FOREST SCIENCE POLICY, MANAGEMENT, AND CULTURE

An interview with

CHARLES W. PHILPOT

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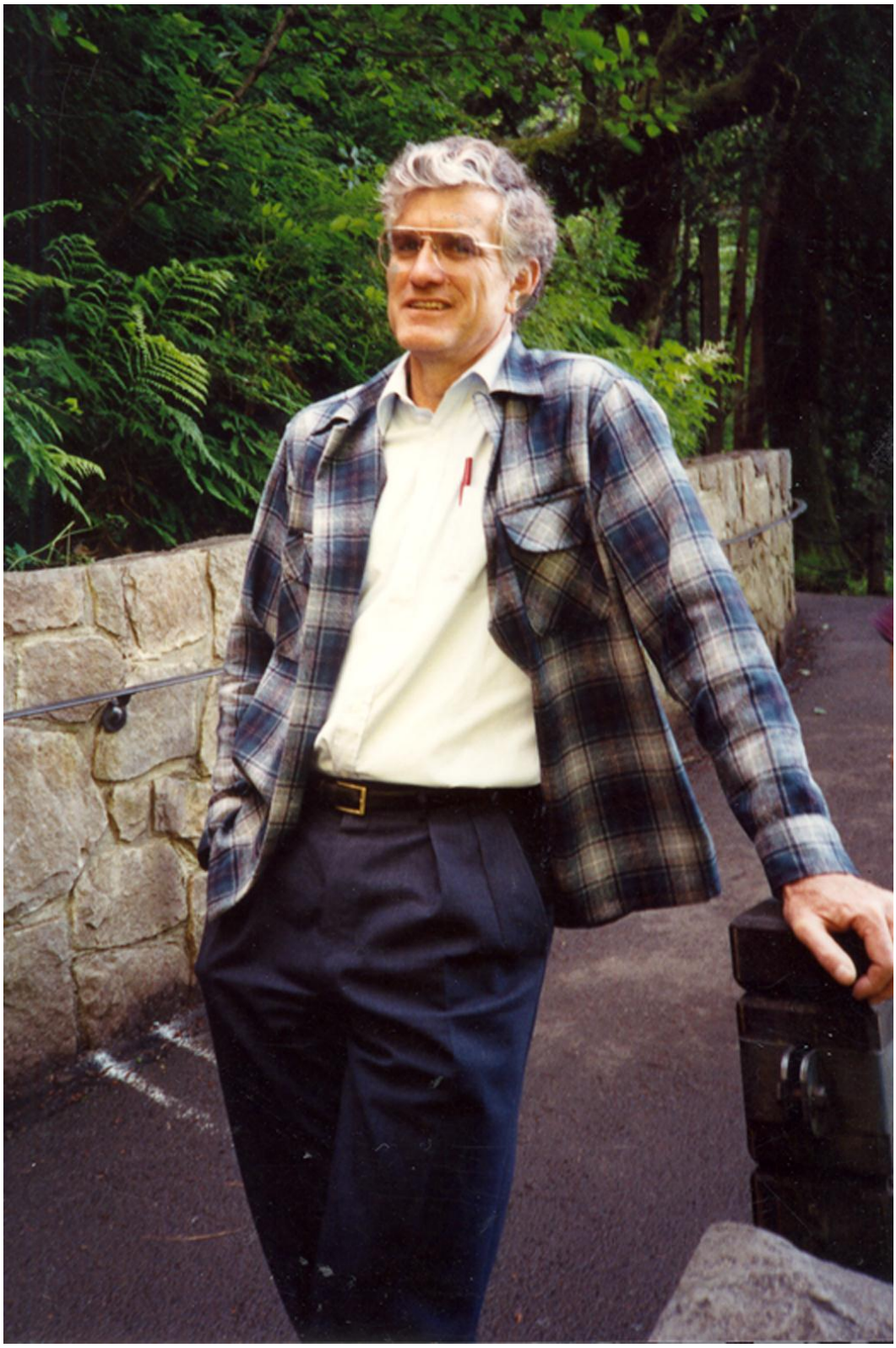
By

Harold K. Steen

Forest History Society in cooperation with the UDSA-Forest Service

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



Charles W. Philpot in mid 1990s.

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INTRODUCTION

"Charlie was always sort of a maverick in the research organization. He frequently expressed opinions that deviated from the general opinions and wisdom of the old guard. I always liked this about Charlie and paid a lot of attention to what he had to say. Because of this trait, Charlie should be an interesting person to interview." This insight into Charlie is by former Forest Service chief Dale Robertson in a personal communication. Charlie is indeed an interesting person, as you shall see.

Charles W. Philpot was born in Sacramento on February 14, 1939. While in junior college he explored preparing to become an engineer, but after being exposed to the biological sciences and much influenced by a particular professor who suggested that he consider forestry, when he enrolled at the University of California, Berkeley as a junior, he was a forestry major. He received a bachelor of science degree forestry in 1960. He then worked as a research technician at the Pacific Southwest Forest and Range Experiment Station, also in Berkeley, while pursuing a master of forest science, which he received in 1963. He was then transferred to the Fire Laboratory in Riverside, California, and in 1976 moved to the Northern Fire Laboratory at Missoula, Montana.

Charlie had long been interested in fuels, especially their chemical composition and related characteristics. In Missoula he resumed a graduate program that had begun in California, and in 1970 he received a Ph.D. in plant chemistry from the University of Montana. He also teamed productively with Richard Rothermel, who was a leading figure in fire modeling. In 1972 he moved to Washington, D.C. as a staff specialist in the Division of Forest Fire and Atmospheric Sciences Research. From then on, Charlie was more and more involved with forest science policy, management, and culture.

The fast tempo of Charlie's promotions and transfers continued: assistant director, Pacific Southwest Station, 1975-1983; director Forest Fire and Atmospheric Sciences, 1983-1986; Associate Deputy Chief of Research, 1986-1988, and finally, director, Pacific Northwest Station, 1988-1995. But in this portion of the interview, the emphasis is on high-profile issues, such as acid rain and global warming, and on significant personalities. Then there was the cultural resistance to change. In the agency's research arm, as in the branch that managed the national forests, there was a stormy shift from multiple use to ecosystem management. "Traditional" forestry saw wildlife and recreation concerns as constraints to multiple use, where ecosystem management saw wildlife and other non timber programs as being equal to timber, or even dominant. This new way of looking at forests prompted much denial and resistance from the "old guard." Charlie was not only in the middle of all these changes, but he was a prime mover. And Chief Robertson, as noted above, much valued his contribution.

A core issue throughout the history of Forest Service research is just how to evaluate and reward its scientists. As a federal agency, there are Civil Service requirements for each level, then there are departmental requirements, and finally, there are agency requirements. But more and more the various disciplines became influential. During the long period that foresters were dominant,

economists, landscape architects, biologists, chemists, and others had their performance reviews conducted by foresters, who were the most senior and thus superior. In some other agencies, evaluations were by peers--biologists outside of the agency would rate publications by biologists, and so on. One result of this tradition was that the National Academy of Sciences had rated Forest Service research as "second rate and pedestrian," which offended some in the agency but caused others to say, "of course, our goal is to solve forest management's myriad problems and not necessarily to produce distinguished scientists." It was this latter thinking that, for example, prompted departmental resistance to foreign travel, which was seen as career advancement and not helping to solve American problems. Charlie the "maverick" leads us through this maze with examples and insights, as he insists that agency scientists had to become more credible within their disciplines, at times causing an apparent lessening of loyalty to the agency, in order to be effective in the ever harsher glare of controversy.

But Charlie also points out just how vital "development" is to the research mission, and that it is essential that agency scientists who produce useful "products" can advance and in other ways be rewarded, even if the National Academy is not impressed. The most obvious example that he treats in detail is FEMAT--Forest Ecosystem Management Assessment Team--headed by Jack Ward Thomas, an eminent wildlife biologist who officially was a subordinate of Station Director Philpot.

The spotted owl controversy was in the nation's headlines often enough to prompt President Clinton to convene a "forest summit" in Portland, the home base of the Pacific Northwest Station that Charlie headed. Chief Robertson comments that "I kind of threw Charlie into the fire, as station director, to exercise whatever supervision of the scientists was appropriate for the situation without interfering with the scientific process and the pursuit of the truth about what was needed to protect the spotted owl." Another former chief--Jack Ward Thomas--comments, "Charlie, at Dale's behest, saw to it that we had the resources we needed. He shielded us from any 'internal pressures' of the government, . . . And he saw to it that efforts of Forest Service scientists in these matters worked for them and not against them in terms of ratings, cash awards, and full credit in panel reviews." If the reader has any doubts at the beginning of this interview about the keen significance of "Forest Policy, Management, and Culture," they will be convinced by the end.

Another significant management shift across the entire federal government was the creation of the Senior Executive Service in 1979. Except for presidential appointees, no longer can someone become an agency head (or deputy, division director, etc.) without first successfully completing rigorous and comprehensive executive training. Charlie very generously donated his personnel file (about the thickness of the Manhattan phone book) to the Forest History Society, where it is available to researchers interested leadership training and performance evaluation. A single example from his 1986 evaluation while he was associate deputy chief reports on four "performance elements:" 1. Advice and consultation with superiors. 2. Manages human and financial resources. 3. Equal Opportunity and Civil Rights. 4. Provide national field level leadership and maintain good communication and working relationship. Charlie scored 4.0 out of a possible 5 and "Exceeds Fully Successful." Obviously this isn't Shakespeare but our federal

government talking; the important thing is that he did well on a broad range of complex and challenging responsibilities. Belated congratulations are in order. In all, the materials offer much insight into the real world of Forest Service management, including that of its scientific programs.

All to the good, but there is a flaw in the interview too. Encouraged by Charlie being such a good listener, I talked too much, way too much. The interviewer's role is to keep the process on track and ensure that the outline's main points are treated adequately. But, time and again something that Charlie said triggered my "observations." The most tangential of these outbursts have been edited out, but in keeping with the fact that this is a transcript of the interview, and the fact is that I talked too much during the interview--well, read on and see for yourself.

Harold K. Steen (HKS): Let's start with an easy one. You were born in Sacramento, I have 1939. What's the precise date, your birth date?

Charles Philpot (CP): February fourteenth.

Choosing Forestry

HKS: Okay. What was there about your growing up that made you decide on forestry? [CP laughs]

CP: That's a good question, because I never heard of forestry 'till I was probably eighteen or nineteen.

HKS: Is that right?

CP: Never even thought about it other than the fact that our family camped a lot, and we ran into people like interpretive rangers. And I'd been through a couple lumber mills when I was a kid as a tourist, and lumber camp a couple times, but never connected that with any kind of a career or a forester as a profession. My grades in high school weren't the best so I didn't go directly to university; I went to junior college, and I started out to try to be in engineering because that's what my father was. There were aspects of engineering I liked. I didn't like the math, which was a problem. Most of my younger years I loved to garden, I love the idea of irrigation, you know, raising plants. And I liked to build things. When I was in high school I only took chemistry and physics, I didn't take biology. I never had been exposed to the biological sciences. Then I got to college and I took a general botany course and it was taught by a professor who got a forestry degree at Berkeley. And that was my second year. I was trying to get my grades up to where I could transfer to Berkeley. That was my big dream. I'm actually a third generation Berkeley graduate. So that was a big deal for my family. My dad went there, my mom went there, and my grandfather was an architect from Berkeley. So that was kind of a goal that I never thought I would achieve.

Anyway I started to get into these courses like geology, botany, general biology, and I got straight A's in those things and I just loved them, you know, I went crazy. Just turned over a whole reason to go to school. I just couldn't get enough of it. Well one day-- must have been the beginning of my sophomore year-- this prof was talking to me. In this botany class he required all the students to do a research paper. He preferred it to be a field research paper. I proposed it and he helped me design it, to go up in the San Gabriel Mountains behind my home where there had been a large forest fire the previous year and do an analysis of what came in after fire. What plants. So I put out these plots, and got all excited about this whole concept of fire recovery and that sort of thing, still not connecting it to a career or anything.

One day he was looking at my stuff and he said, what are you going to do next year? I said I'm

going to try to transfer to Berkeley but I don't really know what to go into. I was thinking about geology, soils, couple things I'd heard about. He said, well have you looked at forestry? I said I don't even know what it is. And so he gave me a catalog, and I went through it, and it was obvious. [Laughs] It was all in there. There was some engineering sort of things, and there was of course the botany and the dendrology and the forests and the water and all that stuff. So I applied to the School of Forestry. Actually I had to spend an extra year before I went to the School of Forestry; I had to go up to Berkeley as a sophomore, so I was still short of some courses for pre-forestry. In those days pre-forestry was the same as pre-med and it was a list of stuff. Organic chemistry would be an example that I hadn't taken. Anyway, I got accepted. And I went up and I went to my sophomore year at Berkeley and kept my grades to where I wasn't going to flunk out, you know, I just squeaked by, and then in '59 I got into the School of Forestry, which was a two year program. Went to summer camp and did the whole thing. So that's kind of how it happened. But it was kind of that one-person deal, you know, this exposing you to something you never heard of.

HKS: Botany was probably the most fascinating course I ever took.

CP: Yeah.

HKS: I almost switched my major to botany when I was a freshman.

CP: I was in three doctorate programs at three different universities for reasons we can talk about later, but I picked up genetics, comparative anatomy, and plant physiology. I probably could have gotten a degree in botany if I'd been so inclined. Couldn't get enough of that stuff.

HKS: I'm a graduate of the University of Washington.

CP: Right.

HKS: And we had three options then. I think they have more now. Forest management, logging engineering, and forest products. Were you in management?

CP: Yeah, forest management. Berkeley did not break down a forestry degree like that. You got a degree in forest management, and then when you went to the master's level they called it forest science. Now you could specialize. The School of Forestry's gone now, but when it was there you could move over in your graduate program to related fields. You could go anywhere on campus and go into physiology, you know, genetics, soils, and so forth. But the basic program was fairly well defined. There weren't a lot of options in it, like they have today.

Forest Service Research

HKS: Well, if you have a degree in forestry how do you wind up as a research technician at

Pacific Southwest Station?

CP: When I was at school in 1960, summer of 1960, I got a job on forest survey at the Pacific Northwest Station. My first job in forestry. I was on the eastern Washington crew. Best summer of my life. When I came back I needed some part-time work. I was paying my way through school. I went down and applied for a, I think it was eight hours a week forest research aide at the PSW station with the guys that were in fire research. Because I'd had that summer experience in the Forest Service already I just got hired on the spot. So I started working part-time on fire meteorology and fire behavior related research data. You know we didn't have computers so it took a lot of people to compile data and record it and so forth. From that point I worked my way up to research forester when I got my master's.

HKS: Was Keith Arnold there then?

CP: He was director of the station at the time.

HKS: Did you ever get involved with him directly?

CP: Yeah I did, because Keith was a big fire person and probably some of the biggest research programs in the agency at the time were fire programs related and paid for by Defense, ARPA (Army Research Projects Agency) and the Office of Civil Defense. And I got involved in those. I know from my own experience later that he must have spent an awful lot of time keeping those things funded and tacked together and doing all the outside liaison.

HKS: I know he went off to Nevada for the nuclear tests.

CP: Before I got there the station had a big program at the nuclear test site, going back to, probably '47 or '46. Arnold, Chandler, Countryman, there was a whole list of guys that started their careers actually over in Nevada. And if you see movies of the early day nuclear tests, where the blast comes in and knocks down homes and trees, that's PSW research. Trees were harvested up on Mount Charleston and hauled down and buried in concrete.

HKS: Did the Forest History Society send you a book called *View from the Top*?

CP: Yes. And I have not read it. It's on my desk, looking at me. I knew all three of those guys. I'm going to read it before we're through.

HKS: Well there's quite a bit there. Arnold talks about that.

CP: Okay. I'll be interested in seeing what he says. I got in just after that, but based on that experience Keith and a few other people, but primarily probably Keith at the time, made the case that the Forest Service fire research group in California could handle other kinds of defense-related fire questions. (I don't know how much time you want to spend on this but a lot of this the public I don't think ever really understood.) The big fear from nuclear attack in the '50s was

not radiation. It was thermal. The old Office of Civil Defense, they were obsessed, they needed to know some way to predict the thermal effects of a nuclear attack. What was going to burn, how much was going to burn, how many people were going to get killed.

I got my Top Secret classification very early in my career because I had a job with these big programs. I was able to go through classified material like movies from Dresden and Tokyo, primarily Dresden. The Tokyo fire storm from the incendiary attack was the highest death rate the world's ever seen. Deaths per minute. Not the nuclear bomb. So there was this big thing about, what's going to happen to forests and homes with a nuclear attack. I got into the program in '62, a year before I moved to Riverside to open the new lab, a project called Flambeau. In today's numbers it wasn't big. In those days it was really big in terms of dollars. And people. And we built simulated houses at a test site in Nevada—not to be confused with the [emphasis] Nevada test site where bombs were tested-- which is above Montgomery Pass, above Bishop, California, at about 6500 feet. We harvested pinyon pine and built simulated housing developments with different street designs and tried to ignite them all at once. It's called a mass fire. And that was a big part of my career for about three years.

HKS: It's hard to imagine nowadays, but aboveground testing was all the rage then.

CP: Well and in fact an interesting thing happened. In '63, possibly '64, the U.S. signed a treaty and aboveground testing stopped, and DASA, the Defense Atomic Support Agency, that's the agency that instrumented the Nevada nuclear test site, didn't have anything to do. So they had all this money and all these scientists and technicians, and they came in in around '63, '64 and started to support this Flambeau project too, so we had a third party at that time. A defense party. So it was a massive thing. Lots of technical problems, lots of design problems, and lots of management problems. I don't know if you want to go into any of those things, but I learned a lot about the problems with large contractual research programs.

HKS: You were a technician?

CP: I was a technician and then I went back to Berkeley for two years in '61 to '63 on a GETA program. My boss paid for my tuition to get my master's degree.

HKS: What's the name of that program?

CP: G-E-T-A. Government Employees' Training Act. A lot [emphasis] of us, my generation, lots of us got our advanced degrees under that program.

HKS: I was scheduled for an advanced degree under that program.

CP: Yeah, it was very, very common. It's not so common today because it was sometimes mis-used. But nevertheless I got my master's, and when I got my master's degree, I got the degree in '63 and I moved down to Riverside and I got a permanent position as a research forester at GS7. I think that's about the timing. I'm pretty sure that's true because my wife and I bought a house

in ‘63, if you can believe that, when we moved to Riverside. She was still in school full time. A whole group of PSW employees were moved to Riverside to open the new Western Fire Lab.

Vietnam Project

We were down there three years. ‘63 to ‘66. I was also working on studies for Vietnam, which I didn’t like, and I was also carrying a full-time program of my own research. What I called my own research was studying fuel moisture trends, a Forest Service program, it’s completely separate from Defense. So I was working seven days a week trying to keep both jobs at the full-time level. It was pretty traumatic. [Laughs]

HKS: I know there was a lot of research done about use of Agent Orange and so forth. What did you work on?

CP: Well, Agent Orange and Purple and White, there were actually three mixtures, came out of the PSW Station. They had a range program there on type conversions and brush field control, especially in the Northern California. It was linked to getting conifer back after fire or after logging, where these big brush fields came in. It was also linked to fire and fuels management. But the expertise for 2-4D and 2, 4, 5-T in an open environment was at the station. So Jay Bentley and others were tapped by Defense, Army Research Projects Agency, the ones that invented the internet that we all know about. Anyway, they got involved with formulations that could be used in tropical forests to defoliate. Agent Orange was actually part of a weapons system involving mass fire to keep large areas free of the Cong.

HKS: Why didn’t you like it? Just didn’t like the work?

CP: I didn’t like the work. It wasn’t so much because of anti-war, I just didn’t like the Defense Department pressure. They messed with data, there was a lot of problems. They’d hurry. They’d get mad at us ‘cause we didn’t, we didn’t have money to spend. You know, every time they came out to visit our Nevada site they wanted to charter five airplanes to fly up to Bishop. We didn’t have money for that. [Laughter] But what I wanted to say about Agent Orange is that’s another thing the public probably doesn’t really understand, and probably part of it’s because it was classified. That Agent Orange was part of a big system to kill several hundred square miles of jungle at once and then go in and start a mass fire. See that’s the connection with me and the people I worked with. We were writing the prescriptions for mass fire, and that would be the whole thing burning at once, not spreading. And so the idea was, you’d brown it, let it cure for a while, go in and mass fire it, and then the Viet Cong would either be wiped out or have to move. What the public thinks is we were spraying foliage so that you could see through it and see the Viet Cong. That’s not originally what that was about at all.

The plan was to brown out the forest with Agent Orange, then burn it with mass fire. Hopefully after just a few fires the Cong would clear out due to spraying only. Burning would then stop and

only spraying would continue. The mass fire was to be ignited using B-52s and M-69 phosphorus bombs (as in Tokyo and Dresden). That was the plan. Never happened. And one of the reasons it didn't happen was, we could not get the fuel conditions that were required, even while it's droughty, to carry much of a fire.

When I did my Ph.D. thesis in '70 to'73, one of the things we were working on was the chemical composition of plants and how that affected flammability, and we found out if our hypotheses are right these plants shouldn't have burned because of the chemical composition. Tropical plants just are not very flammable because they haven't evolved with fire, and that's a whole other field we can talk about later. I also got very tired of the way the project was run. The experimental design was very weak. We built all our instrumentation, we even made circuit boards ourselves. You couldn't buy field instrumentation in those days like you can today. Field data was very hard to gather electronically. We had a big staff down at Riverside that just literally built all our equipment.

HKS: How do you know when something's declassified?

CP: Well you don't always know. Documents that have been formally classified are so stamped. It's a funny system. In fact you don't even know really if your security clearance is in effect. I don't really know right now if mine is. I'm assuming it isn't, because I retired. The way you generally find out is you request something. And the people you request it from, if it's Top Secret especially, and that's the highest you can go, they'll go through a process and come back and say you don't have clearance, or you do have clearance. They find out before they can give you the information or let you review a project. What you do is keep your mouth shut, basically. And if you have classified files you keep them locked. So basically some of the things I just talked about with you, I've never talked to anybody about.

HKS: What was the issue on classification? So the American public won't know?

CP: No, no. Take the Dresden films for example. The Dresden films I used to look at were taken by the U.S. and the British from the air. Okay, so what you saw was when you walked into the room when we were viewing these films and you looked at the screen, it was little dots. It looked like stars. People would come in there working on this with me and say, you know, why are they taking sky pictures? No. That's the town of Dresden burning. See, that was all laid out by design. And at the beginning they were just little fires. The other films we had were the German films, from the ground, and the ones I can't talk about very long. They're so bad. But I don't know why we classify stuff like that sometimes. I'm sure there was a need to keep some of the formulation for mass fire creation, the spacing, and the elevation of the bomb drops and all that away from our enemies. I suspect that's classified for really a good reason, because it could be used against us.

HKS: I was thinking of Agent Orange. The actual purpose versus…

CP: Well I don't think that was ever classified. I just don't think Defense ever talked about it. I

think they just let the press, the public go ahead and think it was just a defoliation program. And just leave the rest out. Now another reason might be, the fire part never worked. And so maybe you just don't talk about it. But it was a rather interesting strategy, if it had worked. But it didn't.

HKS: When I did my master's degree, a course that we all were supposed to take was micro-climatology.

CP: Great.

HKS: And the professor had been a scientist in Germany during the war, but had been an American for a long time. Great teacher. He used Dresden as an example of a fire storm, as a part of our understanding how the forces work. So I'm not surprised at what you said about Dresden. The fact that the film was classified is surprising.

CP: Yeah. That film was really a quite serious thing to get to just look at it. Don't forget that Dresden was basically a civilian target, so there was serious political reason to classify. Even though we were working for the Defense Department, it was not just given to us. But anyway, like all the films that you see now on TV, like the ones I talked about with the trees breaking and all that, that at the time, that was all classified too. We had all that material locked up. Much of it's been made public since. Very dramatic. That has to do with the shock wave, not the thermal wave.

When I got to Missoula things changed. I had visited the Missoula lab. It was much better organized, the technology was better, the science was better, I could go on for a long time about how it was better. And all this madhouse Defense stuff was not at that lab, except there was a little bit of ARPA work on remote sensing. We had a big remote sensing project there. And there were a couple guys up there that had gone to Vietnam several times with the group in Berkeley because they were fuels and remote sensing experts. I never went to Nam. But I used to get requests. I got a request one day from ARPA to develop a hypodermic for pilots to shoot into a tree to make it radioactive so they could come over with sensors and find the pilot. It was not going to work because the vascular system of tropical trees is just not the way an oak tree is, but they'd looked up the wrong botany. [Laughs] Just mind-boggling, the dollars spent on these kinds of projects.

HKS: Keith has a few interesting stories. The timing device the Forest Service used for their high-level research at the Nevada test site. They bought a bunch of alarm clocks, two dollars apiece.

CP: Yeah. Yeah.

HKS: Where the military people used hundred dollar gadgets.

CP: That's right. We were doing that all the time. [Laughs] They'd come out and look at the instrumentation and they'd go, hey you know, just for another two million bucks you could have

got this. We said yeah, it was a dollar fifty. [Laughs] So. Interesting times.

HKS: You wonder if it's changed.

Riverside Fire Lab

CP: It's funny, that whole thing in the military is very interesting. If you read Eisenhower's book (every U.S. citizen should read it but they don't) he had it all figured out. And that's really what I saw day in and day out, was this marriage between private sector defense contractors and all these different defense groups. Yeah, we support this kind of research, and all this. They were fun to go to lunch with. But anyway, that's kind of what happened. So when we got to Riverside in '63 we opened the new lab. I went down as one of the new scientists at the lab, and I immediately started to continue my fire research on vegetation moisture trends while I was trying to keep up with this other job, large fire simulation.

It was a brand new building. We all went down en masse. And we got moved with one contract, all our furniture and belongings, and we literally just walked into a brand new building. That was four research work units started there. Lyle Green had fuel break, Clive Countryman had fire behavior-- and I worked for Clive Countryman-- Mark Schroeder had meteorology, and Jim Davis had what was kind of a fire systems planning group. That's how we started the lab down there.

HKS: What I remember about Countryman, he smoked the shortest pipe I've ever seen.

CP: Yeah, he could. [Laughs]

HKS: It's amazing. I don't know where he bought the thing. Custom made or what. Well that's fascinating, what people wind up doing. You're not really trained for that, but you're versatile. So what else happened? Your defense-related work, that tapered off?

Missoula Fire Lab

CP: For me it did, because when I left Riverside and went to Montana in 1966 I walked away from it, basically. And it went on for another two, three years and then finally was terminated.

HKS: I don't want to cut you short on any of this, but how did you decide to move to Missoula?

CP: Okay. I had been up to Missoula on a trip. I'd been to the lab and had met all the work unit leaders. It was so different than the Riverside Lab. The work units that were there were very productive. They were well managed, they had in my opinion much better science in terms of experimental design. They had some top managers that came out of the private sector and out of

defense. A guy named Jack Barrows was lab director when the lab opened in 1959 and he just went down to General Electric in Idaho, a big nuclear research center there, and came home with four brand spanking' new project leaders, totally outside the Forest Service. Brilliant move.

HKS: Yeah, I just interviewed Dick Rothermel.

CP: Dick is one of those guys. And I worked for Dick. Dick was at my house two weeks ago. Anyway it was just a dynamic place. And the other thing about it was, it wasn't southern California. It was a different place. We'd never lived anywhere but California, and I just fell in love with the environment, because it was a good place to raise kids, so on and so forth. And they wined and dined me. I didn't really know that Craig Chandler who was Washington office director of fire research at the time had been talking about moving me up there. I didn't really know all that was going on behind the scenes. They wanted some expertise in fuels, which is what my field was at the time.

HKS: I was sent to Missoula on detail for two weeks, I think it was 1962. I had just started in the fire research in Portland, and they sent me over. I was the most expendable person and they needed some hands for a retardant test they were doing on burning pine needles and stuff. And so my observation just looking around, all the fuels people were foresters. I mean, they were not scientists but they knew fuels because of their fire experience.

CP: That's right.

HKS: That was why you were brought in. You knew fuels.

C P: That's right, they were trying to do that. And there has always been a problem in fire research, not just there but the Southern Fire Lab at Macon, and Riverside, really lack of technical direction from people with solid science backgrounds. For example, at the time at Riverside the division director was a ranger from the Angeles National Forest who didn't know anything about science at all. Was in my opinion a very serious problem. They had the same problem up in Missoula, not quite as bad. The reason it wasn't such a problem at Missoula is that the project leaders there were very strong people. And very solid people, and they didn't get so influenced by the lab director as happened in Riverside. Anyway I went up there and got into fuels. They had a fuels project, Bob Mutch was the project leader and I was on that project for about a year. Then I moved over under Dick Rothermel because I'd begun to move into fire chemistry and we were looking for more fire chemistry for the modeling, the fire behavior modeling. So I took that on. Went back to school for the third time.

HKS: Were you in the chemistry department?

CP: I was in a program between forestry and chemistry. I was actually located in the chemistry department and I was under Professor Shafizedeh. He's dead now. A world-renowned wood chemist.

He moved into a chair at the chemistry department at the University of Montana, that was put up by Hoerner-Waldorf, the pulp mill. In wood chemistry and carbohydrates. And he was looking for grad students. He was just starting the program, and he ran into me at the Lab one day. He'd been out to the Lab a few times just kind of to see what was going on. I don't know what we had been talking about, but he called me a couple of weeks later and he said, would you be interested in coming down and finishing your doctorate program? And at that time I really wasn't too excited about doing that. I had been in two programs. I had been in a Ph.D. program at Berkeley for a year and then I got transferred to Riverside and had to stop it, which was probably okay. I wasn't that excited about it anyway. And at Riverside after I'd been down there I think six months I went over and started a physiological ecology Ph.D. at the University of California at Riverside related to drought stress and things that I was working on in terms of plant moisture and that sort of thing. I'd been in that program eighteen months, and I got transferred to Missoula. So all this stuff I was doing at Riverside, the two jobs I was talking about, I was going to school also, at the same time. So was my wife. And we had two babies. [Laughs] It was different times. So anyway I didn't go to school from '66 to probably '69, somewhere in there, I don't remember.

HKS: But some of this earlier work was transferable.

CP: Yeah, the basic courses, the chemistry and the biology, I'd got credit and brought that along. I didn't throw much away, actually. I did have to catch up with a lot of chemistry, which I eventually started to click with and started to get some decent grades. But anyway he started to talk to me and said, I think you ought to come down here and get your doctorate. I knew it was going to be a long time to do it because of my lack of chemistry for one thing.

He and I got into this whole thing about pyrolysis and this hypothesis that we had been working at for years that basically says that cellulose wood products have two pathways to combustion, and you can move them back and forth depending on what kind of retardants or chemicals that are present. Now at that time I had started getting very interested in natural fire, which is where all my contributions really are. At least the way I look at it. We had a hypothesis called the Mutch hypothesis that plants that evolved with fire were flammable because when you get to be dependant on fire you have to burn. So plants like chaparral and many of the conifers, they have genetically inherited characteristics that make them flammable. One of those might be the minerals that are in those plants.

So we were looking at these pathways and the way different minerals, chemicals, kind of move from what's called the glowing pathway which doesn't lead to flaming, and the flame pathway, which does. Some of these compounds we already knew were doing that from the retardant programs. We didn't know why. Because the retardant programs, probably today too, are still hit and miss. You test phosphates and you test the borates and so forth. They certainly work, but you really can't explain why, and I think today we probably still can't, because the program I'm talking about I don't think was ever continued. But anyway what I did in my Ph.D. thesis was try to make sure we could study those pathways by using wood or the components of wood and we could add up the results. So it was a really basic research thing.

HKS: You've got lab facilities at the Lab, or?

CP: I had two chem labs. I had a chem lab at the Fire Lab with two lab technicians doing the studies with plant material, and then I had the research with the pure chemicals down at Shafizedeh's lab. I had a lab down with him. By the time I got in there he had five or six grad students. He had a pretty large program. He was very well known, and he's the guy that got me to give papers at American Chemical Society. That never would have happened if I hadn't worked for him. So I got a real taste of basic research there. And a better understanding of what it is and what it isn't. In about '73 I had a big decision to make, and basically it was to go back and be a staff specialist in Washington in fire research over fuels. I looked around and I said the Forest Service is not going to support my work, which is true.

HKS: Because it was too basic?

CP: Too basic. Too long-term. Many people in fire research didn't understand it, really. Or in the Forest Service. I mean, it was a lot of things.

I had started working a lot with a couple other scientists in the Park Service, one in the Forest Service, named Bob Mutch, trying to get people to understand the significance of the fire suppression policy on ecosystems. And doing a lot of work on, not necessarily personal research, but a lot of work on related subjects like allelopathy and species composition shifts in the West, and all the changes that were going on because of fire suppression. It was a really gutsy time, because I almost lost my job twice on that issue. Literally because people upstairs couldn't handle it. But we held our ground and eventually in '73 when I had the chance to go to Washington, part of the deal was, I could help influence the research program to move towards at that time what they called fire effects, 'cause nobody wanted to call it fire ecology but that's what it is.

HKS: Let me interrupt and go back to when you're still in Missoula. I got this publication from Dick Rothermel, and that photo doesn't do you justice. [CP laughs] Must have been one of your bad days. That's what you did to keep your job there while you were doing all this basic research.

CP: Yeah.

Fire Management Controversy

HKS: Fire modeling, fire behavior

CP: No actually, this was done in Missoula, before I moved to D. C.

HKS: Yeah. I wanted to bring this up because you're moving on to Washington.

CP: By the time I left southern California I had quite a different understanding of chaparral fires and those systems than most fire people had. Or I would say all fire people had. And when I got to the fuels project up in Missoula it was legitimate for me to study things like this. This is one of the first landscape level studies probably ever done.

HKS: I see.

CP: Yeah. I got the fire records from those lands and I got a good illustrator. We had a great illustrator. I said I want this stuff plotted out on plastic sheets and I want to track it by ten-year increments, and we did. And by golly it turns out large fires there don't return for thirty years, they go over here, and so forth. And so the older the fuels are that's where you're going to lose a fire and it's going to get large. It's going to be controlled by the wind at that point. This was extremely controversial. I got beat up because of this. Dick and I decided finally we're just going to publish this, because we tied it back to his models, and so his models are in here. So we use that to do some projections. The original study is much larger. And I used to present it and audiences would look at me like, what are you talking about?

HKS: I'll just read this in directly. *Predicting Changes in Chaparral Flammability,* and this was published in the 1973 Journal of Forestry. Who was critical of it?

CP: The fire establishment. I'll just give you a couple examples. And this would have been before I went to Washington. It's the late '60s, early '70s. We started, Bob Mutch and I, with people like Bruce Kilgore who had already started natural fire programs in Sequoia under a research exemption in the Park Service. They had the 10 A.M. policy also. We couldn't do that in the Forest Service. We could not do that research in the Forest Service because of the 10 A.M. policy basically. The policy required all [emphasis] fires to be suppressed by 10 A.M. the following day. So under that policy you could not study unsuppressed wildfire.

Around 1970 the Bitterroot or Lolo National Forest-- thanks to supervisor Orville Daniels, the Region One recreation director, the Region One fire management director (Bud Moore), the regional forester, and Bob Mutch from the fire lab-- asked for an exception to the 10 A.M. policy so natural fires could be studied in wilderness. The policy was modified to allow for study of unsuppressed fire in a wilderness. Only in wilderness in the Forest Service. Bob Mutch and his group started a research program in the Bitterroots that still goes today. Letting lightning fires play their natural role under prescriptions and that would get twenty, thirty years of data, I guess. I was a big advocate for that program. I was not directly involved in it, but I used that as part of this whole debate about changing the 10 A.M. policy and trying to allow some fire to play its natural role, at least in some areas. And this whole question of fuels build-up, all predicted by us in the '60s, it's all come true. I mean, I read things today that foresters say about this, in those days if you'd said you'd have been fired. Pure and simple. I was hauled back to Washington once, probably around '70, and taken to lunch by the director of fire research, and made real clear, if I don't stop this talk I can go somewhere else. I was very shocked by this.

HKS: What is the person's name?

CP: Jack Barrows.

HKS: Is that right?

CP: He was total fire suppression, anti-prescribed burning, period. Not only him, I mean all these guys who came up through fire control, this is the way they were. I went to the best station director I ever had, Bob Harris, I told him what happened. He exploded. Because you know, you're assigned to us and you're supposed to be protected from this kind of threat, and if you're wrong you're wrong and if you're right you're right. If you're scientifically correct that's the way you should be. This is an interesting story. He called four of the directors, station directors, and they all came around '72 to the national fire research meeting in Boise, Idaho. Used to be one every ten years. I don't think they have them anymore.

There were several problems between Jack and station directors. He worked outside the system a lot to get money directed toward his favorite projects (all suppression related, along with advanced technology, etc.). And their agenda was to get Jack out of his job. Get him to retire. Two or three of them had range backgrounds. Bob Harris had a range background, and he had a real sense about this fire issue. And he was really a supporter of mine. I can remember going to that meeting, and all the directors went into that motel room like they always did, and closed the door and had their little social. He always left the door open and brought in the young guys. [Laughs] He's just a neat guy. Anyway they did, they pulled it off. At the end of the meeting Jack announced his retirement. And we busted that thing open and started talking about fire ecology, and we got research programs. Nothing nearly adequate for today's needs unfortunately, but we started to really open that up. So that's one example.

Another time in '76 or '77, I was now assistant director at PSW and my office was in Riverside at the Fire Lab. NBC News came out to talk to me about fire ecology during the fire season. There were fires going all over the southwest. They wanted me to talk about the flammability of chaparral and its relationship to fire, how it needs it for regeneration. I mean to them this was an amazing story, they had never heard it before, you know [Laughs]. So I was on NBC News one night, and they did a pretty good job. They were really careful. I told them, for my sake if nothing else, say what I say but don't say anything else. They were really good and it was pretty neutral. I didn't advocate prescribed burning. So I got a call about midnight from a fire director in the southwest region of Arizona and Mexico. They had some big chaparral fires going. He just tore me apart on the phone. Gonna have my job and everything else. I didn't really know what had happened, but it turned out a local station picked up this NBC thing and they had replaced the video behind me, I was actually standing next to chaparral, not burning. They had replaced it with one of those fires down there. [Laughter] I told him, go and look at the original. I have no idea what you're talking about. But it was just one of those things. Today you would do that and nobody would say anything. In fact they'd probably call you up and say thank you. But at the very early days of this it was very hairy. So I spent a part of my career for the next ten years getting rid of the 10 A.M. policy or helping do that, and do fire training and fire ecology for fire

managers in Marana, Arizona-- The National Fire Training Center-- writing, giving talks, whatever it took to try to get this thing down the road. And we made some progress.

HKS: Did you read a book that came out in the '60s, *Fire and Water; Scientific Heresy in the Forest Service*?

CP: Yes. We used to recommend that to some of our students. That's an amazing book because of its date. I mean that's an old book.

HKS: That's right.

CP: It was correct in both cases, the water and the fire. Probably the water's not quite the emotional thing that the fire thing was. In those days we could have got the people that had any kind of expertise or talked about this in a single room. That's how few there were. And we did it. And we used them for teaching.

HKS: You'll see when you get around to reading that Keith Arnold interview, I asked him about that book. And he rejected it. The author probably came in with his mind made up. To listen to you talk now, that's not my vision of Keith, to have a pro-fire-suppression mind set.

CP: It would be mine. From my own experience. Oh absolutely. That fits. You know, paradigms are wonderful things. I love that word paradigm. I just think that's just a paradigm and took a long time to shed.

HKS: All the forest health stuff.

Career Change

CP: Oh God, we just kept coming up with more and more and more stuff related to fire exclusion. Anyway, in '73 I made the big decision to get out of doing research. I felt my value was more in directing research and shifting programs as best I could and trying to get better links between research and the users. When I got to Washington one of the things I did, I joined the National Forest Systems fire staff. I went to all their morning meetings, and I started to build some real ties. I got national fire training programs started with all the federal agencies.

HKS: You got there just after Keith Arnold left? Or was he still there?

CP: Oh. Keith calls me and begs me, you know. He doesn't beg, he just jacks you up. He was good at this. You're a wonderful person, we've just got to have you in Washington, and so forth. I mean, this was a hell of a decision for my family. I had relatives in California who couldn't believe I'd go to Washington, horrible place, and on and on and on. And Keith called me and said, and that's quite a thrill, when the deputy chief calls you, you know, you're a GS12 or

whatever. He said, I've talked to Craig Chandler, the director, and we've got to have you back here. Now I also knew Keith, if he wanted to move you, he did. Keith was tough. I could have said no and I'd still have been there, you know. [Laughter] But I was intrigued and complimented. So he said, okay, here's the deal. You'll be here two years. I guarantee you'll be only two years, and you'll go back out as an assistant director. So I go in there and get on the bus with Craig, and we go over to meet Keith. We walk into Keith's office, and he just announced he's leaving. [Laughter] I said, what about my two years? I was there two years and one day. So it was a commitment that was stuck to. It was nice.

HKS: So Buckman came in then. Right?

CP: No. Dickerman.

HKS: Right.

CP: A totally different guy. And then later, when I was in Washington the second time, Buckman was there.

HKS: Okay.

CP: So that was how I got out of doing research. And I'm basically glad I did, because the research I wanted to do, I never would have gotten the money and horsepower to do. I was thinking really big, fire effects.

HKS: So this publication that you had with Dick Rothermel that we talked about, that's about the limit of your work as a scientist and publications and that sort of thing.

CP: Well my doctor's thesis was published. I actually have thirty-four publications. But some of them are not research, strictly speaking. But many of them are. All the fuel moisture research is published. I published a paper from my master's thesis. I was trying to predict vegetation moisture from soil moisture. We had pretty good models in California for soil moisture. And the problem was we couldn't predict vegetation moisture for fire danger rating. Needles and small twigs and other fuels. And so the question I asked is, could we relate vegetation moisture to soil moisture, and then predict one from the other? And then use the soil moisture predictions in the models for fire. I put some plots in three elevations in central California. Ponderosa pine and manzanita and bear clover. So three different rooting depths. And use a nuclear probe, one of the first times that was used for soil moisture, and found out that there was a relationship.

Probably the most significant thing I found, which I never really pursued, I don't know if anybody else has, is that one of the reasons that ponderosa pine seedlings failed was when their tap roots went down they hit drier soil instead of wetter soil, because the second layer of moisture in the soil was being depleted by bear clover. You know what bear clover is? It's almost a ground cover. And bear clover would not exist at near the level it does today if you had the fire cycle back. See this is how it went. So removing fire from central California and mixed conifer stands

had an impact on tree seedlings because it let a plant grow there that took the water out at the two-foot level. I'm talking mostly about planted stock. But anyway, we never did pursue it to the point of predicting but we did get the relationship. So I got some nice data out of that. That was published.

HKS: Let me ask you about another book. Steve Pyne. Are you a fan of his?

CP: Well I wouldn't say I'm a fan. I think his books are good. There are problems I think. One of the things I have a problem with in general from authors is I think they overstate the Native American use of fire. If you look at the natural fire occurrences on any national forest or grassland, you don't need the Indians out there burning to get one hell of a fire system perpetuated. And I think they underestimate the natural fire occurrences and overstate the effect of Indian activity. I think he does a little bit too much on the cultural side of it. And I'm just doing that from my opinion. I don't know if there's any real research on it. I do know the research on fire occurrences. I mean we have forests in the West that have six, seven hundred fires a year, from lightning. And if you're not suppressing them, they did something. But I think Steve Pyne, he's a good writer, and I don't have any problems with his books. I mean, it needs to be said.

HKS: He's pretty critical of the Forest Service.

CP: Yes, he is.

HKS: 10 A.M. policy was too inflexible.

CP: Right. Impossible for fire managers to make some decisions, economic or ecological, doesn't matter. The 10 A.M. policy was amazingly effective. You suppressed all fire. Period. You did whatever it took within certain constraints to do that. And it was easy to understand. People that like to be in those kind of structured systems responded well. It was like a lot of policy and direction in the old Forest Service. This was what you did and you did it well.

HKS: Well my experience was one year on the Snoqualmie National Forest, just out of forestry school. The Forest Service had a must burn slash policy. We burned four-year-old slash. We had natural reproduction head high and we burned that because on the map it showed slash, and all slash had to be burned. Weyerhaeuser and Northern Pacific owned every other section where we worked. They didn't burn, and you could tell, driving down the road, [CP laughs] which section was Forest Service, it was desolation, and which was private and green. And you couldn't talk about it. I would ask, I'm going to be a ranger some day so explain why we're doing this so I will do a good job as a ranger.

CP: See, that could be a tough question. It could be a tough question. Not whether we do it or not, but why. What's the rationale? And the problem with the Forest Service and probably a lot of bureaucracies is that it's very, very hard to document a decision process. Try it sometime.

HKS: Well the answer was, if I got one rather than some angry retort, was, we don't want another Tillamook Burn.

CP: Oh, yeah. And that's the same thing with snag removal. Went on for centuries.

So there I was in Washington. And I got a lot done, I think. I got back out to PSW and reorganized the fire lab down there, to try and get it more towards southwest needs. We started the first fire ecology program.

HKS: You wanted to go back to Riverside?

CP: Not particularly, but I didn't mind going back, because my family is down there and I was raised down there and I now had the financial capabilities to buy a very nice house with an orange grove. I had an orange grove. The home environment was very nice. I had the program in Hawaii, and Fresno, and I even had a couple projects up in Berkeley, so I got to travel, which I always enjoyed till it got really bad. But that was my first experience getting out of fire. So now I had wildlife and economics and silviculture and all kinds of fields that I could ask interesting questions about also.

HKS: Assistant Director for Continuing Research. Is that an accurate title?

Changing the Research Culture

CP: Yes. That is a title from a reorganization under Keith Arnold, I'm pretty sure. They got rid of research projects and made them research work units. They got rid of project leaders and they were research working leaders. They got rid of division directors and assistant directors and made them assistant directors of continuing research, and they were multi-functional. So before that you had a director of fire at PSW, director of range, director of timber, director of economics or whatever. That all went away. Then they put all the projects, research units, under ADs of continuing research, which could be from any field. Which actually was an excellent idea. It just was an awful clumsy title. [Laughs]

HKS: It sounds like something, in mid-career, you go back to school for continuing research.

CP: Yeah. And continuing research was research that continued. I mean I don't know the history of those exact words, but that's what came out. But I think part of it was an attempt to kind of mix these pretty isolated divisions up. I mean the fire folks were not linked to the timber folks, and they should have been, and wildlife of course. It was like fraternities, all the way to the chief, because they had their own divisions in Washington also. So I have always had a real problem with the effects of functionalism. I've written a lot about it, given talks about it, made some progress. But it's still a big problem, I think.

HKS: Well it happened over at National Forest Administration, to some extent anyway. There's no longer a division of timber management under national forest. There may be still in Region Six.

CP: Well there still would be, you're right, there'd be a timber staff to do the specifics of timber management and silviculture. I think some changes were really triggered by the National Forest Management Act and all of the interdisciplinary requirements in the act for planning and that sort of thing. So there were some big changes there.

HKS: Well that's fascinating, and we'll be talking more about that. But the way you put the package together, it has an impact on what possibly gets done.

CP: Oh yeah.

HKS: Although there's always resistance from, we'll just call them the old guard for lack of a better name. [CP laughs]

CP: Well, it's a long, long, long, I'm going to call it a battle. So-called inter-disciplinary or multi-functional research. Multi-functional, the word functional comes from the functional line items in the budget, while the discipline comes from disciplines. And they're not the same. Whether they're used interchangeably or not, disciplines are not functions. The function would be timber management, the discipline would be silviculturist. But you might have a lot of disciplines in timber management that are not silviculturist.

The first exposure I had to an attempt to fix this was the one we used to tout all the time, the work unit up at Fairbanks, Alaska. And when I came out as director I spent some time up there going through that, and what I found was it wasn't multi-functional at all, and it wasn't multi-discipline. What it was was they had put all the money from the different line items together in one work unit, but when you went down the work unit description, the insect guy had insect questions, the water guy had water questions, they were not integrated questions. And that's the big issue to me, and it's not simple. Lots of folks have tried this, and there'd be some successes, but trying to do an integrated research program where you actually have integrated questions and hypotheses is extremely difficult.

HKS: Let me ask this question that I asked Buckman. It didn't make sense to me that they had forest protection research, which is disease and fire and insects. Two are biological and one's physical, more or less. How does that work? [CP laughs]. Keith Shea, who I knew when he was at Weyerhaeuser, who was a pathologist, was heading fire and insects as well. Is that part of the new trend, or is that the old guard? The old situation?

CP: Well, I think again it was an attempt to get these functional areas to cross-pollinate, and start to ask common questions. There's no question that there's a huge relationship between fire and insects. Go find the research and study it. It's very limited. You don't study that by asking just straight old classical insect questions or straight old fire questions. You ask the questions

together. You know there's been some really, really important research that's come out, which was fairly multi-functional, looking at alternatives to clearcutting. And you get all through, and we say, here's a great alternative to clearcutting. Then you ask the question, what do people think about it. And they say, why are you asking me that? I'm asking that because if the people don't like it it's never going to be applied on the ground, is it? Why weren't your social scientists and your silviculturists asking human value questions about these alternatives? We probably got some of that started. That's an example of a big investment in a research program, and the research is fine, but when you get down to whether the public's going to accept it, you've got to know that. Because if they're not, it's not going to happen.

HKS: I want to talk more about this. Where do you draw the line between Research and National Forest Administration? Because they're dealing with what the public wants.

CP: Yeah, but what I'm talking about is handling them off a new silvicultural system, like retention forestry, which I think is an amazing breakthrough, and will be accepted by the public, and not be able to tell the managers, here's what we found out about the public's acceptance of retention forestry. It's a research responsibility in my opinion to do the whole story, not just the silviculture.

HKS: But you'd bring in more social scientists?

CP: Oh, it's the biggest lack in forest research today. Lack of social scientists.

HKS: They have them in National Forest Administration.

CP: And they have a few in Research, but it ought to be a program many times bigger, sometimes I think. I mean, that's what we're talking about. We're really talking about not just the biology and the physics or management structures and strategies, but how they're accepted by the owners.

HKS: Seems to me Congress would be leery of this.

CP: Well Congress, yeah, and if it's presented wrong, and this has already happened to some of the programs in the Forest Service. They've been beat up especially by conservatives because it's presented to their colleagues as social engineering. You're trying to modify what the public thinks, not find out in the answers to questions what the public thinks. To me that's the biggest error, of many, that forestry's made in the '70s at the time that the Bitterroot controversy and the Monongahela were going on. The National Forest Management Act, because of those two things, plus a few others. The response, as I remember it, of the forestry schools and the agencies, and I'm just going to say it, the forestry profession, was, we had to be better communicators.

We started hiring writers and speech specialists or whatever, and we started to do more communicating and hire more communication expertise in both Research and in National Forest Systems, Bureau of Land Management, and so forth. And what I used to hear all the time, when I was in Washington especially: if the public understood what we were doing they'd like it. I'd just

sit there and shake my head and I said, God, how many more years are we going to say that? What we should have done in '75 and '76 and '77 when we had a chance to make some big change is to get more resource professionals trained in sociology, so that we could go out and understand why people make decisions about natural resources, what they like, what they don't know, why they like, why they don't know, and not be so concerned about they don't understand what we're doing. Because I think they all understand what we're doing. They go look at it. That may be all they need to know. Whether it's good forestry or bad is maybe not even the question.

I thought that was one turning point for the profession that wasn't taken that should have. And we never really have in my opinion fixed that. You know, my recollection in the '70s and '80s, what we called social science research was primarily recreation research and primarily impacts. We had social scientists in the wilderness research program, and they were studying how people impacted the wilderness. Now to me that was the least of the questions about wilderness. The biggest problem in wilderness, in the West, at the time and still is, fire exclusion. If you talk about change. Unnatural change. But to try to get it funded, and try to get the expertise. There's about five or six social scientists in the northwest now, two of them in the station that are in my opinion real treasures. They're not always listened to, some that have listened to them are very complimentary and talked to me about it. They deal with the real true social questions, not impact and things but human nature. Why people conclude things, why they go where they go.

HKS: By adding this dimension-- what do people think?-- to research, does that put even more stigma on the kind of basic research that you were in?

CP: No. That's an interesting question, and the assumption made a lot of times is that you can't even do research in the social sciences, in the classical sense of research. And I found working with these folks, yes you can. You can test hypotheses and you can do experiments with controls. If you've got good people they can do it. It's not just qualitative stuff going out the door, and opinions and advocacy and all the things you hear about from these crazy social scientists. It's a little bit parallel to the history of wildlife research, where it came through a long history of what I call observational research, but not very much experimentation, not much controlled research, you know, with experiments. And that's changed dramatically. There's a fair amount of that going on today. And they got the same reputation, you know, that they really can't do quantitative research with animals. You can.

HKS: Ecology was strictly observational. Until the late '60s.

CP: Yep. And so was fire. In fact, fire research was too observational for too long. You know, I think it went way too far with what I'll call observational research, I don't call it science. There's a point when you've got to begin to understand why and how, and get into mechanisms. Right now there's a lot of that going on in wildlife research. Which is now the biggest research program in forest research. Used to be the smallest. Another one of those major changes during my career. There's about five or six of them, but that is a huge one.

HKS: You talked about wilderness and reminded me that I was at the station, here, in the early

‘60s. The guy in the next cubicle was a sociologist, getting his Ph.D. in sociology at the University of Minnesota. His dissertation was on the Three Sisters Wilderness Area. Why people used it. Sociological technology. Well, *The Oregonian* got hold of it and made a big article out of it, and within the experiment station this guy really had the screws turned to him. And the Wilderness Act wasn’t yet passed.

CP: Oh. It was before ‘64.

HKS: Yeah. Before ‘64. And if you want to talk about official censorship from the research administration of a scientist, that was a classic case. And the whole station was watching it. Some people were upset, some people were trying to stay away from it. But this was a part of my decision to get out of this organization and go back and become a historian. I didn’t want to work for that.

CP: I think if you talk to Roger Clark, who’s the lead social scientist with the station right now, and George Stankey down at Corvallis, they could give you probably several stories like that from their field.

HKS: Well Bill Burch went off to Yale and published a lot of stuff, and he was the guy that they really skewered.

CP: Oh. Yeah. I knew of him. You know, that’s an interesting thing. I think in the ‘60s, from my perspective, there was much more control of independent scientists than there ever was later on. In fact today it’s very hard to do that, because scientists have so many ties now to people that support their work, including politicians, special interest groups. Because there’s so many people involved now with resource questions that they end up with programs in the research stations that they really think are important. If you start to interfere you start to hear it from really important people not to do that. I never had much patience for it myself because I had gone through it myself. And it just seems to me so many times when it did happen the guy getting beat up was right. Now he might have done it incorrectly and come across as an advocate and all these things that are bad for scientists to do, some of which I buy, some of which I don’t. But nevertheless I don’t think the discipline side of it should have occurred. If you’re going to tell the world you’re an independent research arm, and we tell the world that, we have legislative protections to be independent. Which we do. But sometimes that’s more important when it comes to the managers’ control of us than it is in controlling our own people, I guess. [Laughs] That’s part of the problem.

HKS: Dale Robertson, when I interviewed him, didn’t use Buckman’s name but it was very obvious who he was talking about. One of Dale’s tasks when he was still associate chief was to deal with Research, who saw the Forest Service as just one of its clients. Dale thought the Forest Service research arm ought to get more interested in what the Forest Service is doing. I’m not quite sure how that fits in.

CP: I worked real close with Dale. Dale in fact was the chief that supported my reorganization of

PNW when Research didn't support it.

HKS: I've got an email from Dale. I want to talk to you about it.

CP: He understood, better than many people, about the benefits to the National Forest System if we in fact did what we said we were trying to do. On the other hand, I don't think he ever looked at forest research the way that the legislation looks at us, or did look at us, and the way we are all trained to think about, as being the forest research arm of the U.S. federal government, with responsibilities to BLM and the Park Service and the Fish and Wildlife Service and so on. At one time that was actually true, because none of those agencies had a research program. They all do now, big ones. So we have for other reasons now become more of a direct supporter of National Forest Systems, more like what Dale thought we should have been. But I fully understand why Dale had the concerns he had. I mean look what he went through in terms of national forest planning and all that stuff, and all these new questions that foresters are never asked and never even trained to think about. And here's this expertise over across the hall, not very much of it because we're not a very big organization, but he knew it was there, and he couldn't find those direct links. And you try to do it through State and Private, which never worked and never will.

That's one of the key things in the organization that we tried to implement at PNW, was that you would have development groups in the station program that were specifically responsible to produce products, directly, not through local research programs necessarily, for the clients, and the big client of course would be National Forest Systems. The other thing that I never knew where Dale stood was, we could do a lot of what you want us to do if you'd give us some money. The user pay concept. When we get appropriations for a certain program and we have responsibilities, like in the northeast we have almost no responsibilities for National Forest Systems. There aren't any to speak of. We've got responsibilities for private sector and timber companies that are probably ahead of federal land owners. But if you want to skew that, or give us more capability to tap these sources that you need, then you're going to have to think about a National Forest Systems appropriation or allocation to research. And we pursued that. We worked on it night and day for quite a while, and got to the point where we were blocked by Congressional concerns, among others, that National Forest Systems money could not be used for research, by law. That if you looked at the budget package that goes to the U.S. Forest Service, there's Research, and it's not mentioned in any way, shape, or form anywhere else. Now that doesn't mean they don't contract for specific questions, because they do. They spend millions on what we would call research for national forest planning through contracts with universities and so forth. But to go one step further and say you're going to have a big chunk of money going to the research program, to earmark it directly for support, is not going to work legally.

That's another reason I wanted to get a development branch in Research, because then it would be legal. And in fact we did R&D programs and we did that all the time, and Congress never said anything. In fact they gave us more money. So there were some ways to do that, but you have to get the whole organization to get behind you to make a change like that, and I never could bring that off totally. So yeah, Dale was an interesting guy that way, and very frustrated. There was an

attitude that didn't help things in the Washington office when I got there. The second time, when I was associate deputy. And the two years before that when I was director of fire. There was an attitude in those offices about what Dale's talking about that was really bad. Really bad. I mean, it was so bad that when I got there I found out that Research almost never went to the U.S. Forest Service budget session to participate in building the Forest Service budget. They did it completely outside. You know we had our special congressman and the deputy had his own buddies up there. And I used to say, that isn't going to last forever.

HKS: Was that Buckman doing that?

CP: Well, yeah. Not the only one. Dickerman did it, Arnold did it.

HKS: Was this pragmatic on their part? Did they think they could cut a better deal with Congress that way?

CP: Partly. And it was, you know, we're independent, we shouldn't be in the room talking to you guys. And in some cases with some of the folks, in my opinion, it was snobbery. We're special. And one of the reasons that I think I was so well accepted in the Washington office by the chief's office and the staff directors is I refused to have that attitude. To me in the long term it was going to kill Research. You can get to a point where okay, fine, cut you off, go. And now today because of the way the budgets are set up, the president's budget, you know, you better be in that game, because there's not enough money to do everybody's package.

I could give you examples in the '80s, before I was station director, where we moved with OMB, together, money that was going to be in National Forest Systems president's budget, to Research. Before it went to the Hill. And that got more and more important because at that time when you started to work outside the budget, which we all did, a very risky business, you still had a better chance up there if in fact what came across from the president was more in your favor, because senators and congressmen had to start to document where they were going to get the money to add to your budget. When they moved several million dollars into air pollution research in the Forest Service from EPA, that whole thing had to be wired up and balanced out to zero, and EPA lost several million dollars and we gained it. I mean, they agreed to it, but that's the way it had to happen. I don't think a lot of Forest Service research top managers ever really understood all that. The other part of that, this is just a side thing, I used to make the case over and over and over that you do not do the same things in the budget process that you do in the appropriations process. They're two different processes. Two different groups of people, two sets of rules. And we continued to go up to the Hill fighting for appropriations using the budget packages. Which I didn't, I used different packages for the station, and for the full agency many times. Well anyway, that comment from Dale doesn't surprise me. I used to see that all the time. And they'd get pretty upset at staff meetings if Research wasn't there.

HKS: Buckman made a big point of looking at an issue, where in the southeast, in Atlanta, I think the state forester of Georgia proposed to Max to move Research under the regional forester.

CP: Oh yeah.

HKS: In the southeast. And Bob was so delighted that Max wrote a letter back saying that Research is always captured by the administrative arm.

CP: Yeah. If any chief that I ever worked for understood that, Max Peterson understood it. And I could give you many personal experiences with that guy where he just said, don't even talk to me about that. That's not gonna happen. Max was an interesting guy. He could give you examples of why you wouldn't do that. He talked about park supervisors who are going to run off with the wrong answers because they forced Research to study the wrong questions. It was pretty clear to him. Max was a very strong supporter of that aspect of research. But on the other hand, I think Max would be just kind of like Dale. If he had a staff meeting talking about some lawsuit where the issues are technical and you don't have your top technical folks in the room with the chief, then there's something wrong.

HKS: Max is quite a storyteller.

CP: Oh yeah.

HKS: John McGuire required nine tapes, nine hours. Max required twenty-two.

Acid Rain

CP: [Laughs] I was on the board of directors of NAPAP, National Acid Precipitation Program. We had about three hundred million dollars between the five of us to spend. The biggest portion was research. And I had about five agencies, three departments, all working on acid rain research. Eventually it became a comprehensive air pollution program. But anyway, EPA and I were always going back and forth, this was in Ruckleshaus' time, about forest research ought to be done in the Forest Service because we've have the expertise and capability. We've got experimental forests that EPA didn't have. So there was this thing going on all the time. And Max was part of that.

For example, one day I was over at EPA. They wanted to do a water quality survey of western lakes in wilderness to see if there's any deposition from air pollution. They were going to go to Congress or internally re-direct --and they did a lot of re-direction-- several million dollars to do this. And I told Max, you know, we could do that. Yeah he said, we could do that. So he goes out and talks to regional foresters and they find out how many people, how many horses, that it would require. Sampling equipment. He whips up this thing, and it's about four hundred and fifty thousand dollars. And he goes up the Hill, visits a couple congressmen and gets it added to the supplemental. EPA called me in. How did he do that? I said, oh, you know, whenever things like that come up in the Forest Service we've got ways to get the job done. We can run with it; we've got a good cheap price.

HKS: Was that the project that required helicopter landing in wilderness areas?

CP: That may have been proposed. In fact as I recall that was one of the problems with the EPA design. And why Max said no, we know how to get into wilderness and we use horses and mules. It turned out they had a protocol on time-- water sample time-- that was incorrect I think. I'm not sure you'd say it was incorrect. It wasn't required. You could maintain a chemical composition long enough, like twenty-four hours, to get it out by trail or horse or whatever. You didn't have to use helicopters. Yeah, I think that was one of the issues. But Max just felt Forest Service Research and National Forest Systems working together could do a much better job, which was probably how he got the money, by saying, you know, instead of five million dollars it's a half a million [Laughs]. And we can still guarantee the results. But [Laughs] you never knew what Max was going to say. He got going one day, I remember, in a meeting about photo oxidants in Southern California, which I'd briefed him on. And they were [emphasis] affecting forests, and in fact still are. And he got the story almost ninety-eight percent correct, I mean the really important stuff. He was great to brief because he understood and retained information.

HKS: It's interesting to hear you tell this story. Both Max and Dale talked about that same EPA water sampling proposal, but they have different views. There's a Forest Service inflexibility on the definition of wilderness, which is an issue that Dale talked about; it's absurd to say you can't land a helicopter.

CP: Oh. Oh. Yeah. Sure. Okay. Yeah, there would be issues like that.

HKS: Yeah, issues like that. He's got a whole different angle on it. Well, Max has got lots and lots of stories. His characterization of himself, his own career, when he was regional engineer in California. He spent a lot of time over in research learning what was going on scientifically. He had a lot of interest in research. He had opportunities to move to research, which he didn't want to do. He saw early in his career that research was significant.

CP: I think of all the chiefs I worked with Max probably kept up with the technology and the science better than any one of them. He was interested in everything. He had a good sense of what was going to happen in the '80s and '90s to the Forest Service, and I don't think many chiefs did, and deputies.

Assistant Secretaries

HKS: Well he was in an especially tough spot. I don't know how this affects research but I'll just throw it out. During the Reagan administration when John Crowell was assistant secretary, he wanted annual cuts of twenty-one billion or something.

CP: Twenty-seven at one time.

HKS: It was off the charts, whatever it was. What does the chief do when his direct boss says

you've got to cut twice as much?

CP: Well in my opinion you get out the basics and you go with it. You get out the Sustained Yield Act and you get out this and that and you go call the people that are opposed to it, which is what Max did, and you have enough networking out there to help you get through something like that. But that's becoming harder and harder because now, in my opinion, starting with Jack Thomas, you have a political appointee as chief. And now you've lost a whole bunch of control that you might have had if you were not a political appointee. Because there's at least a perception that a career leader is different and has more independence, whether they do or not. I think they do, but there's at least that perception. I think Max was pretty good at that. The other thing I would do with John Crowell is make him explain himself. Which is what we did. And we found out where he got the numbers, and it was like kindergarten time. The man didn't know what he was talking about. Yet he was in a very powerful position. In my opinion he should never have had the job anyway, and this is just sort of a side issue. How could general counsel of Georgia Pacific, who's in court against the Forest Service, become assistant secretary over the Forest Service? That never should have happened.

I was the first person in the field to brief John Crowell, and he fell asleep. It was on Firescope, a huge program in Southern California, where we got the world's five biggest fire departments together. A big, big program, and everybody was wanting to show Crowell how industry and government could all work together in this new organization for fighting fires and save money and all that. He asked the most idiotic questions, and then he lost his payment for his move to D.C. and oh it was just, all over. So then when I got back to Washington later, he finally was replaced, but, yeah. Where'd you get the twenty-seven billion feet? Well, there's a hundred and ninety-three million acres in the Forest Service, and the average annual growth is two thousand board feet per year, and I multiplied them across, and it was that kind of nonsense. Nothing about the law, or sustained yield, or the fact that two thirds of our land doesn't even have trees [Laughs]. But he was actually serious about it, you know. Was going to up the cut.

HKS: Buckman portrays Crowell as just thinking the Forest Service research was looking too far ahead. Too much wasted research. Didn't like a lot of what the Forest Products Lab was doing.

CP: Right.

HKS: Because it really wasn't turning out better newsprint, or whatever.

CP: Although it was turning out the basis for engineered products, which is sustaining a bunch of companies, you know. [Laughs] Those engineered wood products, that's where they came from, you know. But he was, oh my God, the stories I could tell. I'm not going to do that.

HKS: I've tried to get money, but there's no logical funding source to interview former assistant secretaries, now under secretaries, at least a couple of them.

CP: You know that would be so fascinating.

HKS: But the Forest Service won't support it obviously, and the department wouldn't support it. Now who's going to pay for that?

CP: That's an interesting question.

HKS: Talking about twenty thousand dollars or something, you could get three or four of those guys on tape. A Democratic guy and a Republican guy.

CP: Oh man, I mean they're just this far apart. [gestures] The last one we had under Clinton, who I worked with, I can't even remember his name.

HKS: Jim Lyons?

CP: Yeah. You talk about difference between assistant secretaries. And the guy in between them was the evangelical guy, the one who tried to start his meetings with prayers. I mean, all these different people.

HKS: Max said if the nation is in peril today it's because assistant secretaries are all about thirty-two years old and none of them know squat about the agencies they oversee.

CP: They don't know anything. They really don't know anything. They're just going to be people that take the charge from the administration and give it to the agencies. But the problem is, they have more power than that. I mean, they make bigger decisions than just what the White House says. And they can move things right or left. I used to tell John Crowell's staff two things. If you don't stop, you're going to double the wilderness, which happened, and the cut's going to go down to about three billion feet, which also happened.

Jack Ward Thomas

HKS: Jack Thomas was fascinated by the way elections affected important decisions. If it's January you have until November to decide. If it's October you only have a month to decide. And it just screws everything up.

CP: And I can understand Jack saying that. You know, Jack's experience as chief was much more politically directed and violent than any other chief. When I was station director we'd just finished FEMAT, which was an amazing package. They wanted to make Jack chief. Lyons asked me at breakfast one morning. And I basically said, don't do it. The guy has got no managerial experience, he doesn't know where the talent in this agency is, he's going to have to make really important personnel decisions, and he's going to be perceived as a political appointment because of what he's done that you guys like. And I'm not talking about politics stuff. You know, clean stuff, but it turned out it worked for you better than the other guys. Okay. Then he asked me would I like to come back as associate. And I said no, I won't do it, and I certainly wouldn't do it

under Jack. I wouldn't have done it for a lot of reasons. I didn't need the stress at the time. Also, in my head I knew kind of how that was going to work. I mean at that time, here's an assistant secretary directly talking to forest supervisors, and you might want to grab a couple of the guys someday for a whole other kind of story about that experience. Going over the regional forester's head and telling forest supervisors what to do next in their management planning or whatever. And here's the chief back there, and he's not in the loop. Just a horrible situation. But that's typical of organizations that have strong political oversight, but don't have, quote, the independence that we're supposed to have. I'm not sure it's the best argument, but it certainly makes an argument for an independent resources agency somehow, because I just think this is getting worse and worse.

HKS: Well, if you get around to reading his journals you'll see that one of Jack's primary complaints was, not only the short term thinking, because of every two years there's an election, but field level decisions were coming out of the White House, mainly the Council on Environmental Quality, and bypassing everybody.

CP: Absolutely. And Katie McGinty approved the stuff. Katie was the head of CEQ. She worked for the vice president. Basically natural resources were under the vice president under Katie McGinty. And Lyons reported to her, in effect. So that whole thing, she was basically supported by environmentalists. So was the vice president. And so, direction came down that wasn't really appropriate, but it was what they liked. Jim Lyons would get it across, including in my opinion in some pretty unethical ways. Yeah, that was an experience.

HKS: Well, maybe you've said all that you care to say about Jack thinking about being the chief. What you've said really is not what his journals suggest, but his journal wasn't every day and he didn't write about everything. He didn't want to be chief because his wife was dying.

CP: That's right.

HKS: Also, he wasn't sure he wanted to go back to Washington. For all the reasons that we can understand. He's a scientist, he's tired of the spotted owl crap, and he wants to go back to being an elk person or whatever he did in the first place.

CP: That's what he said. I just don't believe it.

HKS: Okay.

CP: I think those were important things for him to think about. Especially his wife. That was a horrible disaster, just terrible. But those that know Jack real well know he's got an ego that's absolutely indescribable. Basically when he writes and talks-- he did this as chief too many times-- he talks about Jack. I can remember going back to Washington on committees and visits and having folks ask me about Jack, 'cause he worked for me. And just rolling their eyes when the chief does a big family meeting and ends up talking about Jack again. You know, what he's doing, beating up senators and on and on. And the guys, in a loud enough voice that you could

hear, [mock whisper] is that all he talks about? I said, yep. Sometimes that's all he writes about. Not to take anything away from him because he's a productive guy, but, oh man. He used to go in his office and rant about his awards.

HKS: It's news to me.

CP: Interesting guy. I don't really see how he could have said no. Chief of the Forest Service? And all these people back there that have really turned forestry around. I'm not really talking about environmentalists necessarily, but the whole idea that you can make that kind of impact on forest management, leading FEMAT and that sort of stuff. And finally seeing a hundred year's worth of research actually get applied, cleanly. That was really important to him.

HKS: Well it was very hard on Jack, and you can see it in his journals. He went back there and thought that he'd deal with issues of right and wrong, and the system doesn't work that way inside the beltway. It almost literally killed him. His health was bad.

CP: Oh, it was terrible. I used to go back and close the door and sit down and talk to him, and I could see that every visit. Then of course the business side of the Forest Service he had no experience or very little understanding of, and so the associate was doing all that. Which isn't necessarily bad if they're together, but I couldn't find much tie between him and the staffs back there. Which was kind of dangerous too. Of course a lot of them were reporting to, I think, to the assistant secretary also. [Laughs] I know Wildlife was.

HKS: Let's go back and make sure it's accurately recorded here. Jim Lyons approached you about being associate chief?

CP: He mentioned it at breakfast. Would you like to come back and be associate? That's all he said.

HKS: Okay. So he was fishing around.

CP: He had the same problem Jack did. He did not know where the talent was in the Forest Service that was on their band wagon. He assumed I would be fine because I had been supportive of FEMAT. In fact I was an author. I co-wrote chapter 8 in the FEMAT. I think he considered me fairly objective. They really didn't have to screw with information to make change, they really didn't.

HKS: So he knew you from FEMAT.

CP: Oh yeah. Oh yeah. He was out there all the time of course, and we met all the time.

HKS: We need to talk about that.

CP: I don't know if Jack said anything to Lyons or not. That's possible, but I think he probably

talked to some other people that said, you ought to talk to Philpot. I don't know. That wouldn't surprise me either. I think he also understood that he needed an associate that was a pretty strong manager and understood how things really go in the Forest Service. I'm talking about personnel, and all the organization things, that obviously Jack didn't know about. He also probably felt that I knew more of the people in the Forest Service to go to for future positions. I knew all the regional foresters. I knew all the staff directors. I knew a lot of people personally.

I really can't tell you why I was asked. Katie McGinty could have in fact asked him to talk to me. Because I knew her from some work we had done. There is another thing that is interesting about Jack that just absolutely flabbergasted me. When I retired I got appointed as chairman of a federal advisory committee. I've done three of them. I did one after I was retired. I wish I hadn't done it, but I did it. To go down to California, Region Five, to evaluate a landscape level plan for the Sierras. I had huge problems with it. And I knew this before they asked me to go down and take the committee. In fact, that's where I should have said no, 'cause I'm going to mess some people up that are friends. So we got this committee slapped together.

I don't know if you know about federal advisory committees. They're very formal, they're legal, you do everything by hearings and so forth. Anyway, we got all through with that, and we wrote a report. I tried to get that report as gentle as I could get it, but I don't know if I earned that credit for doing that, but the things that could have been in there were really not positive. Then Katie McGinty and Lyons called me back to brief the secretary of agriculture, assistant secretary of agriculture, and then go over to CEQ and brief McGinty and her staff, which essentially is the vice president, on this big thing that had become really political at that point. I could not believe, as I went through assistant secretaries, the secretaries, the names they called and what they said about Jack Thomas. I just couldn't believe it.

HKS: You'd believe it if you read his journals. You see it from his side of it.

CP: Does he know that?

HKS: I don't know what they said to each other, but I can see where they were not happy with him.

CP: Oh, foul language, I mean it was just, I couldn't believe it. I mean, my God, this is your guy. I wasn't in Washington at the time, but some place a lot of stuff was severed. And I know that a lot of Jack's characteristics that we all tried to help him with, because when you go to a Senate hearing, for example, be a gentleman and don't beat too many senators up in front of them and their staffs. Don't do that. And I think that's part of what happened. Because he may not have been on one side of the aisle or the other. That's another interesting thing about Jack. When he got tapped I was one of the first people to know that, and I called two or three people I know, a couple with Washington office experience and a couple without it, that Jack had a respect for.

I proposed an advisory cabinet for him for a year. Said we'd come back, temporary quarters, the whole bit, to give you help on some of this stuff that you're going to have to address. He never

agreed to it. I don't know if it would have worked or not, but there was some intent by some of us to do that, because the other thing of course that happens to somebody like that is that your own staff begins to manipulate and play you and you don't catch that, and it can get pretty serious. That's an interesting part. Of course he always refused to believe he was a political appointee, but he was. He was not eligible for Senior Executive Service when he got that job. They had to amend that later. But you certainly couldn't make the case that he came up through career management positions, like regional foresters or station directors or whatever. He had none of that. So it's about as close as you can get. He was hand-picked for various reasons. He was treated that way.

HKS: Well if you ever want a justification for the Senior Executive Service, just look at the process around Jack Thomas' selection as chief, which he treats in some detail in his journals. There needs to be some standards of administrative skills. I'm not sure at other agencies like EPA, how it works with political appointees routinely changing with each administration.

CP: The Senior Executive Service has two kinds of appointments. One is career-based, and out of the five thousand slots that's about three thousand five hundred, I think, by law. And then there's fifteen hundred, and they don't call them political appointees but they're basically like what they did with Jack. The career ones you have to show, through your experience or a special training program, (I took the program, I went to Harvard and all that stuff) that you are in fact in an eligible pool. They can only use that eligible pool, and Jack was not in that pool. So there again, technically speaking, he was a political appointee even under Senior Executive Service rules. He had a degree and he had a professional background, but he did not have the administrative experience or managing experience.

HKS: I'm trying to think what would have happened to the agency's view of itself with two scientists—you and Jack-- put in for chief and associate chief.

CP: Well the thing that bothers me a little bit is, all the regional foresters can be political appointees by law now. That's never happened. I think there's a couple of staff director positions that are in that fifteen hundred. If you look at EPA, Fish and Wildlife Service, NOAA, that's already happened. There are directors in Seattle and Portland, they're all political appointees.

HKS: Interesting. As an historian you're not supposed to judge the present, because you can see no one really understands the present. When you look back after twenty years, fifty years, a hundred years, how it turns out colors what we remember of it.

CP: Yes. Oh sure.

HKS: If you're right in the middle of it you don't know how it's going to turn out. We don't know if Jack is going to be a blip or a turning point.

CP: That's right. And we don't.

Forest Fire and Atmospheric Research

HKS: I want to make sure we haven't skipped something important. You didn't give me too many specific examples, and maybe you don't need to, about when you were director of forest fire and atmospheric research. You just talked about acid rain. Do you want to emphasize that a bit more?

CP: Oh okay. There were two things went on there. One is I got appointed to the second layer of NAPAP, which was the liaison position between the U.S. Forest Service and the acid rain program. It was a very technical position. Oversight of research at the stations and all that stuff. And writing the budget in the Forest Service and Department for that work, and that sort of thing. At the same time I was director of fire and atmospheric sciences. I had some pretty good staff people. This was the time when the Forest Service was downsizing. It was fifteen years of very dramatic reduction, you know, fifty-two thousand down to thirty-two thousand PFTs, and pretty short for an agency. Research was going through a lot of pressure to make some programmatic changes, some consolidation, closures, that sort of thing.

I worked on a reorganization of fire research with the stations. Some of that happened, some didn't. The other thing we did there, we tried to do during that time was get the program reoriented more toward fire ecology and fire effects, fire planning stuff, and away from suppression-oriented things. A fair amount of that happened. And of course I was still on the Hill a lot trying to get the program funding increased across the board in fire. And I kept my ties with National Forest Systems, especially the fire staff, and continued to do some training. So I think the big change for me was when I got into NAPAP at the top, and started to work with Commerce, Interior, EPA, and Ag, with lots of money and a lot of scientists from the big program and lots of politics.

More on Acid Rain

HKS: I read an article in *Time* magazine about acid rain.

CP: Right.

HKS: Is acid rain a real issue?

CP: All right, let's talk about that for a minute. It was really important, and it was really an issue for the Forest Service. Unearthed a lot of things. The NAPAP program started just before I got to Washington, by the Reagan administration, in my opinion because the Reagan administration didn't believe it was a problem, therefore we study it. It's the same kind of thing going on now with Bush and climate change. So literally the research dollars were unbelievable. We're talking several hundred million dollars. Some re-directed, some new. The question for NAPAP was limited by the appropriations to study the effects of sulfur dioxide acid rain on forests, crops,

structures, health, and aquatic systems. About the time I got in there, there were textbooks that I reviewed that said acid rain was killing forests. There was no evidence for that at all, for example.

HKS: But you used to read that.

CP: Oh yeah. I got asked to review some high school and grade school what they call environmental science textbooks. Some of the worst stuff I've ever reviewed in my life. And that was stated in there. Here we had this huge program that's going to try to find out if that's in fact true, and it's already a conclusion in a lot of parts of the public, in the media. At one point we had documented a growth decline in southern pine through forest inventory data, which is not the best data to be doing that, but it looked like something was going on with southern forests. Immediately that was because of acid rain. I'll just give you one example. A project leader at Asheville, over at the inventory unit, really truly believed there was a documented growth decline occurring in these forests. And one day a contract producer from Nova came into his office and demanded that he take them out and show them dying forests from acid rain. He said there aren't any. We had this big blow up, you know, which I got involved in later. That's the kind of environment at that time. However, some lakes were dying.

HKS: This is environmentalist-driven.

CP: Oh yeah. Big time. It was also a backlash to Reagan. Lot of stuff going on.

HKS: I remember an anecdote, maybe Max was telling me this. He got this call, Reagan's going to Canada, to Ottawa, tomorrow and acid rain will be on the table. I mean you've got to deal with this.

CP: You do. Twenty minutes.

HKS: Yeah.

CP: Anyway, we had a deposition network in place pretty much in the East and Plains states and Canada, and we were documenting some pretty low pHs in rainfall. Again, no effects stuff, just the pH at certain times in certain rain storms could be as low as 5, and even lower sometimes. So we started a whole bunch of research at the stations including using growth chambers where you can expose seedlings to acid rain and other air pollutants.

HKS: I was at Duke for a while and Duke Forest got some money for acid rain.

CP: Duke was involved, we had a big contract with Duke. I had a big contract with several universities, Yale. We had to go up to Congress all the time and brief congressmen that were getting this information and pressure from their constituents and try to explain right now, all we can say about those spruce trees, there were some at Asheville and there were some at the Northeast, there was a decline, that that may be just a perfectly natural decline of the spruce in its

life cycle. Maybe there's something else going on, but right now there's no credible evidence that it's acid rain.

That went on for about a year, and we started to show Congress and EPA our research in the Forest Service on photo oxidants. It was a whole different pollution. We did document that photo oxidants are affecting forests in the Sierra Nevadas, Southern California, and we found oxidant damage in loblolly pines in the southeast and so forth. This is an interesting problem because photo oxidants primarily come from transportation. Whereas acid rain as described by Congress mostly came from power plants, sulfur and coal. That's where the SO_2 comes from. So now we've got a whole new proposal that power companies are very excited about. Let's branch this program out and look at all pollution, totally outside our mandate. But in a very short time, and I was very active in this politically, we got the program widened to include all pollutants. Which was a breakthrough. Because now we've got money to go and expand our photo oxidant work. When I left the program there was still no evidence that acid rain affects forests. There was a lot of evidence that photo oxidants could. It all goes back to policy. The Clean Air Act was finally modified and not just the addition of a big sulfur limit, which is what environmentalists were proposing originally, it actually dealt with all pollutants. And so I think that was a hell of a contribution. Outside of whether we did science or not.

The big problem with that program in the Forest Service is it began like a lot of programs and new initiatives as re-direction, no new money. And there were all the standard reactions the agency took, re-titling things already going on, and so on, and I didn't have a lot of patience with some of that. I really wanted to see new research if we were going to do it. But that wasn't our nature and culture, new initiatives. The problem here was I was part of a very large oversight organization involving several secretaries, and they had all kinds of ways to find out whether we were actually doing the new research on air pollution, or just calling something we had already been doing air pollution research. Then there was a lot of folks, because they didn't believe acid rain affected forests, they thought the program wasn't worth doing anyway. And so they would talk about how bad the science was, and there was [emphasis] some poor science at the beginning but improvements were made. That's not the only field we were doing mediocre science in by a long ways. So there was a lot of internal staff that didn't support it. There was a fear, always a fear, that the president's budget would have a massive earmark proposed, out of the silviculture program or whatever, to deal with the new research. We did pretty good. We manipulated that pretty well. And the coup that I finally pulled off was the moving of I think it was around three million dollars, which was a lot of money in those days for research, out of EPA's budget into our research program, so we could actually begin to start new work. And that's how the Duke and southeast station package came out together. There was actually a lot of new money in there. Doing research at Durham and Riverside, California. We actually had new dollars. We hired a lot of new people.

HKS: So the acid rain issue is no longer an issue?

CP: As near as I could tell it died, it's gone away when the revisions of the Clean Air Act passed in the late '80s. I don't really detect that it's on the table any more. I know the research

continued, and it had to because some of it was fairly long term. NAPAP was supposed to be five years. You can't answer a ten-year question in five years. So that was another problem foresters had with the whole idea of a short term program. But nevertheless I think the program got Congress to come across and look at the whole broad questions about air pollution. The acid rain damage did occur in lakes. There are lakes in the northeast that are sterile from acid rain. Not hundreds and zillions of them but there are some, and there are certainly a lot of, in fact the biggest impact is probably structures. Statues and limestone and marble.

HKS: Did you sit down face to face with staffers in Congress?

CP: We had a lot of staff contacts. We were up there a lot

HKS: Which committees were you talking to?

CP: Well, the big player was congressman Waxman. It would be Waxman's staff. And I don't remember what committee he chaired. But they had all the air pollution related stuff on the House side. Leahy was one of the senators that kept track of us. And Ruckleshaus, this was an amazing thing about Ruckleshaus. He would have us come to his office for briefings. And that was refreshing. So when he was ready to go up to the Hill, which was all the time, of course, he wanted to know what the hell was going on scientifically, and he took it with him. The other secretaries I never briefed. Never saw any interest from the secretaries of Ag, Commerce, and Interior. In Interior, the directors of the Park Service, Fish and Wildlife, we saw them quite a bit, because they were on the management team. But Ruckleshaus, of course he was on the line. He had to first know that we were spending the money wisely, and then of course understand what we were finding out, or weren't finding out.

HKS: Ruckleshaus was an interesting guy. He was brought back to the EPA under Reagan because of that incredible mess the EPA was in.

CP: When I was at Harvard in '80…

HKS: Why were you there?

CP: Senior Executive Service training. I was there for four months as a Senior Executive Fellow at Harvard's Kennedy school. That was the second class in that program. Still going today. It was an honor to go and I just loved it. Top university campus, full semester. In the afternoon we could take any class on campus that we could get in to. All paid for. We had thirty people and one of them was one of the top staffers in EPA's director's office. She worked directly for Anne Gorsuch. And I mean, the stories. She'd only been there six months, because Reagan had just got in. She basically just told her staff, we're going to disobey the law. I think it was why this woman was very glad to be at Harvard. [Laughs] But she got caught. Watt was the same way.

HKS: Well again, Jack Thomas in his journals. A lot of interesting tidbits, things to follow up on. He said he was directed to break the law time after time, because the law wasn't convenient. The

president's going to be in Portland tomorrow, and you've got to do this, Well Jack said, I can't. It's against the law.

[Laughter]

Global Warming

HKS: Global warming. With the Bush administration do you have any insight into global warming? Twenty years ago, at an SAF meeting, there was a report on warming. As the climate changed there's going to be loblolly pine in Ontario. Forestry research was involved. I'm not sure it was Forest Service research, but forestry research.

CP: Forest Service research has been involved for a long time. And wildfire research developed projections of changes if [emphasis] the climate changes. And the work in Fairbanks where they tracked melting of the permafrost. I mean a lot of research going on. There's a big program at the Seattle lab doing simulations on snow pack, thunderstorm occurrence, a lot of projection on vegetation shifts. If, if [emphasis] these things happen. None of that work is designed to say it is or isn't going to happen. Big difference. But yeah, we've had people interested. I think probably some of the folks that were in the air pollution program originally have broadened out and are looking at the potential effects of climate change on forest ecosystems.

This whole question about climate change and acid rain is a bigger question about the relationship between research programs, especially the Forest Service, and policy questions. On the lists that are in that equation when you're not careful about driving the research by the policy folks and so forth. And you're not clear about the difference between doing research on a policy question and advocating an answer. Although it's interesting to note that some of the best advocacy ever done for big questions were done by scientists advocating, so I mean there's a [HKS laughs] big discussion in the Forest Service, probably in the last fifteen years because of this new relationship with policy makers that we didn't used to have in research.

HKS: Well I haven't kept a tally, but it seems to me the press generally has been skeptical or even cynical about the Bush administration's position on global warming. The journalist, the guy writing the article, believes in global warming, and that Bush somehow is ignoring it.

CP: That's it. Oh yeah. I don't know that much about the current discussions in Washington and the White House, but it would seem to me that he may be the kind of person that is going to have to have a hell of a lot of evidence before he would say I think this is a problem. You saw the same thing with acid rain in the Reagan administration. At the point where you can say, yeah, some lakes are dying, that still isn't enough to say we ought to do anything about it. It gets to people's values, and what are the trade-offs? It's like any research question. In some resources we waited too long. I mean look what's going on in fisheries in the ocean. It's a horror story. It shouldn't have happened, and it's happening. Maybe we'll recover, maybe we won't. I don't know. That's where the policies can be made that are not science-based. And to me it's very

important to have a science-based policy if you're dealing with resources. That's not the same as saying you ought to have scientists help develop your policy. But people get that all mashed together sometimes. And some scientists just refuse to work on policy issues. They just walk away from it.

HKS: I can understand that.

CP: I mean somebody may take their research and use it, but they're not going to push it.

HKS: So what you've been talking about, in terms of your chronology, was both when you were director of forest fire and atmospheric sciences, and also associate deputy chief.

CP: Yeah. When I went over to associate deputy chief I was now high enough to be on the board of directors of NAPAP. I took Keith's place.

HKS: Were there any other issues of that complexity or controversy that you were working on? The let burn policy was one. It's still going on.

Technology Transfer

CP: It's still going on. That was a big one. The continued discussion about technology transfer was going on and getting hotter and hotter, and in fact there was a federal act passed at one point to force research organizations to do more of it.

HKS: Well let me ask you about technology transfer. In my limited experience the biggest problem is on the receiving end. Foresters don't read the *Journal of Forestry* because it's too technical.

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CP: Well let me say, that's not how you do technology transfer. Anytime somebody says, I do this and this and the user doesn't listen or use it, then I say, don't do that anymore. Stop doing that. We've got to do something else. This gets into the whole thing about RD&A, and my goal in trying to get the really major shifts in how we organize and perform what's classically been called research but it isn't. It's a whole mixture of stuff, and how we get it out to the users. And I've written a lot on it and it was part of the re-organization of the PNW station.

The classical Forest Service model is called linear model for research and development. What it is, you do a lot of research and at some point somebody says I've got a product, they make a product and they give it to the user. Very ineffective process. Can work and has worked. There are certainly silvicultural guides out there that have been very useful that come out of that process. It's very slow, and many times the final product is not something that the user can use or understand or whatever. The model that we were trying to implement, which is very common in the private sector research and development areas, and some agencies, is development driven. The development drives the research. And the development is a process just as sophisticated and

technical that starts out with a product to build. It then identifies if there's any knowledge gaps that research has to fill. So research is supporting the development, and application is automatic because the user is paying for development and is sitting there helping design the product. That's basically two different things.

What I was trying to do in the Forest Service was get us towards that second model. Using technology transfer is the primary reason for doing it. I had more support from users for that concept than I did from research. Not all research. There's lots of folks in research who really wanted to do that also, because they were basically already developers trying to force themselves into the research environment, managed as scientists, paid as scientists, evaluated as scientists, when in fact they weren't doing science. They were doing development. Not science.

The other thing you do in development, if you do it right, is you go to lots of sources for information to build a product. You don't just go to research scientists. You might go to users, professionals, or use modeling. But you don't take a hundred years to do it. You get the best product you can at the time, or in a time frame that you've agreed to with the user. That's basically how we did the Firescope program in southern California. It's an emergency management system used all over the world now, not just in fire. That came out of that kind of a model. We told Congress, these are the products we want you to pay for. If we have to do research, and we did, that's the support. In five years we're going to give you an incident command system and a command and control system for, in that case southern California. The five biggest fire departments in the world can now work together during a fire disaster. And they do. They even share dispatches. So that was an example of a development product.

Another example of a development product that almost nobody would even think of is FEMAT. That wasn't a research product. It was a development product put together by researchers. Full of research. Full of a lot of stuff that's not research too. Here was a product, very, very tight specifications, and a time frame, ninety days, to do this and this and this. Thirteen rules in there. First rule, it had to be legal. That right away described a whole bunch of the stuff that's in FEMAT and why some of the stuff's not in FEMAT. But in my opinion in a very effective research organization development's the biggest part of the program. The biggest money, not necessarily in-house money but in terms of dollars and people, and product production. And the science part is a smaller part, not the other way around. That's not to say the science would get smaller. But that is such a paradigm shift for Forest Service Research, it's extremely hard to get there. By the way, Forest Service Research has been changed to Forest Service Research and Development.

HKS: I was going to ask the question about personalities. The scientists in place, where they've got twenty, twenty-five years in, and they're not much interested in your paradigms. They want to continue on with what they did.

CP: They do. Some [emphasis] do. Not all of them. Jack Thomas would be an example of one that was a developer his whole career and wanted to continue as a developer, and that would be one reason he thought the proposal was worth pursuing. Because he never was just a scientist, in

the definitions of this paradigm we're talking about. Lot's of scientists are developers. They're not doing experiments and publishing, hypothesis testing and that sort of thing. They're producing products. But it was just too much change to be acceptable, even if we just did it at one station.

Station Reorganization

When I came out to PNW I had already published and talked about RD&A and that sort of model, and gotten lots of support from key people, including the chief. When I got out to PNW I got all the project leaders together, there were thirty-three of them. They were pretty independent of each other, the labs were independent of each other, there wasn't much integration. There were huge research questions heading our way-- the spotted owl, though we didn't call it the spotted owl problem, but endangered species was one, water reallocation's another one, fishery's another. I mean huge things. They're still here. In my opinion all predictable, but not many people were predicting them. So we got in a room and I said, here's what we could do. We could put together a team, a subset of project leaders, and meet often-- it would be a big commitment-- and start at the beginning and see if we could come up with a set of criteria for an organization that would do these things better than we're doing them now. Not to critique the old organization. I got seven or eight guys and they stuck it out. Took us two years.

A lot of people think, Buckman's one of them, that I came out there and had this plan. It's not true at all. I can show you the analysis. It goes on forever. Some adopted by other organizations, including private sector. I mean it's really, really significant stuff. And a lot of hours in it. Then when we got through with that, we said here are the alternative organizations that could do that. We had six of them. We actually ran them through the station employees. All the people got to look at that. Even support staff participated; there were some administrative subsets that had to be looked at. And we didn't just say, you know, here's the one. So we went through all that. And what we came up with was not my proposal at all. My proposal was there would be two separate organizations in a directorship, development and research. We did not split them out that way. We did make separate different programs, RD&A programs and science programs. Each requiring different kinds of managers.

This is a very hard problem because we didn't have very many people in research trained to manage and lead development. It's a different kind of expertise and management style. We had a few. So that was a problem from the beginning. Getting managers to do this. And then we had the old guard. Assistant directors that were no longer there. They were now called deputies, and they had different responsibilities. They had a hell of a time being deputies. Deputy regional foresters have the same problem What is my job, really? That was an issue. We had a guy, Bill Bridges, and you might want to look at some of his books, but we had a consultant that helps organizations and large corporations get through what he calls transitions, when you make a major organizational change.

We had transitional workshops that he helped design, and a whole bunch of things for employees

to help this chaotic period of about two years when you make a big change, to get you through it and then on. He reviewed it without pay --the guy costs about five grand a day-- and he said, you guys are doing something so significant I would just like to help you out and watch and so forth. In fact we went down to his office north of San Francisco one time and he spent a day with us, going through the proposal. And he got all through and he said, you know, I don't know if you're going to make it or not. What you're doing, it made sense from the R&D, that sort of stuff. But he said, and he was absolutely right, the biggest problem you're going to have, and all these organizations he's ever worked with had the same problem, is corporate. In our case the Washington office. Because everything you're doing is going to affect their perceived power, their perceived authority, their perceived budget responsibilities, etc. Your documentation won't fit anymore. And that was in fact our biggest issue. Outside of the chief himself and the associate chief, some people like the deputy talked a good story about helping us and supporting us, but I knew from my own networks that wasn't quite correct. It was seen as just kind of a thing that didn't fit very well. They didn't want to work out processes to go from this to that. It just wasn't going to work, it wasn't going to work, it wasn't going to work. So as a result we got about fifty per cent accomplished.

A lot of it's on the ground, still. I had some horrible problems we never overcame. I got tangled up with the department on affirmative action. I tried to fill four of the ten program managers, which is a new position, from outside the Forest Service. That was part of the game plan, which was supported by the employees. We found some good guys; Charlie Peterson is still there, is an example that came from R&D model that I was talking about, both from private sector and EPA.

Affirmative Action is a long [emphasis] story going back to my experiences with the famous Region Five/PSW Consent Decree. I was a strong supporter of Affirmative Action as a concept. I received lots of recognition for my Affirmative Action efforts. However, I had problems with some of the ways Affirmative Action was implemented and much of the hype upon which it was based. I can give you many examples of poor policy, poor placements, program impact resulting from the misuse of Affirmative Action. The diversity "mantra" was partially based upon speculation, emotion, etc. For example, "diverse (gender, race, discipline) teams make better decisions." I found many times the opposite to be true.

As to my program manager issue. When we got approval to proceed with the reorganization of the PNW station, I needed ten program managers. These were new positions and absolutely critical to our success. They were G-14 and G-15 level and presented a rare opportunity to place minorities and women at the higher grades. Leaving out the problem the Forest Service had in understanding those positions (a whole different story), I also got approval to open these positions to everyone, public and private. We sent the lists of highly qualified candidates for each position, with our evaluations, back to the Department for final selection. There were no minorities or women on any list in spite of our substantial Alternative Action recruiting efforts. There were some women applicants, however. Some selections were approved.

Four or five lists were sent back with direction to resubmit with minorities and women included or the jobs would not be filled. I received verbal clarification of what was expected. I had half the

station without management. (ADs and project leaders were gone.) What we did was modify our definition of "highly qualified" (anyone in highly qualified could be accepted), and this resulted in two women moving up and now eligible for appointment. We knew better, especially in one case. As predicted, both women were appointed. The rest is history! Neither one ever came close to performing as program manager.

As I look around at the Forest Service today, especially at the top, I see this sort of thing still going on and I think the ramifications for the agency are significant.

There are some changes. I couldn't believe it when they changed the title of Forest Service Research to R&D. That was nice. I don't think many people still understand what D is. But it takes me back to technology transfer. Technology transfer in the Forest Service conceptually is basically handing off guidebooks, products, physical products, new things. Gadgets and stuff. It's not FEMAT. The biggest technology transfer package in the history of the Forest Service in my opinion is FEMAT. Hundreds and hundreds of science publications in there actually used. Thousands of scientist hours. Whether it's right or wrong, that's actually happening on twenty-two million acres after it was converted to a management plan. But there's no way I could go back to the Washington office and sell that as a technology transfer product. Everybody on that team should have gotten a technology transfer award that we give out. You wouldn't expect large, significant products from a model that does research, research, research, and it shoves out some kind of product that may be used or may not be used.

HKS: My mentor, so to speak, at the station was Jim Trappe. I played cards with him while we ate lunch. I used to take fuel samples down to the lab where he spent a lot of his time. And we were just friends, I mean, he was more experienced and certainly a higher level than I was. He was really disgusted one day. He said, I just went to a meeting where the station director held up the station publications for last year, this stack of papers, two thousand one hundred and fourteen. He said, this is what we've done. Jim said that's not a fair representation of what we've done,.

CP: It certainly would not be in Trappe's case. I mean, that guy was all over. All over. Anywhere he could go help. He's really famous for that.

HKS: I have here three emails.

CP: Okay.

HKS: One from Dale Robertson, one from George Leonard, and one from Jack Thomas. All three are very supportive and complimentary about your tenure in Portland.

CP: Okay.

HKS: There's two parts to this. One deals with the owl and one deals with the reorganization of the station. This is what Dale said. "Charlie was always sort of a maverick in the research

organization. [CP laughs] He frequently expressed opinions that deviated from the general opinion and wisdom of Buckman and crew. I always liked this about Charlie and paid a lot of attention to what he had to say." So did you have any sense of that, when you talked to Dale?

CP: Oh yeah. Oh definitely. When I went back on the final day to get the final go on the reorganization, I started with Dale. And you know what he asked me? He said, who's opposed to this? So I told him. He said, damn it, go do it. [Laughs]

HKS: This is from George Leonard. "Charlie oversaw a complete reorganization of the station, much to the consternation and discomfort of the old line research community."

CP: Yeah, he had that figured out.

HKS: "Charlie streamlined the overhead structure and concentrated more of the budget on solving real world problems facing foresters in the Northwest. He also worked hard to clarify the role of scientists in the public policy arena." And so forth. Is that a fair characterization what you were trying to do?

CP: Yeah. Yeah. I forgot that, I didn't talk about George. And George and I were pretty close. But I think a part of that again was George looking for somebody in Research that was not part of that group. [Laughs]

HKS: Well George is a remarkable guy.

CP: He's a sharp guy. Oh yeah. We didn't always agree, but. I really appreciate the comment on the reorganization because I was never quite sure that he was tracking it that close, but obviously he was. [Laughs]

HKS: It's a little harder to figure out Jack Thomas' two pages. [CP laughs] But I think he liked the reorganization plan. I think he did. What he says is, "Charlie went to an enormous amount of effort upon becoming station director to reorganize the station around a model he developed as his professional paper for SES training." Is that basically an accurate statement?

CP: The professional paper part is right. Actually, I had written on this model in a couple outlets and given many presentations about these concepts going back to the late 1970s. So he was aware that I had thought a lot about this before I got here.

HKS: "The proposal caused a lot of disruption. Some of the old project leaders loved the whole drill; others considered it a colossal waste of time and energy." Is that a…?

CP: The way I used to put it was, we started with a third, a third, and a third. At that meeting I had at the very beginning, I asked people about their willingness to take this on, because we weren't going to do it if they weren't going to support it. Well, a third were gung ho, a third were, okay, I'll do it, and then there was a third in the back of the room, some of them were

standing up, one was Jack Thomas, we'll just wait and see. I think when we were all through there were still a few people that would stand in the back of the room. I don't know if Jack would have. Jack lost a lot, in his head, from the reorganization. Because he was king of LeGrande, had his own agendas going on, very little oversight, and now he's reporting to a program manager. He could handle ADs, you know, because they came and went and all that. And now he had a program manager that actually controlled budgets and products. He didn't relate to that very well.

HKS: Is this an accurate statement? You've already addressed it in part. "The Pacific Northwest Station still operates on that model. No other station nor FS Research as a whole has ever adopted the model. His views on that very expensive experiment would be interesting, at least to those of us that lived through the experience." So the Pacific Northwest Station is the only one that's adopted that model?

CP: Oh yeah. That was part of the deal, that I would not try as a member of the Green Team of station directors, sell this to other stations, that was their business. That this was in fact a PNW station project and it is going to be done here partly to look at it and evaluate it. Other stations came and reviewed it, and the Rocky Mountain Station members came and there was a lot of interest in doing some of it. I used to caution stations not to do just some of it, to be very careful, because here again the whole thing was designed to meet this set of criteria and outcomes, and you just can't take pieces of it. You could still do RD&A programs under the old organizations. Some stations have had them, not very many. You could do RD&A programs, but those are always separate. They're not integral parts of the organization. And I was trying to get away from that also. No, I don't know of any other station.

HKS: Did they adopt bits and pieces of it?

CP: If they did I don't know about it. I know some stations, PSW, they fought the hell out of it. I knew, like I say, I have a lot of networks. Why are they upset and fighting? Well I found out one of the reasons. They didn't have a clue what we were doing. And even if you brief people a lot of times they still didn't hear you. So there was a lot of misrepresentation about it. Jack wasn't on that team, and I don't think he ever bought into it. And by the time it would be important for Jack he was already moving around into other things anyway. I used to tell him in the office, Jack, if you're worried about having to report to a program manager, who are you kidding? You never have reported to anybody. I know that and you know it. Just go do your stuff. But I think it was more of a perception on his part.

[Note added by CP during review of interview transcription: I was recently informed that all [emphasis] experiment stations have converted to Programs from the old research work units!]

HKS: I'm not sure what the correct verb is; the shift to development or the addition of development to research and development. Has that been adopted nationwide?

CP: Yes, the Research branch of the Forest Service has been officially changed to Forest Service Research and Development.

What I think happened was, it was a way to recognize that a lot of the work going on in the Forest Service was in fact development. Not that it's managed that way. It would be important in today's environment, like the funding environment, to be able to tell Congress and others that we are in fact an R&D organization. That we always have been. We're a very applied R&D organization. We may just not have the right structures to do it effectively, and to produce the really important products.

HKS: What's the status, I'll put it this way, here in Portland, of forest economics research? It included Forest Survey, which always struck me as a strange pairing.

CP: Okay. Forest Survey and forest economics and social values are in a research program managed by Richard Haynes out of the Portland lab, which is about four blocks away from the station. In fact one of my other frustrations as station director and associate deputy was to try to get more dollars into economics and social programs. A lot more into them than we had, because that's some of the most important stuff we do. And again it's got this stigma sometimes, that it's not real research, not real science.

Forest Survey

HKS: I know that Forest Survey's been around a long time.

CP: Since '27.

HKS: Why is it in Research? For independence?

CP: I would say independence. I would be really concerned if it was not in Research. If the U.S. Forest Service had a development arm, separate from Research, you would put it in there. But especially because it's private sector lands and so forth, I don't know where else we'd put it. Unless it was totally independent, and that wouldn't be very efficient.

HKS: I worked on it a little bit under contract, on the Fourth Forest project, which got a lot of flack from the industry on projections and timber volumes and all the rest of it, that the industry's still cynical about the purity of Forest Service research. There might be a policy issue driving the numbers or some such thing.

CP: Dan Oswald's a real close friend of mine. We still see each other a lot. He was a project leader for forest survey here for a long time. He had a horrible experience in northern California on the same kind of thing. The survey numbers they ended up with didn't please industry. And because it was in Research, they went ahead and published and were protected. So that's where I would put it. I think there's also been some pretty good science tied to that program. Not as much as I would like but some of the forest statisticians, mensurationists, that came out of that program have done some pretty good work.

HKS: One of the guys I got to know in Forest Survey was John Beuter, who you probably got to know later in life. He had a master's degree and he was in Forest Survey, and he got his Ph.D. and worked in economics research, then he left the agency.

CP: Right.

HKS: Did a variety of things. Including being assistant secretary, or under assistant secretary.

CP: Under, I think it was.

HKS: Yeah, whatever it was. But the Forest Survey people, we played volleyball against them. There were enough of them [CP laughs] they had one team and everyone else made up the other side. And they were a roughneck bunch of people.

CP: Tough guys.

HKS: Yeah. It struck me as a strange group to have in an experiment station because they certainly weren't scientists and didn't see themselves as scientists.

CP: Right. Yeah, that's right. I would call them classic developers.

Green Team and RF&D

HKS: There are some very, very significant policy and science issues. Have we dealt with the reorganization enough right now? You'll probably want to come back to it.

CP: I don't know what else to say about it. It's there, people can see what happened, what didn't happen. In my opinion, personally, I think it was worth doing, because so many other things were brought up and discussed that didn't end up in the reorganization. Everything from the evaluation of people, the kind of people we hired, the relationship with the users, I mean all that stuff needed to be discussed anyway, whether we reorganize or not, and so I think it was a valuable exercise. Jack says "expensive and disruptive," and I would disagree with that, and this I dealt with all the time. Observers said productivity at the station dropped off during those two or three years. It didn't. It went up. Our publication record went up. And stayed ahead of all the other experiment stations all through that period. I briefed people with those numbers, and in one case, and I won't tell you who said it, I was called a liar. That's how bad it got. The Washington officer staffers were convinced that things were so chaotic and disruptive out here that we weren't producing anything. And they are the ones that tracked publications. And our biggest products, in terms of resources, weren't even publications. It was things like FEMAT. You know, threatened and endangered recovery plans, all the other stuff that our scientists were involved in that were never published or came out as research products. What do you do with that? See that's what the consultant warned me. He said that's what going to happen to you. And it did.

HKS: The agency culture's been set more and more.

CP: Oh yeah. I can remember the Green Team meetings. The Green Team is a team I started with another station director when I became station director. The station directors never got together. They'd go back to Washington once a year maybe and sit down with the deputy chief and have a meeting about the Washington office, but not among themselves. So we started a thing called the Green Team. It's still going. Directors a couple times a year would go somewhere and just meet, themselves, with the deputy chief, and talk about station programs.

HKS: This different from RF&D meetings?

CP: Oh yes. Definitely different from RF&D meetings. And one reason it was different was because RF&D meetings to me had become nothing more than a giant, I'll call it a communications group. We're talking about two hundred people. Everybody.

HKS: I didn't realize it was that big.

CP: Oh, they got bigger and bigger and bigger. I used to talk to regional foresters over a beer at night. I said, I don't understand how you guys can come back here and not close the door with the chief and lock it for five hours and talk about what you're going through. I just don't understand that. They eventually got an executive session going. Station directors were in the same position. We'd go back there but never talk about real issues. Like Dale said, I'm a maverick, but everything we've been talking about would be important to me as a director. So we started the Green Team. And I can remember Green Team meetings when we got the reorganization down the road a year or so. They'd bring in staffers to talk about, like the staff directors, and the PNW would come up. We don't know where the money is, we don't know where our scientists are anymore, blah blah, blah blah, blah blah. And we had produced all these documents. I had guys go back and spend weeks with staffs.

HKS: I'm surprised by what you said about the size of those meetings, because no one else has said that, and given the constant scrutiny of Congress on travel, that they could do that four times a year.

CP: What the big change was, they stopped going in the field. RF&D meetings used to, one a year, would go out to a region, which I thought was tremendous. But it was a small group. And probably that's why. But when you had them in Washington, you've got several hundred employees back there and they all want to be at the RF&D meeting.

HKS: So it wasn't people from the regions.

CP: No, no, it was mostly the Washington office. The regional forester might bring a couple of people, All the staff directors were there, all the specialists were there, budget and finance was there, policy analysis was there. Assistant secretary would come over and maybe a few different

people from other agencies. They were huge. And like I said, it became more like somebody would stand up and make a nice presentation. A couple people that had the backbone would ask a question or two. And then on to the next subject. Here's an agency headed toward massive change begun in the Northwest. And there is no mechanism for top level, executive discussions of strategy development. To me a lot of the reason for this is, it was more comfortable not to do it. Perhaps this was one reason so many employee felt the agency had lost its direction?

HKS: I distracted you from the directors' meetings, because I'd never heard of that before.

CP: Yeah. They're called the Green Team, and the Green Team came from an exercise we did at the first meeting, which I believe was at Point Reyes, California. We had a facilitator there to kind of get the directors to talk about how they want to run these meetings and how would they organize them and what issues and so forth. They ended up with three alternatives, and one was green magic marker, one was purple, one was black. We took the green ones. [Laughs] It became the Green Team. And it was the station directors, staff directors, deputy chief and associates. I thought they were very effective, especially if you remember up to that point, station directors other than phone calls really didn't spend any of what I would call executive time together. They just didn't do it. Which was unfortunate.

Chain of Command and the Other Disciplines

HKS: Do station directors in general report to the deputy chief? Officially?

CP: Officially they report to the chief. Operationally they report to the deputy.

HKS: So the deputy really gets a lot of implied authority?

CP: Oh yeah, and a lot of it would be because his staff runs the budget process for example. His staff does station evaluations. You know, they're not inspections anymore, but reviews. It's not a bad way to do business, if the deputy chief is the right kind of person. When you do performances ratings with station directors the deputy chief is not in the room, but the deputy chief writes up a package that the chief has there. He may or may use it. In fact I know he uses it. In my case sometimes there were serious conflicts between the deputy chief's comments about me, or the station-- it wasn't just me-- and the chief. Which I always thought was fascinating. [Laughs]

HKS: I was surprised when I interviewed Dick Dickerman. After World War Two he was a civilian still in Europe working on some war projects, civilian rehabilitation and so forth. And he got a call from Lyle Watts, the chief, to come back to be, I guess station director in Minneapolis, wherever the Lake States Station is.

CP: The Lake States, yeah.

HKS: He eventually came back and Lyle Watts told him to do this, this, and this, and I said, where's the deputy chief? Well, I had assumed the deputy chief had done the briefing, but the chief himself sat down with him. Is that generally what happens even today?

CP: No. In fact today, unless things have changed, I would say at least half of the station directors never deal with the chief at all, period, except during their performance rating. There are other station directors, and I was one of them, that spent a lot of time in the chief's office, but part of that was because of what we were going through. Not the reorganization but I mean the issue stuff. It just became important for myself and that regional forester for example to meet with the chief because of what we were going through.

One of the big changes that I didn't mention during my career, and this is one that I don't think people grasp sometimes, is that in my early days in the career if you went to court, the agency could make a statement, we know of no evidence that there's an impact from this strategy. When the Forest Management Act passed, around that time, the courts shifted and now it became, if you can't show evidence that there's no impact, you can't proceed. Which is another reason science and scientists have been dragged into so many court cases and policy questions. Big shift there. The other big change, when I mentioned the wildlife program goes from smallest to the biggest. The big connection with policy is another one. The, and this is a more long-term thing, the disciplinary changes. There are less retreaded foresters today than there used to be. More true disciplinary people, outside of forestry. That's a change. That happened in National Forest Systems too, because of planning, which started it, and affirmative action helped it. Probably in Research too.

HKS: George Leonard said women are easier to manage than the other disciplines. He thought it was very difficult for the Forest Service to handle the NEPA directed interdisciplinary stuff.

CP: Oh yeah.

HKS: Biologists didn't really care about timber supply.

Forestry's Myths and Legends

CP: That's another interesting subject. In fact, if I ever wrote a book-- I've talked to some people who might want to help me do this-- it would be about forestry and its inadequacies in terms in current and future resource management questions. It's a big problem for a geologist, a soil scientist, a botanist, a social scientist, coming into National Forest Systems if in fact he's surrounded by forestry graduates, and I'm one of them, who really have very tight consistent view of forests that we learned in school. We all learned the same thing, I don't care what school you went to. And it's very hard sometimes to see a different view of the forest.

HKS: We always used the McGraw Hill forestry series. We all spoke the same.

CP: Right. And all this stuff about, you know, our mission in the world is to convert natural forests and old growth or whatever into managed stands. Short rotations. Sustained yield. Producing wood. That's real. And it still goes on. And then you'd have an agency that's primarily managed by that profession. And the forestry schools are all consistent, I don't care where you go to forestry school. Today too. My concern is, and I look for these people, we're producing foresters still that don't understand forests. They take almost no forest ecology that I would call adequate, social sciences, all the things they're going to deal with. It's hard for them to get outside of the stand level of thinking and planning.

On top of that there's a whole series of what I call myths and legends in the forestry profession, and that controls a lot of things. What questions you ask when you do research, how you look at policy, how you look at management strategies, there's a whole series there. I'll never forget when I got here and I started to hear-- of course I knew the story-- that Douglas fir is shade-intolerant. So you have to clearcut it. That's an example to me of a myth. I remember being on a field trip, just got out here, and a professor from one of our illustrious forestry schools is standing in shoulder high regeneration in a closed overstory of Douglas fir. Making that statement. Now if I'd been a little ornerier and not a new guy--Where'd the regeneration come from? So it's that kind of thing. It's the one type of fire cycle in Douglas fir; there's a whole bunch of different fire cycles in the northwest. I still hear young foresters coming out of forestry school talking that way, when they should know better because the science says there's a lot more to it than that. In some of our old growth stands in the northwest, we had periodic fire cycles. I've been in stands that had a hundred and twenty years, three forty, five seventy, seven fifty year age classes in the same stand, that didn't have any kind of a catastrophic fire that stripped off a landscape and started a new stand. But we tend still as foresters to say that's the way it was, everywhere. And it was not that way at all. Only sometimes.

I found a reinforcement of that in another legend. On another field trip I was down in the Willamette National Forest, and we went to look at this fire and there's this whole watershed just burned clean. The guy was giving the story-- there were a lot of different people there-- that that's the typical fire cycle in Douglas fir and that's why we clearcut it and so on. Because it mimics that. I did raise my hand that time. I said, how old was this stand. He said seventeen years. I said, what kind of fire would you expect in seventeen-year-old Douglas fir on four foot spacing? Nothing natural about that. [Laughs] But it would be a fun book to write. I've got a whole file drawer of these examples of forestry myths and legends that I think get in the way of foresters. The problem I have with it, and my wife's pointed this out many times, it would take a lot of research support to do that well, and some really good professional help, and on and on. I'm going to step on some toes, especially the forestry schools. Because I don't think many of them have changed very much.

HKS: When you read the letters sent to the *Journal of Forestry* you can see there's a lot of people still talking the way we talked thirty years ago.

CP: I resigned from the society twice. The first time was in, it would have been '65, before I moved to Missoula. I and a guy I worked with started the Riverside/San Bernardino chapter of

the Society of American Foresters. And we tried to get them to do a symposium on fire effects, which is what we called fire ecology then, because that was a safe way to talk about them, because 'effects' was negative. It was against, quote SAF policy to do that. So I looked around and discovered the Society of American Foresters was nothing more than a whole bunch of folks from my agency regurgitating agency policy, when it was being sold to me as a professional organization. So I resigned. Okay. Then when I got up here to the station I got beat up really bad because I wasn't in SAF. So I joined again. About two years later the SAF section in Washington produced a tape about the spotted owl that was absolutely scientifically incompetent. In fact the regional forester reviewed it with me and he was just madder than hell. Not a scientist. We talked to the national headquarters: you've got to get that thing out of circulation. It needs to be [makes throat-slitting noise]. Well we can't do that. That's the section's decision, so we let it stand. We both resigned. [Laughs] To me that represents how powerful that whole, I guess it's another use of the word paradigm, is, called forestry.

HKS: It seems to me that the SAF, the presidents, the elected person, not the guy in Washington, alternate from dinosaurs to visionaries every other year. Look at the statements coming out. It's just incredible. The next year it goes the other way.

CP: Another example I really enjoyed. Just after I retired I was sent back to the eleventh International Forestry Congress by the University of Washington to kind of represent them. I don't know how often we've had these congresses, but they must be every fifteen, twenty years, and there's been ten or eleven of them. But anyway, all these foresters get into this room and they break down into groups for workshops. In one of the workshops I had two feds, I had a fourteen year old girl who was home schooled up in Estacada that was one of two students that got invited. It was kind of an honor. And her mom. The rest were private sector foresters from the South and a couple from the West.

We got talking about forestry and forest management and the impact of some of the federal laws on foresters, such as the endangered species act. I said, you know, everybody talks about the federal endangered species act, but that's not the big constraint. It's the viability requirements of the Forest Management Act. Far more constraining. Oh yeah, yeah, okay, maybe. And so we were going to help write a set of forestry principles that would come out of the congress. When discussing one of the principles, the foresters said on private land they could live with species viability requirements. I looked and said, how can you make that statement? You couldn't possibility. You couldn't cut anything, [Laughs] what are you talking about? It turned out they didn't even know what it was. I mean they really didn't know what species viability was all about. Yet here they are, all embroiled in these big environmental challenges and court cases and issues. Oh man. I think what I found out though is when they said species viability they meant some animals, and still in 1996 wildlife to them was game. Which is what I learned in forestry school. Every time the word wildlife was used in my forestry school, it was game.

HKS: This is your interview, [CP laughs] but let me make yet another observation. The only person I know, and I respect him a lot, who has a positive view of forestry in terms of where it's going now, is Al Sample, head of the Pinchot Institute. Super bright guy, a policy wonk type. He

sees forestry as having something to contribute, where Dale Robertson said forestry's lost its chance, it's no longer the lead profession.

CP: I was talking about that with Dale and I had to agree with him in the context of our discussions was that forestry really should become a support profession like engineering for national forest management, and that we really ought to be looking for ecosystem-level intelligence and training for management positions. And that when you get to a traditional forestry question like a silvicultural prescription, a mensuration question, spacing calculations, whatever, you go to a forester, because that's what they're really trained to do. So I kind of agree with that. Now I don't know where Al Sample is coming from but I just have a sense, and like I say I'm not that close other than I still read some things, that foresters really still are not prepared to even understand some of these resource questions and requirements.

HKS: I'll throw a little bit of me in here. The Society of American Foresters has studied forestry education. Major studies, starting about 1915 and on. So I want to say two things. The first one said that one of the major problems that forestry has is the kind of people who are attracted to forestry. [CP laughs] They are hard-working and so forth, but they are not leaders. They want to live in the woods.

CP They really want to be foresters. [Laughs]

HKS: They don't want to do the policy stuff. Forestry does not attract people of leadership stature. There's some very good foresters and we're not discounting that, but by and large foresters are ill-prepared, by choice. Then let's get to 1963.

CP: Okay

HKS: Society of American Foresters was going to do another study on forestry education. It never happened. And the Society of American Foresters records are held by the Forest History Society where I was.

CP: Oh. Okay.

HKS: So I would go down and look at these files.

CP: Okay.

HKS: And in 1963 there was a push made by someone in SAF to endorse, in terms of accreditation procedures, what they were calling multiple use forestry. Ecosystem management wasn't even a concept then, but it really was the germ of ecosystem management.

CP: Yeah. The beginning.

HKS: It's interesting to read the correspondence that came in from the field. The policy proposal

to adopt multiple use forestry, and the foresters voted ten to one against it. That was their last chance to get ahead of the curve. 1963. *Silent Spring* was published in 1962.

CP: Yep. '63.

HKS: Before I was holding forth, you were talking about forestry itself as integral to the whole process.

CP: I want to mention one more thing that I worked on while I was director. I went to Australia twice, with the social scientists I already mentioned, to look at reorganization of the forestry commissions in five states. It goes back to this whole thing again about the forester and forestry paradigm. The forestry commissions in Australia were modeled after the U.S. Forest Service and they all started around 1918, '19. The multiple-use idea, foresters, public lands. They had very little oversight up through the '70s. There really wasn't a green movement in Australia until late '70s, '80s, and so on. And up till the time I'm going to tell you about they pretty well ran their forests the way the Forest Service ran its forests in the '40s and '50s. Commodity production, recreational uses were not really important; wildlife was low priority, I guess. But anyway, the Australian states have the control, the authority for most issues in Australia, so these were all state agencies.

We went over there after they were all literally, in a very short time, dissolved. We went to some district rangers in some of the states where they showed us how they had come to work Monday morning and half their land had been moved to something else– parks, wilderness. Some were absorbed in the new organizations, multi-agency organizations. There were five or six different ways this was handled. And it all happened, because they have a parliamentary system, very quickly. Bam. But what was interesting to us was that the reaction to it was very similar to what we've been talking about. If these people knew more about what we were doing, you know, we'd get through this, on and on and on. We went out one day and looked over this cliff at a forest, beautiful forest that had been partly harvested, and up on top and way off there was about two hundred thousand acres of multi-use forest that had been moved over to what we would call wilderness. Not quite the same but pretty close. This was driven by threatened and endangered species and a whole bunch of issues that just all came together at once. And the attitude of the foresters was, we'll show them, we're just going to harvest right up to that line. Like, did you guys hear any of this? [Laughs]

That's another book that we may try to get out, is these five different ways of dealing with this issue organizationally, and which one of them might actually ever happen here in the United States or how could it happen here. It's much more difficult to see that happening fast. But it's always a risk. Dale used to talk about it a little bit. You know, a department of natural resources (all federal resource agencies) or some other thing to replace National Forest Systems. In fact he used to say it in meetings. You know, national forests do not need National Forest Systems. They could be somewhere else. But I would love to see Sample, has he written anything? What's he so excited about?

HKS: I gave up full-time work in 1997, and I was made a senior fellow at the Pinchot Institute. And because of that I was on the mailing list. I edited the Pinchot diaries, I did some stuff like that, so I got to know Al, I attended some of their board meetings. They were interested in my views because I had managed a non-profit and had to raise money in the same climate, the same kind of donors they have, so we shared experiences. That sort of thing. And I was impressed with what they're trying to do. He seems to be very successful getting money from the Forest Service. The Forest Service wants to be sure the credibility is there so they have outside groups make a range of studies. But when he writes, he's upbeat about the future of forestry, and I just don't think that's true.

CP: Well in this study we've been doing, forestry has been almost eliminated in Australia as we know it. In Victoria, Australia, in the forest commission, you are not allowed to use the word in a job title. I mean, that's the backlash they got from the public through this parliamentary process. We've seen a decline in other countries. I mean there's a lot of places around the world where forestry, the way we've been talking about forestry, is in decline.

HKS: I was adjunct prof at Duke for fifteen years, and we went from the School of Forestry and Environmental Studies to the School of Environment, and there was a major shift in the kinds of students. The SAT scores jumped way up. As soon as you dropped the word forestry we got better students. It doesn't mean they're better people.

CP: No no no. That's right.

HKS: And I taught a course called Forest and Conservation History. Well I was asked by the dean to drop the word forest from my course description, because the students didn't want to have the word forest on their transcript. They felt that would lessen their ability to be hired. They were interested in forests, but they didn't want to be portrayed as foresters. They wanted to be ecologists or something.

CP: Something broader.

HKS: You can work for EPA, you can work for anyone. And forests was restrictive. And I thought, that's interesting that twenty-five year old kids or twenty-three year old kids working on a master's degree in environmental management have that perspective.

CP: See, that's consistent though. I've seen other cases. There were interesting reactions to the president's forest plan. In that plan there are large areas that are called habitat conservation areas. They either today have old growth or in a hundred and fifty years they will have old growth. A lot of foresters in the northwest will tell you, they're all just lines around old growth. That's not even close. But they're designed to be managed over the next hundred and fifty years so that at some point they will be what we'll call old growth stands, stands that will have characteristics of old growth, so that spotted owls and other things can move their genetics around et cetera. If you read the forest plan it's very clear to me, it was to FEMAT, that these areas are to be managed. And in fact if you understand the plan they might require some of the most sophisticated resource

management ever devised. I mean, how do you manage for fresh water clams? That's in there. As soon as that plan came out I started to go to briefings of National Forest Systems people that had to implement it. And the HCAs were primarily referred to as set-asides and wilderness. To me that's an indication of how serious this paradigm really is.

Another example: I argued and argued and argued with some other folks for years and years and years that the only really professional way to sell reintroduction of fire and fuels management was because of the ecosystem relationships and the ecosystem management aspects of fire, especially in western forests. Turns out it's a lot of other forests too. And not [emphasis] convert it to a salvage, thinning, commodity production program, which is exactly what they're doing. Because if you do that the environmentalists, who are really all on your side this time, are going to fight you. Which is what we're going through now in the northwest. The proposals for thinning, salvage logging, and all that should be basically talking about, they're going to reintroduce fire, where it's appropriate, into these stands because of the relationship between fire and succession and animals, processes and functions. But I think the excitement of the agency didn't really get very high until it became more we're going to sell small wood to products producers and that sort of thing. And that's where they are now today, and unfortunately that's what Bush's people are running with. They're completely missing the point, they don't really care much about the ecosystem management aspects of reintroducing fire. I think that's another example, if there'd been a different kind of professional base in the agency, that ecosystem side would not have been left out. Because it probably in the West is going to be the key part of ecosystem management.

HKS: Both Mike Dombeck and Jack Thomas made the same kind of rather angry or at least disgusted statement about points in their career. Both are wildlife biologists.

CP: Right.

HKS: They would go to a meeting and the chief of the Forest Service would stand up there and talk about wildlife as a constraint to multiple use.

CP: Oh absolutely.

HKS: A constraint. [emphasis] Wilderness is a constraint. What they thought then I'm not sure, but they looked back at it and said, that's why we're in this mess today, because all these things we have to do now are constraints on timber production.

CP: They're constraints. Absolutely. The first thing we heard about the Northwest Forest Plan is that it's a constraint on all these other things we're going to do. And you say, did you read the first sentence. It had to be legal. All these other things you're going to do are not legal any more. And one of the problems that National Forest Systems has, I think, in their management structure, they do not read case law. And that's what happened to me down in California with that advisory group. Finally one day, I said, did this planning team read case law on species viability for example? No. That's where your guidance is. That's where the interpretation of the

law is. Whether you agree with it or not has nothing to do with it, actually. But you're going to have to do that. And you know, I'd just shake my head.

The other one, and I think Jack would say the same thing, and so would Dombeck, I betcha, is that ever since the Wilderness Act passed, which clearly says on the first page, wilderness is a resource, we have always considered it a use. Big difference. Big difference. So you study wilderness as a use, and that's why you got into these programs of social scientists looking at impacts of people on trails and campsites, and so on. If wilderness was a resource you would manage wilderness for resource criteria, not recreation criteria. I don't know if that's changed or not. I haven't heard people talk much about wilderness lately, but I know when I retired it was still people talking about, this use. By law it's not. But I think that's a difficult concept for some people, to know that there's a difference there.

HKS: Well I'm not sure who these people are, how to categorize or put a label on them, but any stream that reaches the ocean without going through a dam is water that's been wasted. [CP laughs] It's the same idea.

CP: It's the same idea, yeah. We're going through the same thing right now. They want to salvage log the Biscuit Fire, part of it, and the environmentalists are getting all the science they can find that says, for long-term recovery of the ecosystem you don't want to do that. Whether they're right or wrong, they're doing that. And the agency is giving the impression, at least in the press, they're citing what industry's saying, all those trees are going to waste. I mean, nothing goes to waste. That's a bad word to use in the first place.

HKS: And they attract insects. And they do.

CP: And they do all these bad things. And they might burn again too. Yep. They might.

HKS: I've always been intrigued by the notion that the government, that has the capacity, much more than the private sector, of taking risks, doesn't take risks. [CP laughs through all of the following] That's why we burn slash, no matter what. But the private sector took that risk all the time and was rewarded with vigorous stands of natural regeneration. The government won't take risks.

CP: That's an interesting statement. Yeah. I hadn't thought of it that way. Oh boy. Okay.

Robertson to Dombeck

I think the station was involved a little bit because we were watching what was going on with Dale and George when the department basically came in and took over the spotted owl stuff, which normally would have been under the regional forester and chief. And then when FEMAT started, what's his name?

HKS: Jim Lyons?

CP: Lyons (assistant secretary of Agriculture) practically lived out here and worked with the team directly. We'd been in progress here about maybe thirty days on FEMAT out of the ninety. Dale came to visit the team up in the thirtieth floor of that big building, and he came up and wandered through. I mean Lyons and a couple people with him just treated him like crap. We'd never seen a chief treated that way. It was gross. And Jack was just appalled. We hadn't realized it quite that way, but we realized at that point that the chief of the Forest Service had no idea what was going on in that building. Completely cut out of it. Which is really stupid, primarily because at some point you're going to implement this, and if you don't have the whole Forest Service behind it it's going to be a hell of a bad implementation, part of which actually happened. We saw more and more of that, just basically shoved him out the door, with no explanation to the troops and so on and so forth.

HKS: What I recall Dale saying, and I haven't checked with his interview to see what he really said, but the secretary took the owl away from him to protect the chief. There was no way the agency could take what was about to come down, and only the secretary had the clout. Now that's what Dale said.

CP: Now that is fascinating, because the words that they used all the time about Dale were just gross. You know, it's his fault we're in this problem to start with, and on and on. That was part of that Lyons style, I think it was more of a game plan, to cut out as much of the management structure of the Forest Service as he could possibly get away with and shove this stuff out the door and get credit for it. But Dale didn't give you any sense that he was bitter or anything like that?

HKS: Oh yeah.

CP: Okay.

HKS: He knows, as a human being, that bitterness is not good for you. You've got to put it behind you and go on with your life. He spent quite a bit of time in the interview talking about how he has put his life back together. It was a humiliation and an embarrassment.

CP: That's the word. That's the word I'm looking for.

HKS: You could see it in his face. He was kidding himself; he still hadn't put it behind him, but he was making every effort to because being bitter didn't help anything and it hurt him. His health and whatever. So he wanted to put that behind him. George Leonard talked about it, and he was more philosophical, but he wasn't in the direct line of fire. He was swept away with other stuff.

CP: Right. But it was crystal clear what they were doing to Dale, and it was totally unnecessary and inappropriate.

HKS: Right. Dale said they just, they didn't know how to handle it, they meaning Lyons and company, they didn't know how to handle it and it got very personal and sloppy.

CP: Okay. That's fair. Yeah.

HKS: Rather than just asking him to resign. I mean Espy going up the Hill and saying we're going to fire the chief, and Dale hadn't even met him.

CP: That's right.

HKS: So Espy was part of the problem?

CP: Yep. Yep. I just wondered about that. How Dale is doing with that whole thing.

HKS: Well as long as we're talking about this. This happened after you retired. The only information I have is from Mike Dombeck when I interviewed him. And interviews are always suspect, when people are telling about something their memories play tricks and all the rest. I'm not disagreeing with anything Mike said, but I'm just saying what he said. He was director of BLM and he saw all this over in the Forest Service, and everyone is mad at Jack. Congress didn't like him and the White House didn't like him and all this stuff. And when Dan Glickman and Jim Lyons kept talking to Mike about would he come over as chief, he had almost a year to think about it, and then they had private conversations. He didn't share much with me on what they promised him. But he made them promise certain things, like personnel jurisdiction, except for Senior Executive Service, and they were not to get involved in it. And apparently they agreed in writing.

CP: But they didn't do it.

HKS: Yeah.

CP: I can tell you that.

HKS: All sorts of things.

CP: Yeah.

HKS: Jack retires in early December. And then they waited to make sure that Dan Glickman was still going to be secretary, so it wasn't until January that Mike was asked to be chief. Like January 6th or some date like that. He came in, he sent emails to RF&D and he had phone calls and they had meetings and so forth. Mike said, we have to get on top of all this. The press doesn't like us. Nobody likes the Forest Service. We have no friends anymore. What are we going to do? And I want your advice, mister regional forester, mister station director and so forth. And he got this feedback from the field. Lyons had been on Gray Reynolds' and Mark Reimer's

case for a couple of years, trying to get them fired. And I'm not sure of the reasons why, but he just didn't like what they represented, I guess. Jack Thomas kept saying, you can't do that, I'll resign and publicly disavow this. Stay out of my thing. A month after Jack was gone, Reimers and Gray Reynolds were no more. I mean, they went out quickly. Another person who went out, I knew it but it didn't register, was Jerry Sesco. He was reassigned as special advisor or something to the chief.

CP: Right. One reason, especially for Reimers, was that they were somewhat outspoken and had strong congressional links.

Shake-up in Research

HKS: And they brought in Robert Lewis.

CP: Right.

HKS: Okay. So I asked Mike, I know about Reimers and Reynolds. But what was Research doing that merited this? Because Mike was himself involved in those reassignments. He said, that came out of the RF&D feedback, that Research had lost its direction. There was no leadership to Research, and we needed leadership..

CP: Go ahead.

HKS: I'm just saying what Mike told me. So he moved Jerry over, and it didn't take very long for him to retire.

CP: Yeah.

HKS: Well Jerry was on our list of people to be interviewed in this series, but he's still so bitter. He refused even to talk to us directly, to say no, he wouldn't be interviewed. He uses one of his former secretaries back in Washington for communicating with outsiders like me.

CP: All right. All right.

HKS: Unlisted phone number and secret address. At least Dale is trying get around his bitterness. Jerry is not..

CP: Oh yeah, yeah, yeah.

HKS: What was going on in Forest Service Research? It was during your time; you're still active. If you had still been there two years later, when Mike became chief, what would you have said needed to be done? I mean, was Jerry's leadership that ineffective?

CP: Yeah, that's interesting. I talked to Jerry after that happened. I was in his office, and he put on a good show for about twenty minutes, then he just kind of came apart. He had this special job, and in fact he was kind of trying to ask me to help him. It was a strategy plan of some kind he thought I could help him with. I wasn't interested. It was after I retired.

I do know a couple things. I do know there were some regional foresters that were very upset that other stations were not doing what the PNW was doing. Every time they met, the regional forester from here, no matter what hell they were going through, Butruille especially, complimented the station. And that didn't happen in our history very much. Regional foresters generally didn't do that. And that could be part of what was going on. That they got feedback that Jerry was in fact getting in the way of these kinds of changes at other locations. Because I can remember going to meetings with regional foresters talking about some of this stuff, and they'd be telling me, I just wish we had you guys in our region.

HKS: Because they like the development of R&D?

CP: We were involved in all these big major things. Every time they turned around, whether it was salmon, steelhead, spotted owl, the PNW station is doing it, you know, helping somehow. Also after the forest plan came out, we had a bunch of scientists, and I didn't particularly support this because I felt the regional office had their own staffs to do this, but they kept doing the old stuff and the researchers came in on details and there was a lot of that got around. That here it was scientists running the regional office helping to write strategies and plans. Okay.

But Jerry had another history that is very serious, and it has to do with inappropriate personal behavior. And some of that got out, I know, and there may have even been a number of directors that would have made comments that were negative of Jerry because of that history. This is part of the reason why Sesco became deputy chief. You'll love this. Jerry was director at southeast station. Deputy Chief Lamar Beasley was having similar behavioral lapses. I wanted to get out of Washington but I wasn't making a big deal out of it. Dale and George knew I wanted to, I was burning out. Lamar Beasley, me, Jerry. There's two more people—Jim Overbay and my PNW predecessor. So Dale and George put us in a room and said, here's what we're going to do. We're going to move Jerry in as deputy chief, because Philpot doesn't want it. He's going out to the PNW station. You're going out to the northwest, there's a lot of issues you can jump right into, the spotted owl and all. And Lamar Beasley is going to go down and be director of the Southeast Station. That's how they handled those two very serious missteps.

I had some good relations with Jerry; I also had some really tough times with Jerry. One of the things I had a real problem with, and my employees had a problem with it, is that he'd give these unbelievable, passionate speeches about women's rights, and the role of women, and women in the workforce, and respect of women. But there are no secrets in an agency, and our employees knew of these other things, and they just thought that was so hypocritical. So there was a credibility thing. That's all I can offer about why Jerry was moved out, because I don't think things were in that bad shape. Because what they replaced Jerry with was not a solution.

You know, part of it might just be my memory. I know it happened, because I found out that Jerry had this other job, and I went out of my way to go see him. And here he was up in the tower in this little office and he didn't even have a secretary. And he put on, like I said, I've got this great thing to do, and then finally he just kind of collapsed. And I don't remember what he told me happened.

Gray Reynolds I think would have been a real problem because in spite of his language and his rhetoric, was a commodity guy. Reimers was too, and I think that would have been enough. Lyons was trying to get as many green people up there at the top as they could possibly jam in there, and I think that would be my guess. Reimers also worked the Hill a lot. A lot. I mean, I know that guy got calls direct from the Hill. Not just staffers either, and a lot of that was to challenge the president. There's no secrets on the Hill either. And Jim Lyons had an advantage in that he knew a lot of staffers on the Hill, he kept those networks, and if you went up there and started arguing for more money he would know about it compared to other assistant secretaries that had no ties to the Hill at all, and wouldn't know about it. I mean, it was easy to get around Crowell on the Hill, because he didn't have a clue about the Hill. And the guy who took his place, Cutler, he was the same way. So naive about the process and the linkages you could have outside of the administration. You could play a lot of games. Lyons was very different. He had a lot of contacts up there. He knew who was up there.

HKS: Lyons kept a journal too, and he's writing a book. And I thought, this would be fascinating, because there's so much [CP laughs] in Jack Thomas' journal that is very uncomplimentary to Lyons.

CP: Yeah. That would be fascinating. That's interesting.

HKS: That would explain the suddenness and all. I can see why Mike didn't feel he needed to wait.

CP: You just triggered thoughts about Alaska. There is another contribution that I think I made that I do get credit for occasionally. The planning team in Region Ten couldn't get through the courts on the Tongass National Forest Plan. I proposed the region and station put together an integrated planning team with scientists on it, co-managed by myself and Phil Janik, the regional forester. Never been done before. Station director and regional forester. And they came out with a hell of a product. And a whole bunch of things in Region Ten: cooked books, misrepresentation of science, I mean it's a horror story, went out the window. With great effort. We almost had fist fights with some of the long time staffers up there. It was just gross. Phil was right in there protecting Research right to the bitter end. He said some really neat things about it. That took about five years. One of my fisheries scientists was our team leader. Tremendous guy, Fred Everest. Fisheries biologist. Turned a lot of stuff around in National Forest Systems in the fisheries business, by making them be honest. But it was quite an experience for him. Phil was a fascinating guy. We had a hell of a great relationship. He made some really important changes in Alaska. Really important.

Situation as Station Director

HKS:I want to follow up on one thing you said when you were describing what you thought was Jerry Sesco's situation and why he was transferred out of management responsibility. As I recall, Dale brought you into his office and said here's what we're going to do.

CP: Dale and George both.

HKS: Okay. That you're going to go to Portland.

CP: Um hum.

HKS: Okay. And did you say, instead of becoming deputy chief? You were associate deputy chief. In line to be deputy?

CP: Yeah, I'm sure I was.

HKS: Okay.

CP: But I had made it real clear to Dale at that point, probably in some subtle ways but probably pretty direct, that I did not want to do that. Did not want to stay in Washington. And I don't think there would have been any other place to put me at that point. With the one possibility that Dale and George had thought about moving me over to National Forest Systems or policy analysis, or one of the other non-research branches. That came up many times when I was in Washington, from various places. Discussions like that with other staff directors. Would you like to come over and change your career path a little bit? Do some things with National Forest Systems or some other part of the Forest Service. So at that point, unless something like that had come up, I pretty well had assumed that I would be asked to be deputy chief. A job I did not want at that point.

HKS: Why not?

CP: I was very tired. I did not have the energy to try to implement the changes in Forest Service Research that I believed needed to be done. There's probably no way I could handle that situation personally.

HKS: Okay.

CP: In my opinion, and in some other people's opinion at the time, I was already doing the job in many respects, and was probably one of the frictions I had with Jerry Sesco. People would look at me. [Laughs] I hate to talk about myself, but people would look at me at the RF&D meetings instead of the deputy chief. Same thing at Green Team meetings. And I didn't like that and it happened all the time, because I was always ready to take on something for the future, or a new initiative. I was not very conservative about stuff like that. I was a firm believer in strategic

planning for large organizations, and I used to make speeches about the chaos we deal with is partly due to the fact that we don't really know and agree on where we want to go next. And you can't do that just by a few conversations. There were some big issues in Research, they're still there, about how much science we ought to be doing, what's the role of development, all those things, really big issues and discussions that were just starting to occur, usually because I stimulated them, not because the deputy chief did. And I know that was a problem with Jerry and me, one of our frictions. He would never say it and I would never say it, but I just knew. I could read his mannerisms and actions around me. And so I think he found that very frustrating. So I think as associate deputy I was taking leadership roles in the budget, I was taking leadership roles in personnel action and other things, anyway.

I don't think my becoming deputy would have been a good idea from other respects. I think some of the things I wanted to change in Research would have just been overwhelming at that point. I didn't have the right directors to work with. A couple were good at their jobs; some were not. One of the things that used to drive me crazy in Research was, you could be a station director and just literally sit on the status quo. You know, don't ever think about something new or something different. Don't deal with poor performers or whatever. I'd been there four years, that's a long time for somebody like me to be in Washington. Washington is a very grueling place, if you do your job. I mean you work more than full-time, lots of travel, everything has to be done with networks and lots of different ties, if you want to get it successfully done. It's not a one on one place at all.

HKS: The amount of traveling you guys did. I'm not much of a traveler.

CP: I don't generally mind traveling, but it gets to the point where you're away from home three weeks out of every four. And that's what was happening to me in the acid rain program. I think one year I gave, I can't remember the number, seventy formal presentations around the United States and in Europe about that program. It was unbelievable. What was also an impact, I still had my associate deputy chief job to do, which was nothing to do with acid rain. I had half the research program under me for the whole organization. And I took that pretty seriously. Some associate deputy chiefs don't. My replacement didn't. That's what's interesting about the Forest Service and probably a lot of bureaucracies. You can do your job a whole bunch of different ways and still be doing your job. In some way that's probably good, because it suggests there's a freedom and flexibility and breadth to the possibilities, but on the other hand it can also mean you can just sort of sit there and keep everything together.

Then the Forest Service went through another change during my career, of what I would call strong line decision processes being converted to committee task force kinds of processes, where lots and lots of people were involved in everything. Which requires meetings. And lots of meetings. To reach a conclusion, or too often no [emphasis] conclusion.

HKS: Would you have been as agreeable if you were transferred to the station in Asheville instead?

CP: No, and I think Dale read this all along. I had a chance to go to Asheville, before I went to Washington. I didn't go. That would have been okay, it turns out. It just didn't happen. But I would have had no interest in several stations, from where I was. I did have an interest in the PNW station. It was a good station. It had a good reputation. It was large. The biggest. I was predicting, sometimes in writing, what was going to happen in the northwest. It's another side of that reorganization thing. I don't think the station would have played the roles it played in the '90s and late '80s on some of these big issues that you've got there if they had not changed a lot of things on how they were organized and how they looked at problems and that sort of stuff. When I got to the station, a sort of side thing, what I found was nine field locations. Almost independent of each other. Not just the disciplinary separations, but location separations. I said at the very beginning, these are things that are coming down the road that we're going to get involved in. No way you're going to get out of it. These are science-based issues. And we cannot do that with nine independent experiment locations.

HKS: I thought the creation of ADs was to deal with that.

CP: Right.

HKS: But it still didn't deal with that?

CP: No. It's another example of a position that, if you had the right person in those positions that could be solved partially. There's other barriers. But if you have an AD that's just almost an administrative coordinator in the sense that they make sure that the units are funded and they level money and spread money, and again, protect the status quo and make things work at the status quo level, they're still good ADs. You know.

HKS: Is it in part because of an institutional tendency to see it as a reward for a successful career, and this is a high three situation that gives increased retirement benefits?

CP: The ADs?

HKS: Yeah.

CP: Possibly. ADs are a mixed bag. Good scientists can make as much or more than ADs. But there are many GS 15 ADs that would never reach that level as practicing scientists.

HKS: Okay.

Managing Science and Scientists

CP: This gets pretty hairy, but I think the history of Forest Service research, if you looked at administrators, station directors, and assistant directors and staff directors and staff specialists, they're not, as a rule, the cream of the crop. They're not the best scientists. They're not the best

thinkers. They're not the best decision makers that we could have in those positions, and lots of folks move into those positions because they're not terribly successful at science. And that isn't necessarily bad if they're good, I'm going to call them administrators, because administrators are different to me than managers, and some of them could be very good managers. But they would tend to shy away from the technical evaluations that they should be doing about their programs. And project leaders take advantage of that isolation and become decentralized control points, many times I think beyond their authority and their position descriptions. So in a sense they're not reporting to anybody in the line direction sense. Some people say that's good for research. I think it can be good for research. I think you can do both.

One of the things I found out when I got involved with the research programs, in EPA especially, a massive program, Fish and Wildlife Service, and NOAA are other examples, was the different quality of their managers. Technically. I mean, these were people I worked with in those agencies that could walk into a chemistry lab and ask basic chemistry questions, if chemistry was in their responsibility. Wildlife questions, whatever, genetics, it didn't matter. That was a big difference between the two organizations. Not to say we didn't have people like that, because we did. That gets into the whole question about the quality of the research program over time, and how it's viewed by outsiders, and how credible it is as a science program.

There were some real eye-openers when I got over there. One of the things I found out real quick, was that by law, EPA cannot use Forest Service in-house publications. The station papers and the station notes, which many of us published in. They're not considered peer-reviewed science. By law, EPA cannot use non-peer-reviewed science in policy support questions. And that was a huge blow to the Forest Service because about half of our research in those days was in journals, and the other half was in this in-house system. Some of the most important air pollution stuff was in the in-house system. Good or bad, it doesn't really matter. That's the rules. And I found that one of the biggest criticisms of the Forest Service research branch across all these groups was the lack of peer-reviewed science, in a couple of different senses. The whole station editorial system didn't exist in these other organizations. That was all done outside the organization, through peer reviewed editorial boards and journals. If you did an in-house package it wasn't called research, it was called an assessment or a general awareness package or something like that.

HKS: Does that lead to the opinion held, at least at times, by the National Academy of Sciences on the pedestrian nature of Forest Service research?

CP: Yeah.

HKS: Where they, the pure scientists, the physicists and the chemists, see agricultural research as very applied, not theoretical.

CP: Yeah. That's a very complicated question, because you have to look at a whole host of things. First is who we hire to do science, or research. And an interesting thing, have you ever seen a list what we call our scientists in the forest research branch? We don't call them scientists. We call them researchers. Ever notice that?

HKS: No. I know we went through a name change for lots of us in the ‘60s. I was a research forester. And my title was changed to forest fuels specialist, because somehow that would give more luster to my work

CP: Yeah. But we’re not called forest scientists. In any documentation, you know, position descriptions, whatever you pick up that looks at people, a majority of the Ph.D.s in my generation were in fact foresters that I call retreads. I’m one of them. We now have more of what I would call the disciplinary Ph.D.s doing research. We’ve mostly had, in our history, foresters that went back to grad school and specialized in something adjacent to their forestry degree and got a Ph.D. in forestry that is plant phys, pathology, entomology or whatever. Different than saying you got a Ph.D. in chemistry, physics, entomology, and so forth in another department. So that’s a problem right there.

The next thing you look at is how we ask questions and what we study are what I call observational research. That was true especially in fire. Probably in other disciplines. You know, reams and reams and reams and reams of research and investigation and publication that basically describes things. Not how or why things happen, but the description of the phenomena. So that’s a problem. One of the questions Bob Buckman asked once, when I worked for him as associate deputy chief for a while, he just asked me one day, why don’t we have any scientists in the academy? And I didn’t answer him very quick because I thought, why would somebody with Buckman’s experience in this organization ask that question? To me you just look at the organization and you say, we don’t have anybody like that. And we may have had a couple people over time.

HKS: Kent Kirk at the Forest Products Lab.

CP: Kent would be one example, perhaps. There may be three or four in our history. I mean, that’s a very small number in an organization that says to Congress every year, we do research and we do science and so forth. So the other thing that’s a problem that I tried to get people to work on and I did get some progress-- but I don’t think changed a lot-- this peer-reviewed, peer-driven evaluation system of scientists is in-house, entirely almost. In my opinion, if you have systems like that, I don’t care if they’re peer review systems or whatever they are, and they’re in-house, over time the quality standards decline. Okay. They just do. It’s not a peer process at all, because by peer what we mean is grade level peer. If you’re a GS 13 being evaluated potentially for a 14, you have to have GS 13s and 14s on your panel and that’s your peer. There only has to be one person in your field. If you go to other systems like that, in NIH for example, if you have an evaluation as a biochemist, all five people would be top biochemists. I mean, they would be your scientific peers, who love to beat you up and really put you through the grinder before they decide whether you ought to be promoted.

HKS: The civil service system requires this sort of in-house?

CP: No no. This is a system developed by the Forest Service research. It’s one that’s been

adopted by other agencies. At the time I was in the acid rain program, scientists in EPA were not promoted through a peer system at all. They were promoted by their bosses. And they looked at this and they adopted some kind of a system similar to ours. My guess is though, it's not manned by grade level peers, it's staffed by scientific peers. My brother, an NIH scientist doing basic research on human physiology, and I have talked a lot about this. He just looked at that and said, that's amazing. I would just go around my wing there and pick up five GS 15s to evaluate me. He says that's not how they do it. His peers come in from universities, from private sector, I mean it's a big deal.

It's one of the things that happens on systems, and that's just one example. In-house publications is another one, where you're totally isolated from the rest of the science community, you tend I think over time to decline and decrease your standards for what you accept as a certain level as a scientist as output quality and complexity. The scientist evaluation system itself is not just science-based, because there's four parts to it. One of the reasons there's four parts to it is we have a lot of people in research in the Forest Service that are not even doing research. They're doing development. The forest survey people would be an example. And there's lots of others. You know, Dick Rothermel's work, which is world famous, basically is developmental. It's not just research, although there's a research program that supported Hal Anderson and Dick Rothermel's production of those models that are used around the world. They're really classic developers. They are in that same system. So there's always this tug and pull in there about is it a science-based system, which in fact would be the factor four, publications and their contributions to science, or is it also the complexity of the problem area, the lack of guidelines, and the assignment itself. Those are all evaluated and assigned points which are added to scientific contributions.

When I talk to people outside the Forest Service about the quality of science in the Forest Service, and why they were so down on it, issues of peer review and grade evaluation usually came up. It's not a big secret. Sometimes it's not deserved either. I'm not saying the program's trashy either, I'm just saying that when you present yourself as a certain type of an organization, and you really aren't practicing what would be expected to be that kind of organization, then you're going to have problems. One of the indications we had about the panel system was, every once in a while some experiment station would try to put some professors on these panels. And invariably, I mean ninety-nine point nine percent of the time it didn't work, because the professor would sit there and come out with evaluations way below the Forest Service's. And that was always, always talked about as, they don't understand our system. And my position was, there may be another answer. They don't agree with the quality standards we're using for our scientists at these grade levels. In other words, when we use words, "highly significant", the professor sees different quality work; expects a different level than a Forest Service scientist. And over time, and the time we're talking now fifty years plus that system's been in place, that's a long time for an in-house system.

HKS: Did you have examples, or at least suspicions of difficulty recruiting top scientists from other professions to come in, that you wanted to work here?

CP: We did. I think recruiting is an issue, one that's hard to evaluate, because to me there's a cultural thing about who we were looking for. It's not as if we went out and recruited basic scientists until we got into some issues in the '80s, air pollution was one of them, where you could not do the research program with just retreaded foresters. You couldn't do it. There's no way. It was too basic and technical. So you begin to pick up atmospheric scientists, atmospheric chemists, hydrologists in the water programs. We finally started to pick up what I would call real solid forest ecologists, scientists. Not foresters at all. But sometimes those people, there was a couple ornithologists, Verner is one at Fresno I hired that's still in the Forest Service, world-renowned ornithologist, real basic bird biologist, has done a wonderful job, been able to fit in the Forest Service quite well, and make ties with land managers. Others just can't do it. There's just too many places they have to be linked that people with forestry backgrounds have an easier time doing than the non-forestry backgrounds.

That began like I said when we got into the spotted owl. I mean, you can't study spotted owls using just forestry science. You just can't do it, if you're really going to address habitat needs and genetics and basic biology. The same goes with an anadromous fishery program. You really have to pick up fisheries biologists that are trained as fisheries biologists, not as foresters who went back and took some fish courses. I think the agency's got a long ways to go, and it again goes back to the question about what's the agency want to be? That's not closed, I don't think. It's a big question. Part of the outcome of that question is linked to the development of large research organizations that are not Forest Service research. BLM has its own research, Park Service has its own research, and on down the line. I think part of it was, they just could not get the kind of answers and quality out of the Forest Service research that they needed to do their jobs, which often are not forestry-based at all. You know, we use very broad term when we say "forestry research". It's not all to do with forests. And neither are the questions. That was a tough one to deal with, because I can remember going down to stations on reviews and giving the keynote thing about issues like this, and have scientists blow up when I suggested we ought to look at our quality. Not that it was bad or good. Just, we ought to sit down as a research organization and ask some really tough questions about the quality of our science. And the frustrating part about some of those discussions was, the people raising the most hell were the poorest scientists. The weakest. Which is another whole part of the story. [Laughs]

But anyway. I told Buckman in response to his question as best I could, I just said there's a whole bunch of reasons for it. And one of the things we tried to do in the reorganization that many people just completely missed, was the research side of that reorganization was a science-based organization, with science-based criteria, science-based hiring and firing and performance that went way beyond what the Forest Service had ever done in its research program. And just, you know, just laid it out and said, if you're going to be in the science business, you're going to be a scientist and you're going to act and be held accountable as scientists are in other organizations. And you're not going to be in development and you're not going to be in technology transfer. You're really going to study basic questions in science. It wouldn't be a large part of the organization, maybe twenty percent. But it would be specific to science.

HKS: Obviously Congress is supporting this in other federal agencies.

CP: Absolutely.

HKS: So that's not an issue?

CP: No, it would not be an issue in Congress, because what you take to Congress is the output of your development program, which are products people need and products you would tell Congress about. We have some examples through Region Six, of regional foresters going to Congress and saying you ought to see the products we're getting out of the PNW station. You know, Congress doesn't care much about science, but they do care about their investment having a return on it. In fact, that's a problem with science and Congress; you've got to be careful you don't take too much science up to the Hill. You need to take-- which is the reason to do what I was trying to do-- really good development projects. The incident command system would be an example. Those are less controversial, and if enough people come up to the Hill and say, we're really using this stuff you get a lot of points for that. Corporations to do more of it, if they get real excited, and in fact you can get earmarked funding sometimes.

Anyway, I think it's an issue. I think it's going to be an issue in the future. I think many programmatic areas that Congress would support in forestry research are not supported now because others are going up the Hill with better packages in terms of quality, or perceived quality. I remember one time I was asked to go out and do a program review of EPRI. That's the Electric Power Research Institute; the research branch of the power companies of the United States. Big, big organization. Very quality stuff. They have a headquarters down at Stanford. I said fine, so we went in and took a look at their atmospheric science program, and I expected that what we would do is look at their funding and their hiring and firing, and the facilities and stuff that we always included in our reviews. It was a hundred percent technical. Much of it way the hell over my head, because I'm not an atmospheric chemist. My God. These guys came in and basically went through their science. But EPRI's position was, if we don't have the best science-based people and the rest of the stuff we could talk about with you, it really doesn't matter that much. We can carry that through the managers, we can keep our folks well-funded, that's not the business of the review. We want to know, is this the best science we could be doing in these areas that are so important for the coal industry and the power industry and so on.

The other thing that is in disarray and has been in disarray and I think will continue to be, is the staff positions in the Washington office that ought to do doing more of that technical review but don't have the capability to do it. They're not the best in their fields. There's a few exceptions, of course. Mike Fosberg and Bill Sommers will be an example. But in general these folks were behind the field. Sometimes way behind it.

HKS: Well, I think I asked Buckman, or one of those deputies I interviewed, to justify the position of the director of forest protection research, where you had a pathologist dealing with insects and fire as well as diseases. Is this what you're talking about? Keith Shea as far as I know is a very fine pathologist.

CP: Yeah. Keith was associate deputy chief. But Keith had directors under him that were qualified specialists.

HKS: Okay.

CP: Yeah. You have the staff directors below associates, and there's a staff director for atmospheric sciences and fire, which is a nice combination. I guess today there's been some mixing there. And one for timber management and so forth. But their staffs are broken down into specific disciplinary areas, and they're supposed to have a top scientist in those positions, because part of their job is to evaluate the quality of the science at the stations, in fuels, insects, or whatever. To do that you've got to have very top people. You've also got to have people, and we said this year after year, that they are brought in for fairly short times and sent back out to the field. Keeping up with science in the Washington office is very difficult. Washington office staffs seemed to have become more static with time.

I think you get the drift of my feelings. And I never want that discussion to sound like I'm disappointed or critical or anything about the organization. It's a very productive organization. I just happen to be the kind of person that looks at possibilities and potentials, and I've done that my whole career. You'll hear that from other people. [Laughs] My expectations for that kind of an investment of dollars and talent is just higher. And I just think there's too many issues out there that we could have helped with a lot quicker if we'd have had more years of good solid science to look at, and a lot of times we didn't. I'm talking about mechanistic stuff, you know.

Sensitive Issues

HKS: I want to ask this practical question, using Sesco as an example. You have someone with administrative responsibility, and they do something that's obviously a lapse of judgment.

CP: Yes.

HKS: Is that in itself grounds for transferal?

CP: Absolutely. In this case could be grounds for dismissal. If there had been evidence of harassment, in both cases, the employee would be out the door. There was more than one example of this in the '70s, '80s, and '90s. I had two such cases at PNW. One led to dismissal, one to withholding of one month's pay.

HKS: Any idea why that didn't happen then, as opposed to when Mike Dombeck comes in?

CP: I just think the incident with Lamar Beasley, which got around the whole agency faster than I knew about it, it was just unbelievable. My office was right next door. [Laughs] Here's Lamar Beasley. This guy is brilliant. He's the only deputy of National Forest Systems I ever worked with that I felt really had parallel concerns about the agency that I had and could have made a big

difference, if he didn't have this behavioral thing. He's got some terrible personal problems at home, retarded son, there's a whole bunch of stuff. But anyway, this act of indiscretion really almost killed Dale. Dale's a very straight person. I don't think he'd ever been exposed to anything like that. But he was just absolutely shaken by this. I think George Leonard probably helped him through that because George is a really stable guy. So all I can say is, I think that he and George decided under the circumstances, because they had two deputies; well, Jerry was a station director, that's a pretty high position, Senior Executive Service, and a deputy, with pretty similar problems.

Maybe the best thing to do is not pursue those in a direct way, because of what it would do to the agency. Don't forget what we were going through at the time about women. That's not trivial, what this agency went through, and probably is through it now. Some of it fair, some of it very unfair. Here's Dale taking a lead on affirmative action related to women, and George very strong. I mean if you didn't get on the bandwagon, I'll tell you right now in your performance review it was bloody. Mine was not because I did pretty good at that. I got awards for it. But some station directors, regional foresters, some got moved because they couldn't do it, or wouldn't. So I just felt they said, my God, look at this. We've got Philpot who wants to get out of here, we've got a retirement up at PNW. We've got a possibility to put Lamar into research, which Dale and George and some others had talked about over the years as something they ought to be doing under Senior Executive Service. Occasionally put a non-research career person in a station director's position. I didn't necessarily agree with that, but it's legal, you can do it. Under Senior Executive Service you can just do it like that. And Jerry would make a pretty good deputy chief. At that time I think he had a lot of respect around the stations. I mean if he'd called other stations, and they may have, I think Jerry would have come out okay.

HKS: A chief has so much on his plate, you can't do everything.

CP: If that incident I talked to you about-- which is like I said, amazingly well-known in the Forest Service, but not outside-- had gotten in the Washington Post, for example, at that time when the cutbacks were going through. As much as I hate to sweep something like that under the rug, I think it was a big, big comedown for Lamar, in a sense of punishment. A deputy of National Forest Systems down to a station director. Especially to station director. I think it was a reward for Jerry. It didn't matter to me because I wasn't in trouble. So the two persons actually had different outcomes.

HKS: Look what happened to Dale with the John Mumma affair. George Leonard was very candid in his interview. He did the performance review for Mumma, with three years of poor reviews before this transfer took place. And Mumma went public.

CP: Yep.

HKS: And it was really damaging to Dale, and the Forest Service, when Mumma went public.

CP: Yeah. Dale had some tough stuff. There's no question about it. And sometimes he wasn't the

best to deal with some things, but I think that's probably what happened. I suspect they just sat down between the two of them—Dale and George-- because they were the only two involved. It was pretty well announced from those two guys. We didn't go through committees or reviews or anything like that. We just walked out of the room with new jobs.

HKS: It's interesting, looking at Dale and George, the difference in titles and responsibilities. A lot of people probably felt that if they were going down a back road they'd like to have George with them, because if the car broke down he'd get out, pop the hood, get something out of his shoe, and make a new gasket. And if Dale was there, he'd give you a discussion on the theory of transportation. [CP laughs] Now that's not really true.

CP: No, but I know what you mean.

HKS: Dale was a ranger, forest supervisor and so forth, and yet he was seen as a philosopher. George was staff his whole career until he became associate chief. And yet he was seen as the guy who was hands on. Interesting, just the perceptions.

CP: Right. Right. I think George's only problem was his complete dedication to the harvest. And in my opinion (this is another whole story) some of the failure of the forest plans, especially in Region Six, was due to his strong influence to inflate the potential harvest. I was in some of those meetings where forest supervisors would bring in their plan, with a preferred alternative, and then go through it. We've got two hundred and eighty million board feet of annual harvest in the preferred alternative, and here's all the analysis. And then George or one of his timber staffers would say, no, you can find four hundred million feet, we know you can get it, go back and revise the plan. Happened many times. Interestingly, none of those plans even at the preferred level were going to make it anyway, and that of course is another story, but he really held on to that way too long.

I can remember talking to him one time, I came back from a northwest review and I was talking about competition for logs out here, and how it had become so regional. For a guy that kept up with timber he didn't seem to know that. I was really surprised. And you know what Charlie, he said, you'll never see logs going up and down I-5. You want to bet? Go out and stand on the bridge here in the morning. There's log trucks going both ways. Lots of them. I had just come back from a review of the national forest at the north end of western Washington, out of Seattle. And I went through a mill at, oh that little town up toward the north Cascades. There's a big mill there. I asked the mill superintendent where those logs were coming from. And he said northern Idaho, and tomorrow we may bid on a sale in Montana. I had just seen that.

HKS: That's a long haul.

CP: Yeah. I had just seen that. Holding on to the old concept, the working circles and the mill with its Forest Service timber base up the hill and all that had already pretty well gone away. And still those guys dreaming away about it.

Senior Executive Service

HKS: I'd like to have you spend a little time specifically on the Senior Executive Service. The training. Let me read to you from this chart from the file you loaned me. These categories of training. "Activities Manager and Personnel Support. Stress management: 40 hours. Executive Development Seminar: 106 hours." That's three weeks. That's a long time. "Program for Senior Executives: 506 hours." At Harvard. We mentioned that before. "Issues in Science and Technology: 40 hours." At the Brookings Institute. "Executive Seminar: 160 hours." And then Harvard update: 6 hours back at Harvard. That's a lot of commitment and financial support and disruption of your normal duties.

CP: Yes.

HKS: And it's not just you, it's a lot of people going through this. Describe a bit of what you actually go through. Is there an exam at the end to show you learned something? What happens?

CP: Okay. The Senior Executive Service was formed under Jimmy Carter as part of the Personnel Revision Act, where we got the new evaluations, the new retirement system and all that. Carter had very strong feelings about this, he even talked about it in some of his political speeches about the bureaucracy and civil service. He felt there ought to be a level of management in the federal government-- very small-- talented people that were generic. In other words, they could be moved around between agencies and departments, and handle this what I'm going to call upper middle management position, many of those positions of which were career positions that were filled from within an agency only. He created a system that allowed managers to move across agencies or make it easier to fill them from the private sector.

There are about five thousand slots out of two million employees, five thousand slots called senior executive service slots, and they were distributed among agencies. A percentage of those could be political appointees, not necessarily in the sense of the old political appointee, but they could be filled by non-career ladder senior executives. I think that was about fifteen hundred, and the other thirty-five hundred were career senior executives. These positions were to be filled under a new set of rules, not the old Civil Service rules. Now at the beginning of the Senior Executive Service in about 1978 or '79, there were two ways to get in. One is, you could make the case you had enough mixed experience as a manager to meet the criteria, and then you could be put on an approved list and appointed to any SES position out of there without competition.

HKS: Max Peterson would probably be an example of that, because he was the first chief under this process.

CP: Probably was. And that was another key difference. These were jobs that could be filled without applications or competition. I mean really going to be dynamic, with lots of movement among agencies, lots of new blood, etc. The other way to get into the Senior Executive Service was to go through a formal training program and at the end be evaluated by the department and

put on the same list. I didn't have the experience to go into the Senior Executive Service directly, but the chief, Max, would be the first one, Dale would be another one. The message to me always was, we want to get you into the Washington office as fast as we can. I heard that from Keith Arnold when I was about thirty years old. And it happened to me a lot. So you better be prepared to be in the Senior Executive Service, because you're going to be a station director or a staff director or whatever. This evaluation program was run by the Department of Agriculture by a group in the personnel division, with mixed competency, some really poor people, some fairly talented people. They had some industry people that were doing the same kind of thing in the private sector. Executive training. They would prepare with you a package of training that you had to go through to be evaluated, and then you would be eligible for an SES position without competition. Some of that I did not want to do. I had already done it. The Forest Service had a much more advanced training program for its managers than the Department of Agriculture ever dreamed about. In fact they used to say that. I had taken executive training programs as a GS 12. You could do things like that if you wanted to take a week off. So we were already regarded highly about that.

Anyway, I looked at some of the stuff they wanted me to do and I said I've done that, I don't want to spend my time on it, it's pretty rudimentary, I'm beyond that. What other options do I have? And they said well, another option you have is you can go to an approved university program. There was at the time two of them I believe. One was at Stanford, I think, but the one at Harvard is the most famous. I think Buckman at the time, and the chief, worked out a way with the department to get approval for me to go to Harvard in their second class for Senior Executive Fellows as it's called. Full time thing for a semester. They called me in and said, do you want to do it? And I said yeah. I'm scared to death but I want to do it. I mean, the idea of going to Harvard for a semester, getting away from what I was doing was scarey.

I should tell you what I was dealing with at that time. I was in the process of firing a GS 14 black scientist for performance. I was in three separate court cases over it. I won them all. I had just started a process to fire a GS 15 scientist, who turns out, because he was a veteran, could take my job when I left. I was in some tough stuff and I was pretty young, I was forty-one years old. I was pretty much on my own, other than I had a deputy director at PSW named Paul Guilkey that really supported me, because he wanted these guys out. And Bob Callaham came in as station director, he was supportive also. So I had the backup, at the station. I was never sure in Washington. Anyway, that's what I was leaving to go to Harvard. [Laughs] And that was a tough one. Because one of the rules in the program was, you cannot contact your employer. Now people did that, but Harvard was trying to make it real clear to the agencies, you're not going to hear from this person. We're going to capture this person. That's the only way it's going to work. You can't have them there in the afternoon on the computer still running their programs. Amazingly that actually did work pretty well.

So I went to Harvard, got through the program, and came back, and then personnel and I worked out a couple other additional things you see there in my files. Then they evaluated me and put me on the roster. The only problem I had in that whole process is when I got back from Harvard, the department changed their mind and decided that Harvard didn't count. I still had to take all these

other courses. That's when Max helped me. Max was good at issues like that. I said, Max, bullshit. I just gave up three, four months from my family and all that, three thousand miles away. It was a wonderful experience, but I'm not going to spend I think it was another six weeks of stuff designed by the department. I'm not going to do it. Well, anyway, long story short, the secretary of agriculture finally told them to cool it and that I was fully qualified. That's how it happened. That's the process that is used to use to get into Senior Executive Service, and it's followed generally. I think the Forest Service was able to put a lot more people into the Senior Executive Service based on their experience than they were on special training. The other thing that happened with Senior Executive Service in the Forest Service is that folks got put into the training program that would never make senior executives. And the agency knew it and still did it. So you put people on the list that are on the list forever. This was done when management can't deal directly with people's qualifications. Let the program sort it out. Really sad situation, I thought. Some of those people worked for me and it was not good.

HKS: Do you have homework? Do you write papers? I mean, what are the classes like?

CP: A class would be thirty people typically, from all the agencies, or if it was a Department of Agriculture thing it would be ag agencies. This is when Reagan came in. I spent a week up at the Coast Guard Academy with a really good teacher, public policy, public administration kind of a person, economist, exploring for five days what it means to have a conservative president and administration come in to your future business, as a senior executive. We were really getting close to the White House. I mean, really getting close, because they brought in people that were being appointed by Reagan to discuss their views about government and where the administration wants to go. We had the vice president of United Airlines for four hours talking about deregulation and its effect on the airline industry. And one of the comments he made to us that night was, I don't know if we can survive without regulation. That was fascinating. Newt Gingrich spent a day with us, because he was perceived as a leader of this Republican neo-conservative movement. And that's what he became. He was a junior congressman at the time. So that would be an example.

Decision processes– how to make decisions in a political environment. Very complicated, as you know. Things of that nature. Lots of economic and policy analysis techniques could be involved. Personnel management policy, even including how to deal with poor performance. Appeals processes, because they're very complicated and there's a lot of them now if you have a person who's in a protected class. The most complicated example being an old, minority woman. They're in a minority class and a woman class, age class, and so forth. And then they have their own civil rights. Civil service. Those are separate appeals processes. Separate rules. Things like that. Lots of subjects, most of it well done. Really well done.

This last example you referred to is not Senior Executive Service. It's a Forest Service executive seminar. That's a two-week, Federal Executive Institute I think it was called, down in Charlottesville, Virginia, that almost all top managers in the Forest Service go through, that's been going on for years. It's a well-run thing. It includes everything from policy analysis to health, personnel.

HKS: It's a commitment of time. I can understand better now than I did before why Jack Thomas for example said when Buckman tried to get him to be qualified, that he didn't want to spend the time.

CP: No, Jack unfortunately in his career at the station would look at this and laugh. That is just nonsense. And he paid dearly for that. Dearly. Because this is exactly the training he needed. To a scientist to look at this and say, aw that's a bunch of Mickey Mouse stuff. This is not Mickey Mouse. This is background and knowledge a lot of folks, especially researchers, might not even understand. So that's just a perception.

HKS: Was there a, I don't know what to call it, a debriefing? How can they be assured that you've actually absorbed enough to make you qualified? Or did they just take it on faith?

CP: At the end of the senior executive training you went in front of a panel and discussed yourself, and got questioned.

HKS: What you learned.

CP: Yeah. And that was pretty well designed. I think it probably came out of a contract with a private sector personnel system somewhere, because of the way the questions were asked.

HKS: Did you have heavy reading each night?

CP: In these courses you could have, yes. If you did the course. I mean, at Harvard we had two case studies a day generally. And to do a case study well you better go home and spend a couple hours on it, even though it's only three pages. It's a great teaching system. I never had been exposed to it before. It came out of Harvard Law, but it's used all over the United States now in business schools and so forth. And if you get good facilitators, and of course at Harvard we had some just top, top people. The director, one of the key folks we had was a guy named Finn, who you may know, was director of the Kennedy Library. He was a prof at the Kennedy School. And the history the man knew about governing was just outstanding. But anyway, that's about all I can tell you on it.

HKS: I intend, with your concurrence, to make copies of some of these documents.

CP: That's fine.

HKS: I've researched Forest Service records for thirty-five years and I've never seen a personnel file. That's not available.

CP: That's yours.

Representing the President

HKS: I looked through your SES accomplishments. Charles W. Philpot. The three things, the most significant accomplishments above level three, and one was, I want you to just briefly say what this is. "Represented United States in Paris at" all caps, "SILVA, highest level forestry meeting in history." And I've never heard of it.

CP: It's a great story. It was a wonderful experience. I met Mitterand at this meeting. Reagan was asked by Mitterand to come over and participate in a conference designed to get more commitment by the developed countries to support forestry and agriculture in Africa. Clearly one of Mitterand's agenda's was to embarrass the United States. We already had big Africa programs, but he didn't feel it was big enough and so on and so forth. So Reagan declined, and the vice president declined, the secretary of agriculture declined, and picked the assistant secretary of agriculture, Orville Bentley, and Charles Philpot to represent the president of the United States formally.

HKS: Gifford Pinchot used to represent Teddy Roosevelt so I guess the precedent had been established. [Laughter]

CP: So we did. Orville was a wonderful guy, he was over the Agricultural Research Service and other agencies. He was an ex-dean of the University of South Dakota. He and I got along really well because he was involved in the acid rain program for the department, so we knew each other. He may have recommended me, I don't know. Anyway. So we went over to the State Department and got briefed on probably what was going to happen and why Reagan had declined and so on. There were going to be other leaders there. I was the technical person and he was the policy person. In other words, he could sign a treaty; I would be the one that would say here's the outcomes of these parts of it, you know. And we sat one behind the other in this huge conference room with officials from all the European nations. Canada was there.

HKS: This says sixty nations.

CP: Yeah, it was huge. Huge thing. We came into the airport at the time that Paris was under siege. They were going through that horrible mess with terrorism. We talk about terrorism. And there were Uzis everywhere. And they picked us up at the airport and drove us into town, a hundred and twenty miles an hour with five motorcycle cops. [Laughs] The old man, Dr. Bentley, he was overwhelmed the whole trip. I was too. I had a state department guy assigned to me that spoke fluent French, in fact lived in Paris for many years. That was just wonderful.

I'm just going to tell you some experiences, just fun to talk about. We checked into the hotel, and I was on a U.S. per diem which didn't even cover the hotel bill, let alone food. Just gross. And this guy that I'm with said, we're not going to stay here. He said I've got a little hotel down about three blocks, you can actually see the Eiffel Tower out the top windows, and it's eighteen bucks a night. Wonderful place. Just great. Well we went down there and checked in. Didn't even tell Bentley. Came back the next day and we were in really bad trouble. The French just went

berserk. They couldn't find us; they didn't know where we were. This is dangerous for you guys because of terrorism. Well anyway, we got that worked out.

Basically what happened was, in the morning the technical folks would meet, work out the statistics and dollars and programs and any technical questions that would be involved, and make sure we understood the program we already had in Africa, which was a big part of my responsibility. Then the policy folks would meet after a five-course lunch (nice) and they would work out the specifics of this new agreement on forestry and agricultural support for Africa. And all the African nations were there. Their presidents were with us. Amazing group of people. Some dressed in beautiful costumes. All of them arrived in limousines. But a lot of the time the discussion would turn towards Bentley and become critical, including from some of the African nations that expected more help. It was quite amazing to watch, being from the United States.

Our president didn't have a lot of respect, for various reasons. And that didn't help. I sat there a lot of times with my hand on Bentley's shoulder because I knew he was going to blow. And he'd been told by the White House, do not blow. Your main job's to sit there and take it. Be cool, and be accurate. And this one African nation just went on and on about the lack of U. S. support. Well see, I had all these numbers. I had a record of the dollars, and where they were going. And I could just regurgitate that to Bentley. Here's what we're doing.. So he got madder and madder. One time he raised his hand and he said what percentage of your national budget goes into weapons? That was the question we were supposed to ask. And the African official hemmed hawed around, and he'd already given the number. It was over ninety per cent!

One evening we went over to the university there in Paris and met Mitterand. He gave a talk. We didn't give anything away. We certainly maintained the program we had, which was fairly large, and came home and debriefed the White House, and that was the end of it. It was a great experience. I also represented Bush senior in a treaty situation in Russia. That was even more interesting. [Laughs]

HKS: This is what Forest Service scientists do.

CP: Right. Yeah. I'm station director now, and I got a call from the Washington office that said that because of my relationship with these other federal labs going back to the acid rain days, I'd been selected to go to Russia for two weeks to represent Bush senior. This was after he was out of office, but he had written an agreement with Gorbachev to send representatives of the federal labs to eastern Russia, Russian Far East they call it, Siberia and east, in an attempt to see if we could do some mutual research and help save their research institutes which Gorbachev knew were going to go because of the break-up of the Soviet Union..

It's a huge system, these big buildings, they're like five, ten stories, sometimes in these towns they're the biggest building in town, and they're organized around the natural resources, fisheries, social sciences, physics, chemistry, and so forth. There's twenty-two of us, EPA, USGS, the national labs, Defense, etc. We toured and got briefed by all these labs, looking for places where we could use their capabilities in our programs for less cost, and use that as a way

to help save these research institutes. I went there in '94. It was the most tense trip I'd ever taken– I'd done a lot of foreign travel– because they were just totally disintegrated. There weren't any police anymore. Local government was not there because they hadn't established it. The Communist Party members who ran these cities were all gone, and there was a lot of vandalism, and it was pretty tough. In fact we had a couple women with us that really had a hard time.

Anyway we learned a lot about Russia. It was just fascinating, the way the planned economy did things, and what they didn't and did accomplish. We could get a fully staffed marine science ship, three to four hundred foot kind of a thing, like you'd have at Scripps, for a hundred thousand bucks a month. In the U.S. it could cost a hundred thousand dollars a day to run something like that. So that's the kind of capability we were trying to look at. I was there with an EPA guy that's now in Corvallis, trying to find out if we could use one branch of the Amor River, which is the same size as the Columbia, it's all wilderness, as a control for salmon research, which we don't have in the United States. So we were looking at opportunities like that. But as we went through the country we were also exposed to all these other things. The medical system had collapsed, the schools had collapsed, it was just amazing. Something I wish I'd written about more. But that was another assignment where I had formal documentation that I represented the president of the United States.

HKS: That's what happening in Iraq. You take away the central authority and the place just goes crazy.

CP: Yeah. Except in that part of Russia there aren't all these cultural subsets and tribals and things, so they're not shooting each other. But there's a lot of anarchy kind of things going on. The Russians were developing partnerships with foreign countries to get their industry going. There's a name for that. The Russian partners were almost always ex-party members, because they still had the power and the networks and the money. Something the United States should have helped stop, but didn't, and they're paying for it today. We saw a lot of that. We went to a new lab in Magadan, which is the infamous Gulag. The stories they tell you about Magadan are almost unbelievable, in terms of the millions of people that were killed there working in the gold mines because Stalin didn't like them. But anyway, here's this brand new lab going up, and there's no construction at all in eastern Russia at the time. Literally. Everything had stopped. Here's this big lab being built for this guy. Turns out to be he was way up in the party, he was a social scientist and had this big research program. We were in this building, it wasn't finished, and we're looking at the construction. Looking out, it looked like a motel out there. And we said, what's that? He says, that's my motel. It was [emphasis] a motel. He was half-owner of this motel with a Japanese partnership, on federal land in a federal lab, and he was going to get the money from renting out those rooms. He also said, I have the only Hertz franchise in eastern Russia. And I said, where's that going to be. Oh, it's right there in the motel part.

HKS: A real capitalistic view.

CP: And you know what? That's what they told us. That's capitalism. We said no, no, no, that's not capitalism. You could not do that in the United States. They didn't understand it. They had

been so trained over generations that capitalism was immoral and dirty and so on. When they did it, it fit. It was just fascinating. I don't know if you know of anybody that's written about that part of the shift, but I'd love to read more about it. Everywhere we went we saw that. Well, isn't that capitalism, they said? No, no, that's not capitalism. That's waste, fraud, and abuse. [Laughs]

HKS: I had the privilege of working with an especially bright young woman at Duke. She was a doctoral student in policy. She became fluent in Russian, and went to Russia to work in Russian resource policy. And she was mugged twice, her apartment was broken into. She said, I can't even work there. A very attractive woman, if it's not sexist to say that. So she came back to the States and became fluent in Spanish, and she's doing Latin American natural resources, because she said you can't live in Russia as a private person.

CP: Yeah, it's amazing. At the station we were cooperating on a program in Russia helping to establish a forest industry. We had a crew over there, forestry crew. They came back one day from a field trip and some hoodlums had gone through the hotel and taken everybody's clothes. All the people in the hotel were naked, standing in the foyer, and these guys were taking their blue jeans, which were worth a fortune, and their shoes. And no police or anything. Very, very fascinating. I'll just tell you one more story that just tore us up. When we left, one of the Russian scientists with our team asked us if one of us would adopt their fourteen-year-old daughter. Take her home. Just amazing.

Spotted Owl

HKS: Okay to shift gears here?

CP: Um hum.

HKS: Okay. Must have been 1983 because I was still living in California at that time. I moved to Duke in '84, so that's my calendar. I've known Don Flora for a long time, and I was passing through Portland on my way to Seattle for something and I stopped and chatted with Don just for old time's sake. He was assistant director of the experiment station. I say that for the record. He said, tomorrow I'm going over to Bend and they're going to take me out on a tour that deals with what they're calling the spotted owl. He says I'm not sure if this is a high tech snipe hunt or there's something real and they're playing a joke on me or not. He says I've been told it's going to be an important issue.

CP: Right.

HKS: That's the first time I'd heard of the spotted owl.

CP: Right.

HKS: I don't know how long bird people in the agency knew it was an issue, but certainly by the

early ‘80s it was understood technically that this was something that had to be looked at, and it was a few more years before it made headlines. So if we could talk a bit about it-- or a lot about, you choose the emphasis– which includes the President’s Plan and FEMAT, and anything else. Dale says in part you were selected to be director because he thought you could stand up to the political pressures and the institutional pressures, and he wanted the science to be...

CP: He actually did. He really did.

HKS: And other directors might not.

CP: Yeah. And he was probably right. [Laughs] The owl thing is a hell of a story. I think a lot of aspects of it in books have been misrepresented and misinterpreted. The initial story that I know about is, Jack Thomas-- this probably would have been around 1980-- supported a graduate student named Eric Forsman at OSU on a study on this owl. And of course Jack claims when he saw the results he knew right away, but I don’t think that’s quite true, but if Jack wants to believe that, fine. No way to challenge it. But the irony of the whole thing is, here’s Eric Forsman, from a logging family, ends up to be the key scientist at PNW in the long term studying this owl and so forth, along with eventually a lot of other scientists. At one time it was by far the biggest research program in the station. When I was assistant director at PSW, which would have been the late ‘70s...

HKS: [papers rustling] Here’s your life in front of you.

CP: I came out in ‘75 as assistant director. Somewhere between ‘75 and when I left the PSW station, which was after ‘80, to go back to Washington, there was discussion at the PS [emphasis] W station about the spotted owl in northern California. There was a little bit of work going on about it and a lot of the comments were more like tee hee hee, this is sort of a silly thing. That’s the way I remember it. It wasn’t taken very seriously. Maybe that’s fine, I don’t know. But I do [emphasis] know, I learned somewhere before I left the station that the habitat requirements for that bird were so narrow and definable that folks were out predicting owl viability from the habitat, and that was before 1983. So there was some stuff going on in California too.

I got involved in it once before I got to be station director. It supports Jack’s opinion that I was pretty strong about protecting science. One of the scientists from PNW went down to a meeting in northern California and gave a paper on the size of SOHAs. SOHAs are spotted owl habitat areas, and they were a concept developed by the National Forest Systems from research that showed that pairs of owls had a definable habitat area. And the National Forest Systems grabbed onto the idea, and I can tell you why in a minute, that it was a constant area of around nine hundred acres spread out all over the northwest. Which was not true. This approach would greatly reduce the impact of owl management on the timber harvest. Turns out they were different. They got bigger as you went south and smaller as you went north and so on and so forth. And this paper said that. And this scientist, they started to beat the hell out of him for saying that after Research had already said they were nine hundred acres. I got involved in that and got that stopped.

So I had a little bit of experience already with what some of these folks were going to go through on this issue, because people at that time were beginning to understand if they couldn't do the SOHA approach, the spotted owl was going to be one hell of a constraint on timber management. Pure and simple. Some people understood it. Lots of people didn't, but some did. Because at that time it wasn't listed, it was being proposed for listing, but it had been selected by the National Forest Systems planning staffs as a indicator species, which means it had to have special treatment and its habitat requirements had to be specifically looked at. It also, in hindsight, under species viability requirements of the National Forest Management Act regulations, it still would have been a restraint on timber management, whether it was ever listed or not. But that just complicates the story.

When I got out here I reviewed the spotted owl R&D program. It was set up as an R&D program which is different than a work unit. The manager actually reports directly to the director, if you do them right. This one in the PNW station was more of a large work unit, but we don't need to go there right now. I got briefed on what they were doing and started to stay very close to that science, because I could see what was coming also. The region produced two major, they were called spotted owl EISes. They both failed in court. They were both scientifically incorrect. So the agency at the time, with administration (White House) and Washington office pressure I'm sure, was still trying to get away with the minimum requirements for things like threatened and endangered species, in lieu of losing timber base. In fact, one of the EISes had a maximum allowable reduction in harvest of fifteen per cent— as a planning guide.

HKS: This came from within the agency, or down from the department?

CP: Both. It's one of these things where the department makes direction but it fits what agency folks, because of their own values, really want to happen. That's another thing we could talk about. Lots of people think the Forest Service gets excited when the Democrats are in control. That's not true. They get excited when Republicans are in control, because Republicans generally were commodity oriented and did everything they could to keep the timber base. Al Gore's effect on the Forest Service was extremely tense. Because of values.

Anyway they went through these very expensive EIS processes. And they both failed. Which is interesting to me because nobody was ever held accountable for their failure. And you talk about accountability and big dollars and human commitments. We just lost, you know. Court cases in the Forest Service were more like athletic events and you kept score of wins and losses. We never seemed to learn just why we lost. Every forest supervisor ought to memorize the case law on any issue before they take off on another proposal.

About the time of the failure of the second EIS I got more and more concerned that we were not tying the science with National Forest Systems, and I went in and talked to Jim Torrence. I said Jim, we have got to get this fixed. We can not do this again as an agency. We just can't. And he agreed. So we had the chief come out, and we had the regional forester and myself and the key scientist on the owl program, I think Jack might even have been there at the time, and we locked

them in a room, literally, at a hotel out at the airport. And we went through some really grueling discussions about why these EISes had failed and where the science had been misused, and making the point over and over that these scientists are getting very tired of being witnesses against their own agency. Which is what happened in these court cases. They'd bring Eric to Portland and ask him questions and he'd answer them. And they were getting real tired of that. I mean they were really, really emotional.

Well an incident happened in there that I think really helped clear the air a little bit about why this whole thing continued. Finally Jim Torrence got totally frustrated, he stood up and he said, there's no way we can keep up with the changes in science. And I said, Jim, the science hasn't really changed. Your questions to scientists have changed. That's what really changed. I've had the same discussion with Senator Hatfield and others. You're asking different questions. These answers aren't that different than they would have been two or three years ago. He said well let me give you an example. You told us that spotted owl habitat areas were nine hundred acres. And we put that in there and we got to court and they blew it out of the water because now you're saying it's nine hundred acres to twenty-seven hundred acres. It actually turned out to be up to forty-eight hundred when the science was all finished.

I looked at the program manager and I said, I want you to comment on that. Because I knew what he was going to say. He said, you came to us and asked, what's the smallest SOHA you ever saw and documented? We said nine hundred acres, and the next thing we know, the plan says they're all nine hundred acres. We didn't say that. And then they referred to that paper down at Eureka several years previous where they had laid out, way before the EIS, SOHAs it turns out are nine hundred to forty-five hundred acres and they vary with latitude. And Jim, he went, oh. And I said, one of the things you guys need to understand is, when you ask scientists a question, they answer the question. It's their nature not to go and give you a whole bunch of other information. Now if you'd asked me the question about how big a SOHA is I might have given you a two hour presentation about it, which at the end you'd be clear, that's the answer to your question but you should be asking all these other questions. So it's one of those cultural differences that I saw over and over and over between Research people and National Forest Systems people.

It's a thing you could handle with, again, a strong development side, because they would be involved up front with designing those products, and if they had wanted a product on SOHAs, that stuff would have been clear with long discussions about this is what you're going to get. You're going to get a guidebook on SOHAs that vary, as an example. Anyway, the next thing of course, there's a series of products produced led by Jack Thomas. They call them the Gang of Four: Johnson, Jerry Franklin, I guess Eric Forsman. The first one that came out dealt specifically with the owl. It was done under court mandate. I'm going to condense a lot of stuff here because it's much more complicated.

When the courts basically reviewed that they said no, you cannot deal with only the owl. You've got to include all the species associated with old growth. You can't do an old growth EIS with owls only. Because the habitat you're going to be talking about includes a hundred and forty-three other animals that may depend on old growth or at least are associated with it. There were

various levels of research to support the difference. It turns out there's probably more that depend on old growth than we knew at the time. So go back and put together a proposal, an assessment of habitat needs under the viability requirements of the National Forest Management Act related to old growth. That was the second big report that Jack and the team did. So now we have the National Forest Systems locked up by the court. Can't harvest anything on the west side especially, I think it was the west side. You've got two EISes that have failed primarily because they were not scientifically correct. And you've got these two reports the judge has that are taking us into a complete different world of how you would manage national forests. If you look at those reports you begin to see habitat conservation areas, the matrix concept, and the aquatic zone strategies being used as the links. Then the next thing we know, Clinton and Gore are here for a day, many of the scientists are around this table, National Forest Systems are around the table, a lot of special interest groups, Jack was there for us, of course.

HKS: He was at the table with the guys?

CP: He was my selection, and the chief's. And I think the White House asked for him. I think Jerry Franklin was in there too, and for the same reason. So part of the Gang of Four was actually at the table with the president. Then we had opportunities to have other handshakes and stuff, and I declined and let my secretary go. We did some things like that. Pretty exciting for folks. Anyway, they announced at that meeting, and of course we had done some work behind the scenes that even Dale didn't know about-- this is where that whole thing began to do that I was talking about earlier, the way they treated the chief– that the president would announce before he left on Friday that Monday morning FEMAT would start. Now the reason he could announce that, we'd already rented the space, we'd already purchased the computers, we had most of the staff, the ones that did agree, about thirty scientists. The space had been allocated, you know, there'd been some interior partitions and things already put in. Phones were in. The chief didn't know it. So the president says, this is what we're going to do. We're going to do it in ninety days. And that's what we did. On Monday morning Jack was there, he was the leader, he had his top group, which included Jerry Franklin and Johnson.

We included a chapter in there, chapter eight-- and I'm going to go all over the map for a minute-- chapter eight is what the Forest Service would have to change culturally and organizationally and financially to actually not get themselves back into a spotted owl issue. I personally think it's one of the most significant parts of the document, but very few people would agree with that. It includes the idea that whole planning paradigm has to go away and be replaced. We even talked a little bit about administrative boundaries that don't match ecosystem boundaries. Lots of stuff in there. It was co-authored by a scientist from the research branch of the USGS, which is the Interior research branch that was moved over under Clinton into the USGS. So there was a lot of other authors involved in contributions.

Viability of Species

HKS: Let me ask a question about those two EISes. George Leonard and others have insisted that

the Forest Service loses in court mainly because a judge is procedural, and the Forest Service doesn't actually follow the procedure correctly. The judge never really gets into the substance about is clearcutting good or bad and so forth. The Forest Service has never learned how to follow the rules. Is that a fair statement?

CP: First I would say that is a common statement from Forest Service officials.

HKS: Okay.

CP: Second I would say that I don't agree with it entirely. There are some cases, and many of them perhaps, where because the Forest Service didn't follow procedures they lose court cases. That does not mean to me and never did mean they shouldn't lose the court case. Okay? I mean when you stand in court and you say, I didn't account for species viability, you can say that's a procedural question. I say that's a biological question. And the case on viability to me is clear as hell. Too many times it was not scientifically addressed. One of the things that drove me nuts in the Washington office was court-case tallies. Chief and staff met every day in those days. We met every morning. And one of the things the attorneys would bring to the table is what court cases we were involved in, and whether we won or lost any the previous day. And it was really like keeping score. Okay, we lost one. And all it meant to many people was, we lost a court case. We didn't win it. Not that we had done something illegal. Which we in most cases had done, if you think the regs are legality, as the courts have said. The courts said real early on that the regulations written by Forest Service under the processes prescribed by Congress were the same as the act. So the regs are law. Viability is not in the act, but it is in the regs. Five year regeneration is an example of something that's actually in the act; size of clearcuts is in the act.

There's a bunch of direction that came out of the regs, and one of the things in there was this commitment to species viability, which says the Forest Service actions on the land will continue the viability of all vertebrates. Amazing thing if you think about it, because it's probably impossible with today's condition of forests and the way the land is allocated in the United States. That's one of the unique things about the owl, it's a landscape level question. The habitat of the northern spotted owl, that's been separated from the Sierra spotted owl, the habitat of that animal goes from northern California to the Canadian border, maybe further. One of the requirements for the long-term viability of that species is to be able to move those genes around that huge piece of landscape. You cannot deal with species like that on a forest-by-forest planning basis. We said that in FEMAT. You cannot do it. You're going to have to do some regional planning, which a lot of people don't want to do, for those kinds of species. Salmon's another one.

HKS: I'm not sure "blame" is the appropriate verb, but I'll use it. George Leonard blamed the committee of scientists for developing state of the art in the regs. That that's really where the problem came from. The regs were not realistic.

CP: There are some problems in the regs. You know they're being re-done and I still haven't seen the final draft. I think they're out. There were some problems. But do you know where

viability came from? The wildlife staff in the Washington office. Bob Nelson and his people got that in there because the links were obvious. At the time there was a huge internal battle between wildlife resources and timber resources. They were publishing all over about the effects of the timber management program as we practiced it on fish, all these wildlife species.

The environmental organizations like Audubon were trying to get more emphasis and more money and more support and more belief in the wildlife requirements of the U.S. Forest Service under the National Forest Management Act. And if I had been those folks viability would have been a hell of a way to do that. [Laughs] That's my remembrance of it. It's not just the committee of scientists. You can say all you want about the committee of scientists, but that process involved a lot of players that the Forest Service at the time wasn't even talking to. One of the really weak parts of Dale's leadership was to refer to the national environmental headquarters in Washington as, what the hell did he used to say? A gang of something. He should have been in those offices all the time, keeping track of what they're up to. He just said, I'm not going to deal with them. They're not honest, and on and on and on. So that was all part of what was going on.

FEMAT (Forest Ecosystem Management Assessment Team)

So FEMAT took off. They basically had the most important parts of the documents on the first, second, third page, and that's the rules that came from the president of what this plan is going to do. The first thing is, everything in this plan has to be legal. Now there are alternatives in the plan that are not legal. We were allowed to keep them in there to give people, and society in a sense, a chance to understand how some alternatives, even though they may support them, they don't fit case law at the time. The third alternative is the closest the FEMAT group felt they could get with a legal alternative. And there's only one. It's one of the criticisms of the plan that there wasn't all these alternatives like you have in a forest plan, all the phony alternatives and all the real ones, and all this and that. They didn't do that. They went right down to the habitat requirements of the spotted owl, the marbled murrelets. Fisheries was in there.

There was a requirement-- it was way up at the top-- to come out with an old growth system. Not lines drawn around old growth, but a system, managed over time. A lot of readers of FEMAT at the very beginning never even read that page, and got all mad about this and all mad about that. When I gave briefings about it I said, no, no, no, go back. Turn to page three or whatever. You now have for the first time a legal alternative for national forest management in Oregon and Washington and northern California. And it will go through court, because it meets the requirements of the National Forest Management Act, the Endangered Species Act, NEPA, and Air and Water. All those acts, all at once.

The fisheries side of it is also fascinating. When I came out to the station I started to look at forest plans, and the preferred alternatives. Most of them that I looked at predicted in their impacts of the preferred alternative further degradation of the anadromous fish habitat while at the same time these fish were being proposed for listing. I found that mind-boggling. Just unbelievable that these folks could be that shortsighted and not understand what was going to

happen. And the fisheries stuff is just as significant as the owl stuff. In fact fisheries interest in Oregon and Washington based upon the jobs impact was probably higher.

So they had this whole thing about watersheds and anadromous riparian zones protections, and ways to refine that. This watershed analysis program allowed the managers to put in the initial constraints, if you want to call them that, but redefine them over time by doing a specific analysis on watersheds. So there's a lot of directions in FEMAT. As I said before, it's probably the most comprehensive technology transfer product ever produced in resources, based on the amount of science in it, number of science years, publications that were reviewed, and so on. It stepped on a lot of toes because it also exposed a lot of cooked books, a whole other thing we could talk about. Especially in fish. So it was a tough package. And then of course, because of NEPA, FEMAT could not be implemented. So what's on the ground is not FEMAT, which is another misunderstanding. FEMAT was taken by another group and converted to an EIS. An EIS team led by a Forest Service manager with a couple of folks from FEMAT-- FEMAT was always there as consultants-- but a new group primarily experts from National Forest Systems converted FEMAT into an EIS document. Then the EIS document, this is another interesting part of the story, which would normally go up the line and be approved by the regional forester, was taken away from the regional forester and [emphasis] the chief, and sent directly to the White House for final approval.

HKS: That's CEQ?

CP: Um hum. The resource branch of the White House under the vice president was more than CEQ when Katie McGinty was the director. It had tight ties with environmental organizations and their attorneys, and strong ties with the resource agencies. The next job is to convert the EIS and the preferred alternative into a Record of Decision, which again would normally be done internally and approved internally, but in this case was done by CEQ and signed off at the White House level. I'll just tell you one of the things that happened that has turned out to be just what we said it was going to be, a serious problem. In the preferred alternative in the EIS and in FEMAT there's a projection of what they call probable sale quantity. Probable [emphasis] sale quantity of about one point two billion feet a year, down from four and a half, if this plan is actually implemented and you harvest in the HCAs, which is allowed for eighty year old stands or less, if the harvesting is retention forestry and moves that stand towards old growth characteristics. In fact it's the only place right now I think they're actually harvesting. And then you could harvest in the matrix, that's the areas between HCAs, if again you held to an overstory limit, around forty percent cover, and some other things, but harvesting could take place there. And in fact you could harvest in the riparian zones if you met certain requirements. If you looked at all that, you could project possibly taking out about a billion two hundred million board feet a year. Well it got back to the White House, and they wanted to add survey and manage requirements to the preferred alternative. Are you aware of that issue?

HKS: No.

CP: Survey and manage was in FEMAT, but it was not recommended through the EIS as

something to do because the science was so weak on many species. What it meant was, before you could do anything on the ground, anything, build a bridge, road, whatever, you had to survey the land and look for these species that might be endangered because of the loss of habitat. They included things like freshwater clams. Then you had to develop a management plan for that species.

HKS: Do you know if the people from Fish and Wildlife Service were involved in advising the White House?

CP: Aw, that's a whole 'nother...

HKS: Okay.

CP: I can remember Jack on the phone, up in the thirtieth floor, just livid because the White House staff called and told him they were going to put survey and manage in the final product. And Jack said you can't do that without changing PSQ. You will never get one point two billion feet if you require the Forest Service and BLM to go through survey and manage. In the first place, we don't even know how to survey much of this stuff. There's almost no research on some of these animals, and some plants. And you certainly don't know how to manage for them. So the FEMAT conclusion was, if you could protect the old growth resource and increase it over time– time in this case is one hundred and fifty years—then species would remain viable.

That's another thing people don't understand about FEMAT. It's not tomorrow, it's a hundred and fifty years. Just as an aside, the owl populations go from ten thousand pairs when FEMAT was written to about forty-eight hundred in 2050, before they stabilize. That's based on analysis of habitat as it changes over time. If you followed the plan. But anyway. You don't know how to manage these species and we probably don't know how to survey for many of them. So what you're going to do is, you're going to limit timber harvest to a level below the level projected in the Plan without survey and management. They published the Record of Decision with both, the survey and management requirements and the one point two billion PSQ. Which turns out has never been achieved. Not even close. I think it's around three hundred million is the highest they've ever gotten. You talk about ethics. Public owners of that land needed to know there was a trade-off, and it's buried in there. That's what came out. That was the first time I think Jack began to really get bitter about some of this stuff. I think that was the first really bad experience.

HKS: He was mad at CEQ before he became chief?

CP: At that point he's smart enough to know there's going to be some tough times if that's what they're going to do. When FEMAT was announced I gave a briefing the next day to a dean's tour, a Northwest tour with several private sector foresters primarily. I discovered real quick this was going to be a horror story, because the foresters just did not seem to understand anything I was talking about. They had already branded it as wilderness and exclusion, all the words. I got into a discussion with a forester wanting to know why there was a difference in the HCAs between natural eighty year old stands and plantations, when they're exactly identical. And I said,

how could they be identical when the planting stock's not in local genetics, the species composition's different, the spacing is different, the time frame that the seedlings came in, the understory's different. But to foresters it's an eighty year old Douglas fir stand.

It turned out the rules were different in natural stands and plantations. The natural stands you could not harvest and move them towards old growth. They were already doing that themselves pretty well. But the plantations you could. That's just an example. And then in the next few weeks I was in briefings by the top leadership of the region, and I heard some of the same misrepresentation, and I knew right away this is going to be a really grueling experience to try to get this thing implemented, at least to the level where it would get through the courts. And it was. A lot of things happened and a lot of things didn't happen. One of the things that happened that really upset my own scientists was, this was never handed off at the regional office to the staff directors, which are high paid technical people. They kept doing their own jobs. That isn't one hundred percent true but it's pretty close. And their staffs kept doing their own jobs. So we had all these products that had to be produced, guidebooks and stuff, and we bring in teams of scientists to do that job. That really, really upset the station. We got a lot of credit for it.

Like I told you before, I think other regional foresters saw that as just an example of this great assistance they were getting under Research. In some cases we had no choice at all. We had to do it because it was a mandate from the White House. They wanted to make sure the researchers were right in there on everything, because if they weren't it would be just another piece of crap from National Forest Systems. That was the attitude of White House folks, who were very anti Forest Service. Very. We got through a lot of it, a lot of stuff. Some of the most important things, like monitoring requirements, years and years. Even after I retired they were still wrestling with what to monitor and how to measure it. And it's a key part of the plan, because it's dynamic, another misunderstanding. It's dynamic. It needs to change. It says right in there: this needs to change as we learn. That's where the adaptive management concept, which is in chapter eight also comes in. Recommendation that the Forest Service adopt adaptive management, so that they can change their prescriptions as we learn. Never read. Never really implemented. I co-authored a paper on that, you might have seen.

Cultural Resistance to Change

HKS: I don't want to come up with a glib or simplistic statement here, but how much of this could you just lay at the feet of Forest Service culture? Meaning it's almost impossible to make this shift.

CP: If this had been handed off to the Park Service it would be implemented very quickly, and pretty clean, although there are some glitches in there that you'd have to address. One of the most amazing things to me in this whole story is, the president, by executive order, included BLM lands in this process. And he included-- and this is being challenged but I think it's still there-- that the viability requirements of the National Forest Management Act apply to BLM. By executive order. Multi-agency management structures were set up to implement FEMAT, and I

was on the one at the top with the director of BLM, Fish and Wildlife Service, EPA, regional forester, and so forth. We were formally chartered, we had a staff, we hired people and had money to oversee this big job. What amazed me was how fast BLM implemented it, or major parts of it. And what is amazing about that is that BLM did not really start from multiple use. Especially on the O & C lands, which we basically set aside for timber production. By law.

There was a court case that the judges have said, the O & C lands should be taken out of the president's plan. They're commodity production as originally chartered. I think it was a lawsuit, it might have just been an appeal, that was basically initiated by the counties that over fifty percent of their revenues came from the O& C lands, from timber royalties. So there's another story. Why is the culture in BLM so different from the Forest Service? I mean I knew the cultures were different, but I mean in this case, why? I don't know, I can't answer that. I know that Elaine Zielinski, who was the BLM state director at the time, didn't monkey around with the president's plan. I didn't see any of the hanky panky and stuff that I saw over in the Forest Service. Maybe the organization is more streamlined. Maybe they're more responsive to political pressure.

HKS: I asked Mike Dombeck, who is in a position to compare.

CP:Yeah. What did he say?

HKS: He said that the myth is the Forest Service is decentralized, but by culture it's highly centralized. The chief is an iconic figure. In the BLM it's been a political appointee and no one in the field really gives a shit what he does. State directors of the BLM run the organization.

CP: I agree. State directors.

HKS: And Washington just spins its wheels and nobody cares. But in the Forest Service, everyone looks to Washington when it gets tough.

CVP: When it gets tough. Yeah.

HKS: And whenever it's a political problem everything goes to the chief's desk. There's no lower level decisions automatically made in the Forest Service. It goes to the chief, because he knows the answer. [CP laughs] Mike admires the Forest Service, but he was answering my question. Compare the cultures of the two agencies.

CP: Yeah, he's probably right. I think that one of the most overstated characteristics of the U.S. Forest Service is its decentralization. I mean some aspects of it, it's very decentralized. But other aspects, and you just named one of them, when it's tough time, it's not decentralized at all.

HKS: Well Mike thinks the deputy chiefs don't earn their salary. Too much stuff gets passed up to the chief. When he was chief he passed it back down. That's your job.

CP: Yeah. Go do your job. Man, that's fascinating. I don't know. I think the owl was a tough

experience and a very enlightening experience for the station. They might not tell you this but I would say a lot of scientists that had been rejecting a relationship with National Forest Systems because they'd seen their stuff screwed with so many times in lots of different ways, really saw that as a chance, finally, to be heard. As a scientist. To see their research actually cleanly applied to the resource base. And I think some of those folks kept going, doing more of that than they would if they hadn't gone through that experience.

HKS: This is based upon anecdotal evidence. Half of the deputies are dinosaurs. They just can't tolerate challenge, that's not the way we do it. And half of them are progressive. Dale was still very junior but wound up on a committee with Max Peterson, when Max was regional forester, on what to do about dissension within the Forest Service, which became an issue in the '70s. People in the Forest Service, for the first time in its history, were speaking out.

CP: That's true.

HKS: Dale and others went out and they talked to people and they prepared this report, and they gave it to John McGuire who brought up in chief and staff. Half of his deputies said take a match to it. That's just a bunch of junk. We don't have to listen to that. There's a rejection at the highest levels. This denial.

CP: Yeah. If you write a book about the effects of the National Forest Management Act on the Forest Service culture, one of the chapters has to be what happened when they hired all these non-foresters on these ID teams, and many of those folks are just green as hell. I mean in their values. And you start to see this real early. Here's this new botanist, soil scientist, anthropologist, I mean it went on and on. And I know there was a lot of panic around because we've never dealt with that before. We were more like a family, I think is the word.

We haven't talked about the dissension movement. It was a serious, lost [emphasis] opportunity. Many Forest Service problems were fed to special interests by these employees because they were not listened to internally.

HKS: That sounds about right. I'll say one more thing. I took a look at the history of endangered species. I was much surprised to learn that in 1969 there was a major conference on the red cockaded woodpecker. Somewhere in the southeast they had a conference. Like sixty or a hundred papers. It was very clear in those papers that the woodpecker was in decline because of habitat loss.

CP: That's right.

HKS: There was no question about it.

CP: Right.

HKS: The Endangered Species Act happened four years later. How do you go from scientific

knowledge to a policy shift? At what point? Looking back we can see all the failed opportunities, but when you're in the midst of all this stuff, with all the other pressures, and all the controversy, how do you say, all right we now know enough? We're going to change the way we do business. If you're a reasonable manager.

CP: I think if you were a manager that came to work Monday morning excited about putting together an owl management plan, I mean excited like you would be about a timber plan or recreation plan, then that might happen at an earlier state. But that isn't what happens. There may be more of that going on now than there was. One of the things I told the forest supervisors when they talked about HCAs as wilderness, I said you know, if you read and understand what an HCA is, you'll see the challenge for the most sophisticated land management you can imagine. But you're not excited about that. You only see that as a constraint on what you have as your own values, and your own values happen to match the agency values. An interesting thing about Forest Service and foresters. Here you come out of school with a set of values. And you go into the biggest forestry organization in the world that has the same set of values. It's like going to heaven, you know? [Laughs] I don't know how you address that.

I'll tell you another experience that relates to what you just talked about. When I came out here I said this station's going to do a strategic plan. Most stations had never done one. And it's going to be a plan that everyone in the station participates in, because I believed in participatory management. That's a whole other story we can talk about. And we're going to talk about the next twenty years in resources. Public, private, whatever. All renewables. And we're going to try to predict in that strategic plan what the major issues will be facing these land owners and managers in the next twenty years. So we produced this plan. Now this is in 1985, before the owl was listed. Before the fisheries thing took off. And here's what we talked about.

We predicted the Columbia River will be reallocated. There's going to be this massive pressure to provide habitat for endangered species. We didn't even know what they were. And the viability thing. We had all this stuff. And I had a meeting with private sector foresters, a couple vice presidents, and I said before this came out, I said I'd like to review the strategic plan with you and make sure your concerns and issues are in here because we work for you too. And to a person they said you've got to take some of that stuff out of there. I said why? He says, because it might happen. I mean it's the president of a lumber company that's since gone down the tubes because of lack of timber supply. And I just went oh my God. And of course I got the same thing with Fisheries. How could you say that the Columbia River's going to be reallocated? I said, because there's going to be this conflict between recreation, agriculture, fish, and navigation, and power. And there isn't enough water to do all that. Oh. Well I don't think it's going to happen. And why do you care? Well I said I care because one of the biggest programs in the next twenty years at this experiment station is going to be anadromous fish research, and we're not ready for that. We don't have the right people, we don't have the experimental basis, you know on and on and on. And I want to be ready for that. So that's kind of what we did. [Laughs] Well I guess I was very naive. Don't put things in writing that might happen that you don't like.

RPA's another one. I went back to RPA about the same time, and I said for God's sake, get an

alternative in there-- I told you this before-- at about three billion board feet Forest Service harvest. We were at about eleven at the time. And I think the lowest they had talked about was eight. I said we're not going to cut eight. There's no way if these things happen. I thought your job was just talk about strategy and tell the U.S. public and the Congress what actually were some of the things that could happen, what are the alternatives and what are the impacts. And there's a lot of impacts from going down to three billion feet. There's job impact, ecological impact, economy impact, and on and on. Well one of the feedbacks I got from RPA folks was, we don't want to put that in there because it'll never happen. Politics won't let that happen. And actually politics is why it's happening.

HKS: I thought one of the reasons would be because you're admitting that there's an issue there, and the bad guys are getting hold of that and take you to court.

CP: Oh I think there's a whole subset. And one of the reasons that might not be in there at the time was, a Republican administration for example, might say take it out. Because it is the president's report. And that's fine, I don't care about that. I wanted the agency to stand up and say, here's what we think might happen and here are the different impacts. And if OMB and the White House want to take some of that out, that's ok. Why do we take responsibility for doing a lousy job? Let them, they're the politicians. Well anyway.

HKS: I don't know if RPA's been repealed, but it at least fell out of favor. I think it was during the Clinton administration that the RPA report went up to the White House and never came back.

CP: I don't think the RPA would have been of any real use for the Clinton administration, because the Clinton administration when it came to forests and forestry and resources was basically being driven by their contacts with what I would call environmental groups, not all of them the ones that are not so ethical, but lots of different groups. The RPA in the way it's done, it's hard to tie those documents to their interests. It is basically also a classical forestry document. I mean most of the analysis in RPA, maybe I'm wrong today but at that time, was timber analysis and road investments. You couldn't open up RPA and get any kind of sense of long-term species viability issues and all that stuff. It was mentioned in there with social values and things. It's not fair to say it was a timber document but it was basically from that paradigm, that viewpoint. You're really telling Congress, this is the money you'll get from different harvest levels and these are the impacts. And maybe that's what RPA's supposed to be, I don't know.

Ecosystem Management and Forest Health

The president's plan is the first ecosystem management plan of the Forest Service. I mean if you really understand FEMAT and the Record of Decision, it really is an ecosystem management plan. Not the ultimate or anything like that, but it's so different than a forest plan in that respect. Ecosystem management is a really tough thing to talk about, because there's almost no examples of it being done. One of the things that happened, and it happened a lot in the Forest Service, it purposely got dubbed the new initiative. Now if it's a new initiative, and I can give you lots of

examples of new initiatives, basically that's perceived in the agency as an add-on to current responsibilities, not a replacement. So in a lot of people's heads, although maybe they wouldn't say it quite this way, ecosystem management is something you do on top of multiple use, on top of the Forest Management Act. It's another thing we do. It's not what we do.

Now you've got an initiative and now you need a new staff in the Washington office to implement this initiative. So for example, now you have a technology transfer staff, you have a new whatever. Now you've got an ecosystem management staff. And their job is independent of wildlife, soils, timber, recreation, range. That doesn't make sense to me. And it didn't make sense at the time and I argued against it and lost. Now the job is for the staff that's been appointed in the Washington office that works for the chief, to identify and describe what ecosystem management is. They couldn't do it. Didn't have the right people, they're not on the ground. And so you just keep going. I would expect as chief to see changes.

The next step is you go around to all the national forests and ask them to re-label what they're doing as best they can to look like ecosystem management. So all this stuff would be accumulated into a report by this staff of all these things on National Forest Systems that are now called ecosystem management, although we've been doing them for fifty years. Some of them actually were ecosystem management, little pieces of it, not in the landscape sense. That to me, that's how we always did the new initiatives. New Perspectives was that way, acid rain was that way. First step in the Forest Service is to re-title as much as you can as fast as you can to protect yourself from re-direction and actually changing what scientists are actually doing by calling it something different. Some of that's legitimate, some of it isn't. So I never had high hopes for ecosystem management.

One of the key parts to me of ecosystem management is adaptive management as a decision process. We just published a paper on that, I think it's been out a few months, on lack of implementation of that concept in the northwest although it's required in the president's plan. It's never been used. And we talked about the literature and the background. It isn't something we made up. But until we see some of those things I don't see ecosystem management as practiced say in the Park Service is going to happen on Forest Service lands.

The last really big opportunity I talked about a little bit before was to run with this whole relationship of fire with ecosystems, because in many cases ecosystem management, in the West especially, is going to be the fire program. Prescribed burning, fire management, whatever, to try to get these systems back in balance with one of their most important processes that has been eliminated. And all the results of that, the wildlife results, the species composition results, all the things that would change if that actually happened. It is happening in a much bigger scale as a percent of land base in the Park Service. They don't make a big deal out of it. I mean, look at what's going on in Yosemite, not just up in wilderness but down in their mixed conifer stands, Sequoia groves. That's [emphasis] ecosystem management. But what has happened now is, it's gotten trapped in the old culture, the politics of commodities and so forth to become a hazard reduction program that includes a lot of proposals to harvest small material and so on and so forth. Which in many cases you'd have to do first anyway, but it shouldn't be the basis of the

program. And so I think the support that was there across the board is diminished and the fights have started.

HKS: Because of some of the bells and whistles like logging and green timber, the forest health issue is murkier. I don't know how to link forest health with ecosystem management.

CP: Forest health as it relates to the fire question has now become a package within itself, with its own supporters. It is not a broad approach to managing ecosystems, where harvesting would be a subset that would have to happen to achieve ecosystem management objectives. Now it's going to happen because we need fire hazard objectives. Very different things. Although in many cases you might get the same results. But you have a hard time convincing me this is an indication the Forest Service practices ecosystem management, because in my opinion it's never even been defined. It's never been defined in any rational way that I know of. Maybe it has. Like I said, I haven't been that involved for several years. But if it goes the way of a lot of, quote, new initiatives, it probably will have a hard time getting to that point. The other part of ecosystem management that is a real problem, as we talked about, it's very difficult for people with forestry training to implement ecosystem management. Because they don't understand ecosystems, like some of the Park Service managers do. They talk a different language.

HKS: Well I read the definitions. Some of it is in Jack Thomas' writing, when he was chief. He's going to, by God, change to ecosystem management, and he doesn't ever want to hear again, "whatever that is". He didn't like that. And he was going to go around, one on one, to every forest supervisor, and get these guys to do it. So I read some of this and, my forestry's pretty primitive, I graduated from forestry school in 1957, and I've been doing other things since then, but longer time frames, a concept I can understand. But landscape scales, how do you do that? Where's the guidance? And within a bureaucracy if you make a mistake. I think Bob Buckman stated it best. The rewards for doing a good job are less than the punishments for making a mistake. So the tendency is to be very conservative and never be innovative on the ground.

CP: Right.

HKS: Because it's a gamble. And the agency, if you screw up, is on your case. It's in your performance review and so forth.

CP: Yeah. Right. In fact in the fire business, going back to the '50s or the early '60s, one of the barriers, it wasn't the biggest barrier but it was one barrier, from a management standpoint was, taking the risk was not worth it. Even if you knew it was the right thing to do. You know, the regional forester in California when I was a very young scientist, he was very anti prescribed burning and very pro-suppression. His son worked for me as a scientist. Connaughton. Charlie Connaughton, used to say to the forest supervisors, you can do all the prescribed burning you want in California, but if you lose one we fire you. Okay, that's the end of that discussion, because you're going to lose a few. I mean, it's that kind of a thing.

HKS: I was here in fire research at that time. And we were called in to help solve a problem in

northern California because of this accumulation of slash. After we looked at it we figured their problem was the regional forester. That you can't tell a ranger that if it gets in the way, you've got to burn it, but if it gets away you're fired.

CP: You can't. [emphasis] And who cares? One of the concepts I had real early on-- never got anywhere-- was one of the problems with prescribed burning is we put boundaries on the prescribed burn. And we should not have boundaries on a prescribed burn. We should talk about a prescribed burn in this area. And if it's a two thousand acre area and we go to twenty-five hundred acres and it's the same stands in the same conditions and the same impacts, it's more success than if we'd only gone to eighteen hundred acres. But I never got anywhere with that one [Laughs] 'cause we still draw lines.

I was on a National Academy of Public Policy task force a couple years ago, reviewing the fire that burned in New Mexico, the prescribed burn in the park that moved over and took out Los Alamos. We went right to the very top with that team. Most of them were not resource people, they were public administrators, couple of mayors, mayor of San Diego– not once in that experience did anybody beat up that park superintendent. He wasn't fired, he wasn't crucified, his peers didn't walk away from him. I'm being positive. I mean, holy mackerel, that's amazing. Earlier I was on a national task force that looked at Yellowstone. Huge project, and I at that time co-chaired it for the secretary of the interior. And all these people, from especially Forest Service and BLM, wanted us to recommend that that whole staff up there at Yellowstone be fired because of this event. I never heard any discussion at all, in the Park Service or upstairs in the Interior Department, that that was even on the table. Of course that was a misrepresented thing anyway because half those fires were not natural fires at all. They were suppressed fires that got away, some of them from the Forest Service. That wouldn't have made a hell of a lot of difference either way. But the point was, I just sat there and thought, what would have happened if a forest supervisor lost a fire like that? Or fires like that? And he had actually ignited some of them, or let them burn. You'd never hear from him again.

HKS: Well they had the fire in Colorado in '94, when the fourteen lives were lost.

CP: Oh yeah.

HKS: And OSHA came out and said the Forest Service was at fault and didn't care. This is all in Jack's journals. He said we were at fault but we certainly cared. That was his reaction. OSHA's job, he said, is to find out who is fault, and that's what OSHA does.

CP: Okay. I wasn't aware that they even had that role in fire. That's new to me. I'll be darned. I know there's been a lot of talk and discussion and concern in the last ten, fifteen years about the way that employees are protected in the fire fighting business. Talking about breathing apparatus even, the effect of retardants, there's a whole bunch of things that we never thought much about. That may be what triggered it. Which would be occupational safety and hazards. Well anyway. There you go.

PACFISH

PACFISH has a similar history, at least conceptually, that we've been talking about. The key scientists that got involved demanded their stuff be applied correctly. There are some interesting stories in there we probably don't have time to talk about. The anadromous fish part of that eventually got included in FEMAT, so on national forest lands that issue basically was addressed that way. Now I don't know if there was ever a recovery plan separate from FEMAT for fisheries. I don't think there was.

HKS: I don't think so. Dombeck used PACFISH as an example of what happens when the president personally gets involved, like the president's plan and FEMAT. The bureaucratic rivalry drops away and it goes through. But PACFISH never had presidential authority behind it, and it's still going on after eight years or whatever.

CP: Okay. FEMAT made it through, and of course we had scientists from all these agencies on FEMAT, but the tough times with the other agencies was in the implementation. That's a whole other thing we haven't talked about. But this concept that all these agencies were working together fell apart in many ways during implementation. For example, when you try to implement the Record of Decision on a landscape or watershed level, the Fish and Wildlife Service would come in with their own requirements and you had to do it by project, by project, by project, which is horribly expensive and slow, but pretty much met their objectives which were anti-timber objectives. I mean it's just so obvious. That's a different culture too. And Marine Fisheries, the same way.

We had this upper level management structure where we had to work together, but boy there were lot of projects going on at the ground where these agencies time and time and time again were not cooperating, and were using FEMAT to meet their own long-term objectives. One of the problems the Forest Service had that compounded that is, all these agencies were basically opposed to the Forest Service. Literally. I mean, I don't care where you went. Fish and Wildlife Service, Marine Fisheries, EPA, in areas EPA doesn't even have responsibility. The Forest Service at that time didn't have much credibility with a lot of the other non-forest resource agencies. The BLM, state, and private sector relationships with the Forest Service were better. Some of them understood why the Forest Service had to do things it did. Some didn't. But these other resource agencies, the birds and the wildlife and the fish and the whales and all that stuff, man, there was some antagonism that really surfaced after FEMAT. It didn't surface so much during FEMAT because of what you just said. The president and the vice president wouldn't let it. I mean, these folks were put in a room and told, you better not give the perception to anybody, like *The Oregonian*, that there's an issue here, because there isn't going to be. That's the rules. It's a rule I forgot to mention. [Laughs] And at the science level that worked out pretty good. There was still some tough stuff in the room but as long as they kept to the science it could be worked out. If it flopped over into policy it could be hairier.

HKS: I have here copies of three pages from the book, *Journals of a Forest Service Chief* by Jack

Ward Thomas. July 18th, 1994. Portland Oregon. Eleven a.m. He's briefing with BLM Director Mike Dombeck, staffs in Washington and the Northwest, including John Lowe, the regional forester, Elaine Zielinski, BLM, and Charles Philpot were at this meeting. I don't know how many meetings you went to. You may not remember this one. But it's about PACFISH, a lot about PACFISH.

CP: Okay.

HKS: And Jack described what PACFISH is, and then he wrote that there's a plan afoot to use the salmon as a train wreck. It's going to shut everything down. And Jack was concerned about that. But he says one of the problems is, and you were addressing this, both the National Marine Fisheries Service and the Fish and Wildlife Service need to be consulted independently about the salmon. And that's just a screwball way of dividing up the turf.

CP: Yep.

HKS: It's just a cumbersome thing and neither agency would back down.

CP: That's right.

HKS: They both claimed jurisdiction, I guess, at one point down the stream. That's to me one of the more significant things in this entry, the overlapping authorities.

CP: I think that was eventually solved by making NMFS the anadromous fish people, the whole habitat, and the Fish and Wildlife Service, they still end up with trout. They're all the same habitat. So even if they clearly stuck to their own responsibilities they're going to be overlapped because the habitat's the same. And Jack's right, it was pretty hairy to go to those consultations.

HKS: Well he's talking about both agencies and he says, "These standards are being imposed by relatively young, inexperienced biologists who seem remarkably naive as to the social, political, ecological game in which they are engaged. The entire scenario is frighteningly reminiscent of the Fish and Wildlife Service handling of issues surrounding the consultations on the spotted owl and so forth." Jack kept saying, there needs to be a change in the law, that the regulatory agencies also have to deal with the output level. They can't be separate from the output agencies like the Forest Service.

CP: That's right. He's right. That's really perceptive. And you'd have people coming out, twenty-five years old, brand new Ph.D., not a clue about what land management is because that's not their business at all. It's the regulatory side of the resources. And demanding these outrageous things that were not even scientifically credible, let alone in FEMAT. We saw that time and time and time again. These agencies did not have the staff when we started to do this job, so they did a lot of hiring, moving people around, bringing a lot of young folks in. The other problem with these agencies is, they're much more politically driven than the Forest Service. They had political appointees down to the regions, and at that time we didn't really. We still don't, officially

anyway. So there was a lot of that stuff that he's talking about. It just drove regional foresters and supervisors crazy. Just crazy. And held up implementation. That's another reason there's no harvest to speak of. Because of all those things. And they're very expensive. That's the other part of the story, that to staff and implement this thing, millions and millions of dollars. Some of it came out of the rest of the Forest Service, which made the rest of the Forest Service unhappy with the president's plan. They saw it as a siphon.

HKS: In other entries in Jack's journals he's sitting at his desk in Washington and the phone rings, and it's Katie McGinty or one of her aides saying, Clinton's going to be in Portland tomorrow and he wants to announce an increase in timber harvests. And Jack says you can't increase the timber harvests because...

CP: Because of what you did. [Laughs]

HKS: Because of what you did. Jack's rendition is that they never really keyed in to the reality of the kinds of decisions they were making in the White House. The actual impact on the land.

CP: No. And Jack always saw that as just unethical, to try to meet the demands of the environmental attorneys and so forth. I think part of it also was the lack of understanding of tradeoffs in the resource business. That there really is a tradeoff. If you do these things on the land you aren't going to get this harvest, and that's why in the forest plan the harvest levels change with your commitments for the other resources. I'm not sure they all understood that. I think some of them did. And politically of course the thing to do is, to get both.

HKS: Sure.

CP: Whether it ever happens or not.

HKS: Most of what I understand of this comes from Jack's journals. And as I say, you would enjoy reading them for a variety of reasons. There was a Columbia River study, sort of an ad hoc thing, that was replaced by PACFISH, which was a broader. You couldn't just do Columbia River. Is that the correct sequence? PACFISH came afterward?

CP: Well I'm not really sure.

HKS: It may not be important.

CP: I'm not sure. I know also PACFISH at some point, its predecessor was mostly Forest Service lands, and then it became all public lands and more of the habitat. And I believe it even expanded up to southeast Alaska. That whole thing was put together as a strategy for managing anadromous fish. But I just don't remember. You know, we had a guy named Fred Everest, and Jim Sedell who's now director at PSW, I believe that really ran that as station scientists and reps. I didn't get that involved with it. I did get involved with trying to make sure that National Forest Systems understood when they were mis-using our science.

HKS: This may not be directly related but it intrigued me. It was in this morning's paper. *The Oregonian.* It says the U.S. Forest Service is dropping fish carcasses up the rivers to increase the natural food supply to fill up the fisheries. Why is the Forest Service dealing with the critters? I know that the Forest Service traditionally deals with habitat. Is this an offshoot of all of this? The states are very jealous about the feds moving into their territory.

CP: Well it's not just fish anymore, it's all of them. Because finally people realize you can't have the fish and the animals over here in one agency and the habitat in another agency. This is another whole story. In fact part of that's done by agreement that goes back, and I think it's called the agreement on the Potomac, which would probably have been reached in the 1960s between the U.S. Forest Service and the U.S. Fish and Wildlife Service and the states, about who's going to get what piece of animals. There are also federal laws that require agencies to manage for species viability and recovery of threatened and endangered species on their land. Anadromous fish is a good example.

When I was in Riverside as AD I went up and reviewed a large deer research program in the central Sierras called North King's Deer Study. Huge program. There's a deer herd up there, I think it was around ten thousand animals, it was large at one time, that's also a migrating herd, which isn't that common apparently in some parts of the U.S. Big decline, everybody's excited. What's happening to the deer and so forth. So I was up there reviewing the program one day, and I was talking to the scientists and they were using the tame deer technique, which I think they developed, where fawns are given to graduate students when they're born and they bond with the graduate student, and then from then on they're just like pets, and you can take them out and observe them and see what deer eat. You can actually get an accurate account of what they use in the habitat. They were also radio-collaring newborn fawns, and finding out when they died and how they died.

One of the issues was, there was not enough newborns getting to the winter range. And I said, well why are you spending all the money studying winter range if the problem is deer, and I think something like sixty percent of the newborn fawns had to make it to the winter range to maintain the herd and about thirty percent of them were making it. And the answer I got was, we're the Forest Service and we can only study habitat. Now that's an issue I didn't have a lot of experience with.

HKS: McArdle was chief '52 to '62, he was chief when the Multiple Use Act was passed. And he said one of the hold ups-- and there were a series of them, the Sierra Club, the lumber industries-- was the states. The states had to be assured before they'd support the Multiple Use Act, that the states' control over the animals would continue, and the Forest Service could only deal with the habitats. That was a brokered deal between the feds and the states.

CP: That's right. And it goes right to the constitution. States are in charge of game, while the feds have authority over migratory birds and marine animals.

HKS: There's a nifty book by Bean, *The Evolution of National Wildlife Law*, that began as a CEQ report. There was a Supreme Court decision in the 1890s that said as states were sovereign bodies they "owned" what was inside their borders. Then the Lacey Act of 1900 made it a federal offense to transport game across state lines that had been taken in violation of state game law, which was congressional recognition of state authority. The Commerce Clause was the basis of Lacey, just as it was the 1911 Weeks Law. Subsequent laws and decisions have expanded this concept. Throughout all of these actions was reference to the 10th Amendment that left to the states anything not already taken by the feds.

CP: I said what the heck is really going on here? He said what we think is going on is most of these fawns are dying within ninety days, from this study they had with the collars, which they apparently got approval from state fish and game to do. And I said why are they dying? He said ninety percent of them are being killed by mountain lions. And I then said, why are we spending all this money on habitat, when we ought to be studying predation? Well yeah, but that's a state responsibility. This was in Research.

I was going, oh jeez. I said, I'm going to fix this. So I went up and met with the governor's staff and the state fish and game director with the door closed, and I said look. Why aren't you studying predation of deer? I knew why, because cats were protected in California. You can't even look at a cat in California. And they're going everywhere. They're talking about one cat per square mile. [Laughs] I said, tell you what. You give me the authority, and we'll put the money up, and the scientists, and we'll study cats. We'll find out how many there are up there, how many deer per week they eat, and we'll take it all the way to the bloody end and make it clear, if that's what the science says, that the reason the deer population's going down over the years is we're not getting enough young guys down to the winter range. And they agreed to it.

I went back to the station and told the director and the other assistant directors what I'd done, and they just were flabbergasted. How did you do that? And I said basically I made it clear, this is absolutely ridiculous to be spending taxpayers' money on research when we know damn well what the issue is. And the state's not going to do it. It wasn't just politics, they also had a money problem. I don't think there's any issue at all with the salmon programs because there is a legal mandate of the national forests to recover, on their lands, the salmon. I've never heard any debate about it, that you do things like carcass placement, whatever it takes. Planting program. Directly working with the animals.

Protecting Scientists

HKS: This is one of two e-mails from Jack Thomas about your protecting scientists. What was the pressure within the agency upon the scientists? Was it we don't want you to find out something that's going to cause reduction in timber cut, or what?

CP: Sometimes there was pressure on scientists from within the agency. This was more of a problem in the 1950s and 60s in my experience. This involved pressure and direction form within

Research itself. More recently the pressure is from political appointees and special interests. Protection can also come from special interests, especially from links non-foresters have with groups relating to their fields. Many top Forest Service managers realized the consequences of pressuring scientists; a few never got it. Pressure can also include attempted control on what is studied (i.e. don't study fire ecology), not just changing results or not publishing results.

HKS: He said there was no way you could protect them against outside [emphasis] pressures, but you could deal with pressures from the inside.

CP: Actually I did both. I would get phone calls from the timber industry reps and say I ought to fire somebody for what they said. Then the press, you know, they'd want to take on Eric Forsman because he was causing all this loss of jobs, and he's just an advocate, which he's not.

HKS: Here's what Jack wrote. "Charlie certainly did provide protection. We got all the support we asked for and then some. He obviously could not shield us from pressures outside [emphasis] the government, but he could, and did, shield us from pressure from inside the government." And my question is, what pressures?

CP: I'm trying to think what he might be really talking about. I'm not sure what the word is, you can call it pressure, for research directors to get their people under control that say the "wrong" things. And the example I'll give you is about the meeting in Eureka, the science meeting where someone gave the paper on the variability of SOHAs areas. And there was a strong move in the Forest Service to get him reprimanded. Which Buckman and I agreed, no way. And the chief didn't support it either. Max would never support something like that. And I don't think Dale would either. They were pretty good about that. So that's the kind of thing Jack might be talking about. It might be things like, why are you putting so much money in this area? Because we don't want to hear the answers. Although it might not ever be said that way, you could detect the pressure that way. You might be a high official, regional forester, coming in, slamming the door, wanting to know why so and so said something. Just upset about it, until you show them they just did this big research program, in fact in some cases it's research you actually paid for, and that's what they found out. One of the most common forms of pressure on scientists is from professional staffs and employees, especially if the scientist is perceived as reducing timber harvest.

HKS: Most of the salary money that went into FEMAT was reallocated funds? Was there any new money that came in?

CP: There was no new money for FEMAT itself. Outside of salaries the region picked up most of the costs. There was new money for implementation, but not nearly the money that was promised by the White House. So there was some movement of money from other regions, and that was a sore point. Research the same way. I did get new research money. I actually got more money than I thought I would get, but I didn't get nearly enough to satisfy the other station directors, because they saw re-direction there too. We never received enough funds to support the Research support of implementation of the Forest plan.

HKS: Then Jack goes on: "After we'd done our jobs and the flack was really coming down from the Bush political appointees, he" that's Charlie, "did everything he could to protect us," and in parentheses, "and never made any mention of his actions to us." He's praising you for quietly doing what you could do.

CP: I did a lot of stuff behind the scenes, yeah. And as Jack said, it was not just within the agency. Some of what I did to protect our scientists I would not want made public.

HKS: "He even offered to give me a several-year research assignment to Guam" when he and his family were threatened. I know the FBI sequestered him in a resort for a while.

CP: Yeah, there was some dirty stuff there. Jerry Franklin also got involved with it. I think I had three people who were threatened. But Jack's was the most blatant, I think, in terms of a threat, and the FBI thought it was serious enough to be concerned about. Oh, there was more to that offer than that. After FEMAT Jack was a mess, emotionally. He still had his wife's health situation. This was before he became chief. I had talked to him about going on a sabbatical. I think Guam was a little bit of a joke but, you know, go to a European institute, if you want to do something like that. The chief and the deputy will fix it up for you. That would have been easy. So it was more than that. But of course Jack isn't going to admit he was in bad shape, [Laughs] because he's never in bad shape. He's too tough for that.

HKS: He does talk a lot about it. In his journals, about the stress.

CP: Does he really?

HKS: The terrible stress he was under. And his wife was the pillar he leaned on.

CP: That's true.

HKS: She had the constitutional strength that he lacked.

CP: Oh that's very honest of him I think.

HKS: You have to read the book. Here's something I hadn't thought about. "So I think Charlie, at Dale's request, saw to it that we had the resources we needed. He sealed us from any internal pressures from the government, and he saw to it that efforts of Forest Service scientists in these matters worked for them and not against them in terms of ratings, cash awards, and full credit and panel reviews." The implication is you're taken off your real job and suddenly there is this dead space on your performance reviews, well you haven't been doing your job. Was there really an issue there?

CP: No, I don't think so. You're talking about my [emphasis] performance?

HKS: No. His performance and the scientists working with him on spotted owl things. You haven't been doing your assigned job.

CP: Oh, yeah, yeah. That was another interesting internal debate about some scientists that refused to join FEMAT for that very reason, considering it not their job. Then my getting told by other stations and by the Washington office, you shouldn't be allowing these scientists to do that stuff because it's not their job. But on the other hand these same people sit there and tell me we don't do enough technology transfer. I say what the hell do you mean by technology transfer? There's someone like Eric Forsman, implementing through presidential orders his research career. Well they hadn't thought of it that way. This is just staff work. I said no it's not staff work. These folks are producing a development document that's very technical, very credible, and is going to make a big difference. When it came time for these folks to be paneled, and a lot of the GS fourteens and above were re-paneled in the Washington office, I had to make sure that those people back there understood the productivity of these people. Because they were the top producers in the Forest Service in my opinion, and they still are.

HKS: Well Jack says they got the cash awards and all the things that would have happened if they had remained at their regular assignments. And he was very grateful.

CP: We did all kinds of things like that. I was trying to make a point. I wasn't just trying to reward people. The hell with you guys. Good grief. Seven days a week for ninety days? Working for the White House? [Laughs] That's not their job? What is their job? Sit in a lab somewhere with the door closed? I have to agree, Jack's right. We did do a lot of that. And a lot of it was done without any fanfare. It's just like working the president's budget, behind the scenes, you don't make a big deal out of it. You're careful, but it's not something you do because you're going to get credit for it.

HKS: I guess it's like the district ranger who lets the fire get away and he gets punished for this. You're dealing with an agency where the bureaucrats far distant from the ground are going to look at this on a piece of paper and say, no, you didn't do the right job. And Jack was concerned that might happen.

CP: But another thing that happened that was amazing to some people, and this goes back to my comments about the reorganization, the science productivity of these folks did not decline. They were publishing stuff just as fast as they were before they took on all this extra work. So that's just another research cultural thing. People believe sometimes you can't do both.

HKS: What happened to Eric Forsman?

CP: He's either at the station or he's now retired. I'm not sure. He was a neat guy. I had more than one phone call about him. Some forest products people contacted me and said it was a disgrace that PNW science was taking so many timber jobs away. And I said, do you know anything about Eric Forsman? Do you know where he came from? He came from a logging family. Well they didn't know that. And do you think that he's happy about the outcome? I said,

he's not. Go talk to him..

HKS: Did you have any sense that, within the Gang of Four and the various groups, that there was a lack of cordiality? There was pressure for dominance or for technical superiority, or did it really work well? There were a lot of time pressures. Was Jack a good leader?

CP: Well Jack's an interesting leader in a case like that. Yeah, he had to settle some things. Basically Jack was in his office doing what he said I did: protect his team against all the stuff they were being accused of. They weren't allowed to talk to the press, for example. A quote got out from a restaurant that they were referring to the building as the pink palace, and the tower of power. That hit *The Oregonian*. That was just totally uncalled for. We don't really even know today where that came from. Jack was on the phone with the White House a lot, he was doing a lot of that stuff. Touring. He had a lot of folks who wanted to come in and observe what was going on. They weren't allowed to ask questions or anything, but they could come in. Dale was one of them. That kind of stuff. Jack also had to deal with debate and disagreement among the various teams developing the FEMAT document.

Basically the way I remember it, there was key leadership in all the different areas. Social sciences it would be Roger Clark. Fisheries would be Fred Everest, or if it wasn't Fred it was Jim Sedell. The timber questions in terms of supply was Norm Anderson. Forest ecology would be Franklin, and the silvicultural stuff would have been Swanson. I mean in other words they broke it down in teams like that. Then they were all writing chapters that later became more integrated. That's more how Jack operated. He's a pretty good delegator. He really is. A lot of these folks weren't in the Gang of Four but they provided support to the Gang of Four, and Jack had done a lot of pre-work in getting these guys to work together. There were some tough disagreements, but they were more to me related on perceptions on where these folks were in values, not in science. Lots of them were convinced Jerry Franklin wanted to lock up all the old growth, and that that was a bad position to be as a scientist. When you really look at Jerry and spend time with him he's actually very careful, much more careful than people think. He talks more about implementing his research as it relates to old growth, which I think is a legitimate thing to be an advocate for. But of course he had strong ties with all the environmental groups. They just loved him and thought he was great. He was the messiah for this big change. And he was.

Jerry Franklin and New Forestry

HKS: Jerry Franklin and I were contemporaries at the research station. We were both very junior at the time. I mentioned before about the guy in the next cubicle who was doing this wilderness study. And through that wilderness study he had Sierra Club people come in and talk to him, and other people too, and also talked to Jerry Franklin. That's how I met Jerry. At that time in his career he was a high alpine ecologist dealing with mosses and things that grow on rocks above the timber line. Well time passes and Jerry is now an old growth expert, and I thought, what the hell happened? How did he go from mosses to old growth? But Jerry would be up in his high perch doing his ecological studies, in the early '60s, and he'd look down and he'd see a logging

road being built and he'd call the Sierra Club. Then I left and I never saw him again, and then suddenly Jerry Franklin was a famous person.

CP: Yeah. Right. But for much of his career he had a large research program on what I would call today studies of old growth characteristics. Animals, plants, mosses, lichens. There's a fair amount of science where Jerry ends up in terms of savings these systems because we can learn from them. They're an important part of the landscape, you can't just have everything in eighty-year-old stands or less. But he's had a lot of direct ties with the Sierra Club, Wilderness Society, Audubon, on and on and on, and he's been beat up pretty bad internally and externally for that. Then he left the Forest Service and went over to the university and it was a much better environment for him.

HKS: I thought he was detailed from the Forest Service too, but he actually resigned? I didn't know that.

CP: Yeah. He was an employee. And then he moved over and got a job at the University of Washington. He tried to get-- and this is a big mistake in my opinion-- he tried to get a forest ecology program started at OSU, as part of the forestry curricula, and wanted to be its leader. They didn't go for it. Then he looked around and U of W just snatched him up real fast, so he retired and then went up and started a new career as a professor.

HKS: It says something, I'm not sure just what, that the SAF gave him the Barrington Moore Award for his contributions to science. And I would imagine there was some negotiating going on in the judging committee.

CP: I can imagine there was. I don't know but there had to be. Towards the end of my career Jerry made a proposal to study old growth at the Wind River Experimental Forest. There's a stand of old growth there, and we helped get him a two hundred and twenty foot crane, and that's where the famous crane study started. I was instrumental in helping him get that accomplished. So he's doing a lot of research now in insects and everything else. You know, there's this whole system two hundred feet off the ground in these big trees. It's really fascinating from a science standpoint.

HKS: I was fascinated when I was interviewing Dale. He was explaining the chronology to ecosystem management. They were just getting going in New Perspectives, which was sort of step two en route to ecosystem management. He said they took Jerry's New Forestry because it was the only new thing they had.

CP: Yep.

HKS: It was something [emphasis] to put on a piece of paper.

CP: Yep. New Forestry was a hell of a contribution, because it's the first really major shift in how we look at silviculture. Silviculture, in spite of what many silviculturists will tell you,

silviculture systems are designed to produce wood, all kind of ways. Retention systems in New Forestry are designed to produce overstories and large woody debris. The commodity product is secondary. I went to two national silviculture meetings when I was director, as an observer, and listened to hour after hour of arguments about what to call retention forestry within the old silvicultural systems, because it simply was not new. It was not new. Silviculturists as a group, not all of them, could not accept the possibility that this was new. And I had a couple of research silviculturists, good ones, spend time going back through all the literature trying to find any documentation anywhere of what we would call retention forestry, and it doesn't exist. A staff director in the Washington office who held that position up to when he retired, would actually brief people, potential supporters, there's nothing new in retention forestry, it's the same old stuff.

HKS: Was that Carl Ostrom?

CP: No, it's after him. It was Stan Krugman. And proud that he had these discussions. He was driving us crazy out here. Retention systems were actually developed by Jerry Franklin, but then Swanson did much of the research at Andrews, and that's where the biggest research program on retention is. There's some work in the southeast also on hardwoods. They had the same concept that they need to get credit for. Most of the people who worked on this were not in the timber management research program. The stations kept moving more and more funds out of forest management and into forest environment research over this and other issues with this Washington office staff that was so out of touch. They were more in the ecosystems stuff.

HKS: I knew Krugman, just barely, I knew who he was, I talked to him once. In Jack Thomas' journals, the unpublished part, which is the majority of the journals, he has a couple of entries that refer to Krugman.

CP: So Jack commented on Krugman ?

HKS: Oh yeah. Absolutely. He's one of the guys who, according to Jack, was very old guard.

CP: I learned about a new group at the National Academy they were forming on ecosystem management. I think it was called the National Association of Ecosystem Management Research or something like that. A lot of university folks, talking about what you and I have talked about. This was in 1983-84. I called Krugman. I said I need a package of current research in the Forest Service that's ecosystem research. Not ecosystem management, just ecosystem research. And I didn't have a chance to read any of this. I had this big package. Got in a taxi, roared over there, started to go through this stuff. And started to make a fool of myself, because what he had given me was projects such as thinning and spacing studies. [Laughs] That's when I realized, you know, we had a hell of a problem, although nobody ever dealt with it. I remember these meetings with silviculturists saying it's just seed tree. Retention forestry's seed tree. And no, no, no, because you harvest the overstory when you're finish. Okay, it's shelterwood. Same problem!

HKS: That's what I was going to say. Shelterwood.

CP: No, because under shelterwood the overstory's a crop. So it isn't shelterwood. Under retention the overstory is retained in perpetuity. You recruit up for replacement. Old trees become large, woody debris. Any "crop" is taken only from the understory. I mean they go through these discussions hour after hour, refusing to accept the possibility that going back to Jerry Franklin's New Forestry and going further with all the research on the retention system and what they could do, and their impacts versus clearcutting and the more standard techniques, that that wasn't new. That somehow that was just a modification of what silviculturists have always known about and done.

HKS: I don't know if Buckman, whether it was his opinion or whether he was just characterizing what other people were saying, but New Forestry was just sloppy clearcuts.

CP: Yeah, you heard that a lot, and it's basically because they didn't understand it. The first work left a very light retention and did actually look like sloppy clearcuts. As New Forestry evolved into Retention Systems this view was reduced. I'm sure I could still sit down with silviculturists, groups of them, and still have them not understand it's a system designed to perpetuate an overstory. There is no silviculture system in history that was designed to perpetuate an overstory. You recruit into the overstory out of the second and third stories. What you want to end up is old trees above everything else, and you keep them up there for reasons that have nothing to do with commodities. And you also recruit large woody debris out of the overystory, for another set of ecological reasons. I think this is so foreign to silviculturists in general that I just don't think they can get through it.

This lack of understanding internally cost us a lot of money in new funding, because it was probably the first time that the Wilderness Society and the Sierra Club and the Forest Products Industry could be put together to support a research program on a common question. The first time it looked like we might have a silvicultural system most people could agree on. Now they might want to push it this way and pull it that way in terms of volume produced or other characteristics. A big research program was needed, because there were no prescriptions; nobody knew how to do this operationally. I could take you down to Andrews and show you the stands. FEMAT directs retention silviculture in the matrix lands and in young stands being moved to produce old growth characteristics.

We had started a research program before I left, that looked at retention and other systems in full scale. Got some new money to go out in national forests and actually put retention systems in adjacent to clearcuts, shelterwood and silvicultural systems you could use in Douglas fir, and to evaluate them over the long term. This whole internal debate was a real downer, that whole episode for me, because I kept saying if we could just get this going. Basically the silvicultural prescription in FEMAT for the matrix lands between HCAs is a retention system. It's probably similar to what they were doing in Douglas fir before 1928, when the experiment stations said you ought to go to clearcutting. That's the real irony of it. [Laughs] There wasn't a lot of timber production at that time, but they were thinking about ways to do partial cuts and those kind of things. That's not retention, but it's different than clearcutting. But that would be another book

you could write some day.

HKS: There was a controversial paper that came out of this station about 1935 by Bert Kirkland who was director of the station, and Axel Brandstrom, a professor of logging engineering up at the University of Washington. It's about selective logging in Douglas fir. And Leo Isaac, Mr. Douglas fir, just didn't accept it, bad science and so forth. A generation later Gordon Robinson, a Sierra Club forester, picked it up and used it as an example that you don't have to clearcut Douglas fir. And here's expertise. Robinson called it, Excellent Forestry.

CP: Right.

HKS: It was so controversial in the 1930s that the Forest Service didn't publish it but got a foundation to publish the document. It's kind of intriguing. You deal with all the political forces, people are out of work during the Depression and this helps to create jobs, and on and on and on.

CP: Right. It's interesting.

Talking about myth and legends, to have a clearcut system be so believed in by foresters, and I think it's still happening in schools, as the only real effective way to manage Douglas fir because it quote mimics the natural processes and on and on, as if these stands couldn't be managed any other way. I think that's changing, but it took the law and a whole bunch of outsiders to push it. I think all Jerry Franklin was trying to say when he first got into that is, you know, we can do this all by ourselves, if we wanted to. No laws against it. But we didn't.

HKS: Well we saw quite a bit when I worked on the Snoqualmie National Forest. During World War Two they high-graded Douglas fir peeler logs for PT boat and airplane construction. They did enormous damage to residential land, because they weren't careful when they yarded the logs.

CP: Sure. Oh yeah. And that would be one argument you would hear. It's going to destroy whatever you leave. You don't have to. You can be very precise. Also under retention you would not be high grading the overstory in the first place.

Contrasting National Forest and Research Cultures

Anyway, I guess that's all I can say about that. I did want to make a comment that I want to get in here, that we may want to expand later. The difference between the two cultures in Research and National Forest Systems. I found many times in my career that the acceptance of new ideas, whether they're organizational or whatever, was far easier to get across in National Forest Systems than in Research. This always puzzled me because Research people are trained scientists, and you would think that they would be the most objective and they would be the ones to look at data and information.

HKS: And they have nothing to lose.

CP: And they have nothing to lose. You talk about hard-headed, almost ideological positions on issues-- not necessarily science, although it happened there too-- compared to National Forest Systems. It always just amazed me. I could go down the hall and talk about some of the things we've been talking about with somebody in National Forest Systems, and maybe hear it regurgitated later. Why don't we look at this? And go down the hall in Research and just have it totally rejected. Bam.

HKS: An example I give my students of this research mind set. I was at the station when *Silent Spring* came out. I played volleyball with the entomologists. And they pretty much rejected it. The common response was, there's nothing new. Well the new thing was, people outside the Forest Service had heard about it. Big news. But the head of entomology research, I forget his name now, grand old man at that time, spoke to the Society of American Foresters meeting in Portland, just really ridiculing the whole Rachel Carson business. Nothing's going to come out of this, this is stupid, blah blah blah. About two weeks later, the White House suspended federal use of DDT.

I read Silent *Spring* in 1962 when it came out. I thought, that's what I learned in forestry school. That natural systems are better. Through genetics you breed disease-resistant trees, you bring in predators. You do those kinds of things, and you use the pesticides as a last resort. That's not where you start. You may have to, but.

CP: You may have to, yeah.

HKS: The goal is not to. And that's what she said we ought to be doing. And I thought, why is there so much upset about this? Years later, when the Forest Service was reviewing the manuscript of my book on the history of the Forest Service, it was published in 1976, I got a very stern letter from the deputy chief of State and Private Forestry saying I should not have Rachel Carson in the book. She's not a good person. And my footnote was, she was selected by the voting members of the American Forestry Association as one of the ten most important conservationists in American history.

CP: Oh, is that right. Oh my goodness.

HKS: That's my source. I [emphasis] didn't say she was important. The American Forestry Association said she was important. And AFA at that time was still a dynamic organization.

CP: Yeah.

Fish

HKS: You mentioned something earlier about cooking the books on fish. That intrigued me. I

didn't know that the Forest Service research was that involved with fish. I knew that Dombeck worked with fish but I didn't know that Research was doing it. I guess what you meant was these reports about fish were not accurate.

CP: In the 1980s-'90s fisheries research was a major program in the station. Well one of the examples of this misapplication of research results that's well documented was the forest plan for the Siuslaw National Forest, where they had worked out a relationship between the amount of disturbance of a watershed-- in other words the amount that had been put into timber management-- and the condition of the fisheries habitat. There's a whole set of criteria for how you evaluate fisheries habitat that came out of the PNW station and other places. It can be very quantitative. And this relationship had been developed by a research program primarily paid for by that national forest. And what it shows is-- I've got the curve somewhere, I've kept it, it's kind of an interesting case study– there is a direct relationship between disturbance and habitat quality. Elk River is the name of the watershed. If you go up the Elk River and add more watersheds that are managed you get a proportional reduction in the habitat quality. And from that you can predict the number of fish that will survive.

HKS: It's sedimentation?

CP: It's everything. Sedimentation, shading, all the things that happen when you clearcut along streams and so forth. This is all in there. So it's quality stuff from a research standpoint, and it was done with the support of a national forest. It was okay scientifically. Well when that research went through the forest plan, everything in that relationship I just told you, and I make it kind of simple but, any chance they had to move the numbers toward less impact, they did. The planning team did that, till when they finally got through there was literally almost no impact on the fisheries if you put the whole watershed under management. Sedell caught that. He had done some of the research, and started to point it out to the forest supervisor that that's just inappropriate use of science. It's not correct, but it did allow them to have a preferred alternative with a higher timber cut. Now this was before fish were listed. But it looked like anadromous fish were going to be listed, so eventually you wouldn't be allowed to have any alternative that had degradation. In fact you probably wouldn't be allowed to have any alternative that didn't improve fisheries habitat in the next forest planning process. So this would never have been implemented for all kinds of reasons. That's an example, and this was a really interesting example because it was research done with their support. So they were fully aware of the research and they just blatantly moved toward less impact any chance they had. There's a lot of equations and modeling and things in there, when you convert it to planning, where you can change coefficients and that sort of thing.

That was going on big time in Alaska, before we got into that planning process I told you about earlier. Especially related to Sitka deer, which was a big program the results of which were not only paid for by Region Ten but ignored. It's harder to do today because there's so much more oversight and the court cases help. But forest planning, at least the first round, had some really serious scientific problems, and probably the reason a lot of them didn't make it through the challenges. And that's not a deficiency in procedure. It always comes back, oh it was a

procedural thing. They didn't do this, they didn't do that.

HKS: I don't remember the specifics, but in 1948 in the Tongass National Forest—its Maybeso watershed-- Forest Service researchers implemented a study on the impact of timber harvest on salmon spawning.

CP: In '48?

HKS: '48. And I thought, my goodness, and they didn't figure it out. I didn't actually see the study, but I read about it. And I thought, that's a long time ago.

CP: That is.

HKS: And it was recognized then as a viable research issue, and yet here we are in the year 2005, still debating whether or not we can do these things.

CP: There's another side to that story though. In my opinion there's a lot of, I'm going to call it manipulation of the research program by researchers, by the way they ask questions and the questions they ask and the stuff they select to study. There's too many researchers in the Forest Service still repeating their doctor's thesis. And not looking at tomorrow's issues. I mean science issues, not necessarily management issues. Part of that problem is the old culture of a long-term science career.

Appointments, Lectures, and Awards

HKS: Have you had faculty appointments, editorial roles, invited lectures, your professional work outside the agency you feel you want to put on the record?

CP: Well I had a lot of invitational presentations.

HKS: Were you an adjunct professor at any places?

CP: You know I'm not really sure I ever was.

HKS: I interviewed Wayne Swank on the Coweeta. Just finished editing his transcript. And his adjunct appointments were really dynamic. It was a major part of his job, being an adjunct.

CP: Yeah. He's well known for that. No, I don't really think I was. Invitational talks, yes, some of them in science but more in terms of research programs. I chaired two federal advisory committees. Those were all policy related sorts of things. Done three or four of them actually. Many of my invitations related to the science basis of resource policy, or findings from large research programs.

HKS: I knew a forest service scientist who had a university position. Jim Murphy I think his name was.

CP: I know Jim Murphy.

HKS: He was put on detail, University of Washington. He taught classes. And I thought, I don't know how much farther you can go and still maintain your allegiance to the Forest Service. I thought that was quite a commitment on the part of the agency.

CP: Yeah, sometimes that was done in conjunction with the GETA program, that if you left your home base and did what was called a residence program instead of going to the local school, you could be sent anywhere with full tuition, and sometimes there would be some kind of arrangement with the school that you'd do some teaching. Especially if you're in a field, and fire would be a field I think where the university may not have had a lot of expertise. That was typical of a lot of forestry schools. So I could see how Jim could be asked to do that. Another reason this happened was to develop a program in cooperation with a university when we did not have enough resources to proceed. One advantage is having a cadre of grad students doing research we couldn't afford to support.

HKS: And he had students going into his office.

CP: Yep. Several scientists at PNW have Ph.D. students. Especially down at OSU, and U. of W. That's a good way to evaluate people and get some post doc help and all kind of things can go on there. I think that's good. But I never really did that.

HKS: Congress oversight never says, how come the feds are paying for instruction at these universities?

CP: No, because it would probably be handled in a co-op agreement so that there's an exchange of resources. The issue of co-op agreements after I retired became really a big thing with GAO. GAO probably had this feeling that co-op agreements between a professor and Forest Service scientists were a conflict of interest because the production from those agreements would be used to advance the career of the federal scientists, and most of them are non-competitive. They're more based on disciplinary cooperation and mutual interests and that sort of stuff. Although some stations like the Rocky Mountain have done them competitively.

Then there was a related issue; why were Forest Service scientists in foreign travel? Because the government's paying for what amounts to advancing their careers so they can get a higher paycheck. It was an interesting way to look at things. Of course the case we made was, they do foreign travel because we want them to be linked with world science. I know it was tough for a while but I think it all got dropped. I wasn't that involved. It's always interesting to be expected to do good science and not use the tools traditionally used by other productive research organizations.

Awards. I've gotten awards like annual performance awards. Big ones. No national awards from conservation organizations or anything like that. I also never lobbied for such recognition.

HKS: Both Wayne Swank and Kent Kirk sent me rather detailed resumes, and they had year by year the awards they got. Cash awards for exceeding the requirements of their grade level. I guess the only alternative would have been to give them a promotion, but they weren't in grade long enough.

CP: Oh, yeah. Well, another thing that happened under the personnel act under Carter that I talked about was that it gave us the opportunity to give employees annual performance pay. If you clearly described the expectations and they were exceeded. It's a system I liked, because it made the performance rating really serious. It wasn't just a qualitative thing like we had when we began our careers. The problem with it is-- like a lot of things related to setting priorities-- a process that I call leveling that bureaucracies get trapped into. The Forest Service is a prime example. You really can't set priorities and move resources to highest priorities because it leaves out people, programs, or geographical zones, so you tend to spread money. Spread resources. So performance pay for some managers was nothing more than splitting up the pie. There was an amount of money that you could identify. Instead of giving the automatic yearly increases, half of that money went into a pool which you could reallocate based on performance. Some people got zero; many of my people got zero. Others got big awards, if they really put out. Some stations couldn't implement that because that was so counter to the idea of leveling. They'd make the pool, then they'd split evenly. Kind of made a mockery out of the whole concept. I'm not sure where it is today. It may not even be used any more.

The Senior Executive Service has a performance award system that's very formal. When I was in it there were twenty-five hundred dollar, four thousand dollar, and ten thousand dollar awards. A certain number of those that the chief could give out to senior executives based on performance. I generally got one of those. I never got the ten thousand. So I always felt pretty good about Washington office support of what I was doing, based on that evidence.

HKS: I was impressed by Wayne Swank's characterization. He got the superior service award from USDA once, maybe twice. How nicely it was handled. He and his wife were flown to Washington at government expense. I mean they were treated like it was a real honor, and it was departmental, it wasn't agency. He had really a good feeling.

CP: That's good. I'm glad to hear that. It's so hard for a large organization. Actually it's hard for small organizations too, because I'm in two of them now that have the same problem with recognizing achievement. Recognition, fair and square and adequate and appropriate is really tough. In the Forest Service recognition sometimes got all tangled up with a lot of agendas. So it doesn't mean necessarily the best performers or the most outstanding people got awards. I think everybody understood that.

HKS: Don Marx is a colorful fellow as you know. I interviewed him and he said when he got the Wallenberg award, the Forest Service wanted the money. The one million krona award.

CP: The Forest Service wanted the money?

HKS: Yeah. He thought that. Apparently some middle level bureaucrat got in the supply chain and said the money comes to the Forest Service. You earned it while you were on our salary.

CP: Holy mackerel. I never heard of such a thing.

HKS: Well Don was pretty aggressive.

CP: Oh yeah. [laughter] I wouldn't mess with him. That is unbelievable.

HKS: He spent most of it bringing his entire staff to Sweden to accompany him.

CP: Is that what he did?

HKS: Yeah. He took nine people with him.

CP: Well good for him. That's amazing. Fascinating guy.

HKS: I don't want to get talking about Don, but it was a fascinating interview because the guy is so excited about this stuff.

CP: He's a character.

HKS: Not too many scientists have a U.S. Marine Corps background.

CP: No, that's right. [Laughs]

After the Forest Service

HKS: Back to Charlie Philpot. I know you're involved with a museum. Please put on the record a little bit what you've been doing since you left the Forest Service, including liaison with the Forest Service.

CP: One of my decisions when I left the Forest Service was I was going to leave the Forest Service. As director I'd had interference from retirees who couldn't. I didn't appreciate it, and in most cases it was very inappropriate and uninformed. So I just said, it's over. So I looked for other things to do and I ended up, within six months, joining an organization called Oregon Electric Railway Historical Society, which is currently building a streetcar museum. I saw a little ad in a journal I get that they were looking for volunteers to move the museum site from Gales Creek to Brooks, Oregon near Salem, about fifty miles. I got involved, and in the first year I restored a 1932 streetcar, ground up, with one other guy. I worked full time for a year on that.

Then I got on their board. I got active down at the new museum site which is a complex of about fifteen independent museums at a place called Antique Powerland, a heritage power museum complex. Autos, trucks, streetcars, railroads, large engines, fire apparatus. We have the only Caterpillar machinery museum in the world. I landed a large grant to build the first phase of the streetcar museum, and I managed the grant, and I was also general contractor for the construction, which I loved to do. I also did a lot of the work. Yesterday I was pouring concrete. All that stuff. I operate heavy equipment.

Anyway I got involved with Western Antique Powerland, Incorporated that owns the site. I ended up on their board and I am chairman and president of that corporation, which I turned into a non-profit five years ago. I've done that for six years. It's a full time volunteer job. It keeps me out of trouble. It's very different than my past career, although daily I come up with problems that my past career helps. I don't talk about it very much. Most people down there haven't a clue where I came from, but they do know I've obviously had some management experience. I get them through a lot of issues. Funding proposals, policy disagreements, county planning and all kinds of problems. So anyway, that's what I do.

I went back a couple times, one of the times I told you about earlier, to be a federal advisory committee chair to evaluate the regional plan for the Sierra Nevadas down in California, which had some serious, serious problems. The Region Five experience was one of my worst. It was like going back to the early days of forest planning. Part of their problem was obsession about the Northwest Forest Plan, even though the planning team and R-5 Regional Office did not seem to understand it. Unfortunately heads rolled over this (including the regional forester). I chaired the Federal Advisory Committee reporting to the Vice President's office to evaluate their draft plan so the V.P.'s office and Jim Lyons could decide whether to kill the plan and start over or not. (They started over.) I worked very hard to soften what the committee, whose members were not connected with the Forest Service in California, wanted to say. I suspect R-5 people didn't understand this and I probably left a very bad taste in California. I really wish it had never happened. But it is [emphasis] part of a big story on how planning of all kinds was manipulated for all manner of agendas.

I do keep in contact with George Stankey and Roger Clark on the Australian stuff, and some follow-on work that we still want to do about Forest Service culture and foresters and some social values questions. So I meet with them about twice a year for a couple days, and we mainly just have discussions about forestry and forestry organizations. They have recently retired and I think we may get together a little more in the future. I've had really no interest in much else. I watch things, but I have no contact with the old networks to speak of. One of my best friends was deputy director under me and we go out to dinner, and one of my ex-project leaders and I, who's married to my wife's roommate from Berkeley, we've become friends again, so I have some Forest Service contacts that way. But they've also cut it off too, so we're a little bit in the dark about a lot of things, other than what we see in the papers or read between the lines.

There's two publications I receive that I tried to get started as director but Tom Mills, my successor, was able to actually do. One's called *PNW Science News*, very well-written. Features

four times a year a complete research program related to resources. And then there's another document that's more of a technology transfer thing that's also well-written. Products the station pays for but are written directly for managers. I keep tabs on things that way. Watch what some of the old folks are doing. I'm amazed at the number of names that I don't recognize. So that's about it.

I have one mission that I'll tell you about. It's one that Jack also supports, although I preached it way before he did. This nation needs a comprehensive renewable resource policy. Or needs to re-evaluate the laws that it piled on the agencies: Multiple Use Act and on and on and on. There's a lot of inconsistencies in there. There's no way in God's green earth you can do all that and be correct in one individual law. It's led to chaos, which continues in the agencies. Not just the Forest Service, but that's probably the best or worst example of an agency that doesn't really know what it's supposed to do. Cannot articulate it, other than give you the laws. And what I've proposed is another land law review commission. You may know more about this than I do but I think there's been several since 1900. I don't know.

HKS: The fourth one was in the 1960s, and produced thirty volumes or so.

CP: Okay. I kind of know about it and what they dealt with. Jack agrees with me. Jack has said this in speeches-- I've heard him say it many times-- we have got to do that again. The problem with doing it of course is how do you do it objectively, independently? Who makes a decision to establish it, is it congressionally appointed, or does the president appoint it? How do you appoint it in a bipartisan way, and how do you keep the agendas off the table to really sit down with a legal staff? You need to spend some money.

HKS: I think Jack also said, there can be no university professors on the commission. He didn't want it to be an academic product.

CP: No. Can't be.

HKS: He wanted real people.

CP: It has to be real people. Although I can think in some cases it wouldn't be a bad idea to have some law professors that have expertise in resources, for a different reason than you might put a forestry professor on there. Which I know is kind of what Jack's talking about. To come out with, hopefully, a practical product that would actually give guidance to Congress. These are the kind of things you've got to do, and if you don't this chaos is going to continue. It's bad not because it's chaos; it's bad because we've got a lot of resources at stake. I've had some amazing discussions with people about that. I tried to get it in the National Academy of Administration study we did about the implementation of fire policy in the '90s, which had not progressed as far as some people hoped since the '70s and '80s. One of the problems that kept coming up in the barriers to fire management action is, it's very hard to relate fire management to agency objectives when you don't have a clear set of objectives, and you keep getting tripped up by the federal endangered species act, NEPA, whatever. So I wanted to get in that report just a

paragraph from the Academy recommending establishment of a land law review commission. Not saying anything else. They wouldn't do it.

It was amazing to me that the Academy would say things like, that's too risky for the Academy to get involved in. I don't know how you do it. There's certain people, if they do it, it won't work. Needless to say I was disappointed because the Academy seemed like an ideal organization to get behind this.

HKS: The National Academy of Sciences in 1896 formed a commission, Gifford Pinchot was one of the members. It led to the Organic Act of 1897. During the 1920s the Forest Service asked the Academy to get involved once again. They needed help managing the forests that the Academy was instrumental in getting created. There's been some interaction. I may be one year off in my date, but in 1971 President Nixon, in one of his reorganization bills, one of two when he was president, of moving resource agencies around, he said something like, there's forty-two agencies in four different departments dealing with natural resources in this overlapping, intermixing, conflicting way. In 1971 the president of the United States basically said what you just said. And it went nowhere.

CP: Yep.

HKS: I mean you don't get a much more authoritative figure.

CP: It's fascinating. And it could go only to the point that you really have a neutral product and you don't have to come to any recommendations for reorganization or anything else. You could just come and point out the inconsistencies and the impacts of some of those things the way we're now doing business without any conclusions. You could at least get that far, I think.

HKS: In 1964 when the Public Land Law Review Commission report came out, it stated that there had been ten thousand federal statutes dealing with the public lands enacted till 1964. And there'd been no effort to codify this. Now a lot of those were trivial; a reward of public lands to the widow of a Civil War veteran and so forth. There's a lot of this sort of stuff, so the numbers are distorted. The first important land review commission was 1880, published in 1884. But by 1884 there'd been three thousand federal statutes dealing with public land. And Congress just keeps turning those things out.

CP: And it's also amazing to me to talk to people about this. One supersedes the other. The National Forest Management Act in effect canceled the Multiple Use-Sustained Yield Act. And all the time the answer's no, we have to do both. To me that's unclear. I think about forest supervisors. At the forestry congress, we had some presentations in the afternoon. One was by a law professor from the University of Idaho, or Idaho State, and she was asked to comment on what we're talking about. And she said there is no inconsistency among those laws, there's simply an addition to the current responsibilities. There's no implementation problems. That was her conclusion. And I looked around the room and these guys were just going, oh my God, did she talk to anybody that's in the business? Go talk to forest supervisors. There's no way they can

do all that and be consistent in the law.

Jack and I talked a little bit about it, and Roger Clark and George Stankey, when we get back together a little more we may continue to think about ways it could be supported neutrally, and ways it could be staffed and led. It may take that kind of work up front to get anywhere at all with a proposal. I don't know. I'm still not sure who you'd propose it to. I had always hoped before Senator Hatfield retired that he would sponsor something like that. I think he might have. Because he and I had some really tough talks about some of these issues, along with his concern that science keeps changing, we're learning things too fast.

He and I had a big debate about that one day. Here's what he said. He said, you know, your scientists used to come up to the Senate committee and testify that clearcutting was fine for Douglas fir. And now you come up and tell us it's not. Because the science changes. I said no. You're asking a different question. You used to ask, is clearcutting a good way to raise Douglas fir? Well yeah, it is. And we know of truckloads of research that would support that. Quality, quantity, growth rates, whatever. Now you ask these same people, they are sometimes the same people, is clearcutting an appropriate way to manage for old growth species? The answer's no. Science hasn't changed. We've got more science now, but that would have been the same answer twenty years ago if you'd asked it that way. You didn't ask that. If I had one thing I would work on it, I mean really spend time on, probably that would be it. We'll see if we can get it.

HKS: The Land Law Review Commission, published in 1903, was highly politicalized. It was about Gifford Pinchot and Teddy Roosevelt going after land fraud in the public domain. And they exposed a lot of that. It was a fascinating document to read.

CP: So these things have had really quite different charters?

HKS: Very different charters.

CP: Ah. I see. Okay.

HKS: The long-term congressman from Colorado—Wayne Aspinall-- was instrumental in keeping the 1960s one alive. And part of that stuff was enacted. It was probably one of the more successful commissions. It didn't just sit on three feet of library shelves waiting to be read by historians.

CP: It actually did something.

HKS: It did something.

CP: Another thing I did for about five years, I was on the board of directors of Wolf Tree Incorporated, which is a non-profit that teaches science to grade school and middle school and even high school students in the field. The way it works is that they wrote agreements with the school, and when I left there was about thirty of these in Oregon. They obtained money through

foundations and even the Forest Service to work with the students and the science teacher to develop hypotheses and learn what that means. Spend a day in the field, Wolf Tree paid for the buses and the substitute teachers. They had three students max per professional. So if sixty kids come out they get twenty professionals from agencies, from the private sector, power company, whatever, and they go through, they split up basically in the field into a wetland, stream, or forest site, or team. The students collect data and then they present their findings and then they go back to school and write reports. The basic rule in this organization is there can be no discussion of values. Nothing's bad and nothing's good. Very popular. It's still going today. It was started by two of my employees. One of them left to be the director, and when I retired they asked me to be on the board and I was I think for about five years. An amazing program. They probably could do a lot more if they had the funding.

HKS: In the 1950s the Timber Resources Review was going through, which is largely a research production. Congress forbade its having any policy implications. They could only report; they could not recommend. It's hard to know who the villains are, really.

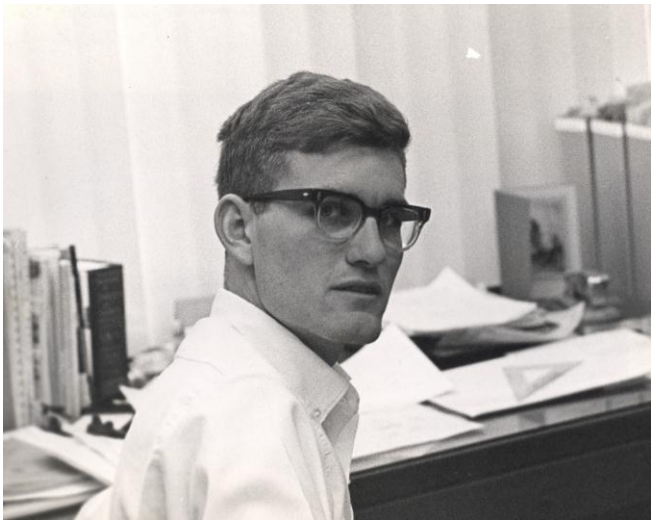
CP: That's right. A big problem is getting teachers off the values stuff. Like I told you before, I reviewed some textbooks. My God. Full of errors and values statements. So it was an interesting experience. And they're doing well. They're all over Oregon and southern Washington now. They do a summer program for two weeks, in the wilderness, camping with teachers. Teacher training. They get a National Science Foundation grant for that. They do a lot of work on textbook development and other teaching materials. So I was in that for quite a while, then I got overwhelmed by the museum that really has my attention right now.

Another thing I did when I got to the station was try to come up with, an institute I'm going to call it, of neutrality for discussing resource issues, for people in the business, whether it be forest supervisors, industry foresters, whatever. A totally protected, facilitated environment. Everything kept anonymous. There would be some outputs published but you couldn't tie the comments back to people, trying to get as much protection as we could. We did one of these workshops at the Pack Forest. We got together a bunch of people-- forest supervisors, industry people– closed the door and said, we're going to do a test. I knew these folks were interested in doing this. Orville Daniels was one of them; loved to do stuff like this. We're just going to talk and see where we go with what's really bothering you guys and making your jobs difficult. Or your boss is on you and you can't say things. In here you can do that. Okay, we all said fine. It was unbelievable. It was great. These guys went out of there practically demanding we try and do this for real. So I went to two universities. I won't tell you who they were, but you can guess. I said I can get the money to do this. If I went to the right sponsors they would say, you know it's time to do some of this, as long as we stick to the standards and so forth. I could get some federal money, I could use my own money, we'd do it somehow. What I really need is commitment from your school to do it as part of the university. Because that's my understanding of what a university is about. Guess what the answer was? It's too risky.

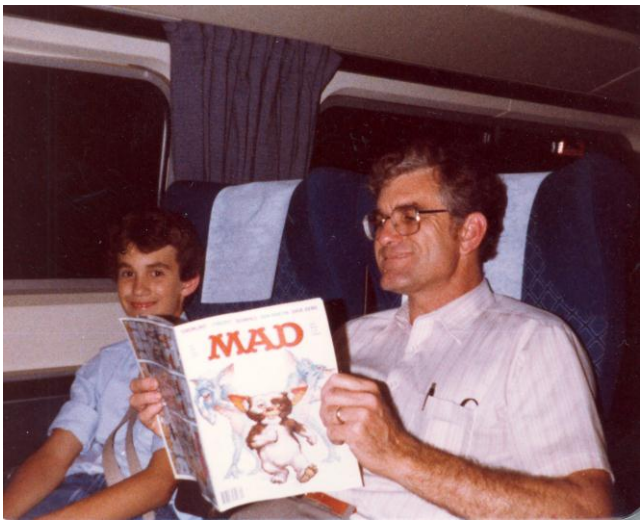
HKS: Get in trouble with the legislature probably.

CP: More disturbing-- the people that help fund the school. It didn't matter. It's just not going to happen. You talk about deflation. But that's another area I could get excited about. If there was another opportunity to actually do that.

HKS: That's a good place to end. Thanks for a nifty interview.



Philpot in his Riverside Fire Laboratory office, 1963.



Philpot and his son Jeff in 1984. Philpot was then director of Forest Fire and Atmospheric Sciences Research.

Philpot receiving recognition of U.S. Forest Service participation in the North American Forestry Commission from the chief forester of Mexico, Jesus B. Cardena, 1985.

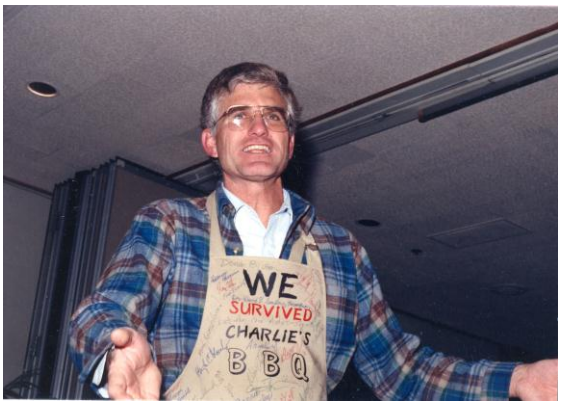
Washington and Station review of Alaska programs, Cordova. Left to right: retired assistant station director Ken Wright, unknown, director of forest environment research Dick Smythe, unknown, Deputy Chief for Research Jerry Sesco, PNW Station Director Philpot, Juneau project leader John Henley, Bob Szaro from Forest Environment Research in the Washington Office, Cordova district ranger Mark Madrid, and PNW project leader Roger Clark, ca. 1990.

Philpot speaking at the 1st International Conference on Wildland Fire in July of 1989.

Philpot working on his 1938 Cadillac restoration project, Portland, 1988.

Chief Dale Robertson presents Certificate of Merit, ca. 1990.

Washington Office review of Region 10 (Alaska). L/r Deputy Chief Jim Overbay, Regional Forester Mike Barton, Deputy Chief Jeff Sirmon, Assistant PNW Station Director Art Schipper, Unknown, staff specialist, research, Washington Office Calvin Bay, Deputy Regional Forester Lynn Sprague, Deputy Chief Jim Space, and PNW Station Director Philpot.



First-ever all PNW Station employees meeting near Bend, Oregon, to discuss reorganization alternatives. Ca 1991.

Forest Service leadership meeting, Houston, Texas, 1994. Philpot at left rear.

Program managers Charlie Peterson, Herman Gucinski, and PNW director Philpot during a field visit to the Pringle Falls Experimental Forest near Bend, Oregon. Ca 1995.

Retirement party at Wenatchee Lab., with Richard Evert presenting certificate.