

Interview with Steve Eubanks, Friday, January 9, 1998, in Eubank's Office at the Chippewa National Forest Headquarters, Minnesota. Interviewer: Max Geier; Transcribed by Elizabeth Foster; Audited by Keesja Hoechstra

OSU forest engineering graduate Steve Eubanks worked in several Northwest national forests before encountering BLM ecologist Chris Maser in 1977, who hooked him on broad-scale, ecological thinking. As Ranger at the Bear Springs Ranger District on the Mt. Hood National Forest he got to put some of that thinking into practice, and that experience prompted Willamette Forest Supervisor Mike Kerrick to hire him into the ranger position at Blue River District, where he interacted intensively with the Andrews research community between 1984 and January 1989. Eubanks was instrumental in promoting retention of live trees and downed, dead wood in cutting units and placement of big wood as part of river restoration projects. He continued to interact with the research community in subsequent positions as supervisor of national forests in Minnesota and California.

Max Geier: I'm gonna get started here with a little bit of personal background. I understand from talking to Mike Kerrick that you interviewed for the position at Blue River [Ranger District – Willamette National Forest] when Jim Caswell retired. Maybe you could start off talking about your personal background up until that point.

Steve Eubanks: Okay. How much detail?

Geier: Anything you think is relevant.

Eubanks: I was born and raised in Oregon around the Salem area. Spent my early years on a farm, and moved to town when I was in the fifth grade. I always liked the out-of-doors. I spent time fishing and hunting, and when I was thinking about college, I had taken the aptitude tests that high school kids do, and they basically said you need to do something in the outdoors. At that time, I didn't really have a vision of what I wanted to do, but I ended up in forestry. Oregon State University had a person who came to my high school to talk about forest engineering, and so I said, "That sounds like a pretty neat deal." Didn't know diddly-squat about forestry at that point. I spent time in the woods, but I didn't know a thing about forestry.

I ended up in the forestry program and graduated from Oregon State as a forest engineer in 1970. I went to work for the Forest Service, because by that time, I had worked three summers with the Forest Service. I knew that's kind of where I wanted to work after school. What was unusual, in going to Oregon State University in those days, was that it was kind of the production forestry school. To some extent I took a fair amount of grief from classmates whose ultimate goal coming out of Oregon State University in forest engineering, was going to work for McMillen and O'Dell in Canada. If you really had aspirations to go into forest engineering, that's what you should be driving for, because that is production forestry at its best. You plan roads and logging and that kind of thing in Canada. Of course, there were other companies in

the U.S. that were next in line, but the Forest Service was not thought of as, I don't think as a paramount profession in those days. But when I went to work for the Forest Service as a summer worker, I thought, "Gee, this is a good place to work, because there was concern about forestry, and there were good people." There was a hint at that time that the Forest Service was not fully production forestry. I think, even at that point, I was sort of headed in that direction. My first job in the Forest Service was working in the supervisor's office in the Mt. Hood [National] Forest. I got to know the non-forestry specialists, as well as forestry, everyone; the hydrologist, the fish biologist, the wildlife biologist, the landscape architects, and those sorts of non-traditional viewpoints.

Geier: Where were you?

Eubanks: This was in the Mt. Hood National Forest headquarters in Portland. I was given the opportunity to learn about some of those particular viewpoints on how to do things in a sensitive way. I think that had an impression on me. From there I moved to a planning position on the Estacada District [Mt. Hood NF]. Because of my work with those folks, I had been involved in a lot of the planning activities on the district. I think the planning I did at that time was not necessarily cutting-edge, but certainly more toward the non-traditional approaches in timber sales. We were still getting timber sales done. We were just doing it a little bit different way. I was very grateful for the help those people gave. It was a relationship that just sort of fit.

Geier: I wonder about the traditional vs. non-traditional issue [timber planning/harvesting].

Eubanks: Just different kinds of logging systems that protected the ground better. The skyline sales were non-traditional at that time. I tended to think toward the balloon sales, helicopter sales end of the scale a little bit, rather than the norm. We planned protection of riparian areas and streams, even wildlife trees, visual management, and some blending of the sales. It wasn't that we were doing anything necessarily cutting-edge. We pushed towards the end, but it was just the fact that that sort of stuff just made sense. And we butted heads with anybody. I mean we were bringing folks along with us as we went. It just sort of made sense.

From there I moved to Wenatchee National Forest as a timber management assistant on a district, and that's where serendipity sort of struck. I moved there in 1975. I think it was 1977 when a couple of folks on the district had gone to a session in Wenatchee where Chris Maser made a presentation. At that point Chris was working for the BLM out in eastern Oregon. The Forest had asked him to come up talk about some things. We were in the midst of having discussions and in the midst of a dilemma about how we were going to handle management in the large basin right around the ranger station. A couple of technicians that came back from that session were very impressed with Chris and what he had to say on sort of non-traditional viewpoints of managing the forest ecosystem. We had said, "Well, we need to get a team together to talk about how we are going to do the pre-commercial thinning and harvesting in this basin." And folks said, "Well, gee, you ought to try and get Chris here," and we did. Chris came and spent a week on the district as part of a small team that we put together with the

forest silviculturist and a couple other people on district, including the silviculturist and the forest soil scientists. At that point, things just clicked. We were just sort of on the same wave length with what Chris had to say. That was the beginning of a long-term friendship with Chris that influenced a lot of my thinking. We came up with some very non-traditional approaches on how to handle everything from coarse woody debris to what kind of harvests that we were going to do in this basin.

At that point I started approaching all other projects on the district through a revised management system. We, the timber staff, were responsible for doing the major planning, so we started building-in lots of things about coarse woody debris and wildlife trees and fuel breaks and slash treatments and that kind of thing. From there I went to a district ranger position on the Bear Springs District of the Mount Hood National Forest, and we had a very good silviculturist named Lloyd Mercer, who shared interests in the different approaches, and also he was real big into prescribed fire. Lloyd and I had done a lot of looking at non-traditional approaches. But, after being there a short time, it became apparent that we were still doing a lot of cleanup of slash and doing things in a traditional way. What we did was ask Chris Maser, Jim Trappe, and a couple other folks to come and spend a couple days with us, and talk about how we were treating slash and looking at timber harvest. They spent a couple of days on the district and we ended up developing some guidelines on how to handle slash treatment, and furthering the relationship with Chris. It was really a neat exercise and the Bear Springs District sort of began implementing some very non-traditional approaches to things, leaving large amounts of coarse woody debris, and we were leaving lots of reserve trees. We had a silviculturist and a fire management officer who were very receptive to these practices, in fact, were not just receptive, but were promoting them. We were doing prescribed burning and under-burnings. We were even doing prescribed burning in pine plantations. Very, very non-traditional approaches, and we took a certain amount of heat from some of the staff officers on the forest, but on the other hand, we were also getting lots of kudos for the things we were doing in non-traditional ways. We were starting to look at managing forest ecosystems and that was sort of the next step in the evolution. At that point the region [Region 6] had a competition for a district-of-the-year award, and for several years in a row, Bear Springs was declared the winner of this regional competition, because of all the non-traditional work that we were doing in ecosystem management.

That brings us up to the time when I was selected as the ranger at Blue River. I think what kind of kicked it over the edge for my selection, was that Mike Kerrick called me and personally talked to me on the phone. He asked how I felt about working with researchers and scientists, and I was able to say, I've already got a really good relationship with some researchers and scientists, and I think it's really neat. I think that was probably the "extra credit" that got me the job at Blue River. At that point I knew that I had an interest in working with scientists, but I had no idea what the extent of the possible universe was when I moved to Blue River. And I remember, I got the job just at the time there was a unit leaders conference going on in Bend. Jim Caswell [Blue River District Head Ranger] and I spent probably a couple hours just walking around the resort area where this conference is being held, and he was kind of filling me in on what was going on at Blue River. It was like a mini-transition. And he was trying to explain to

me how this relationship with the researchers worked on the Andrews. We always kind of characterize things in models we can understand, so you try to explain this, the organizational charter, if you will. Who reports to whom, and who has got what responsibility and that kind of thing. I couldn't grasp it. He was trying to explain some basic things and it just didn't, you know, just didn't fit too well together, but I thought, "Well, I'll pick that up."

It was interesting, but after spending a little over four years on the Blue River District, and even now, I could never explain how all of this works. I mean, there's this unique relationship, very ambiguous; how all things are tied together. Certainly there is a memorandum of understanding that says that the National Forest Service and Oregon State University will be working together; I can understand that part of it. But how, who reports to whom, and who has what responsibility, and all that kind of stuff; all the lines are blurred. Because Oregon State researchers and Forest Service researchers are working closely together, and in some things they are tied directly together because of the grant proposals they had submitted that funded certain people. But, there were no direct lines of authority that say, this person works for that person. I mean there were in some cases, but in many cases, there were people that crossed lines of organization and that kind of stuff. I always characterized it as a situation of not always knowing who has responsibility for the H. J. Andrews. I had some responsibilities as district manager, Art [McKee] had some responsibilities, Jerry Franklin and Fred Swanson had some responsibilities. Art probably had the most direct responsibilities on the research side because he was the site manager. And I always characterized it as if, Art and I really wanted to get into pissing matches, we could have, because our responsibilities overlapped so much in terms of who was suppose to get what done. But we never did, and that's because we sort were all working together on a common vision, in that we were trying to work together to improve resource management. We didn't let the small stuff get in our way. That is how all of those people [HJA] work in research. Yes, they had disagreements from time-to-time, and there were friction points, particularly when it came time for a chapter to be due or a grant application to be made, but it was never a fatal thing, because we all had a greater vision that we were working towards something. That's how things sort of things worked. I got off track from the background, but that that brings us up to the 1984 time-line.

Geier: Good. Had you met Jim Caswell before that conference in Bend?

Eubanks: I had, but I did not know him well. Well, I knew him reasonably well. He and I had gone to an intensive semester program together, so I had some background with him.

Geier: Need some simple clarification things from earlier. Let us back up a little bit here. At Oregon State University, and through your career, are there any people you would identify as being particular mentors or role models? You mentioned Chris Maser as someone you worked with, but you were more of a peer, I gather.

Eubanks: Well, there were a number of people, I wouldn't necessarily call mentors, but they were people who certainly influenced my resource thinking. Fisheries biologist Chuck Witt and engineering geologist Pete Patterson. There were just so many people in the specialty arenas

that I worked with, almost everybody that I came across, I almost hesitate to mention names because it is just sort of a continual process. The deputy forest supervisor on the Wenatchee Forest was Dick [name unintelligible]. Dick was always someone, even after I moved to Washington DC, somebody I maintained contact with, and who was certainly a supporter of mine. He was to some extent a mentor with very non-traditional views on resource management, that certainly had an influence on me, basically in terms of his non-traditional outlooks, which established in me that it is okay to be that way, because he was in a leadership position. The Wenatchee Forest had quite a few non-traditional people. Randy Perkins was the timber staff officer, and he had a non-traditional view point for a timber staff officer on a forest level. You know, there are lots and lots of people like that [with non-traditional leanings]. Kirk Horn was another person, a wildlife biologist on the Mount Hood Forest for a while, and then he was in the regional office, and he had some non-traditional viewpoints, very strong viewpoints. And I spent time talking with him about things and concerns. I'm trying to think of other people, names that come to mind.

Chris Maser is by far the strongest, since that very first meeting and particularly the first spring in the Blue River, I had frequent contact with Chris as well as the Andrews group. Chris wasn't a regular participant in the Andrews group, but he was always in the periphery. But with me, I was always in direct contract with him and so he sort of became part of the Andrews group with me.

Geier: Another question I had here for quick clarification. Who was forest supervisor there at Mt. Hood at the time?

Eubanks: Actually, when I first started, it was Dale Robertson, and he was the one who selected me for the job, but he left almost immediately, and it was Dick Pfils after that.

Geier: Dick Pfils?

Eubanks: Pfils. P-F-I-L-S. That was an interesting thing because we were pretty much given license. At that point, the districts had a lot of autonomy, and we were off doing our thing pretty much. It wasn't so much direct support, but it wasn't non-support, which is important. I mean, basically, we were given a fair amount of freedom. We were meeting targets and getting stuff done at the same time, and so we were pretty much got left alone.

Geier: You were talking a little bit about your decision to take the position at Blue River. At that point in your career, what were your career goals? What were you anticipating coming out of that decision? This was a lateral move.

Eubanks: I was a GS-12 ranger at Bear Springs and a GS-13 ranger at Blue River, so it was a promotion. At that point, I was still enjoying the job as district ranger, had given some thought to the fact that someday I might want to try for a forest supervisor job. But that was really not the reason. I mean, it was another district, and was a district that looked good in terms of having interesting challenges, but I didn't go beyond that point. I had not thought all about a

grand vision of a partnership with research, but saw the opportunity to work with research and thought that was neat. I thought it was neat to work with them, and I had always enjoyed working with the research folks that I had worked with, but I didn't have this grand vision that it was going to get to the point where things got so out-of-hand.

Geier: You talked a little bit about the phone interview with Mike Kerrick. Was that the extent of your interview process?

Eubanks: Yes, that was, and I bet it wasn't five minutes. They had already done a lot of screening of candidates at that point, and they knew who the candidates were. I got the impression Mike had narrowed it down and he was just trying to see whether they made the best choice. I know the research folks had probably approached him and said they would like somebody who is going to work with us, and I think that was probably what he was following up on, from that perspective. I never really talked to him about that after they offered the job and it worked out. It was a very, very short interview process, and I'm sure they had done a lot of screening before that.

Geier: He made the same comments about the reason why he went with you, being familiar and wanting to work with researchers. Maybe you could talk a little about your first impressions once you started. Before that, did you have any previous understanding, and what was your level of previous awareness of the kind of work being done down at the Andrews at that time?

Eubanks: Sketchy. I had in my career seen research papers, that kind of thing, and I knew where the Andrews was, basically. I knew it was an experimental forest, but at that point I didn't know that much about it. I couldn't tell you what it was, and I wouldn't have been able to explain exactly what the role of an experimental forest was, that there are separate areas, administrators, designated experiments and that kind of stuff. Mostly, I just had seen the name H.J. Andrews.

Geier: You hadn't worked with any experimental forests up until that point?

Eubanks: No, not until this point.

Geier: And the scientists that you had been involved with earlier, had they been locally connected with the region or were they from research grants?

Eubanks: Well, a little bit of both, as we had Jim Trappe. I'm trying to remember whether he, I think he was PNW at the time, but he came to Bear Springs. By the time Chris [Maser] came to Bear Springs, he [Jim] had moved to Corvallis, and that's where he and Jim would work on the connections between truffles and tree survival and those kinds of things, and the mycorrhizae connection with rodents, all kinds of research. I think most of them were at Corvallis together. But that was kind of the extent of it. You know, I obviously knew them [HJA scientists], a fair

amount about Jerry Franklin and his work. We had referenced his work when I was up on the Wenatchee, and all of those folks were people that we were aware of, but not in-depth.

Geier: Maybe you could talk about what your first impressions were, and the conditions in the district when you came, including at the Andrews and in general terms of the Blue River District, when you first came in.

Eubanks: I can talk about it, because very shortly after arriving at Blue River -- I moved there in October of '84 and spring of '85 -- we had our first session with the research folks. One of the reasons was that shortly after my arrival, having come from Bear Springs, we were working with coarse woody debris and those kinds of issues. I got to Blue River and had very good people working there. I mean, Blue River was a good team of people, had a good silviculturist, Jim Golden, good fire management officer, and Chuck Anderson was the resource assistant; good people. Timber management was led by another first-rate person. A real good team of people. One of the things immediately apparent was that we were still in high production forestry. Even with the Andrews next door, there had been interactions with the research folk and fairly good relationship with them, more than fairly good, as it was a good partnership. Jim Caswell had promoted that. But in terms of what was actually being applied on the ground, it was still production forestry. We were still yarding all unmerchantable material and the units were cleaned, and the issue of leaving coarse woody debris in the units had not been addressed.

The silviculturist, Jim Golden, took responsibility for calling a meeting in the spring. That meeting with some of the same folks mentioned earlier, Chris Maser, Art McKee, the soils people, and I think Fred Swanson, were there. I can't remember all of the players, but it was a fairly large group compared to what we had at Bear Springs. We invited them to come and spend a little over a day, sort of the same process we had used at Bear Springs. What we basically did say was, "Okay, let's go out and take a look at what we are doing now and let's have some dialogue about what the potential implications are, and then let's figure out what we ought to be doing instead."

This was particularly focused on treatment of coarse woody debris at that point. That was the specific focus, because that seemed to be the biggest impact. In talking with Chris Maser for some time, we really knew what the implications were and the potential tremendous benefit of coarse woody debris. Big logs are basically what we are talking about. In terms of the process, we spent a day in the field, and when we got back to the office, what I said was, "What we need here in the district is to develop some kind of a rough guideline that will tell us how much material we ought to be leaving rather than how much we ought to take." Because all slash guidelines up to that point in time were based on fire hazard, they said, "You should leave no more than such and such." And we said, "Instead of talking about how much we should take away from the site, we want to talk about how much gets left on the site. How much do we need out there for certain purposes?" There was naturally a certain amount of reluctance on the part of the scientists and specialists to commit to something like that which is going to be in writing, and says, "This is it because we are basing this on intuitive knowledge." We had a discussion about that, and I said, "We understand that we are putting you on the spot, we understand that this is going to be based on intuitive knowledge. But we also are telling you

that you are not going to leave this room until we end up with something on that.” And I literally said that with a smile. I said, “We are not going to let you leave until we have something here on flow charts that we can use, and make into a guideline.” We chuckled about that, but I said, “I’m serious, you’re not leaving until we get this thing down.” (Chuckle) And we did that. We tried to create an environment where we said, “It’s okay. We are not going to quote anybody as saying this is the absolute kind of thing.” But I said, “Your intuitive knowledge is better than our intuitive knowledge in terms of the scientific ramifications or implications of coarse woody debris. We’ve got folks here who can talk about the fire hazard aspects, and you guys can talk about the ecological aspects, and all of our knowledge together, we should come up with something that we can at least live with.” We developed in that period of time a very rough framework of how we should be managing coarse woody debris. And that became our coarse woody debris guidelines for the district that involved into, actually several years later as I understand it, the framework for standards and guidelines in the Willamette [National] Forest Plan.

But we took a totally different approach than the rest of the forests, and we were leaving massive tonnages of coarse woody debris out on the ground. And by doing that we were saving a lot of money because we were not paying the logger to bring all of this material up to a landing, where we would burn it. So, we would save money on the logging costs, we would save money in not having to burn up the land, plus the fact that it was out on the ground and was a benefit to the resource. We still burned the unit, but they didn’t end up looking like the carpet in this room, free of material, lots of logs up there, and we did enough analysis to know that it was not going to be a long term fire hazard and all those kinds of things. We did an analysis of that, and I’m sure you’ve seen the book on the different classes of logs; classes one, two, three, four, five. You know, the guidelines addressed how much of which class should be out there and what kind of distribution and that kind of stuff. That was again the first step in the evolution from production forestry into more of an ecological approach. And overall, it took several years to see results from the evolution, but from my perspective, it was very quick. We were able to see the results immediately. We had a sale administrator, Bob Flint, who was more than receptive. He was very innovative in his approaches to getting these things done on the ground. He embraced these new guidelines that we developed to the extent where he was implementing, even on old contracts that required yarding and moving. He went back and implemented them on old contracts. Otherwise there would’ve been this waiting period of four or five years before we saw things on the ground. We were seeing them immediately. Not on every sale, but immediately on a lot of sales, because of the process of updating old contracts. And all of our new contracts were updated as they came on-line. But, he was a real key individual in getting results implemented on the ground. And of course, the timber sales assistant was very receptive to it as was our staff. They basically they embraced this and we sort of had a transition in the district, people were receptive when we did it, and we started implementing it.

Geier: Did you get the impression that at that time the Blue River District was behind, about the same as, or ahead of other districts?

Eubanks: When we began, I think we were probably sort of average in terms of the actual on-the-ground results outside the Andrews. On the Andrews, I think things were being done a little bit differently. We began implementing on all acreage, and at that point we were an anomaly, not only on the forest [Will. N.F.], but in the region. We became an instant anomaly because of all of these things we were doing, and the more we worked, the more anomalous we became.

Geier: What was their reaction?

Eubanks: It varied. One of the things that we had as a philosophy on the district, was that we did not go out of our way to try and preach or toot our own horns. I mean, we tried to let people know what was going on, but our real philosophy in working with the researchers, and I think their philosophy also, was we will lead by example, and we will keep people tuned in, but we are not trying to be evangelists. I mean we were trying to make sure what we were doing was working, and we were focusing on that aspect. To make sure that happened, we were always asking ourselves questions of how can we do this better, differently and that kind of thing, to make sure it is working. We had lots of opportunities for tours and inviting people to come to the forests and that kind of thing. And as the word spread we had people calling up, leadership teams from other forests who would call up and say, "Hey, can we come and bring our leadership team down and take a tour of what you guys are doing down there?" So, we would work with district folks and research folks to take people on these tours. That's how we spread the word.

I mean, we weren't trying to put articles in the paper that said what a good job we were doing. We were trying to sort of transfer technology in groups, and we did it at conferences and that kind of thing. But it wasn't, again we're not trying to be evangelists, necessarily, so from that standpoint, it was more subtle. I think, a little more subtle.

Geier: So concerning people in the general public, was there much interest in that regard?

Eubanks: Well, that began to build. As the word got out we were doing things differently, through different means we would have contacts with people from the environmental community, different groups or whomever. We would sponsor tours, small seminars, and get different people together, would get those started and it sort of spread by word-of-mouth that things were going on here that were different. And so we would tell them what we were doing and why. We had trips with the Silviculture Institute [training program put on jointly by USFS and OSU], people who were going through that formal training program, the classes would come to Andrews, and we would go up and talk. For different training sessions people would come, and frankly, not everyone was receptive or impressed with what we were doing. We often got flack from people who were very skeptical about what we were doing. But we told them what we were doing and why. And there wasn't any doubt in my mind that what we were doing was right. And I don't think that there was any doubt in the minds of the research folk, that we were headed in the right direction. But not everybody shared that perspective.

Geier: How would you characterize the reaction of people in Blue River?

Eubanks: In the district?

Geier: No, I mean in the town.

Eubanks: Oh, in the town.

Geier: Local residents.

Eubanks: Hmm.

Geier: Were they even aware of it?

Eubanks: To some extent the folks were aware, just from our conversations, and we actually had some tours for local people, power-brokers within the community, folks from the school and the county, that kind of thing. We would have tours for them and show them what was going on. But, if you took a casual poll amongst the local residents, most people wouldn't have known that there was anything dramatic going on. I mean, when they were out in the woods, they probably would have seen some changes occur, but that was the extent. I didn't get a lot of reaction.

Geier: If I'm not mistaken, that was a critical period in the local economy, '84-'85. What would you characterize as the leading concern about the district at that time for people in that region?

Eubanks: Well, all during that period, we were still pumping out timber sales. I mean, we were still meeting the allowable cut. So there wasn't any concern from the economic status that somehow we were shutting off timber sales. That certainly wasn't an issue. So, from the industry side, there wasn't any concern about the amount of volume. There was a concern from the industry side, that we can talk about at some point, about what we were doing and different aspects. From the environmental side, there were a number of groups and individuals in the area that were active. Some of those folks, I think, were very receptive to what we were doing. We had a couple of critics that basically didn't want to see any timber harvest going on at all, and so, regardless of whether we were doing things in a different, more ecologically sensitive way, that didn't make any difference to them. Basically, they were going to be critics regardless of how we approached it as long as we were harvesting timber. We understood that as to whether or not we agreed, we just knew that was their perspective. We were able to take some of the environmental groups from the Eugene area, from the McKenzie drainage, out on the ground, show them what we were doing, and again talk about why. And I believe that they were again, they may not have been liked there being timber harvest, but they were supportive that we were doing it in a way that was probably better than production forestry. If you could make the jump that there were going to be timber harvests, they were supportive that it was being done in this way. But not all of them made the jump that there ought to be timber harvest. I understand that.

Geier: Shifting gears here a little bit, I wonder if you could talk a little bit about your perception of the physical layout of the Andrews Forest when you arrived. Did this place strike you as different or unusual than any place you've been in that regard?

Eubanks: Physical layout in what sense?

Geier: I'm talking about the road system that was in place, and the way it had been managed as an experimental forest until that time. Since you hadn't really dealt with an experimental forest previously, and here's your first experience, was there anything that really struck you about it?

Eubanks: Well, the road system was, for the area, sort of typical. I don't think there was anything dramatically unusual. I mean, there were different kinds of experiments going on, the very early harvesting in the area was interesting, the fact that it had been done with the European sky crane [Wyssen], and there was an interesting sort of historical aspect to that. Proportionately, I think there has been less harvested in the Andrews than typically on the landscape. That is just something that I suspected because of it being an experimental forest, but I don't know if there was anything that stood out, other than there were special places for forest research and other interesting aspects. Lookout Creek and some of the studies that had been done there, looking at the amount of coarse woody debris in the stream, the intensive mass and that kind of thing.

Geier: Maybe you could tell me who you would identify as key players at the Andrews when you were there, from '84 to '89, a five-year period.

Eubanks: Well, four-and-a-half, a little over four years. I left in January of '89.

Geier: I know it's usually impossible to do this, but could you list three people that were your closest colleagues during that period of time who would you identify?

Eubanks: Fred Swanson, Art McKee, in terms of the Andrews itself, and probably Tom Spies and Chris Maser. It would be tough to narrow it down. Early on it was Jerry Franklin, but you know, Jerry left sort of in the middle of that period, but I dealt a lot with Jerry in the first years I was on the district. He was the visible leader, if you will, of the Andrews group. It was pretty apparent that he was, and that folks looked up to him as being the leader/coordinator/facilitator. And I think my perception is that he was a big reason why all of that had come together, initially. I don't know, and I'm sure you're getting a perspective from all of the work you've done how unusual the Andrews group is. Having all of those people come together in that kind of a forum, is a very unusual situation across country. I mean it just, using it as kind of a model here, trying to get something similar established. You have to have that peculiar combination, unique combination of personalities, chemistry, commitment, vision, that kind of stuff, and people working together. Certainly everybody else that came together, there was a critical aspect of that but it had to be somebody who was a catalyst, and I think

probably Jerry was that from the way I understand it. When he left, Fred Swanson really took that role, Fred and Art together kind of took that leadership role, Fred probably more dominant because of his role in the PNW. Those are the folks that I think I would identify with the most. Another person, I was trying to think, Stan Gregory is certainly somebody I worked with a lot, particularly in the water area. You couldn't leave him out of the formula. We worked on some unusual projects together. Just a lot of them, and I almost hate to mention names because there is so many people.

Geier: Yeah, it's a tough question and it's almost impossible to answer.

Eubanks: Art was the person I worked with the most frequently, and the most intensively on issues related to the Andrews physical location, because we were always working on things like road maintenance, sizing, and those kinds of issues. Fred was somebody that I worked with a lot in terms of coordinating the general Andrews operation, and then of course, when we got down to specific projects, we worked intensively with all kinds of people. Mark Harmon, on the log decomp study, but if you look at the two people that were really sort of the top of the list in terms of Andrews activities, it would be Fred and Art. And then, I still work a lot with Chris Maser in terms of just general philosophy stuff in ecosystem management, and Tom Spies.

Geier: I'm curious about the earlier comment on trying to replicate the Andrews. I wanted to talk to you later about that, and we'll get back to that. I'm interested in your insights on what made the Andrews tick, what elements were you trying to bring in there, that maybe better to get a little more background. Maybe you could tell me, I think you mentioned this briefly, how would you characterize the degree of interaction among scientists in the district when you arrived? You referred to this in general terms earlier, but more specifically now?

Eubanks: Again, I characterize it as cordial, mutual respect, I picked up to some extent the folks considered for projects on the Andrews. The district was responsible for implementing manipulation, like timber sales or whatever on the Andrews, but I think there was still to some extent the consideration that it was imposition. There was not a full integration between the district and the research community. I think Jim [Caswell] had been a good supporter, but it didn't necessarily become fully institutionalized. And certainly, the information that was coming from [research on] the Andrews was not being fully implemented on the district, as the Andrews was still considered, here's another operation over here, and we've got our district and we're going to operate as usual on the district, and over there on the Andrews, is different. But Jim [Caswell], I think made inroads in terms of good relationships with the research community.

Geier: You mentioned one criteria when you were hired, that [Kerrick] pointed out on the phone, that you were to develop a relationship with the researchers. Was that an expected goal?

Eubanks: Well, I don't know that he really said that. I think what he asked was, "how do you feel about working with research folk," etc., and I think I told him that we [previous team] had

been working with research and I considered it, a real unique opportunity, that kind of thing. Must have done the trick. I was just telling him what I believed, and it worked.

Geier: I think you've talked about some of these already. If I read you right when you were talking earlier, one leading management problems you were concerned about was the coarse, woody debris issue. Were there other major concerns or issues at the time?

Eubanks: That was the one that probably jumped out first, just based on the experience we had had at Bear Springs in working with coarse woody debris. But the other one was wildlife trees, and live trees. I will tell you a little anecdote, and it needs to be the complete one so you understand sort of the evolution. When first on the district and driving around with some folks, might have been a couple of assistant managers, we were looking at the harvesting yields and management on the district, and one of the things I commented about on the harvesting was that there are no wildlife trees and they were doing basically traditional clearcutting. I said, "I'm not used to that," and talked about what we were doing at Bear Springs, and there were places where we were leaving lots of trees. For the most part, green tall trees, in some areas we had a lot of green tall trees, snags, and dead trees too. I can remember one of the statements that someone made, "Well, geez, the forest supervisor was out one time and we were looking at the unit where we had a couple of wildlife trees left, and he made the comment that the only good wildlife tree is one that is going down the road on a truck." I thought, "That is interesting," and filed that one away, as sort of an interesting story. But that was basically, the general philosophy on the district. There isn't any support for wildlife trees and they aren't going to leave them.

Well, I need to add the other end of that, is that I always had a great respect for Mike Kerrick. I think he was a good forest supervisor, and I had a lot of respect for Mike as forest supervisor, and he gave us lots and lots of freedom, even though I know he had a certain amount of discomfort the first few years we were there and some of the things that we were branching off on, some personal discomfort in terms of his understanding and philosophy. But one thing that I have the greatest respect for Mike is his willingness to consider things, and to change where there was better information. Art McKee told me a story about a year after I had left. They had a tour, and I can't remember who all was on the tour, but Mike was there representing the forest, and as they were talking about some things, Mike got up on a stump and started extolling the virtues of ecosystem management and the benefits, and talking about coarse woody debris, wildlife trees, the effects of fragmentation and all kinds of things he had been working on. He said he just stood there open-mouthed at how articulate Mike was on the aspects that we had been working on and how supportive he was. Because he had made within about a five year period, almost a complete transition. And he was not doing it because it was the chic thing to do, he was doing it because he believed it. I mean, he was sincere. Lots of people tend to make seeming transitions and mouth the words because it's the "in-thing" to do, but Mike was doing it because he believed it. So I wanted to finish that anecdote, but wildlife trees was another aspect. Basically what happened after we got coarse woody debris guidelines, we started working on wildlife tree guidelines. Silviculturist Jim Golden and I were probably the ones that really led that, and what we did was we used the coarse woody debris

guidelines as a base for developing wildlife tree guidelines. If the coarse woody debris guidelines are a sort of starting point for what we want for coarse woody debris over time, what do we need to have to create that process over time? In other words, if you always want a certain tonnage of large logs out there, you're going to have to leave some trees in order to create those large logs to be there over time, like that would be there in the natural disturbance regime and natural succession.

So we use that as a starting point and we develop models for leaving how many trees of different sizes and different types we ought to be leaving in harvest units in order to have this continual supply of coarse woody debris, like nature would provide over time. That was the next step in the evolution of ecosystem management, which I characterize in three steps, what I consider key components of the ecosystem or three key pieces of looking at the ecosystem. The first being coarse woody debris, the second being standing dead and live trees, the third being patterns on the landscape or fragmentation. The second part was wildlife trees, and in 1986, we developed the standing-dead tree part, and were starting to implement that on the district, not starting, but were already well into implementation. I think it was spring of 1987, the big ecosystem conference in Corvallis, and the fall of 1986, I made a presentation to the regional leadership team meeting, as they had started talking about ecosystem management and I was asked to speak, asked to be one of the speakers there and there were a number of other folks there.

End Side A, Tape 1 (of 1)

Eubanks: Anyway, he [Kerrick?] had spoken to the regional leadership team at the same time, we were on the agenda together, and he said, "Geez, you need to be on the conference agenda for the session in the spring," and I said, "Okay." I had never done anything like that before, but he had given a similar presentation about what we were doing and about coarse woody debris, wildlife trees, that kind of thing. That's when things really started to pick up in terms of the visibility of the program. That again, was the second stage of evolution regarding the pieces of ecosystem management. The last was the fragmentation part, and we can talk about that later if you wanted to.

Geier: Why don't you go ahead and get into it now.

Eubanks: Well, how that developed, Jerry Franklin went on a leave of absence, a sabbatical back east, and I think it was at the Harvard Forest. He was there, and he and another scientist began talking about forest fragmentation or harvest patterns. And they had done some modeling and he came back for a week or two, I don't remember what year, so he was on the Andrews and we spent some time talking, he and several of us, Fred Swanson and some other folks. He was explaining, he had some drawings and some graphs, and was talking about patterns on the landscape. For years, I had always questioned why we were doing 40-acre clear cuts, as they didn't seem to fit anything in terms of the natural pattern, but that is kind of what we had done. We didn't have a lot of better information on why we shouldn't be doing it. But we had talked about that issue and he [Franklin] had all these figures about the ecological

implications. Basically the modeling they had done was checkerboard, and the computer modeling that they did, showed that once you had harvested, that if you harvest in staggered settings in every other block after you have harvested about 30 percent of the acreage in an area, you have pretty well eliminated big pieces. And once you have harvested 50 percent, the largest piece that you have left is the same size as the piece you have been harvesting. That's a checkerboard, as every other block has been harvested. If you visualize that the black has been harvested and the white is left, the largest pieces, the squarest, are the same square as the black.

So, we got to talking about that, and I said the implications are that we ought to be harvesting bigger blocks, and he said, yes. We ought to be consolidating our harvest units, and so we did some modeling, and we did a hypothetical harvest pattern in an existing watershed, on the Lookout Creek drainage, I think it was on the Blue River side. We took about a fifteen thousand acre watershed, twelve to fifteen thousand, we took the existing patterns, this was the very beginning efforts of GIS, probably been in 1987, I can't remember. We mapped out with different colors where the existing units had been harvested, had all of the existing units, and then we went through and exorcized on the district where our planners said, "Okay, if we are going to continue harvesting at the existing rate, the allowable cut rate, which is the sustainable level we would add a certain number of units per year." And so, they hypothetically added units around this watershed with the traditional approach. In other words, you stagger them around so that you don't have units next to one another. Then we went back and did it a different way, and said, "Okay, if we were going to consolidate our units, try to group them in places where it is the most fragmented now, and save the biggest pieces until later, what would do the same number of acres, but just with a different pattern on the landscape." So we did that and mapped all of this with GIS, we had different colors and all that. But the result was we had two slides side-by-side. One was the traditional staggered-setting approach, and one was what we called the minimum fragmentation approach; the same number of acres harvested, and the same period of time.

We had been harvesting three decades in this watershed and we looked at an additional three decades, and after the additional three decades, with the staggered setting approach, there were no large blocks left, everything was just small pieces. With the minimum fragmentation approach, we had some big pieces left. What we said, if nothing else, after three more decades, you have some options left to maintain some big blocks if you want, but the areas that are being regenerated are also going to be bigger blocks over time, the same age crop. So you are going to have to harvest bigger blocks instead of little pieces of them, of different age classes, you are going to have blocks of age classes. We were able to make the case at that point for minimum fragmentation being the way we ought to go. What we ended up doing on the district, is basically, every timber sale with a few exceptions, had to have an environmental assessment that came up with at least one minimum fragmentation alternative. In a non-traditional way, grouping our harvest center, in some cases we had opportunities for more than one minimum fragmentation approach. There were different ways of achieving these groupings, and in probably 75 percent of the cases, we selected them in fragmentation alternatives. What that required, was to get approval for large blocks, because there was still a

limitation that you couldn't harvest larger than 60 acres in a Douglas-fir region. And we were harvesting some blocks that were, well over 100 acres, a couple hundred acres in some cases, and if we weren't harvesting that large of block, it was considered an opening because there was an existing unit next to it that hadn't grown up enough. So, that was still part of the same opening, so we had to, basically get reviewed by the regional office, but they were approving it. And so we had begun implementation of that and it was pretty strongly implemented by the time I left in '89. That was still a brand new approach, I didn't think the district continued doing that, but it wasn't too long after I left, they started getting into the President's [Bill Clinton] Forest Plan [Northwest Forest Plan], and they aren't doing much harvesting at all now. But we had really strongly begun implementation of that approach.

Geier: The way you are describing it, it sounds like boundaries between the experimental forest and the district began to blur during that period.

Eubanks: Yeah, well, Fred Swanson used to say we were the "experimental district," (chuckle) rather than the experiment forest.

Geier: Jerry Franklin said you were the "experimental ranger on the experimental district." (Chuckle)

Eubanks: Yeah, that's the way Fred would say it, too. I had a few key concepts I was going to go over at some point here. One of them was adaptive management. You've heard the term adaptive management, as it is being used today. Adaptive management now has become a bureaucratic process, with its own bureaucracy. They have approvals of adaptive management areas and everything else. The whole concept has been bastardized to the point where it has lost its meaning. We were doing adaptive management, which means that you have this continual process of research and management working together, and you make adjustments as you get better information. We were doing that without any kind of formal agreement or formal arrangement. We were doing it because we were communicating, and the coarse woody debris idea was based on a very simple, an informal get together of people. We didn't have any formal scientific papers that came out of that. It was based on very good intuitive knowledge and good science, from my perspective. But we didn't require a fifty-page report to prepare a coarse woody debris guideline. We just prepared one and went.

Then, with wildlife tree guidelines, that was based on the same kind of interactions and kind of discussion about the importance of trees. If you look at the harvest units over the years at Blue River [District], all of the units became that way, with large numbers of standing dead and green trees. That was again, based on this interaction. We adapted, we started leaving them more in clumps, because we found it operationally, that was easier to do with skyline logging, than just leaving scattered individual trees. And it was probably more, rather than this uniform distribution of trees around the landscape, more non-uniform or random distribution, which was more reflective of natural disturbance, anyway. But that's adaptive management, you adjust, you try, you adjust. I mean, it's a discussion, implementation, adjustment, discussion, implementation, adjustment; sort of a continual cycle.

That's real adaptive management, and the same thing happened with fragmentation, I mean that was based on a few hours of discussion, leading to a totally radical approach on implementing harvest units on the ground. We didn't go through weeks and weeks of scientific reports, and months of preparing documentation and justification. That was based on good discussion on science, and to me, that's real adaptive management. Now some people would say that's crazy, I mean, how can you be making major changes in something as important as management on the ground based on a few hours of discussion? But it wasn't based on a few hours of discussion. It was based on thirty years of Jerry Franklin's knowledge.

I don't know if you've gone to art shows, but I've seen little placards next to an artist's painting that says, you may wonder why I charge \$500 for a painting that takes me twenty hours. Well, it didn't take me twenty hours; it took me fifteen years of learning to get there. It is the same thing with this, it wasn't just based on two or three hours of discussion, it was based on, at that point, fifteen years of my experience, based on thirty years of science, it was based on all of these things that came together. And that to me, is real adaptive management. It is not a bureaucratic process. It's people getting together, and talking and adjusting.

Geier: But as you pointed out earlier, that is unusual, isn't it?

Eubanks: Absolutely. That was totally anomalous at that point, I mean, there were people who thought that we were nuts, you know, people in the mainstream of forestry. There were critics at Oregon State University, there were critics in the industry, there were critics within the Forest Service that would come out and talk about what we were doing and why, and they would just shake their heads and walk away. They couldn't believe that we were doing things like that.

Geier: What were their important points of concern?

Eubanks: You guys are basing this on inadequate science. You guys are doing things that are not operationally practical. You have got to recognize this was a small element and they were very much in the minority. Some key terms were collaboration and synergy, which made things work from my perspective and made them credible. We had science, scientists and managers "standing on the road" together, talking to people, pointing to what we were doing. When somebody would say to me as the manager, how can you be doing this? You don't have the science that backs you up. I could turn to the scientist and they would talk about why are we doing something and what is the importance. When somebody would say to Fred or Art or Jerry, "I guess the science is pretty good, but you guys can't do this in a practical way, it's not implementable, you can't log this, or it's too expensive," or whatever. They would turn to me and I would say, "What do you mean we can't, we did it, here's what it cost, here's how we did it." People would then say, "Well, it doesn't meet safety regulations, OSHA will get you." And I would say, "It certainly does, because OSHA has been out here and they have looked at this." Then they might say, "Well you can't log it with a skyline," and I answered, "Well, we did log it with a skyline, here's the example." We had the credibility of both science and management working together to blunt criticisms, and again, that is part of adaptive management, as you

have to be willing to take a look at things and answer criticisms. And you know, people would bring up valid points, and that was part of adaptive management, and we would make adjustments.

Geier: I'm curious how you went about creating the kind of framework for communications, and what your talking points and goals were for those communications, and how those were being related to people who came through tours, even critics of the place. And at the other end of that, how do you go about communicating management concerns to researchers and working with them to insure that the kind of research that they are doing are things that are practical.

Eubanks: You just do it.

Geier: Just do it.

Eubanks: You stand your ground and just do it, and you have to have a commitment to do it. That's what made the Andrews, the whole Andrews operation work; the right people were involved. We had people who had a common vision, and I think, we were in it for the same reason. There were permutations of those reasons, but our basic objective was, we wanted to improve the quality of the land and forest management on the ground. You know, as long as you sort of have that common focal point, there's lots of different ways to get there. Each one of us are doing different things to get there, but we are also doing a lot of things together to get there. We had the right chemistry and the right wave length, people wanting to work together and people wanting to communicate. I made a commitment, personally, to be at the Andrews meetings virtually every month, as well as many other times that we met. The research folks made a tremendous commitment to put on all these sessions to work with people on the district, have frequent meetings, and you know, a lot of people don't understand the amount of commitment the research folk had to make. I recognize how much time they spent, as their home station was in Corvallis, mine at Blue River, so it is pretty easy for me to go to the Andrews. For them, it was a couple-hour drive every time they came here, so that's a lot of time commitment and personal energy commitment. Now, sure they were down there for research study sometimes anyway, but a lot of times they weren't. I mean, they had to make a special trip for a tour, presentation, or seminar. Basically, this communication thing is based on commitment, it's based on people wanting to make things work and wanting to spend the time talking about stuff. And we had another key person at the PNW, Cynthia Miner. Have you talked to Cynthia?

Geier: Yeah, I work with her.

Eubanks: She was a technology transfer person, and she and others who have interviewed me, have asked me the same questions: What made this work? What made technology transfer work? Because what they were trying to do is clone the technology transfer coming off the Andrews. But the bottom line, when I get done talking with them, there is no way you can clone it. The only way that this works is because you've got people who want to make it work,

people with the right chemistry. You can read all the text books and all the guidelines and all that you want, that say, "You ought to do this and this and this," but the bottom line, is you need a person who has the commitment to communicate, and if you have the person with the commitment that wants to make it work, and I don't mean just one person, you have to have a group of people, you don't need the guidelines, cause it's going to happen. It's kind of one of those paradoxical situations to some extent. There are some things that you can give as general guidelines that help facilitate the process, but we had the right chemistry and that's what made the communication work.

Geier: Is that what really brought those people together at that point in time and that place?

Eubanks: Well, I saw in your prospectus that some of that was a self-selection process to some extent. The right people moved in and out of there to the point where you had the right chemistry. Not everybody in the Andrews group were actively involved in all of these conversations, but everybody was welcomed. There were other people that were players in this whole effort that weren't as actively involved but were key players nonetheless, and had good relationships. Tim Schowalter, a really good guy and he was not necessarily somebody who was in on everything. He had a specific interest, in entomology, was a little more focused, and I'm just using Tim as an example, and I mean, he was an active member.

They formally called those meetings, but they were relatively informal, and they would sort of make up an agenda of topics they wanted to cover. A lot of the focus of those meetings were chapters and books, who was writing what, when is a grant proposal due and who was going to do what, and that kind of stuff. But there was a lot of informal discussion about the kinds of research projects that were going on, that group's role in reviewing research proposals for research, and deciding which ones should occur. Because the Andrews is a finite resource, for example, if somebody wanted to harvest 6000 acres, somebody would have review the proposal. There was of a combination of formality and informality, but we had an opportunity to discuss possibilities, when something would come up, would we like to do this research project. One of my roles, at least I considered one of my roles, was to look for opportunities to help implement it. Probably one of the better examples we had, was log decomposition [Mark Harmon]. We were able to assist implementation [funds] of a fair amount of the installation of that research with a timber sale, and that saved a lot of research money for other things. We actually had the logger take logs from the harvest area, put them on a truck, and he built the roads. Have you talked -- ?

Geier: -- talked to Mark Harmon.

Eubanks: But the logger built the roads for the installation sites. I mean, there is a whole bunch of bedding sites around, there were like five different sets of bedding sites. The logger built the road, he put the logs on his truck, went out there, had a self-loader on his truck. And we went out there with, not a self-loader, but another loader, and he took them off the truck and set them in the sites. They worked with the researchers to do all that, and all of that was covered by the timber sale. You know, that was a very non-traditional approach.

Geier: You were just working under the contract.

Eubanks: Absolutely, the contract was even to the point, ahead of time, and the process was so different, that we actually had the people who were potentially interested in the timber sale come to a briefing, went out and looked at the sites with our presale and timber sale folks and researchers, and they had to along with their bids and submit a proposal on how they were going to get the work done within the framework of the requirements. There was a requirement that the logs had to be harvested and placed within a very narrow time frame before they would be attacked by insects [corrupting data baseline for project]. It was a very narrow time frame from the standpoint that we had potential difficulties with fire danger shutting the operation down, or rains coming too soon and shutting some of the operation down. It was a very complex project. But they had to submit a proposal on how they were going to get things done within this narrow window of time. So, it wasn't just a matter of how much they bid, but also the process, and we used special timber sale authorities that our presale folks had to research to be able to do all of this work. That was how we assist in the installation and implementation of this project.

Geier: And that came through because of the dialogue at the LTER meetings?

Eubanks: That is where the idea came up. Someone would say, "I think we ought to explore this," and it would just kind of developed and evolved to the point where we had a very detailed flow diagram with specific times that things had to be done in order to get things done by a date.

Geier: Where would I find a copy of that?

Eubanks: The flow diagram?

Geier: Yeah.

Eubanks: Geez, I don't know. Mark Harmon might have a copy of it, I don't know. I doubt if it would even be around anymore. I don't think I have it. But there is another example, we had in the Quartz Creek log installation [into streams] project, with Stan Gregory and his folks. It actually started, and the H.J. Andrews group were doing the log introduction study up in the Andrews. I drove by there one day and they were carrying all their logs down to the creek. And these were logs that obviously had to be small enough you could carry them. They were about this diameter [using hands to show size], and carrying them down the creek, they were putting them in the creek, and they were mapping where they installed them. And then they had each one of them tagged and they tracked where they ended up. And I said, "You know, this doesn't work because it does not really replicate a natural event, because number one, your logs were so small, and they are not like a big log. Why don't do something that really replicates what nature might do?" He [Gregory] said, "Well, you can't do that by carrying stuff." And I said, "Well, how about if we use a timber sale?" So, we actually put up a timber sale in an area that would generate KV money [Knutson-Vandenberg Act funds retained from timber sale receipts],

to put logs in a stream. We did it in a stream that needed woody debris, that had been cleaned out of all of the coarse woody debris a number of years before [Standard practices of the day].

Going back to the '64 floods and after, in the Cascades there was this massive effort of cleaning coarse woody debris out of streams because it caused these problems with bridges and culverts. Well, this stream had been cleaned out and it really effected fish habitat. So we were able to say, for fish habitat purposes on a good sized stream, "We want to go back in and put coarse woody debris in the fish habitat." But we did it in conjunction with Stan and his folks in a way that would meet the needs of their research project. He and his folks were the ones who directed how the logs were placed, and we used our money to install the whole project. It was really a neat project, it benefited the stream, and benefited research together. So those kind of discussions showed how we were always looking for opportunities.

Geier: Are there any examples of it going the other direction? Where you have got management needs and some management concerns that you need answers to?

Eubanks: Well, everything we were working on has stuff that we need answers to. I mean that, the same with the Quartz Creek. We needed answers as to whether or not those kinds of introductions were effective for fish, and regarding coarse woody debris, everything that they were learning was going to be helping us answer the question of how much and what kind of coarse woody debris was good. The log decomp studies were answering those questions; how much, what kind, and what are the benefits. So, we were always talking to them about the practical aspects and implications of what they were doing, in terms of logging difficulty and that kind of stuff. That was always part of that discussion, of this interactive process.

Geier: Really not the way I characterized it. This would be more of a two-way relationship?

Eubanks: It was just always adaptive management, we were giving them information, they were giving us information. It influenced both sides.

Geier: Were there any areas of potential conflict in that process between what your goals were as district ranger? Were there ways that created problems?

Eubanks: Well, there was always this issue of how much should we be harvesting? And we were pretty open. When I left the district I had had numerous conversations with different groups but we were in the process of developing a forest plan [Willamette National Forest]. On the forest, in doing just real rough calculations on yield and economics and everything. Our estimate was that the effect of leaving this coarse woody debris and these standing trees and everything, over time, the implications were perhaps 20-25 percent. We hadn't done anything so detailed that I could tell you an exact percent; it was sort of a roughly figured number. You could say that has implications for potential conflict, because we had not gone through formal changes in the timber sale plan or forest plan for a reduction, and over time that was going to have to happen.

Geier: Did you get any feedback from industry on that issue?

Eubanks: Well, they were all concerned about what we were doing. There were some folks in industry that thought we had gone off the deep end. They were very much opposed to the idea of leaving all these standing trees out there because that was volume that was going to be lost. In retrospect, if we could go back twenty years and implement that process of coarse woody debris, leave trees, and everything across the landscape, my hypothesis is that we could have avoided the dramatic change due to the President's plan [Northwest Forest Plan] and the spotted owl, and what has occurred, a ninety percent reduction [harvest on federal lands]. So, which is better, twenty percent or ninety percent? To me, that is pretty simple, even if it was a thirty or forty percent reduction. That is better than ninety. Ninety is way too high, but still, it is where it is.

Geier: How did you manage those concerns when they were raised? Because that would be part of your role as ranger, wouldn't it, to field those questions?

Eubanks: We just continued talking about what we were doing and why. It was interesting, the last month I was on the district, January of 1989, a local industry representative called up the state safety folks, and asked them to come out and take a look at a timber sale. This was a timber sale, toward the higher end of the number of leaved trees per acre, probably ten to fifteen [leaved] trees per acre that we were leaving. They were a little bit clumpy, as it was a timber sale in a drainage that was about seventy-five percent cut over, and most previous timber sales had not left any wildlife trees the previous decades. So, we did two things in this drainage for this timber sale. One of them was that it was a minimum fragmentation approach timber sale. There were two or three islands of timber left in this drainage, and previously what we would have done was put a couple of units in each one of these islands. What we did instead was basically focused on one island, and left the other two. And in this island where we harvested, we left a large number of wildlife trees. And this industry representative, I don't think it was with the support of the logger. The logger had raised issues with how much volume was being left, but they couldn't attack us on how much volume was being left, so they were going to attack us on safety.

He called up the state safety folks, with the idea of bringing them out there and getting them to shut us down. We went out to the sale, and there were two state safety people, and one of them was like a supervisor from Salem. We went out to the timber sale, and I was there, with the sale administrator and the timber sale assistant, or timber management assistant at that time, Marty Wilson, and there may have been a couple other folks as well. Went out on the ground, and it started out with this guy, basically attacking us. The state safety folks started asking us questions about how to implement this, so we pulled out our guidelines and the contract clauses, and the way we implemented these leave trees. Rather than us marking the trees that were to be left, we required in the contract that the purchaser leave a certain number of trees per acre and that he decide which ones they are based upon these guidelines, which were about size and species and that kind of stuff. But it was up to him to make sure that they were left, and we basically put in there that they need to be left in a way that is safe,

and so they asked us questions about that, and we gave them the contract clauses and talked a little bit longer. The logger said, "Yeah, that's what we're doing." And they [safety officials] said, "What happens when you end up with a tree here that is unsafe?" And the logger said, "The sales administrator told us to go ahead and cut that and leave another one somewhere else." He said, "Is that what you are doing?" He answered, "Yeah." They looked around the landing, looked at it, and said, "This looks great, I wish everybody was doing it." (Chuckle)

That's how we handled it, as basically we were doing things in a way that met all the guidelines and made sense. We just fielded the criticism. And again, to Mike Kerrick goes the credit. When the criticism came, he tried to deflect it back to us rather than him, to avoid everybody running to the forest supervisor. And the bottom line was they just didn't have grounds for the criticism to stick, and the volume concerns over time would be more a forest plan kind of issue, as I've said before the forest plan got implemented, they got into the President's forest plan, and now there is a ninety percent reduction in volume. So it's become a moot point now. The bottom line was, there was always criticism going on but it was not to the level where, that it was debilitating our operation, debilitating our timber operation.

Geier: I gather that strategy is to take people up there and show them what you are doing?

Eubanks: Well, if you are honest and open about it. I think people for the most part, were very much tuned into the perspective that it was not just a respect for research community, but an act for involvement and a desire to be actively involved and to implement new things. For the most part, except for really radical approaches, I think what we were implementing on the district was no different than what would have been implemented on the Andrews. So in that respect, I really do believe we were the "experimental district." I see nothing wrong with that, as that is where we should have been.

Geier: I'm curious about the concept of promoting or institutionalizing support and creating an interactive environment. How would exactly would you do that?

Eubanks: Just making sure that people were actively involved, so they knew what was going on, lots of communication internally about what was going on the Andrews, and continually encouraging people to be actively involved with what was going on in the Andrews. If you hear a negative tone about something, talk about it and try and head that off, eliminating the "we/they" kind of discussions. There wasn't any secret, it was just good communications and people management kind of stuff. We tried to have everybody involved, including getting researchers involved in our projects. I'm not going to report that I was 100 percent successful, but I think in general, people on the district knew the scientists, and the scientists knew a lot of people on the district. Probably a lot more so than when I started. And there was lots of involvement.

Geier: Was there a factor in terms of recruitment and hiring, and was there less turnover at this district in that period?

Eubanks: Yes, but I really can't say that was anything we used as a criterion for hiring somebody, because I felt when people came here, you didn't have to say ahead of time, how do you feel about working with researchers at that point? That was just part of what we did on the district, and I think most people who were coming to Blue River for different kinds of positions, like assistant ranger positions, knew that we had lots going on. And again, if you have the right folks, they've got the right perspective on resource management, it was no jump for them in terms of working with researchers. That was just natural. We had seminars, we had interactions, and it was just sort of a logical thing to happen.

Geier: You were talking before about the self-selection of the group there, and with the LTER kicking in, seeing that this had become more well-known and which had much to say, there was some element of that people saw this as an interesting place.

Eubanks: Well, I think so. We certainly had recognition around the region at that point, amongst a lot of people, a lot more visibility. We had Vince Puleo, a name I'm sure that has come up and you've probably talked to him. Vince was a good sort of a liaison, and he is sort of an unsung hero in a sense. He did a lot of the routine work, but he was also the person who did a lot of the coordination on the district, obviously a key individual in helping carry all of the stuff, with lots and lots of communication. Vince was a person who would, if there were friction points in terms of projects going on, he was often times the one who sorted it out and got the right people involved, and insured that they knew what was going on.

Geier: But in terms of facilities, accommodations, and headquarters up there, I don't know if you've been back since they built the new facilities. How often do you go back there now?

Eubanks: I've been back almost every year. I'm now involved with the Northwest Center for Sustainable Resources, and so I make a trip back annually for that. I'm going back in March this year. Yeah, it used to be called the "ghetto in the meadow." I'm sure you've heard that term. The facilities were a little bit rough, but they minimally met the needs, at the time. We had a lot of groups go through there, including the regional leadership team one time. We had a big meal for them catered there at the Jobs Corps center, which functioned in terms of a facility.

Geier: I'm also interested in, and you made this point earlier, about the number of projects that were going on. Did you have any kind of formalized system of logging people in, to sign in for or to coordinate meetings? There was this sort of informal process at the LTER meetings. Is there anything you formally instituted on the district that you could monitor those activities?

Eubanks: No. If we were going to be doing any kind of activity, we relied on coordination with the key individuals on the district. And particularly with Art [McKee], to make sure that we weren't going to be affecting anything or setting. Just good communications, but you know, we didn't have any kind of a policy or sign-in procedure or anything.

Geier: I am also curious about the role of the HJA in terms of recreational issues.

Eubanks: Well, there were some. Bear hunting was one, and there was interest at one point in closing the area to bear hunting, and also interest in closing it to deer hunting. Those were issues that we kicked around, recognized the political sensitivity of some of those issues, and before we were going to do something like that, there had to be really strong justification. Of course, Lookout Creek was closed to fishing, and that was pretty easy to justify in the study sense. It was a lot harder to deal with, why would we not want people hunting deer up there. And we didn't take that one on, but that and those kinds of things were discussed.

Geier: Lookout Creek was closed to fishing before you got there. Wasn't it?

Eubanks: Yeah, it had been for a long time.

Geier: In looking back, which particular study would you see as most significant at the Andrews that you were involved in, for example, log placement and things like that.

Eubanks: Well, log decomposition was certainly an important one. What was interesting about that was it was a two hundred year study. I think there was a lot of chuckling outside the research community about anything that would be a two hundred year study. You know, that was initially conceptualized, but what was interesting about that was even within one to two years, they were finding out some really interesting stuff, information on what is within log ecosystems. Let us see what's happening inside that wood. Tim Schowalter worked with insects in the upper canopy, and they were finding insects they didn't even know existed in that area. There were just so many different things that you can find out, I don't even know the names of all of the studies.

There were studies in Lookout Creek dealing with coarse woody debris, and fish habitat in Quartz Creek. When we started dealing with the issue of fragmentation, the feedback and discussions we were having on hydrological implications and all of that, we started to examine some of those issues. Also, landslide studies. There were two Quartz Creeks on the district, and the other Quartz Creek where there were some blow outs from the winter storms one year, and had time lapse photography in the creek that showed the changes in stream levels until the slide came down and wiped out the camera. All of that was on film.

There were so many different studies. There was one. I don't remember the name of it, but it involved implementation of a shelter wood for a new harvest method, new harvest techniques in one sale where we left lots of standing trees. Sort of an initial effort. We used that a lot as an example of what can be done for both coarse woody debris and standing trees. You know, there were lots of long term studies, hydrological, the long term hydrology in different drainages, looking at run-off amounts and soil stability, and I wouldn't even know where to start in terms of listing everything. It just, one after another, it just all added up.

Geier: Another one of those questions where I know there is no good answer.

Eubanks: Well, yeah, it's just a phenomenal list.

Geier: The next one may be a little easier, maybe not. Are there particular disappointments or unanswered questions that you had, or unexpected complications that lead to not completely satisfactory results?

Eubanks: I guess I must be “pollyanna-ish.” I don’t remember any. No, the only one, we had a study that we had discussed for some time, at one point, Jerry Franklin, coined the name “Phoenix.” The idea was to burn a large patch of old growth, basically looking at it in terms of natural disturbance regimes; do a lot of pre-monitoring and then burn this area under the same conditions that it would normally burn, in other words, in a summer fire. Now that was an interesting discussion, because what we were talking about was going to be very complicated and very expensive. I mean, you don’t torch off a seventy or eighty acre stand of old growth in the summer time without a lot of implications. That is during fire danger season, and you can’t light it in the middle of winter time because that is not going to duplicate natural conditions. This had to be one where it was going to crown out, a high intensity fire, and we actually had a person on the district who had done a burn plan for an area, and looked at the implications, potential spot fires two miles away, something like that. We’re talking about a major project, and Jerry had just thrown that one out initially, and we sort of reacted like, “holy moly!” But then, we started talking about it seriously, but that one never came about. It just didn’t get the visibility and support to carry that one on. I think that one would have been a real interesting study. The question would have been whether that would have given us more qualitative information that we could get from going back and post-monitoring an area that had burned, with the problem being, you normally don’t have pre-information of a burn area [without all that monitoring]. I guess there is a little disappointment there, but when you’re talking about major complications and major disappointments, we always had complications. I mean, a project like the log decomp had complexities and complications like you wouldn’t believe. But, it was one of those things where we just always expected and that it was going to work out.

Geier: The Phoenix project, whatever it was called; that was mainly an issue of expense and fire danger, being the reasons why it wasn’t done?

Eubanks: I don’t think there was enough interest. I think, if we wanted to, we could have found over time, the money to do that. Because it was going to be a high visibility project, we anticipated you’re going to need 500 people to pull off a seventy-acre burn. That’s going to be expensive. You’re going to have to have people posted for a long way, but it could have been done. I mean, we just never got to the point that we were ready to go with the project, and then it was dropped. On the stage of evolution from 0 to 10, it probably got to the sub-2 stage. It just kind of lost interest, and Jerry had left by that time, on to the University of Washington.

Geier: And the conflict, overcoming the complications, that would be in keeping with this kind of general tone of interests and cooperation you were talking about before. Is it just a question of working through the problems?

Eubanks: You know, we just never got to the point where the relationships deteriorated or anything like that. I mean, when we would have a tough spot, somebody would call up and say “Geez, you know we’ve got a problem going on here.” We would find a solution. And that has happened frequently, little difficulties about, you know, this road needs to be maintained, or what’s this crew doing maintaining that road, because they are disturbing something. We found ways to deal with that, but make sure it didn’t happen again. Just working through the processes.

Geier: I was going to shift gears. Did you have something else?

Eubanks: I was trying to recall a couple of things I had listed here in terms of some things we’ve really already talked about to some extent. I’m sure you know about the ecosystem video, one of the more significant things that we did for technology transfer, and I can give you some anecdotes about that. After that ecosystem conference in, I think it was spring of 1987, Oregon State applied for and received \$10,000 from the regional office [Region 6 – USFS], as the regional forester had a fund of money every year for regional forester’s “challenge project.” You submit a region, a written justification on how and why you would use the money.

So, I got the money, and with that money we produced the ecosystem video, a little over two hours in length. It was done by Oregon State University, and was entitled, “Perspectives on Ecosystem Management.” And here’s a flier about it, “Perspectives on - ” It was really a neat deal. We had a partnership with the Oregon State media center. Really neat people to work with, and for what would have normally cost us a lot more. I think it was an hour and 15 minutes, and an hour and 10 minutes [two parts], so that’s almost two and a half hours, no actually, almost a hundred and sixty minutes, which is about a hundred and sixty thousand dollars. I think you figure \$1000.00 a minute is what a video tape costs, and we got it for ten. High quality, and it’s got all the key players there, talking about the Franklins, the Masers, the Swansons, and the McKees; all those guys are on the tape. And each has little segments on the video tape talking about ecosystem management; riparian management, fragmentation, forest ecosystems, and Dave Perry talking about soils. And dah-did-dah, I mean, it was a big deal.

We distributed a copy of this tape to every forest in the region, and they are also on sale. I still have people, to this day, that are using that tape. There is an instructor at Itaska Community College, in Grand Rapids, Michigan, and when I met him, he said, “Oh yeah, you’re on that video tape. He’s been using it for his classes for all these years. That was produced in ‘87. To me that was a significant product of our partnership, and it was really a neat project doing it. Just before I left, we did one [video] on forest fragmentation, which talks about the minimum fragmentation approach. Again, it was done through the Oregon State media center. Those were neat projects, ones that I consider important.

One of the things I did was to come up with a couple of points to summarize some key aspects of the Andrews relationship. We already talked about adaptive management. That was one of the key things that was going on there. I prefaced it with the adjective, real adaptive management. I don’t characterize what’s going on in adaptive management areas as real

adaptive management, because it has become a bureaucratic process where they have a board reviewing what can be implemented, what can't be done, and all that kind of stuff. When you get to that point, that is no longer adaptive management, you've institutionalized the bureaucratic process and real adaptive management isn't occurring at all.

Geier: You've heard Richard Nixon's seminar on spontaneity?

Eubanks: (Laughs) Yeah, that's right. You know the old joke that sincerity is the real key, and once you can fake it that you've got it made? It's just not the real deal. The other thing we talked about was the common vision, another key word of what went on there. People that were involved in the Andrews operation had a common vision, and that kept us from focusing on the minor, day-to-day difficulties. Again, Art McKee and I could have been fighting about little things all the time, but neither one of us have that inclination, because we have loftier goals we were working towards. And Art's a neat guy anyway, but never stooped to that level. We could have found things to fight about, but we didn't. We talked about the synergy.

End Side B, Tape 1 (of 2)

Begin Side A, Tape 2 (of 2)

Eubanks: Synergy. That's how I characterize the whole, as synergetic, a synergistic process that together accomplishes a lot more than either of these things would accomplish alone. You know, making changes and doing these things. It was just a partnership between research and management. That is what it is all about. The collaboration, working together. That kind of thing was really neat. Two other things that I listed, and one of them was passion. That's what made an awful lot of things work, some people who had chemistry, that passion for our work. I have no doubt in my mind whatsoever, that ecosystem management in the Forest Service and as a national paradigm, would not have happened if it had not been for that period of time, three to four years, things really working together on the Andrews. There's not one iota of doubt in my mind that'd never have surfaced if we had not been working together. I'm sure that you'd find some people who would disagree with that, maybe even among the Andrews group, but because of the visibility of the process, what we were doing to bring it about, and the results of the real and visible things that brought about this national movement to ecosystem management.

This included a lot of articles and discussions from Jerry Franklin. He had great visibility in regards to New Forestry, and many articles on the subject in major publications. Jerry had an awful lot of visibility in 1988, '89, and '90, even on Capitol Hill. He gave a lot of presentations there, and had a lot of visibility with the Forest Service at the national level. The reason that the Forest Service, from my perspective, chartered a "new perspectives" team, an ecosystem team at the national level, is because of Jerry Franklin and the work that was done on the Andrews. Jerry was building on all that. I mean, it wasn't just Jerry alone, it was all the stuff going on. Jerry was a focal point for that, the spokesperson, and I give him credit for that. The

importance of the work during that several-year period, and I may sound arrogant, but I don't mean to be that way.

I just really believe that all that spawned the national movement of ecosystem management, and there wasn't visibility of that issue anywhere else in the country. I do know that's what caused the major emphasis of that at the national level of the Forest Service. I had a really interesting perspective of moving from Blue River to the Washington Office right during that transition period. So I was able to see all that was happening in the Washington office. And it was being driven from this effort. It was not a Forest Service national level, "Gee, this is an new thing and we ought to push it kind of thing." It was pushed on the Forest Service at the national level. Congress and other people pushed the Forest Service into doing something at the national level. Which is how things happen frequently, most often not a top end driven change. Change is not driven top end, this kind of change. It came from the ground up.

Geier: Who in Congress did you see pushing that?

Eubanks: Guys like Peter DeFazio. Peter was a very strong supporter of what we were doing, and I spent time with him personally talking about it. After I moved to D.C., he asked me to come and put on a presentation on Capitol Hill for a number of staffers. He was certainly a supporter, and he was a critic of the Forest Service nationally, pushing things like that. But, there was just a general emphasis there, an interest in things, and we were getting so much visibility that the Forest Service was sort of getting, and if we don't do something at the national level to capture this initiative, we are going to be left behind. Again, this is my perspective, but I think that's how it happened. The last word that I had was risk. To me, the folks that have the biggest risk were the research folks. And some of them may have suffered because of things that they did at the Andrews, in a little bit different way. That was because of this publish or perish mentality in research, and it's really there. I mean it's real, and I'm sure the researchers have talked about this. The risk that they were taking, they were spending more of their effort in direct technology transfer than they were in writing books and writing publications. Every hour that they spent out on a tour was an hour that they weren't writing. And I give them a tremendous amount of credit for that commitment. Because to me, because of my experiences on the Andrews, I have a personal philosophy that the only effective way, the most effective way of transferring technology in dealing with issues like we were dealing with, is on the ground, person-to-person. It's not through writing a publication.

And the reason is we were out on the ground, doing the kinds of things we were talking about, talking about the kinds of things we were talking about, everybody there comes away with a common picture of what we were talking about. When you're pointing to these wildlife trees, pointing to these practices, they are seeing the same thing. When you're sitting in a conference or you're reading a publication or whatever, you're getting a piece of the picture, and everybody is forming a different picture in their minds of what is being talked about. Even if you're showing slides, it's not the same as a 3-D sweeping panorama. You're giving just a piece of the whole picture. Certainly when you're reading a publication you're not getting the whole picture. So, tours reach a much smaller group at any given time than other kinds of media or

technology transfer, but it's a lasting thing. Everybody there has a common reference point from that point on for further discussion. So, I am a strong believer in doing things on the ground, in-person, because of my experiences there. And that's what I believe the researchers felt as well. They felt like they were having a much larger effect, long-term effects, by putting their efforts there, but they don't get credit for that. I don't think the Andrews folks have ever gotten full credit for the kinds of things that went on there. In fact, there is almost a certain level of professional jealousy with the Andrews effort. Again, my perspective. But, you know, the kind of risks that they were taking, career-wise, I have great respect for them, you know the risk and the time commitment.

Geier: I think you've answered my question, I think we should transition here, ask you about the most significant legacy here. I take it you see that as an ecosystem management initiative?

Eubanks: Yeah, I really can't say it enough times. I believe that was the epicenter of the movement, the recent movement to ecosystem management. I don't know. There are lots of people who say [Aldo Leopold talked about ecosystems], there are a number of other people that talked about ecosystem management a long time ago. And I agree with that. I'm not trying to replace those kinds of things. In terms of this recent, emphasis, recent movement in the ecosystem arena, I believe the Andrews was at the center of that.

Geier: From what you've said, you had a strong personal attachment for the people and the process you were engaged in there. You did leave in '89. Maybe you could talk a little bit about your decision to leave and what attracted you to Washington.

Eubanks: Well, that's the toughest decision I've ever made in the Forest Service. It was kind of an interesting process. I was in D.C. on a training session, this was in the fall of '88, and about a year prior to that I had applied for a job in Washington, D.C., and different things had happened and they hadn't filled the job. I had lost track of it, and was in D.C. for a training session, and got a call from Mike Kerrick, he said we have got a job offer for you in D.C. I didn't even know the job had been re-advertised, but unbeknownst to me, it had been re-advertised and my name had been placed in the pool. I figured if they wanted me the first time, they would have hired me. So, my name had been put back into the application pool automatically, because I had applied the first time. So, here I was in Washington D.C., and I walked around, went and talked to some of the folks in the western office, in this position, who would be my supervisors and people I would be working with. Then I just spent hours walking around on the Washington mall, thinking to myself, "Is this what I really want to do?" Because I was having a heck of a good time, lots of things were going on, and I wanted to be a forest supervisor. I knew at that point that I did. But I also knew that I was really enjoying what I was doing. Boy, it was a tough decision. I didn't want to leave what I was doing, but one of the things that I had hoped to do was be able to take the lessons learned there [Blue River/Andrews] to a higher level. I believed that as a district, we had significantly influenced things at a much higher level. At that point, the Forest Service had still not moved to a new perspective in ecosystem management, and I didn't know that was going to happen, but my intent was to take those lessons to a forest level somewhere. I didn't know which forest, but I believed that if I could

help make a difference at the district ranger level, I thought I could certainly help make a difference at a forest supervisor level, maybe even a little bigger difference. And that's what ultimately drove me to make that decision.

For a long time after I made that decision, I wondered if it was the right decision. You know, because one thing I was giving up was all those close relationships. I still have a personal friendship with a lot of those people. Art McKee and Chris Maser, those are the folks that I have maintained the closest relationship with. But, giving up the almost day-to-day dialogue and interaction, was something that I immediately missed. The ability to have the intellectual discussions that we had about ecosystems, and research folks are fascinating people. The kinds of intellectual discussions you can have about all these topics on ecosystem management, and you know, what's the ultimate effect on the earth, and what's the future and all those kind of things. Those are the kind of things that really inspire me. That's something that I missed immediately, not that other people can't be intellectual, but a specific kind of discussions dealing with ecosystems. And these are people are really sharp individuals. Even years after I came here, I still wondered if I made the right decision. I really love the job I'm doing now, and believe we've made some real differences here, but I will always wonder if that was the right decision, and what would have happened if I'd stayed, and what would I be doing now.

Geier: I think I'm a little bit confused. The D.C. position you didn't take. Is that right?

Eubanks: No, I did take it.

Geier: You did take it. And what was that?

Eubanks: That was as the National Recreational Strategy Coordinator [Forest Service]. I was there a little over two years.

Geier: Your reasons for going from there to Chippewa? [National Forest-Minnesota]

Eubanks: The reason I went to D.C., was really as a sort of stepping stone to a forest supervisor job. And so, after two years in a Washington office, why, forest supervisor jobs started coming open. And this was actually, believe it or not, the first one I applied for. I applied for two or three at the same time, or about the same time, but this was the first one that I had actually applied for. And this looked like an interesting area, and you know, a good spot.

Geier: I'm curious if there were any adaptive management ideas you had for Chippewa?"

Eubanks: Before I came?

Geier: Before you came. Is that what attracted you here?

Eubanks: No. I didn't really know that much about what were the specifics of management. I knew more just about the general area. I checked it out, and when I did get the job, one of the

first things I checked was the proximity of research individuals. And there is a research lab just on the other edge of the forest at Grand Rapids. And so I started, pretty much when I first came, I started making contacts with the research community, and there was a fair amount of turnover in the lab the first few years. But some individuals and I began talking about the possibility of doing something like an LTER site here, and that looked like it would not happen, because the funding from NSF wasn't there. So we said we would do something LTER-like here in the area. We will try and duplicate the function of the Andrews, not necessarily as an LTER site, but in terms of how things operate. And the last year-and-a-half or so, things have really begun to develop, really exciting in terms of the commitment to the North Central Station, the interest and the people involved and that kind of thing. It's beginning to build to the point where you can see some things now that I believe we now can duplicate from. The Andrews is one of a kind and always will be, because of not only the individuals but the number of individuals. You have a large number of people in one spot, Corvallis. Here we have a small lab, relatively speaking, and some people in Duluth, from the University of Minnesota. So we have a much smaller area, number of people to begin with, but we are going to create somewhat similar in terms of critical mass, and get some things going, and it's going to operate similarly, but not to the scale.

Geier: You mentioned earlier that Jim Caswell kind of brought you up to speed on what was going on in the district. How would you characterize your role in the search for a replacement at Blue River when you were leaving?

Eubanks: There wasn't any. No, I had left the area. I don't know that Jim Caswell had any role in my selection either, but I had left the area and did not have any opportunity for transition other than a few notes I left for my successor [Lynn Burditt], saying "good luck," and if you ever want to talk about things, let me know.

Geier: If you could, maybe you could identify some of the key components of your effort to jump start an LTER-like process here, or to replicate to some degree what happened on the Andrews. What kinds of things do you look for to do that here?

Eubanks: Developing communication, first of all. Maintaining reasonably close contacts, personally, encouragement and discussions at the station level and the lab level, knowing the people involved, something that I should normally do in my job anyway, but I think of it in a higher level. Also, involving a fair number of people here on the forest, getting them involved in discussions with me and interchanges, so that it's not just me, but it becomes institutionalized. Just last month, we had our first joint meeting with the lab, and what I'm hoping to do is set that up on a regular basis, so that we meet periodically. Something like the LTER meetings in Corvallis, but obviously it's not LTER in this case. Just to get together and talk about what are they learning, how can we help, what are we finding out, that kind of stuff. Because of the interest that I have shown, I've been asked to participate in a number of discussions at the North Central Station. And I believe that some shifts in emphasis have occurred even in terms of helping the Grand Rapids, several years after most of the scientists had left, you know, retired. They [lab] were way down and now there's this resurgence of

interest. They are actually adding on to the lab, wanting and needing more space, and adding scientists.

Geier: It must be rare in the Forest Service right now?

Eubanks: Yes, research has had some tough times. But this lab is doing pretty well now. And they've actually moved some people up from St. Paul, some project people, so I'm really excited about the commitment that's being made and the possibilities of what we can do together, and the kind of communications that we have. We have three experimental forests on the national forest [Chippewa], and none of them are as large or of the same significance as the Andrews but there are three of them. But what I've tried to portray is, let's not worry about doing stuff just on experimental forests, but the whole forest is open. We are starting to do studies around the forest, it's just real exciting, and we've got really good people to work with.

Geier: One of my questions of you about how you might perceive the role of the experimental forests now, compared with when you started working at the Andrews? Is it functioning more?

Eubank: Yeah. I mean the experimental forests on this national forest, and there's been research on some of these experimental forests for many decades. Some growth and yield studies on pine, some by Bob Buckman [PNW Station Director], and they actually did burning here back in the '50's. This is where he [Buckman] started his research career. Some really neat work has been done here, so there's a long history of good work, mostly silviculture-related. The focus of the lab at Grand Rapids has shifted to riparian and aquatic research, which, from our perspective is pretty appropriate given that the Chippewa National Forest has more water than any other national forest. The two Minnesota national forests [Chippewa and Superior] together have 20-25 percent of the water in the national forest system. So we have lots of aquatic-riparian kinds of issues. There's a silviculture element to that John Zasada was involved in. You've probably heard John's name in your work. John was part of the Andrews group when I was out there. John is the silviculture researcher out of Rhinlander, Wisconsin, but he's now he's assigned to the Grand Rapids lab part-time. Really neat opportunities.

In terms of the role of the experimental forest, the experimental forest still has a role. It's a place where there are specific management objectives and specific management guidelines and specific protections, and I believe they are every bit as important as always. But in terms of general management and general application of management strategies, I believe the whole forest ought to be an experimental forest in that sense, or at least open to it. Other than the specific role of experimental forests, there is no reason why we can't do that [experiment] on the whole forest. It doesn't violate our mission, doesn't violate the intent of the presence of national forests, and it doesn't compromise the role of the experimental forest for research either.

Geier: How would you characterize the way in which technology transfer takes place in the 1990's as opposed to the 1980's?

Eubanks: We were talking about, let's see, the role of the experimental forests -

Geier: I think we covered it pretty well. I was asking about technology transfer.

Eubanks: Yeah, the role or the method.

Geier: Yeah, or how effective it is now in comparison with earlier?

Eubanks: Interestingly enough, I was part of this report in which we talk about research and management and how they should and need to work together. I believe, what I've talked about earlier, that the most effective way for technology transfer to occur is more true today, as things begin to evolve faster, the need for good communication, personal communications is even more important. The role of adaptive management is even more important because the kinds of things that we're finding out. I don't think we can either afford to be waiting three or four years for a publication to come out. That's my personal belief. I mean, the kind of stuff that we're finding is the kind of stuff we ought to be communicating on an immediate basis, and adapting our management to account for the new information. I don't know any other way to describe it. To me, that's more important today than it ever has been. We get in this mode nowadays that everything has to be electronic, and it's just not as effective as person-to-person communications down on the ground. We lose the human touch, you know, the low-tech, the technology transfer is to me, the model or the paradigm, even the preferred paradigm.

Geier: I'm curious, you've been talking a lot about communications and person-to-person interactions. Are there obstacles to that in the Forest Service, institutionally or personally?

Eubanks: Both. We have a lot of people working in the Forest Service that didn't join forestry to take up communications. If you're familiar with Myers-Briggs, you know personality type mapping [test], and the Forest Service has a much higher percentage of people, I believe, on the introverted end of the scale. People tend to take natural resource management, get out there in the woods, and be alone. We've always talked about that, and I believe to some extent, it is true. But it is probably less true today than it was ten years ago, but I still think it is true. So that is part of the personal aspect, and institutional part of it has several facets. There isn't anybody who's advocating not talking to one another, but again, there still is to some extent, a "publish or perish" philosophy in the research community that hasn't changed. You know, one of the things that we talked about in the national forests, is how research and management work together. There really are very few incentives for people to operate as the Andrews group operates, very few incentives for researchers to get together in a collaborative mode amongst themselves, let alone in a collaborative mode with management. So that is partly institutional.

Another element of the institutional situation, is the fact that we are going to downsize to the point where we aren't going to have people who have time for reading and communicating. It is becoming more and more difficult during a time when it's becoming more and more critical.

Here on the Chippewa, we've lost twenty five percent of our employees. We obviously do not have the same amount of time to coordinate, for example, the meeting I had last month with researchers in Grand Rapids, in which I had a lot of interest. I had many fewer takers than I had people interested, just because of the press of business. I mean, we've got forest planning going on, we've got all the other things going on, and people are saying, "God, I wish I could make it but I just can't." That's the situation we're in, and it's not like the institution is driving that, but the framework of the institution is, funding-wise. That makes it much more difficult.

And again, during a time where it is becoming more and more political. The debates and controversy over resource management are becoming more intense everywhere. Things are starting to pop out here in Minnesota that we hadn't dealt with in the past. And as those things pop out, the importance of research and management being together, working together in the collaborative mode, are more and more important because of the credibility I talked about earlier; the synergistic credibility we have with research and management being on the same page. You have to have that in order to effectively answer the critics. We have an awful lot of critics who, well, their criticisms are "out-to-lunch" from my perspective. They're posturing, but in order to deal with those kinds of criticisms, you have to have sound research and management.

Geier: Yeah, Lynn Burditt [Blue River Ranger] said they cut back from, I think it's down to 440 employees, from 750 or something [Willamette National Forest].

Eubank: Well, they still got 440, we've got 120, and we're harvesting about the same amount on this forest [HJA/adjacent region] as the Willamette [as a whole]. So, there are more complexities on the Willamette than we have here, but not enough to justify three times or four times the number of employees. So, I mean that's the kind of difficulties we are facing.

Geier: That brings me my next question. It has to do with issues of the relevance of the work done at the H.J. Andrews compared to your work here in the Midwest. How well does what's being done on the Andrews extrapolate to other regions, other forests than the Willamette?

Eubanks: The same kinds of questions, the same kinds of general relationships that are being dealt with on the Andrews, apply in any forested ecosystem. I've had the good fortune to be able to travel around to different parts of the world. Also, in other studies and readings and those kinds of things, I think some of the same basic ecosystem elements that we talked about, coarse woody debris, fragmentation, standing dead and live trees as legacy to the next generation of forest, and all kinds of stuff; I don't know of any forested ecosystem where that doesn't apply. Those same elements and general principles, now obviously, you're talking about different magnitudes. You're talking about different decomposition rates, you're talking about different species, you're talking about all kinds of different ramifications. But those general overriding principles apply. I mean, you're not going to find any forest where it doesn't have some kind of disturbance regime, doesn't have some kind of coarse woody debris at some time in the cycle. You are not going to find any kind of an aquatic ecosystem that doesn't have some kind of coarse woody debris element to it, you know, those kinds of things. That kind of

worked, I mean, folks like Mark Harmon are tied into the international network dealing with log decomposition. He was and I'm sure, he still is. They are looking for partner sites all over the world for dealing with these kinds of things. I could not take the Blue River coarse woody debris guidelines and say we're going to apply them here on the Chippewa Forest. That wouldn't make any sense. It is a totally different context here. But I could take the principles of the coarse woody debris guidelines of the Blue River, and say, "We need to develop something like that here." And I mean, you know, we have class one, two, three, four and five logs here on the Chippewa, just like out there. But they're different species, they have different decomposition rates, there's a different sort of context here. But the principles all apply.

Regarding forest fragmentation here on the Chippewa, we have begun to implement large patch cutting. We've done some ecosystem studies here in an area where we found that the natural disturbance pattern was very large patches related to fire, so we're beginning to harvest six and seven hundred acre areas, which means we are saving larger patches in other areas. Same principles, different species, different context, but same principles in terms of disturbance patterns. The relevance is that the Andrews, on a number of different facets, it has been on the cutting edge of asking different kinds of questions about forest ecosystems. That has people reading and encouraged to ask the same kinds of questions in other forests ecosystems because of the similarities of principles. The kinds of things that Tim Schowalter was finding out about insects in the old-growth stands of the Andrews, can drive people to ask the same kinds of questions about the kinds of insects and the kinds of relationships, in a forest back here. The species are different, the answers are going to be a little bit different, but the relevance of understanding that particular piece of the ecosystem is just as important here.

Geier: The only question I wanted to deal with regards a session on Lookout Creek with a number of people who had been there for a long period of time. And we were talking about just the general concept of long-term research and what that entailed. I was curious from a forest manager's standpoint, what some of the benefits and setbacks might be for ongoing long-term research? You mentioned that you have studies here going back to the 50's.

Eubanks: Well, long-term research provides historical context. There are some things you can find out in a short period of time, and there are other things you can't. Obviously, the whole premise of log decomposition was looking at what happens over a long period of time. Now, as I mentioned earlier, there are some things they've begun finding out with in the first year, the second year, the first five years, of log decomp study. They found out some amazing things. But there is some other stuff that they won't know the answers to, for fifty, one hundred, two hundred years, because some logs last that long in the forest, so you can't answer that question until that period of time. But they were finding out things in the first couple of years that you can project ahead to make some best guesses about what probably will happen. The other part of long-term research we're finding here on the Chippewa, is that there is some stuff that was done forty years ago, that, we've kind of gone full-cycle. We've made some changes, we've come back to the point of what they were talking about then, and what is actually relevant today. And they've got answers for some of the things we would like to pursue.

It is not that in the intervening years, people were either dumb or not paying attention to what happened before. There were just different philosophies and for some, the philosophical focus has come full circle. So personally, I have a high level of support for long-term, theoretical research, and some of the long-term practical research or even basic research, and also have high levels of support for short-term theoretical research and practical research, but long-term certainly has a strong role. We just need to do that and the difficulty is getting people to commit to long-term. Chris Maser has talked about the western mentality of not having a long-term focus, but a short-term focus, usually a year or so, or one based on profit; what do we gain from what we are doing today, rather than looking at the implications and gains in the long run. And we need to take that into account, and understand that we can't learn everything there is to know in the short-run. It's not all short-term focus, and it shouldn't be.

Geier: One of the questions they respond to is the question of viability of long-term research. Roy Silen and Mike Kerrick and others talked about the phenoma at the Andrews where research has been carried on the same studies, or same measurement period over a long period of time, but Roy and some other people have the studied opinion that long-term research can't survive the life of the researcher, or in other words, the personal passion that you talked about earlier.

Eubanks: To some extent that's evident on some of the work that was done back in the '50's by Bob Buckman. When he left, there wasn't anyone to carry it on, you know, that had burning for that kind of research. But on the other hand, the fact that he did it for then, and the fact that we now have people again with passion for the same interest, maybe there is a missing link in between, but some of the work he did then, you can pick up on it again. So, yeah, Mark Harmon, ain't going to live 200 years, so who's going to take on the log decomp study when he's gone? Who's going to have the passion for it? I don't know, but I would say that nothing has been lost during this time period that Mark has been carrying out log decomp. Just because he's not going to be around, and maybe nobody will carry it forward. If that is the case, so be it. Take a look at how much has been gained in the interim. Again, I'm just fascinated by all the information that they've found out in the first few years. And obviously, they've found out a lot of stuff since then that I'm not even aware of. I'd probably be dumbfounded, does that mean if Mark isn't around, all of that has been lost. Hopefully, what will happen is that somebody will be inspired by what he's found out, what he and others have found out in the first few years, and somebody will grab onto a piece of that and run with it, and continue on.

Geier: Do you think, one of the things I'm getting at here is, is there anything in the structure of the Forest Service, the institutional culture of the Forest Service, that would either continue or halt the long-term research?

Eubanks: I don't know. I think researchers in general have more of a tolerance for the long-term viewpoint than western society in general, at least that has been my experience. People are willing to take a little longer look at it. In fact, if anything, there's more of a reluctance to make any short-term guesses or pronouncements based on what has been learned, than there is to wait for more data. I think that's the traditional outlook and research. I think the Andrews

group is probably a little less predisposed to that approach than other groups, but I think, in general, my experience with researchers has been, “Geez, I don’t know; I think I have to wait a few more years before I really say what I’ve learned.” Although, I think to some extent, that has maybe changed a little bit, too. I don’t know if there is anything institutional. It’s a tough question for me. I don’t know if I have that perspective. I don’t see anything institutional that would be opposed to the long-term viewpoint. The long-term research other than, one of the issues that we are getting into now days is funding. That is one of the unhealthier things I see coming, and it has sort of shown its head recently, and is voiced by some people in in Congress, and also I think some people in industry, is that if you can’t show immediate results – don’t fund it. That kind of utilitarian view of research, if you will, if you can’t from your research show what the implications are on timber yield next year, then forget it, we don’t want it. I think there’s a little bit of that element out there, which I think is very unhealthy.

Geier: I wanted to give you an opportunity if you had anything else you wanted to pitch in here. I’ve kind of held you up against the wall here for three hours.

Eubanks: No, I feel like I’ve totally rambled on. I don’t know if there is anything else I could say right now.

Geier: We should probably end it then. You’ve been real helpful.

End Side A, Tape 2
End of Interview