers, I took the children and went to Atlanta, and he went to Duke. Another time, he went to Mississippi State and—I mean to Stoneville—one summer and stayed at the boarding house.

GMF: Yeah. I remember staying there.

CDO: This Mrs. Church?

GMF: Yeah. Yeah.

GF: And this was working on the dissertation.

JEF: Let me interject here for a minute. Who was Mrs. Church? Tell me about the boarding house.

CDO: Do you want to tell it?

GMF: No. You don't have to tell 'er. I remember the names.

JEF: Why don't both of you tell me?

CDO: Okay.

GMF: Let her tell ya'.

GF: I don't know.

JEF: All three of you tell me. [laughs]

CDO: Right out in what's now the parking lot of the Stoneville lab was a great big old two-story white wood house. Now, it was still there in '66 when I was there workin' as a student. Apparently, Captain Church and Mrs. Church owned a plantation, and they had something like 500 bales of cotton on the wharf to sell the next day, and that night the price dropped from something like ten dollars to ten cents a bale.

GMF: Jesus. Where was this? When was this?

CDO: This was in the 1930s.

GMF: Oh. You're talkin' the Depression. That would have been '32, is when the Depression hit.

CDO: Right. So it would it have been then. It was somewhere I think in the Delta, and the wharf, of course, would have in Greenville outside the levee, or another one. I don't know how close Mrs. Church and Mr. Church were to—.

GMF: I remember, you know, the name old Capt'n Church, but I don't remember the house.

CDO: Then they moved to this house, and she ran it as a boarding house. In the daytime she cooked, and a lot of the people would come there and eat lunches. And then she had about seven or eight rooms that she would let out for boarders. Now, I've heard of Captain Church, but he had already passed away when I got there. Apparently it was cancer or something, but Mrs. Church ran it herself at that time. And it was just one of the icons of Stoneville.

JEF: It sounds like a place where a lot of, to use a modern term, a lot of the bonding of people at Stoneville probably would have occurred there.

CDO: I don't know because when I was there, there were only about eight rooms. So not everybody was there. When I was there, it was mainly summer students who were working either for the Ag station or for the Forest Service lab. But at lunch, she had a big room and a big table, and it was full. And, boy, she gave a lot of food.

Did she do that when—do you remember the food?

GMF: Yes. Yes. She was a gal after my own heart. I must have weighed two hundred and sixty pounds. [laughs]

CDO: Sid McKnight told me that one year a student came and stayed with her for a summer and gained a hundred pounds.

GMF: [laughs] He must have worked at it.

CDO: Well, what she would do is have these big meals for lunch, and, you know, there'd be four or five types of meat and everything else, it would be almost twenty people around the table. And then for supper, with five of us, she'd put it all back out again. You had to show restraint.

JEF: Sounds good.

CDO: It was.

JEF: Well, okay. So, again, why did you go back to Stoneville? The Forest Service offered a job. You were at Duke. Why did you go back to Stoneville instead of staying at Duke at that point to finish?

GF: Well, we were out of money. And we had two children—a baby, four or five months old. And our car was on its last legs. [laughs]

GMF: It always was on its last legs. [laughs]

JEF: You had lots of reasons.

Who at Stoneville was instrumental in getting you to come back at that point?

Tape 1, Side B

JEF: —Stoneville, and that you think that Mr. Putman may have been instrumental in that. And that he was very close to you, and you said he was like an uncle to you.

GMF: Also, he was "Mr. Hardwood." You know, essentially, as far as he was concerned, he knew it all. He was confident that he knew everything about hardwood that there was to know about it, and it was our business to prove it. [laughs]

And, you know, he really did. He was very good at—he could estimate timber just about as well as anybody could, and I had a great deal of respect for him. I think that's what you would say. We were there basically to prove that he was right.

JEF: I asked Chad this question yesterday. Could you describe to me what he looked like and sounded like and what was he like to deal with? You obviously had a lot of affection for him.

GMF: Oh, I did. I really did. Well, I never had a teacher I didn't have a lot of affection for. If I had, I wouldn't have stayed with 'em very long.

JEF: What was his appearance? His manner of speaking?
GMF: He was blocky. Dark-haired as I remember.

GF: I remember partly bald.

GMF: Could have been.

JEF: Wore a hat a lot, didn't he?

GF: Don't remember.

JEF: Okay.

GMF: He was chunky. Yeah. Yeah.

JEF: What was his style of speaking? Was he direct?

GMF: I think so. But I honestly can't— He was a Southern gentleman, now. Don't misunderstand me. But he would walk through the woods and look at the top of a tree and tell you how many board feet were in it.

JEF: He had a lot practical experience?

GMF: Yes. But the thing of it was, it's always been something I never really understood there. His father and his family had been big cotton growers back in from the Delta. About half—right in the middle of the cotton land there. Did he— You remember?

GF: You're getting' him mixed up with Monty.

GMF: Monty Payne, yes. Yes, I'm sorry. Yeah, that's right.

JEF: One of the things, again, that I asked Chad yesterday. Putnam's reputation has been handed down as a sort of, I used the word "evangelist," I think, yesterday, or salesman or whatever, who was the great promoter of hardwoods.

GMF: I think that's a fair statement.

JEF: And I wondered what his style was. Was it flamboyant? Was it—

CDO: I don't think so.

GMF: Why, no. He was the opposite of flamboyant. As I said, but very confident of his knowledge. As I say, the best description I can give you is that the rest of us were there to prove that he was right. Is that a fair statement, honey?

GF: I wasn't in the office. I knew Dorothy, his wife, and Marjorie, their daughter. And we saw Dorothy in later years when we went back to Leland a few times.

JEF: Was there a fairly tight-knit social community among the people who worked at Stoneville?

GF: Yeah. We didn't see each other real often, but we were friendly. All the wives were friends. And this at the time we went back, we got involved with the beginnings of the Episcopal Church there.

CDO: That little teeny, I think, brick that's out there?

GMF: Yeah. Now, you know all that names of all the specialists and, say, everything that we had there.

CDO: One thing. At one point—when I was there in '66—of course, John Putnam had just had his heart attack, but Sid McKnight seemed to have risen and taken control of everything.

GMF: Yes. Yes.

CDO: When did that occur?

GMF: I don't know. I'm sorry. I wish I could tell you, but he had it.

GF: But he was always number two.

GMF: Yeah. Yes.

CDO: Okay. But his job, as near as I could tell—and I've talked with other people—seemed to be more of a facilitator, manager, and networker rather than a scientist itself.

GMF: Yes. I think that's true. He was the organizer for the place. And very, very good at that.

GF: We kept a diary. Everybody had to keep a diary.

JEF: Oh, really? And what happened to those? I mean, did you take your diary with you or did it have to—

GF: No.

GMF: I don't know where mine is either. We moved so many times since then.

GF: No. It was not anything personal. It was for business. It was a business diary. Every day you had to write down what you did.

GMF: Oh, you mean the—

GF: At the station.

GMF: Station. If it's not in existence, I don't know where it would be.

GF: You were fire control officer.

GMF: Me? I thought I was a fire-setter. [laughs]

GF: In the fire season, you were on call.

GMF: Oh, that's true. All of us were.

GF: No. But you were the main person.

GMF: I could run faster than anybody else. [laughs] Yeah, we did. We did. Fortunately, you didn't have very often have fires in the Delta, but you could.

GF: In the fire season.

GMF: Yeah.

CDO: You went back there from Duke in what year? Fifty-five, by then?

GF: No. We moved here in ’56.

CDO: Moved to Yale in ’56. So you would have gone back there in—

GF: Earlier ‘50s.

CDO: Earlier ‘50s.

GF: Fifty-three, ’54.

CDO: And then when did you—

GMF: Fifty-three, ’54. Now, I would have been about twenty-eight?

GF: Yeah.

GMF: Okay.

CDO: Did you do your dissertation on something in the Delta?

GF: Shoemacher.

GMF: Shoemacher?

CDO: Right.

GMF: I don’t really— That’s when I first got—what I did is a dissertation. It was the beginnings of statistical analysis for me. I can’t remember what I actually did as a dissertation, but that’s where I started learning statistics.

GF: I don’t know if was a master’s or a doctor’s, but he did a continuation of a Shoemacher project. An enlargement. That could have been just a master’s.

CDO: But in the Delta, did you begin putting in inventories? Or what was your—

GMF: Oh, I was always interested in inventory work. But I can’t—I don’t remember that we had any type of, in the early days, any type of computer whatsoever there. Just all hand-work. And of course this was long before any of the samplin’ techniques that came along later.

GF: You had sample plots though. I remember you would walk to the plots.

GMF: We had sample plots, and we measured the DBH, and we didn’t have any way of measuring form class or anything at that time that I remember. Now, I think it was John—but I don’t know for sure—who could walk through the woods and be writin’ down how much was in each log. Like that.

CDO: Now by the time you did your Putnam-Furnival-McKnight bulletin, you must have had some inventory of the Southern hardwoods. Some estimate of the amount of volume, because it's the inventory and management of bottomland hardwoods.

Had you put in those plots? This was before the FIA, wasn't it?

GMF: Yeah. I guess so. But I'm really—really not sure. You have any idea there?

GF: No.

GMF: I don't either.

JEF: Well, you must have spent a good deal of your time at Stoneville on that project that resulted in that handbook?

GMF: The management inventory?

JEF: Yes.

GMF: But that was a joint operation. I don't remember. I was just one of many authors as I remember.

CDO: There were three of you. It was Putnam, Furnival, and McKnight.

JEF: What were your duties at Stoneville at that point? This was your second time back there, wasn't it? What did you do primarily?

GMF: My reaction there is that I began to get the reporting of stuff on a statistical basis and that sort of a deal.

JEF: So this was the first step toward getting the statistical information?

CDO: Right.

GMF: I think so.

CDO: Did you have crews to go out and take inventory plots in different places?

GMF: That would have been production work, and we didn't—I don't believe that we did. The stuff we did was either on the experimental forest—our management for it—and I don't know what that experimental forest was around Stoneville, to tell you the truth. We had some land, but I think it was just the use of it. I don't actually remember that we had any title to anything in the early days at Stoneville.

Now we must have had some though, because we could plant those— We did have that nursery stuff and the seedling—

JEF: Yeah, the State did own some land.

GMF: Yeah. It did own that.

GF: Remember, there were dirt roads that you had to patrol?

GMF: Yeah.

GF: And you backed off the truck into a ditch.

GMF: We must have inventoried that. Now in the early, early days, that amounted to John walkin' through there and writin' down what was in there. But I think we began to get some discipline into it as time went on. But this was before any of the modern sampling techniques.

CDO: Was one of the people there Krinard?

GMF: Yeah. Roger Krinard.

CDO: Okay. Was he one of the scientists?

GMF: Mom, you remember?

GF: Probably in the latter part of our time there.

CDO: There was a young fellow Krinard—well, somewhere between my age and yours—but I thought he had a father who had been a scientist.

GMF: Could have been.

JEF: There was a Roger Krinard there.

CDO: I remember Roger Krinard as a younger fellow, but as kind of a technician. But I thought his father had been a scientist, but maybe I'm wrong.

GMF: I really don't remember. Do you remember Roger at all?

GF: No.

GMF: All I remember really is that I liked him. He was a good guy. And that his name was Roger Krinard, and he was smart.

JEF: How would you describe Sid McKnight from those days?

GMF: Well, Sid was a prince. I mean, that's just all there is to it. He's just a prince of a guy. He was thoughtful, smart, good second man to John. Helped you. Good jokesters,

and they were friendly.

JEF: What was his big contribution to the lab at that time, would you say?

GMF: I think that he was doin' his own research, but I don't remember what it was. But he was basically an organizer.

JEF: Organizer-facilitator?

CDO: Kind of the glue that held everything together.

GMF: Yes.

JEF: Are there any other people who were at the lab at that time that stand out in your memory?

GMF: Well, not that I can really—

GF: You liked Meisenhelder.

GMF: Oh, Karl?

JEF: Karl Meisenhelder?

GMF: Yes. Karl and Dick Toole—they were all there, overlapping but mostly all together. Who was there? There was Karl and Dick Toole.

GF: That's the first time you mentioned Dick Toole. I had sort of forgotten him.

CDO: How about Ted Filer? Was he there?

GMF: Don't remember him.

CDO: Okay. And Robert Farmer came later. He was a geneticist. Well, of course there was Broadfoot. And Frank Bonner, I think, was later. Then of course there were people like John Gamache.

GMF: Yes. I remember Gamache.

CDO: He was a technician. And do you remember that fellow—

JEF: That name I don't know.

CDO: John Gamache was a technician I can tell you more about.

JEF: G-A-M-M-A-G-E?

CDO: G-A-M-A-C-H-E, I think

GMF: I think there's a G in it, but that could be wrong.

CDO: He is on an occasional note-type publication. He was not an intellectual. And remember the fellow who was in charge of the paperwork and all on the projects—the fellow later got caught embezzling and went to jail.

GMF: Now come at me again on that.

GF: We hadn't heard about that. [laughs]

CDO: Okay. The white-haired fellow.

GMF: At Stoneville?

CDO: I think his name was Laverne or Vern—

GMF: Anybody with a name like Laverne, you can't tell what he might do. [laughs]

CDO: He was very helpful. He basically ran the administration the people worked.

GMF: I haven't any recollection of him whatsoever.

CDO: He kept the books. And later I heard—as I met Walt Broadfoot a few years later—and learned that he had in fact been caught taking money from the Forest Service and using it either to send to his kids to college or buy a car. He ended up in jail.

JEF: Laverne a first name or a last name?

CDO: I don't know exactly what it was. That sounds like a last name.

GMF: This has got to be after our time.

CDO: He may have been there at that time, but you just didn't know 'im.

GMF: But the scandal.

CDO: The scandal was in 1966.

GMF: You can't forget something like that.

CDO: That was after '66.

GF: We were up here already.

GMF: Yeah, we were up here.

CDO: There was a fellow, an entomologist, who was kind of short fellow who was a real big heavy wife .

GMF: Who was the entomologist?

CDO: Robert something-or-other.

GF: What do you remember about Dick Toole?

GMF: The name. Did you all think he was there?

GF: Oh, yeah. He was there. You just came out with his name a minute ago.

GMF: I know I did, but sometimes I get, you know, mixed up.

CDO: He was pathologist?

GMF: Probably was a pathologist.

CDO: He also liked to bow hunt, or shoot the bow.

GMF: Oh, yeah. I remember that now.

JEF: Bow hunter.

CDO: I don't know if he hunted or whether he just archery practiced.

GMF: I was tryin' to think of his name the other night. I couldn't think of it to save my life. I was just snappin' a bow and I thought, I know somebody that knew this. We were in that gun store that was in, I think it was, and had a bow. But anyhow, let's go.

CDO: How about Solomon? Dale Solomon. Was he there?

GF: We didn't know him until we came to Yale.

GMF: Oh, yeah. The name's awfully familiar.

CDO: And by the way, did you overlap with Robert Lewis there?

GMF: Don't think so.

GF: No.

JEF: Robert Lewis that just retired?

CDO: Yeah. Robert Lewis was—I think he worked for Ted Filer. I think he was an entomologist.

GMF: Don't know. These names are—

CDO: Okay. Then they would have been after.

GMF: Much after.

CDO: Now, you left in '56?

GMF: Ask her.

GF: We got here in '56. Yes. He went to Duke for the summer, I think. Probably he finished his work in June of that year and started at Yale. He was hired at Yale before his degree was finished. I guess that was when he was at Miss Church's.

GMF: What's this now, excuse me?

GF: Working on your doctoral dissertation.

GMF: Yeah, I guess so.

GF: Several summer episodes.

GMF: To get it done.

GF: And sometimes you went back to Duke after we moved here.

CDO: Then was it George Garrett who contacted you and asked you to come here?

GMF: You mean at—

CDO: At Yale.

GMF: At Yale.

GF: Probably it was Bob Clapp, the Yale graduate at Mississippi State. We had sorta guessed maybe he recommended him.

GMF: I think we know.

JEF: Would Sid have done it?

GF: No.

GMF: He wasn't in a position to.

GF: No, he wasn't.

CDO: What happened? Did Yale say we need a mensurationist?

GF: Well, they were hiring, what, five or six people all at the same time under the Hartford Foundation.

JEF: Now what's that? The Hartford Foundation?

CDO: I don't know.

GF: Well, it was a big bunch of money that came in. Huntington Hartford Estate or Foundation. And Garth Voigt. And Francois Mergen. And George and Walt Henson and Phil Bordeaux. And Bill Reifsnyder.

GMF: A whole crew of us.

CDO: Did Graham Berlin come at that time?

GF: No. He was later.

CDO: Okay. How about Herb Winer?

GF: He was already here.

CDO: Okay.

GMF: I think that's right, honey.

GF: No. He wasn't Hartford Foundation. I'm tryin' to think of the guy in Canada. We still keep in touch with him. He was, oh, I think he was an entomologist. I can't call his name right now. We talked to 'im when we went across Canada last summer. Walt Henson.

Anyway, there were five, maybe six people hired all that one year. Or actually, maybe it was within two years, 'cause I think Jane said they came the year before we did.

GMF:You're talkin' about Yale.

GF: Yale.

GMF: Yeah.

JEF: Well now, coming to Yale, your working career prior to Yale had been primarily in

research—

GMF: I think that's a fair statement.

JEF: And so you obviously must have decided that you wanted to try teaching and came to Yale.

GMF: It seemed to me that I had done some training programs at least, earlier than that. You know, just short, fairly short-type stuff.

CDO: By the way, just quickly getting back to Stoneville, when was it—were you there in that new, modern lab, or were you in an older building?

GMF: I was in an older building. I don't think we've even seen the new lab, have we, Hon? And we haven't been back in a long time.

GF: Oh, we went back to see Dorothy Putnam.

GMF: Yeah, that's right. But I don't remember.

JEF: Before we go on with Yale, can you think a little bit about Stoneville and the hardwood research programs there and assess their contributions? What have they done that's important?

CDO: Let me back up just a minute. Didn't you go back at one time to Stoneville?

GMF: Could be.

CDO: After you were a Yale, did you go back to Stoneville?

GF: Yes. He hadn't finished his dissertation.

CDO: But he went back to Stoneville, didn't he, after he had been at Yale?

GF: Just maybe for a month.

CDO: But then eventually—

GF: No.

CDO: When was it that Francois Mergen then approached him and brought him back to Yale?
GF: My, he went to Washington, D.C., as chief biometrician for the Forest Service.

CDO: Okay. I thought you had gone back to Stoneville at that time. That's what I wanted to clear up about these other stories.

GMF: I hated that.

GF: We moved to Washington, D.C.

GMF: I hated that work. I was flyin' all the time. Out of town all the time. Like they say, the name of an expert is "a son of a bitch from out of town, generally Washington"? That's what they expected of ya'. I didn't like that.

There is one amusing story about that, if you will, and that is that I noticed that when you had your "doctor" in front of your name, you got special service on a plane and all that sort of stuff like that. So I decided to list myself as "Doctor Furnival," okay, like that. And that was okay until somebody on the damned airplane had a heart attack, and they wanted me— [laughs] I had to tell 'em I was a tree doctor, and they didn't think it was even amusin', I'm telling y'. [laughs]

CDO: Did you start the F.I.A. inventory system?

GMF: No, I don't think I did.

CDO: Were you involved in it?

GMF: In the Forest Service?

CDO: Yes, when you were in Washington.

GMF: I must have been, but I honestly don't remember a great deal about it.

CDO: I'm just wondering if—

GMF: I was in Washington. I was kind of a trouble-shooter. I went out—I was travelin' a lot now on that. I don't think that we had—I think they just wanted a doctor on the staff as much as anything. Somebody with training. But I did different things.

CDO: But you were basically in the auditor's building there, weren't you?

GMF: I think so.

GF: Alexandria.

GMF: Alexandria.

JEF: The forest inventory?

CDO: Yeah, basically it's something that Congress mandated. I'm not sure what.

JEF: What does FIA stand for?

CDO: Forest Inventory Analysis. Congress mandated it, and it's the most beautiful set of data, although people claim gaps in it and everything else. And I'm afraid it's been under-utilized. People are now, only now starting to appreciate its worth.

JEF: When was it begun?

CDO: I think around the '60s, wasn't it?

GMF: Do you remember where we were? That's when I was in Washington.

CDO: I just wondered if some of your work that you did in systematizing the analysis of the bottomlands, that you didn't take some of those techniques and translate 'em to Washington for the whole country.

GMF: Well, I'm sure I must 've. But you really gotta understand for me that the time I spent in Washington is like a bad dream to me. She can tell you more that I can.

GF: You had a secretary named Gloria.

GMF: Yeah. She was a big help.

CDO: The value of this inventory, now that we've got 40 or 50 years of it, was—even when I was in school, and up through the '70s and even in the early '80s, they were predicting an impending timber shortage 'cause we were running out of timber. I did a—I was in charge of a series of papers for the SAF on silviculture in the mid-'80s, and I looked at that data and said, "We're not running out of timber. We're growing more than we're cutting." But that changed a lot of people's minds.

GMF: I'm sure it did.

CDO: And also we realized that what we're growin' is small-diameter wood. But I'm just wondering, the inventory data you have in the Putnam-Furnival-McKnight Management and Inventory—that data, did that come from your plots throughout the Delta?

GMF: I just don't remember.

JEF: You would have had to, wouldn't you?

GMF: If we did an inventory, we did.

GF: Maybe Sid would know.

GMF: Yes. I'm sure Sid McKnight would know. Better memories around still alive that are better than mine.

CDO: You know who else might know is E. C. Burkhardt.

JEF: Sure.

CDO: Did you know E. C. Burkhardt?

GMF: Just the name.

JEF: And Sid might, too.

CDO: Sid might know.

JEF: Yeah. I don't know that I addressed that with the interview with him.

CDO: But it's a good thing—it would be worthwhile.

JEF: Yeah. Absolutely. So that would be obviously a big contribution of the lab to forestry in general. As an employee of the lab during that period, did you all think of yourselves as doing pure science or applied science?

GMF: Now where is this?

JEF: At Stoneville.

GMF: It was applied science. I don't think that you could—I'm not sure, unless you get into the specialties of forestry that you can claim that it is anything but applied science. I'm sure we did. We were looking for problems. We were lookin' for the solutions of what seemed to us to be problems. And we did take a lot of input, not from the cotton farmers a lot of times, but we did work a good bit with the loggers that worked down in the timber briars. They worked up and down the river. We tried to keep 'em from clearcuttin'. We didn't have too much success, but we did extend effort on that.

Well, we didn't have any success at all with the loggers on that, but the forest owners—you know, the people who worked with the forest landowners—we did work actively with them.

JEF: To try to keep them from clearcutting?

GMF: To try and see if there was regeneration. And I won't say we had a whole of success, but we worked on it.

JEF: And so you're working with the landowners and the land managers, the foresters in the area.

GMF: I don't think we worked directly with them. John Putnam would do a lot of that. He was our front man as well as anything. And we would back him up.

JEF: Do you remember the Hardwoods Research Group, the meetings of stakeholders

that came in every year?

GMF: No. Do you remember anything about that, Hon?

GF: I don't know. I was thinkin' about you used to go occasionally across the river to Arkansas, and you'd bring home stories about their coffee, that they boiled all day.

GMF: [laughs] Could be. I really don't remember. I was never much of a coffee drinker.

GF: So, I think there was a little bit of activity across the river.

JEF: You mentioned that you were responding to the research needs, the practical needs, of people in the area. What were the major problems at that time in the area?

GMF: Well, it was very difficult to get them to think of the forest as a crop.

JEF: By them, you mean the landowner?

GMF: The landowners, especially the loggers. Yeah, it was very hard. The periods that were involved were just too long.

GF: Cotton was the crop.

GMF: Yeah. Cotton was. But, of course, you could do—there was no pulp business then to speak of.

JEF: For hardwoods.

GMF: Yeah. Well, yes. That was true and always clear. But you could grow cottonwood plantations. Grow stuff like—I don't think that ever caught on because it took good land, and you could make more with cotton.

CDO: There was that big cottonwood craze of around '65, '66, down there. Then it came back under bio-mass energy in the late '70s, and then it came back a third time especially in the Northwest in the mid-'90s. But it's exactly what you say. It grows so beautifully. It's a silviculturalist's, geneticist's, and mensurationist's dream. But once you grow it, that's not that much useful value in it. And besides, there's so much natural cottonwood, you can't afford to do it.

GMF: Yeah, yeah.

CDO: Although it's neat to watch it 'cause it grows so fast.

GMF: No density to it, to speak of. Well-named—cottonwood.

JEF: So it sounds like, then, the unifying principle of the research was directed toward

education.

GMF: I think so. Would you go with that?

CDO: In an interesting sense. I hadn't realized the extent to which you all felt that John Putnam put the attitude of "We know this—now prove it" rather than—

GMF: I think that's a fair statement.

CDO: I think it is because if you look at the Putnam-Furnival-Mcknight, two things stand out to you. One is there's no talk whatsoever of regeneration. And the second is his management technique is all selective cutting in there. I gather he didn't even say, "Well, let's try something different."

GMF: Now, the regeneration—the cottonwood is in there. That was *the* regeneration program.

CDO: But I'm talkin' about to perpetuate a forest of oaks. I gather he thought you could selectively cut it?

GMF: I think he thought that was the best he could do. You couldn't talk to people about stuff that was gonna take 70-80 years to grow. You'd have a hell of a time gettin' any modern timber or pulpwood company to think in terms of anything but fast , with pine—nobody's growin' hardwoods deliberately. You've got people managin' 'em, and keepin' 'em going and so forth, but I don't think anybody's doin' it for money.

CDO: One other interesting thing is that you were there in a period when the size of log that was valuable was going down. In other words—

JEF: Because of pulpwood?

CDO: No, it was just merchantability standards were going down.

GMF: You mean, all the big trees had been cut essentially?

CDO: Yeah. And the smaller ones started to be worth something. For example, in the early '60s, the mid-'60s, in California, a twenty-four-inch ponderosa pine wasn't worth hauling out of the woods. It was too small. So one thing I wonder that Putnam—John told me that he spent part of his life in research, part of his life in business. And in the business, he would hire a logger and then take a valley and contact landowner after landowner and buy the timber rights and just have the logger cut it.

JEF: You mean in his career before the Forest Service?

CDO: Right. And I got the feelin' that he kind of worked for the Forest Service a while, and then—

GMF: John?

CDO: Yeah, John.

GMF: I'll be darned. I didn't know that.

CDO: Got itchy and came back.

JEF: I don't know. This is easily documented, but I thought that he had run a family business, a sawmill, at one point before the Forest Service.

CDO: That may have been his business. I think he told me his father had invented a machine that could stick a long metal thing into a roll of carpets, pick it up, and tell how much carper is on a roll.

GMF: I don't remember anything about this. Do you, Gloria?

GF: No.

CDO: I think. Now I could—

GF: I don't think. I would talk to him socially.

CDO: I could be completely off, in which case everything else I say should just be—[laughs] But I think he said that his brother went into that business, so he was basically a bit footloose and fancy-free. He went into forestry.

He said at Michigan—I told Jim this—that they would go out to the forests where all the red pines had been cut out, and the professors would say, "Now let's take these hardwoods and assume they're red pines" and give a lecture. And that's where John said, "Well, I saw the future really wasn't in red pines."

But I thought he described bein' in business like that at times and then comin' into the Forest Service at times.

GMF: Could have been, but I don't remember.

JEF: _____. We agree that he ran a sawmill at least.

CDO: I think so.

JEF: And I think he worked early with the Forest Service. I think he was employed in some of those big cruises also. I seem to remember a story of him. He was fairly short—

GMF: Have you all talked to Sid about it?

JEF: I have.

CDO: Jim has.

GMF: Well then, he would—I think he of all the people that are still hangin' around from that outfit remembers it better than anyone else.

JEF: The story that I remember was that he was very short, and cruising some of that flooded land. I think the story was that somebody said, you know, "Come over to this point," and the point was almost beyond his depth.

GMF: [laughs] This is with John?

JEF: Yeah.

CDO: One think I was thinking was that he wrote that in an era when the merchantability standards were goin' down, and if that's happening, he was enough of a businessman to know that if you cut the big trees, leave those small ones that are not merchantable now—not 'cause they're gonna grow, but because next year the standards will—

JEF: The market's going to come to meet him.

CDO: Yeah, exactly. That plus selection cutting is good for small landowners in eking out your cash flow. It's not a good way to grow a forest in the long term to sustain it, but for those two purposes—

GMF: Yeah, that's a good sensible reason. I'd often wondered why you'd cut the big ones, and then you can come back a few years later and get the next ones down.

JEF: Continuing output.

GMF: Of course, your neighbor's gotta do the same thing, I mean.

CDO: And eventually, you've got to cut it down and start over. But I don't think he ever said that. 'Cause it will eventually switch to sugarberry or something. But I don't think he ever got that far. And it was interesting if his—

GMF: He prolonged it.

CDO: Yeah. But it's interesting, if what you say—is sounds like he had less of that analytical mind of always trying to disprove his hypotheses, but he was more tryin' to prove his hypotheses? Would you say that?

GMF: They didn't need proof to him. [laughs]

CDO: Oh. He knew what was true. He just wanted the others to back him up.

GMF: I can't emphasize that enough.

JEF: That was the question I wanted to ask. So basically it was kind of a reversal of what you think of as the scientific method? Rather than gathering information and then drawing the conclusions from the data you've gathered, it sounds like you were gathering data to prove the assumptions you've already made.

GMF: Well, that was true. But he didn't meddle with or influence anything that Karl or Dick Toole or others did. I don't want to you think that in any manner. It was just, what he was talkin' about doin' the practical side, and that was certainly true. But he didn't slant or make anybody slant any research.

JEF: So if something came in that didn't fit his preconception, he didn't have a problem with that?

GMF: No. Well, he didn't have any preconceptions about the type of stuff that the people were workin' on really. The genealogy. We had some stuff—we had about four or five specialists there, and I can't for the life of me—

It was silviculture—and that was mostly with cottonwoods and things like that. But he never influenced and never pushed you in any way. He was a very honest man.

CDO: Okay. But it sounds like, for example, the entomologist would be tryin' to find out all the insects that attacked it. I don't know. The soils person'd find out what grows best where. But he never said something like, "Let's do selection cutting here and clearcutting here and see which gives us oaks the fastest." He never tested his underlying assumptions.

GMF: [laughs] That'd be like askin' God.

JEF: It also sounds like his earlier sawmill experience would have shaped his approach. Or else he was trying to turn out something that would be immediately helpful to the landowner and the forest manager.

CDO: Did anybody ever—was he intimidating to the extent that you would—

GMF: No, no. Perfect gentleman.

CDO: You'd never be afraid to approach him with potentially—

GMF: Oh, now. Again, like I say, it was like approaching God. For me, that was anyway. I didn't approach him much.

CDO: Let me tell you a funny story. I think this was in the late ‘60s. It may have been after I was there. But the story went that John Putnam— By then, do you remember in the early ‘50s there was a switch—it happened all over the country—from selective cutting to clearcutting?

GMF: You mean—

CDO: Just in terms of a philosophical fault.

GMF: Philosophical for what?

CDO: I remember it occurred in southern pines. It was happening in the hardwoods in South Carolina.

GMF: Was it deliberately with regeneration, you mean?

CDO: Yeah. What happened was—I remember goin’ with my father when I was a little fellow, and they were really assessing this debate. They had been selective cutting and found out they weren’t getting the timber.

GMF: Well, they were not payin’ any—were they payin’ any attention to species here or not?

CDO: They was realizing that they also was shifting species on them. But they then looked over at their plantations on old fields and where fires had been through and realized that they were growing good stands of timber on an even-aged basis. And there was a shift that happened in the Northwest. It happened in southern pines. And I remember my father discussing it relative to hardwoods. And actually I was over in Sweden, and they said in the early ‘50s the same thing happened there—this sudden realization. They didn’t know how to do selective cutting, and they shifted to clearcutting.

GMF: Well, that sounds very logical. I still think that there’re distinct differences in what happened in hardwoods and in pines. You can clearcut a pine, and you could think about your—you might be lucky enough to live a thirty-year rotation, you know, and get somethin' back out of ‘em. If you didn’t, your children would anyway.

But it’s pretty hard to think that you could clearcut hardwoods and ever get anything back. You know, live long enough to get anything. At least, I think, what would you plant if you replaced it?

JEF: Part of what you’re saying, I think, is that it was economics-driven, and the other thing that occurs to me—and I’m certainly not as knowledgeable as you are—but that’s also the same period that the paper industry was coming in the South in a big way. So the market was changing, and there was a market for younger trees and quick-growing trees.

And also the technology for using hardwoods for paper was not at that point where it would be later. And I'm not saying that's the only factor, but it would have to have been a factor, wouldn't it?

CDO: It would have, but I remember this was mainly silviculturalists discussin' it.

JEF: But silviculturalists working—

CDO: No.

JEF: Not for industry?

CDO: No. These were a lot of researchers.

JEF: Okay.

CDO: But the whole—in fact, the Swedes—and it was picked up in—

Tape 2, Side A

JEF: —Selective cutting toward clearcutting in the '60s?

CDO: This is something I want to ask George if he'll—

GMF: Yeah. Let me get this done now.

CDO: If you have either heard this story or know what the reaction would be. Apparently there was one of these field show-me trips of Southern hardwoods that the Research Group was on. And John Putnam had prepared a paper on it, on selective cutting. And for some reason he couldn't show up at the meeting. So Sid showed up and first read the paper, and then they all criticized it, very much sayin' that this selection cutting isn't good, we need to go to even-aged management.

But if John had been there, I gather they wouldn't have criticized it. Is that safe to say?

GMF: [laughs] Yeah. I think that's true. I think that's true. Of course, it depended on how well you knew him and how closely you were associated with him. But I always said whenever I was sittin' there, for sure. No doubt about that.

CDO: I do remember him telling me when I was there that summer—that was the summer he had his heart attack—and toward the end, meeting with Sid, I said I always wanted to meet Mr. Putnam, and Sid arranged for me to go over to his office. And he spent two hours just talkin' about hardwoods and then invited me back for another two-hour session.

But he talked about advanced regeneration—when you clearcut, you need to cut it all

back to have it re-sprout. So he was into regeneration somewhat. Do you remember any of that discussion or that activity?

GMF: No. I really, really don't.

CDO: Robert Morris was the other entomologist. Does that name ring a bell?

GMF: No. Now when was the deuce that he was—

CDO: He was there, I know, in '66, but I don't know when he came.

GMF: I really—it really doesn't ring a bell to me.

JEF: Let me ask you an unfair question. What do you consider your greatest contributions to the program at Stoneville?

GMF: [laughs]

JEF: I said it was an unfair question.

GMF: Something about like that.

GMF: Well, I'm not proud of any of my contributions at Stoneville. It was very much a learning process for me, I'd say. Of course, I learned a lot in college, and I learned in those things, but I learned a little bit stripping trees up the Mississippi. Is that it? That's about as good as I can do. And I bless all those people that worked with me—that I worked with. And I have nothin' but pleasant memories of the early—

JEF: I can say, from talking to a number of them, that they think you made a very large contribution. Very positive.

GMF: Well, that's very, very, very nice of 'em.

JEF: I can see why.

CDO: Could I see that? [gestures to item]

JEF: Sure.

CDO: This had a bible they could write.

JEF: Let me go on. When you left Stoneville for the last time, you came to Yale?

GMF: Yes, yes.

JEF: And you spent essentially the rest of your career at Yale?

GMF: Yes. That's true.

CDO: Except for that one—

GMF: Well, yeah. Breakin' away—

GF: Two years in Washington.

JEF: Oh, two years.

GMF: A big fat waste of time.

JEF: Okay.

GF: That was in the '60s, '64 to '66.

JEF: During the course of your career at Yale, what have been the most important changes in forestry that you've seen?

GMF: In my career at Yale?

JEF: Yeah.

GMF: Oh, the environmentalism. The input of the environmentalists now. It's very, very strong. Dean Speth. Dean of the Forestry School?

CDO: Levin is the president right now at Yale.

GMF: Who gave—did Speth do the book tourin? Or did Levin?

CDO: Oh, you mean the environmental book? *Red Skies at Morning*?

GMF: Right. That's Speth?

CDO: That's Speth.

GMF: Well, he's not been one of my favorite guys at Yale because he really has minimized the forestry aspect. But of course, he's greatly improved the environmental side, and that's where the kids want to be now. You know, that's where everybody—all of 'em want to save the world. It's so hard to save the world, and so he's done well.

And it's a good book. It really is a good book. I've got a write a letter and tell him how well impressed I am with that. He won an award, didn't he, Honey?

GF: I don't know.

CDO: He's won a couple of 'em. He won that Japanese Blue Planet Award, then he won the Taiwan Award that's something or another.

GMF: There's still foresters. There's still people— There's still girls that go to forestry, that do forestry. And that really surprised me.

JEF: It surprised you that women were entering forestry?

GMF: Yeah.

JEF: Why did it surprise you?

GMF: Well, ninety percent of 'em are strictly in the environment.

JEF: Okay. So they're on the environmental side rather than the forestry side.

CDO: There're some that are really solidly in forestry.

GMF: Yeah?

CDO: In fact, one of them just graduated. She was president of the Forestry Club. She was actually my student, and I brought her here. Very nice-looking young woman but also does logging sports competitions. She could also be a model.

GMF: Yeah? [laughs] That was the best kind.

CDO: Oh, Guttenberg. Was Sam Guttenberg down there?

JEF: Yeah.

GMF: Gloria, do you remember Sam Guttenberg?

GF: No.

CDO: How about Rosenthal?

GMF: He was never at the Delta.

CDO: Was he in New Orleans?

GMF: Oh, yeah. As far as I know. I know he was never at the Delta.

JEF: Wasn't Guttenberg a statistician?

GMF: Now he was— Lou was really the great guy in forestry, as far as I'm concerned. I was an analyst and so forth, but he was an inventor. I mean, he invented two or three

different types of sampling. Important sampling, and did like that. He was really the great mensurationist.

JEF: And who was this?

GMF: Lew Grosenbaum. I guarantee that he was the real, real mensurationist.

CDO: He was out of New Orleans, wasn't he?

GMF: Yes, yes. I don't know where he was trained. Do you, honey?

JEF: So he worked for the Southern Station?

GF: Yeah. He worked in Atlanta some.

GMF: Lou's a theory guy for me. He died just before I was to give a talk—

GF: They were goin' on to Canada. Be jointly honored in Victoria. He died in the spring before then.

CDO: I remember Tim telling me about this, and you kept tryin' to give credit to Lou durin' the talk. It was very generous and gentlemanly of you.

GMF: It was true. I analyzed other people's data. He invented ways of takin' data.

CDO: You know, Walt Broadfoot must've been there when you were there. Walt was about the height of John Putnam or maybe a little shorter, and a soils man. He did all those small books, green and white field guide to planting sweet gum, a field guide to planting water oak.

GF: What was the name again?

CDO: Broadfoot.

JEF: Walter Broadfoot.

GMF: The name doesn't—when were these things written?

CDO: I got something from '51. He was in the South. I don't know exactly where.

JEF: I think his nickname was Chip.

CDO: These are all in the South—'51, '58.

[Examines document.] "Study Effects of Impounded Water on Trees." It says from the Southern Experiment Station, but that doesn't necessarily mean that he was at Stoneville

at that time. He could have been somewhere else.

JEF: Later, too. I mean, Broadfoot and Johnson put together the whole guide to soils analysis.

CDO: Right.

GF: Johnson was there.

JEF: But Johnson worked with Broadfoot for ten or eleven years, and toward the end of that time they developed this manual for soils analysis.

GMF: Where was this done?

JEF: At Stoneville.

GMF: No. I don't remember anything about that.

GF: Has anybody talked to you about the time they grew spinach?

JEF: No, but I'd like to hear about it.

GF: Well, they planted it in the fall after the cotton was picked.

JEF: By "they" you mean—

GF: The experiment station. And ended up with bales or tons of spinach, which they gave to the employees, and we took it home and we washed it in the bathtub. There was that much of it.

JEF: Goodness. What did you do with it then?

GF: We ate it.

JEF: Bales of it? Did you put it up and preserve it?

GF: Yes, uh-huh. I think there was a freezer locker by then.

CDO: Were they growin' this in between the cotton rows or something?

GF: Yes.

CDO: Interesting. Spinach.

JEF: No, you said "cotton fields." Cotton fields or cottonwoods?

GF: Huh?

JEF: Did it grow it cotton fields or cottonwoods?

GF: The cotton fields.

JEF: Okay.

GMF: After they picked it—

JEF: It was part of the rotation in the agricultural land down there.

CDO: What was the purpose of growin' it in the cottonfields?

GF: Second crop.

CDO: Oh. Okay. So this was an experimental—

GMF: Yeah. It's pretty short a crop, so after they picked it and they could knock those furrows down, and then they could seed the whole thing for spinach.

JEF: Like that whole double-cropping thing.

GF: And the other thing that was sort of strange to me, being a city girl, was we furnished our own milk bottles and took 'em down to the station and they filled 'em. So we had inexpensive milk for the family.

JEF: I remember that as a child, do you, Chad?

CDO: Yes, but they would go into the experiment station, so they had all this milk. They couldn't sell it commercially 'cause they couldn't compete with the private owners, but they could give it to—

GF: Give it away.

GMF: Employees.

GF: More or less. I can't remember—maybe payin' a quarter or somethin' for it.

CDO: But I remember you in South Carolina puttin' the milk bottles out and gettin' the new ones.

GF: We had to take the bottles. Had to take the bottles to the experiment station.

CDO: Okay. Here's an interesting one. "Gamage and Furnival. Chemical Debarking of Bottomland Hardwoods."

GMF: Yeah. I would have been in there for the analysis. That's universally true.

CDO: Well, John Gamage. That would be basically the type of thing you would do. You're right, there was a second G in it.

Oh, did you ever have any dealings with Julius Hoffman? Does that name ring a bell?

GMF: No. [To Mrs. Furnival] Do you remember Hoffman?

CDO: He's well known in the East, and he made a few real blunders when he was doin' research out West. But he did a lot of good things in the East.

JEF: He was at Stoneville?

CDO: I don't know. I was just looking at the references in here.

JEF: What's the reference to Hoffman?

CDO: Actually, I'm sorry. It's even a different Hoffman. Annotated list of the _____.

It looks like Bob Johnson came. In '58 is his first publication. So probably just as you left. But we've a got a lot of these.

JEF: Let me ask you—you've talked about at Yale the biggest change you saw over time was the shift toward more of an emphasis on environmental education.

GMF: Now let me hear that last one.

JEF: You said there was a shift toward a greater emphasis upon environmental education.

GMF: Oh, yes.

JEF: What about the forestry profession as such? Let's say on the forestry side, what have been the biggest changes there?

GMF: I haven't had enough contact with the profession to really know. I've been retired for a number of years, and I have almost no contact with any foresters here, except with the Ag experiment station a little bit.

GF: Tell them about Bob Wilson, Tim Gregoire, and Harry Valentine, some of your coauthors.

GMF: Yeah. Yes.

GF: Well, he worked with him right until his retirement. Harry Valentine was Forest Service, ain't he?

GMF: Yes.

JEF: Did you do any consulting while you were at Yale?

GMF: Very little.

GF: You did some computing for big industries. I don't know if it was when you were director of the computing center.

GMF: I think it would have had to have been, Gloria. I came in with computers, you might say. Grew into 'em, was part of 'em. And I was in it. Big demand for a while on those things, especially after that Tin Can thing I told you about.

JEF: Well, in any case, any consulting you did would have been computer analysis and this sort of thing rather than forest management per se.

GMF: Oh, yes. I never considered myself a forest manager. I was strictly a specialist, a technician.

GF: You did a little consulting in British Columbia. We went out there.

GMF: This last time?

GF: No.

GMF: First time?

GF: Yeah.

GMF: Could be.

CDO: Was this Kim Iles?

GMF: Kim Iles when he was workin' for—

CDO: MacMillan and Bloedel?

GMF: Yes. Yes.

CDO: Now, Ken Mitchell was your student?

GF: Yes.

CDO: But did you ever do very much with growth models, or was it mainly Jesse

_____ and others?

GMF: I just don't remember. I just can't remember. Do you remember, Gloria?

GF: No.

GMF: Ken Mitchell—the name is familiar to me, but that's really all I can—

CDO: Okay. Ken was the British Columbia quiet fellow who did the task-growth model. For his masters he did the two-dimensional white spruce growth model, and you had basically—he divided the computer up into cells and looked at the movement of each branch into the cells.

You started as his advisor, and then when you went to Washington, Dave Smith took over. Actually, Ken was briefly on the faculty here, from about 1970 'til '74 or '75.

GMF: I'm sorry. I remember the name.

GF: Oh, and he said such nice things about you at the party in British Columbia.

CDO: Ken would. He admired you very much. But his growth model is the one basically used in industry. And he had said that you gave him some of those initial ideas.

GMF: Well, it's been a grand life.

CDO: Do you remember someone named Beaufait?

GMF: Beaufait? Yeah. But I don't remember anything about him. Phil Beaufait, it seems to me that it was.

CDO: That's right. He was with the Forest Service. I mean, he was a soils scientist, and you in a slightly different light out West.

[Examines item.] Yep, that would be Ken Mitchell. The bottom is this picture of his model. The top is the _____.

GMF: Huh. Boy, the odd thing, I don't remember a thing about it.

JEF: It sounds from what both of you have said, although you don't want to take credit for it, but it sounds as though your work with computers is the foundation for an awful lot of the modern forestry techniques they use.

CDO: I think that's safe to say.

GMF: Well, I love to hear you say it.

JEF: How would you summarize that, Chad, because you're more aware of these?

CDO: What I would rather do is, if Tim Gregoire is in Monday morning, have you talk with him. Tim is one of George's students, and he now has George's chair and his office. A beautiful office, by the way. I wanted that, but Tim got it. [laughs]

GMF: He had to get it.

CDO: It's a mensurationist's office? [laughs]

GMF: It's a mensurationist's office, and I promised him when I left that place—

CDO: I think you promised it if John Gordon did something, you would give it to John.

GF: Gordon, I meant. Yeah. If he repaired the roof so that March Hall could stay intact.

CDO: Then when John left it was vacant. As I was coming, Tim and I both wanted it, and Tim settled it just by moving in and saying, "I'm here."

JEF: Squatter's rights?

CDO: Yep.

GMF: I guess it was the desk that he had.

CDO: Yep. Tim got that, too.

GF: Forest History Society.

GMF: Is that one of—

GF: It was the Forest History Society desk.

CDO: Was it?

GF: They left it when they moved to California.

JEF: That was Maunder's desk?

GF: Yeah.

GMF: And you see, I—that's when Frank Mergen and I fell out. I've forgotten what it was. Oh, yeah. He thought the forest history was attractin' money away from the forestry school. Frank and I really had it after I told him, "Didn't you think forestry has a history?" Like that. And I think Gloria's about to say—seems to me like sometime I visited down there somewhere with a shotgun once.

GF: No. [laughs]

GF: No.

JEF: Do you belong to the Forest History Society?

GMF: Pardon?

JEF: Do you belong to the Forest History Society?

GMF: No. We take so many. I'm always jumpin' at it. Subscribe to this, and subscribe to that, and subscribe to that. She has to put the breaks on somewhere.

JEF: You know, since the time that you probably belonged, for a while they used to do a quarterly journal, and they now do a thing called *Forest History Today*. And they do a one-year sort of summary volume of research and what's going on. A couple of interest articles. One of the articles in the last couple of years was on the history of the spring camp at Yale. So you might enjoy that. In fact, I'll send you if you like—if you'd rather I did not—I can send you their brochures and things.

GMF: What is this?

GF: Forest History Society.

JEF: Forest History Society. I work a lot with them, and they co-published one of my books, and I've published in their journal, and of course I've very enthusiastic.

GF: I bet that'd be interesting.

GMF: I guess I would, but as I remember I looked at it, it just kind of makes me sad. You know, I regret being out of forestry so much.

JEF: You know, that's sad, but it's also wonderful. In this sense. I have been impressed—I'm not a forester obviously—but most foresters that I have met have believed, and I think rightly, that their careers have been important, that they've done something worthwhile. And that must be a really wonderful feeling to have.

GMF: Yeah. What makes you so sad is when you get to be 80 years old like—

GF: You're not yet.

GMF: Seventy-nine.

GF: Yeah. [laughs]

GMF: Seventy-nine years old, you know everything seems so far away, and you know that you're lucky if you live another year or two, and it's awfully hard to even think about anything.

JEF: Well, things mean a lot to you, and that's good. That's an admirable quality. But the other thing is you—

GF: Well, we are interested in history, and this is a book that I wrote that George helped me with the English.

JEF: How long have you all lived here?

GF: Oh, '66.

JEF: How old is the house?

GF: Uh, 1761.

JEF: I thought it was pretty old.

GF: So this is a book about the cemetery that's out front, with all the inscriptions and thumbnail sketches of the military careers and the families that are connected.

JEF: That's great.

GMF: I could still do stuff, miracles with photo shop.

JEF: You like photo shop?

GMF: Well, I did when I had brains enough to do it.

JEF: I have a book coming out this fall, in October, and I think Chad mentioned I did a history of Mississippi forests and forestry that came out a couple of years ago. And I have a companion book coming out that's a book of about 200 to 250 or so historic photographs of Mississippi forests and forestry.

GF: Oh, perfect.

JEF: Yeah. Everything from trees to machines to people to towns to so on. If you like photography—and I digitized all of them with the computer—that's how I did the whole thing—and went around to archives and families and places and gathered them—would you like to see if what comes out?

GMF: Yes, I would.

JEF: I'll send you a copy. I'm making obligations here. I'll make the press give me a copy to send to you.

GMF: The reason I really quit work in the photo shop was I didn't get very much done. The damned ink would dry up in my printer. You've got to have some volume comin'

through. I don't have a whole lot to do. I've been unable.

Now she has a printer downstairs that she does a good bit on, and I've been trying to get—I thought I should be able to transfer, copy that stuff on one of the disks, take it down her to get it printed. But it doesn't seem to work out very well.

JEF: I think if you get the bugs worked out of it, it will work pretty well.

CDO: Another thing. If you're interested in copying either on a disk or a _____ port, we could print it in the school, and print on photographic paper. I think we could do something like that.

GMF: Thank you.

JEF: I was admiring your woodshop as we walked through.

GMF: Oh, yeah. I collect old woodworkin' tools.

JEF: I have a friend who does also. Teaches the history of technology, and he collects tools and so forth. I like them. I collect them but not in a very serious way. I was admiring your things there. It's a great collection.

CDO: I was admiring both your rifle and your powder horn here.

GMF: Isn't that a beauty?

CDO: That is. Where did you get that?

GMF: Do you remember where I got it?

GF: They're both reproductions.

GMF: Do you have any idea where we bought this?

GF: No. I can't remember. It's been so long.

GMF: I think it was in—

GF: Why don't you hand it to him and let him see it?

GMF: That's a reproduction, too.

GF: It's a manual.

JEF: Isn't that kind of _____?

GMF: No, no. That's a Tennessee long rifle.

JEF: What's the difference in a Tennessee and Pennsylvania long rifle?

GMF: What?

JEF: What's the difference?

GMF: Well, what was that soldier that killed so damned many Germans in World War I?

JEF: Sergeant York.

GMF: He was from Tennessee. And that's the kind of rifle he grew up usin'.

The reproduction was made in Pennsylvania is what she's tellin' you. That is the kind of a squirrel rifle that would have been used in the Southern Appalachians. And you see the extra flints over there on the other side.

CDO: This one can fire, can't it?

GF: Yes, but he hasn't fired it.

GMF: No. Haven't had the nerve.

CDO: I've got a powder horn on my wall in New Haven. Sometime I'll bring it and show it to you. It belonged to my great-great-grandfather, and it was given to him in about 1835.

GMF: You see it's a kind of a map horn?

CDO: I noticed that, and New York, by the way. I wasn't gonna tell you that. [laughs]

JEF: Dr. Furnival, just on the tape, I just want to thank you for your time, and Mrs. Furnival as well. And as I said, we'll get transcripts to you.

GMF: Well, we certainly appreciate it.

Taping stops.

Taping resumes.

GF: Uh, you lived in a suburb where she had her own restaurant with a little redbird sign.

JEF: I'm starting the tape again to possibly correct something that may have been said earlier.

We thought that Dr. Furnival said that he had lived in Nashville, Tennessee, and it was actually Asheville, North Carolina. And his mother ran a restaurant there at a place called the Arcade.

GF: Downtown.

JEF: Downtown. And Mrs. Furnival, you mentioned about a sign?

GF: Yes. After she ran the Arcade Restaurant, they moved out of the city, and she ran the Red Bird, and no restaurant name. Only a little tiny sign with the redbird, but she had a lot of customers.

CDO: Just out of curiosity, what was you mother's maiden name?

GF: Lott. L-O-T-T.

GMF: Phyllis Lott.

CDO: Okay.

GF: Phyllis Kidder Lott.

CDO: And what was your maiden name?

GF: Hays. H-A-Y-S.

JEF: Well, since you were in Asheville, this is another obvious question for a forester. Did you have any interest in or contact with the Biltmore Forest when you were there?

GMF: Yes. I must have. I've been up backwards. I've been up on the mountain there where the forestry began.

JEF: Where the school was?

GMF: Yeah. Where it began. But I was never at Biltmore.

GF: No. He was a child then.

JEF: Well, I'm just wondering if that might have been something that lodged in your mind that may have helped you go toward forestry.

GMF: No. I don't think so. I remember visiting it afterwards, but I don't—

GF: As an adult.

GMF: As an adult.

GF: His mother died when he was eight or nine, and his father when he was ten.

CDO: Okay. Then it was your aunt—

GF: Aunt Margaret.

CDO: Aunt Margaret.

GF: Lewis.

CDO: Okay.

GF: Lewis Dyer.

CDO: Okay. She was originally a Lott but she married— Oh, she wasn't?

GF: No. She wasn't that close. She was a distant cousin.

CDO: Okay. You basically just called her aunt?

GF: Yes.

GMF: Yeah, yeah.

GF: He couldn't call her "Mother."

CDO: And that family was the one that owned the 13,000 acres—

GF: I'm not sure that number is right.

CDO: But you're saying that owned the timberland.

GF: And still do.

GMF: Yeah.

JEF: They still own it?

GF: Yes. And we were both directors until May when both of us resigned as directors in favor of our sons so that they could be more active. And George is still a trustee.

CDO: So this is now in a foundation status or family partnership?

JEF: Family corporation?

GF: It was a company, and very recently it's been changed to a partnership for income

tax reasons.

JEF: Didn't that form a corporation?

GF: Yes.

CDO: And you said that there was you and six other siblings are directors, step-siblings?

GMF: Yes. But you've got on the tape, too, from her.

JEF: Well, let me ask you a couple of other things about that Florida land that was—

GF: Siblings? He only has one brother.

CDO: I know, but I mean who basically had interest in this property.

GF: Oh, and that.

GMF: Yes.

JEF: The forest in North Florida was obviously pine?

GMF: Yes.

JEF: And it's been managed over the years?

GMF: I said it's under lease. It's under lease.

GF: It was to Georgia Pacific, then the Timber Company, and it's now—

GMF: Oh, it's that one that— Mac—

JEF: MacMillan and Bloedel?

GF: No, no.

GMF: It's the one that bought up half the forest land in the United States and runs on up into Maine.

CDO: Let's see, there's the—

GF: They're in mostly real estate.

CDO: Hancock or Plum Creek?

GMF: Plum Creek. Plum Creek.

GF: So it's under lease to Plum Creek until twenty-twenty-four.

JEF: They bought a lot of land in Mississippi.

GMF: Well, ours will get back in the family sooner or later.

GF: Well, it's still there.

JEF: Did they buy it or lease it?

GMF: Leased it.

GF: Well, they took over the lease from the other two companies.

GMF: Yeah, they weren't our idea.

GF: You can't seem to have any control over this buy-outs of companies.

GMF: But at any rate, it'll make somebody a lot of money.

CDO: Mainly longleaf?

GMF: Oh, no. This goes everywhere. The old longleaf in the South was a turpentine business, and there's not been— My impression is that they've tended to go to something much more rapid-growing now. Loblolly and stuff like that.

When our whatchacallit, when Pa John, as we call him—John S. Robinson?

GMF: Remind me. There's a good story there. But when he bought that land in Florida, it was a dollar an acre or something like that.

JEF: Was it cutover land?

GMF: Yeah. Southern oak. No—it wasn't that. He bought it, and it cost more than that. It was for turpentine. And they turpentined it. They started growin' stuff that would grow faster.

GF: Around the turn of the century.

GMF: Loblolly and slash. I guess it would have been slash. And they unfortunately got a pretty cheap lease on it, but, as I say, it'll come back eventually.

JEF: What's the story you were going to tell about it?

GMF: Where was I?

JEF: John S. Robinson.

GMF: Oh, yeah. That son of a gun. He was a great guy. He ran a country store keeper up in West Virginia, and this must have been about the turn of the century, honey, or little later?

GF: Around that. Maybe a little earlier.

GMF: And he always had people—people so poor—he always had people, it was just sort of hand-to-mouth, you know, and like that. And he'd lend 'em money, so he was kind of running a bank, you know, like that. And he had to foreclose on two or three little mountain farms. And goddamn, they struck oil on every one of 'em. [laughs]

That's a fact, isn't it, Mom?

GF: Yeah.

GMF: It sounds like a fairy story, but it isn't.

GF: So the story that he was on the train, and he heard two people talkin' about Florida land, and he decided he'd take advantage of it. And so we went down to Florida, and bought it, and later he was so much in favor of land that he bought large acreages in Mexico.

And when the revolution came—

GMF: They didn't do so good. [laughs]

GF: They took it all.

GMF: They ran him north, ran everybody north.

GF: But we go to this Robinson Improvement Company meeting every spring in Florida. So it's a rule of the company. We have to have an annual meeting.

GMF: I go down there and look at one of my worst errors in judgment like that. I thought that we were gonna get a large demand in land for real estate, and we got one house built out there?

GF: Yeah.

GMF: So year after year after year, nobody. It's a good road, everything out there, and why in the hell we can't sell any, I don't know.

GF: Well, you want to sell big, big quantities of it.

GMF: Yeah. We don't want to sell little lots. We can't afford to.

GF: It edges potato fields on one side.

GMF: Probably should have gone into the potato business. [laughs]

GF: It's been drained, and so you worry about, you know, the water rights and drainage canals and all that, marshes.

JEF: I'm going to cut this off again.

End of Tape 2

End of Interview